DEPARTMENT OF HEALTH

2023 Statewide Health Assessment

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Introduction

What is health?

The World Health Organization calls health, "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."[1] Everything in our lives—our families; homes; neighborhoods; transportation; jobs; schools; the land, water, and air—must support our health.

Health is a resource for our everyday lives.[2] If we are healthy, we can be present with our family and friends, attend school, go to work, play, and be active participants in society by volunteering, voting, and more. Each of us is part of multiple communities, and our health is largely a result of our interactions with the people and the places that surround us, including both the human-made and the natural world.[3] Because health comes from our interactions, health is something we shape together, and every other person's health affects our own health.

As part of this assessment, Healthy Minnesota Partnership staff held group conversations and asked participants what words came to mind when they thought about health. Partnership staff themed these results. Examples include:

Well-being: wellness, happy, enjoyment, joy
Social well-being: community, connections, belonging, togetherness
Wholeness: feeling whole, balance, body-mind-soul, quality of life
Physical well-being: energized, nutrition, longevity, vitality
Environmental well-being: clean air, safe housing, water quality, environmental justice
Emotional well-being: mental health, stress relief, purpose
Access to resources: accessibility, access, choice
Education: education, prevention, informed

What creates health?

For many years, the field of public health has focused on individual behavior change to improve health. However, without discounting the role of a single person, research shows that the circumstances of our lives—in particular, where we live—play the largest role in our health. Where we live determines options available to us and influences our choices no matter how well-intentioned or motivated we may be to make healthy choices.[4]

Decades of research on the social factors that impact our health[a] show that our health is truly most impacted by the policies and processes that shape our daily circumstances. A large set of economic and social forces overshadow our individual behaviors; these forces are a result of policy decisions at every level of government.

What is health equity?

Health equity is the concept that everyone has what they need to be healthy, and unjust or unfair barriers do not prevent anyone from being healthy. We can only achieve health equity when all children get a loving and healthy start; when we all can get a good education and stable income to cover the costs of living; when we all can take part in the decisions that shape our communities; and when we all have good living conditions. When some of our populations are not as healthy as they could be, it is typically because of inequities in these conditions. We can only eliminate inequities in health, therefore, when each of us has the opportunity to realize our health potential (the highest level of health possible for us) without limits imposed by structural inequities.

To achieve health equity, we need to understand how health goes beyond the individual and take a closer look at what really creates health. A collective narrative—that is, a shared understanding and story—illuminates the actions we can and must take together and acknowledges the role that policy decisions play in shaping the material circumstances of our lives. We understand that we all share the responsibility of creating healthy communities where everyone can thrive, instead of thinking that each of us bears the sole responsibility for our own health.

Structural racism and health equity

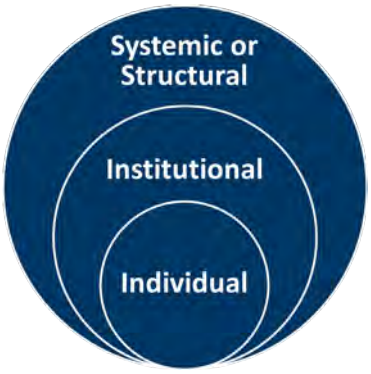
There are different forms of racism: individual, institutional, structural, and systemic.[5] All forms of racism continue to shape society in powerful ways, and we cannot ignore the negative impact of racism on health.[6,7] This statewide health assessment emphasizes the societal forms of racism—institutional, structural, and systemic—and their impacts on health equity. Institutional, structural, and systemic racism are challenging and pervasive, and compound other forms of discrimination (classism, sexism, and more), which can also harm health or result in health inequities.[8]

Race is a social construct, which means it is something created by people and society rather than something that exists naturally. This social construct divides people based on visible, physical characteristics like skin

[a] In the field and study of public health, the social factors that impact a person's or community's health are called the social determinants of health.

color, eye color and shape, and hair color and texture.[b] Dividing people into separate racial groupings is grounded in differences in power, and is used to justify oppressing certain populations.

Figure 1. Levels of racism



Dividing people in this way often dehumanizes groups of people based on the racial, ethnic, and even cultural groupings to which they have been assigned, as evidenced by a number of events in the history of public health and medicine in the United States in the 20th century: forced sterilization of Latina people and people with disabilities in the 20th century, withholding and lying about treatment for syphilis among Black men in Tuskegee to study the effects of untreated syphilis, and using and propagating cells from a Black woman named Henrietta Lacks for medical research without informing or compensating her or her family. This legacy of discrimination continues: the intersection of racial, ethnic, religious, and cultural identities with disability, gender identity, sexual orientation, and more, creates a complex web of discrimination that governments and others in power continue to justify based on the creation of race.[9]

- **Individual racism** is the belief that one's own race is superior to others. It prompts us to see the "other" as a threat, and to treat people differently according to certain easily identifiable physical characteristics.[c] Some individual racism is overt, in the form of prejudicial comments or discriminatory actions. Some individual racism is also implicit, like when a person's attitudes influence their behaviors but they are not aware of their biases.

[b] The genetic variation within one population group is actually much wider than the variation between different groups supposedly characterized by "race." For more information, see: Adelman, L. (Executive Producer). (2003). *Race: The power of an Illusion* [Television series]. California Newsreel.

[c] To categorize is human, but when some people chose to categorize other people according to a few superficial physical characteristics (such as skin color, hair and eye color, hair texture, and/or facial features), and then decide that those characteristics make people more or less valuable: that is racism. Historically, in the U.S. those with lighter colored skin, eyes and hair receive preferential treatment while those with brown and Black skin, eyes, and hair experience more exclusion and discrimination. Discrimination leads to poor health, and thus is a serious public health concern.

- **Institutional, structural, and systemic racism** are present when race as a social construct is embedded into policies, practices, and procedures that work better for white people than for people who identify as Black, Indigenous, and People of Color (BIPOC) and/or American Indian. Institutional, structural, and systemic racism can be intentional or unintentional, like individual racism. Historical and current policy decisions based on racial biases still impact groups today (for example, redlining practices and voter ID laws).[10]

  Systemic racism can be carried out by people without explicit racist intent, but who have neglected to take a race-conscious approach that considers possible negative consequences for people who identify as BIPOC and American Indian. Examples of this include application requirements for public assistance programs or tax benefit programs that are burdensome to obtain disproportionately people identifying as BIPOC and American Indians.[11] Some racism is based on historical and current institutional or systemic policies, practices, or procedures across multiple systems, institutions, or sectors, creating a whole system of intersecting and interwoven structural racism.

A note about racial/ethnic groups, and the terms used to describe them in this assessment

Throughout this assessment, we refer to racially and ethnically diverse populations as Black, Indigenous, and People of Color (BIPOC) and American Indian. The Minnesota Department of Health (MDH) Community Resiliency and Recovery Workgroup conducted listening sessions, which informed this terminology.

Beyond this assessment's narrative text, its data bullets and cited data adhere to each original source's labels and categories. The way data is categorized throughout this assessment varies because different data sources use different terminology. For example, one report might use African American, another Black, and another African American/African born. Some data sources refer to "white, non-Hispanic" people and others only to white. Some data is only available for the five racial groups collected historically by the U.S. Census (American Indian, Asian, Black, Hispanic, and white). Other data sources include data by birthplace and ethnicity (e.g., Hmong, Somali, Black/foreign-born, Black/U.S.-born, Southeast Asian, etc.). While this can be confusing, this assessment does not make any assumptions about what data sources intended and uses the original source terminology.

For more information on why this assessment specifically uses the terminology of American Indian, see American Indian in this document.

Discrimination is not always race-based—other biases are also present, aligned with disability, gender identity, sexual orientation, religion and culture, and more. All of these biases impact health equity. Those who are seen as different—disabled, female, older adult, immigrant, lesbian, gay, bisexual, transgender, previously incarcerated, having mental illness, having lower income or social class—also may experience not being seen or heard; being subjected to derogatory comments; and having their needs ignored. Institutional, systemic, and structural racism compound these challenges.

Research shows that the constant stress associated with discrimination can generate changes in our bodies that lead to more chronic disease, a higher rate of infant death before a first birthday, and earlier death.[12]

Systems and structures impact health

This assessment also attempts to further illuminate the role of systems and structures, and how they impact our health.

Systems are complex, and we interact with multiple systems every day; examples include the transportation system, health care system, justice system, and more. Systems also often have goals—for example, the transportation system aims to get people to specific places, and the health care system aims to care for patients' health. Systems can also be interconnected and impact how they create or sustain conditions for health.

Structures function within systems and help hold the system (and inequities in the system) in place. For example, economic opportunity is partly dependent on opportunities in education and transportation. In turn, our education and transportation systems are dependent on a particular tax structure for funds: the local property tax. The structure of using property tax to fund education and transportation ultimately benefits areas with higher value properties: more tax is collected for those local areas, and so more funds are available to create economic opportunity for those residents.

Another example is medical care: the health care system is designed around specific structures of medical care that require physical buildings (clinics and hospitals rather than community workers) and very specific layers of expertise and authority. The system is funded by third-party payment, which for many years prioritized employment as the means of accessing health care insurance and thus medical care. Better jobs, therefore, mean better access to health care; therefore, inequities are built into the structures of the system.

It is challenging to identify data on systems and structures that impact health. It involves examining past and current policies, decisions, who is involved, and intended or unintended outcomes. Some of this data is not collected, but persistent questioning can help us understand where and why gaps in data exist and how to fill them.

Assets and strengths that contribute to health

The Healthy Minnesota Partnership and Partnership staff used an asset-based approach to examine health in Minnesota. This includes identifying and supporting a community's own local resources that support health, which could cultural, social, and physical assets and capital.[13] Instead of reiterating deficits and disparities, this assessment attempts to elevate community strengths alongside health inequities. By knowing and understanding these strengths and assets as they relate to health, we can take action to build on and support them.

COVID-19 pandemic

Starting in late 2019, the world experienced a global pandemic of a coronavirus not found in people before that year, now known as COVID-19. Though the pandemic officially lasted in the United States for 3 years, COVID-19 still actively circulates in our communities. COVID-19 changed us—our health, our families, our communities, and our understanding of who we are and how we respond collectively to the real and perceived threats of disease.

The challenge for this assessment is not only to document the direct impact of COVID-19 illness and deaths on Minnesota and Minnesotans, but to recognize COVID-19's influence on the many issues highlighted in the assessment (however, this is not a COVID-specific report). COVID-19 did not impact people in Minnesota equally. Communities already marginalized from higher rates of poverty, less secure living situations, lack of access to health care (and other equity issues highlighted in this assessment) suffered and continue to experience a greater burden of illness, death, and economic impact on their lives.

Audiences and uses

A variety of audiences can use the statewide health assessment in a variety of ways.

- As a snapshot and story of health in Minnesota, it can be the spark or seed for further inquiry. It provides the information and data to describe **what** is happening across the social determinants and conditions for health in Minnesota, and how these factors impact the population's health.
- Once we understand what is happening, the assessment invites audiences to consider the "**so what**" (or why this information matters), and then the "**now what**" (that is, what should happen in response or to mitigate these trends and disparities).

Essentially, we can use this assessment to consider what creates health inequities and why they persist.

Partnership staff have also considered the following audiences for this assessment, and the different ways those audiences might use it (though this is not a complete or final list):

Table 2. Audiences and uses for the 2023 statewide health assessment

Audience	Uses could include
Healthy Minnesota Partnership and Minnesota government agencies: The Partnership drives the development of the statewide health assessment. Its members represent Minnesota government agencies, community organizations, educational institutions, and more. The Partnership develops and directs the assessment and statewide health improvement framework to improve the health and quality of life for people, families, and communities in Minnesota.	▪ Informing the health improvement framework ▪ Furthering the conversation on how conditions impact health ▪ Informing their own work ▪ Identifying areas for cross-sector collaboration
Local public health, health care organizations, and health plans: Governmental public health agencies and health care organizations across Minnesota develop local health assessments for their own communities. Assessments at the local level are conducted differently than how the statewide assessment is developed; this assessment documents alignment between state and local assessments.	▪ Considering how statewide findings are reflected in local assessments ▪ Using the assessment's organizational structure and/or assets-based approach in their own work ▪ Identifying possible system-level indicators at the local level
MDH leadership and staff: The Minnesota Department of Health strives to protect, maintain, and improve the health of all people in Minnesota. It envisions health equity in Minnesota, where all communities are thriving and all people have what they need to be healthy.	▪ Disseminating the message of what hinders health and creates health inequities in Minnesota ▪ Providing language and data for grants and programs ▪ Identifying the need or gaps in available systems-level data
Community organizations, advocacy groups, advisory boards and councils, and professional associations: Groups across Minnesota are concerned and engaged in efforts to reduce health inequities and disparities. These may include groups providing direct services or applying for funding, groups advocating on specific issues, groups collaborating around a specific cause, and groups coming together to share skills and strategies.	▪ Validating and providing evidence for efforts promoting health equity ▪ Providing language and data for grants and programs ▪ Providing narrative and framing to understand health beyond individual people and health care

Approach

Assessment structure and background

With the guidance of the Healthy Minnesota Partnership,[d] the Minnesota Department of Health (MDH) takes stock of the health of all people in Minnesota every 5 years through a statewide health assessment.[e] The 2023 Minnesota statewide health assessment, like those before it, tells the story of our health today and how opportunities, belonging, and interactions with nature have shaped that health overtime.

This assessment intends to help make clear the association between the conditions of our lives and our health, and to reveal the sources of health inequities experienced by many people in Minnesota. The assessment sets the stage for a statewide health improvement framework, which guides our collective efforts to help achieve the Partnership's vision:

The Healthy Minnesota Partnership vision is that all people in Minnesota enjoy healthy lives and healthy communities.

The Partnership helps expand the way policymakers and others understand and act for our health, and its vision is similar to the MDH vision:

The MDH vision is for health equity in Minnesota, where all communities are thriving and all people have what they need to be healthy.

Both statements stress that **all people** and **all communities** in Minnesota should have the opportunity to be healthy, but this is not true in Minnesota today for many of the reasons noted in the introduction of this assessment.

The Partnership and MDH determined that the 2023 Minnesota statewide health assessment contains four sections like the 2017 assessment, reflecting what we need to be healthy:

[d] The Healthy Minnesota Partnership is a collection of cross sectoral leaders from across Minnesota brought together by the Commissioner of Health. For a list of members, see Appendix A. Detailed methods of the 2023 statewide health assessment in this assessment.

[e] The statewide health assessment is required for accreditation of MDH by the national Public Health Accreditation Board. The assessment, produced approximately every 5 years, provides information and a framework for planning and action for anyone in the state, including MDH and the Healthy Minnesota Partnership. Public health accreditation standards require MDH to have a cross sectoral partnership guide the development of the statewide health assessment.

- **People**: This section looks at who we are, where we've come from, and how our real and perceived differences play a role in shaping our health.
- **Opportunity**: Our health is related to our opportunities for education, employment, income, housing, transportation, and more. Data exposes the persistent inequities in social and economic opportunity that continue to oppress many people in Minnesota and result in generations of poor health.
- **Nature**: Our health is shaped by our connection to and interactions with the natural environment—including the impact our actions have on the air, water, and soil—and the places we live, learn, work, and play.
- **Belonging**: Community inclusion and our connections with each other enhance or weaken our life-long health.

Gathering information for the assessment

The 2023 statewide health assessment uses existing data and information to explain how conditions impact the health of all people in Minnesota, and is a collaborative effort of groups and partners from across the state. Like previous statewide health assessments, these groups and partners collected and reviewed existing data from across Minnesota organizations and government agencies. New to this year's assessment, the Healthy Minnesota Partnership elevated collecting data on systems and structures whenever possible, and using a strengths-based approach to review and present the data. For more information on the groups involved and the methods they used, see Appendix A. Detailed methods of the 2023 statewide health assessment in this assessment.

▶ The assessment calls out data points throughout the report with green triangles, like this one.

Also new to this assessment, the Partnership called for increased community engagement. The Health Equity Bureau of the Minnesota Department of Health[f] supported the planning and implementation of assessment engagement activities for this assessment listed below. Although the community engagement activities listed below allowed for additional input and perspectives, future statewide health assessments can improve on these efforts and engage more diverse audiences. For more information on methods and levels of community engagement used, see Appendix A. Detailed methods of the 2023 statewide health assessment in this assessment.

Community engagement activities for this statewide health assessment have included:

- **Community engagement inventory**: The MDH Health Equity Bureau and other partners stressed the importance of not overburdening communities that might be fatigued from already participating in

[f] In 2022-2023, the MDH Center for Health Equity became part the Health Equity Bureau, and work conducted for the statewide health assessment under both entities will cite the Health Equity Bureau for this report.

other research or public health activities or due to the COVID-19 pandemic. To learn more about recent community engagement activities and existing findings, MDH staff reviewed community health assessments and other health-related plans and assessment from across and outside the state. Partnership staff then examined the community engagement approaches and findings in these assessments, and refined this assessment's activities. For more detailed methods and findings from this inventory, see Appendix B. Community engagement inventory in this assessment.

- **State strength survey**: In June 2023, Partnership staff conducted an online survey to determine whether the state strengths cited in the 2017 statewide health assessment were still relevant for this year's. 538 respondents shared their thoughts, which are collected and shared throughout this assessment in excerpts highlighted in green in the beginning of Opportunity, Nature, and Belonging sections, and in Appendix C. State strengths survey findings.

- **Group conversations**: Between April and July 2023, groups gathered to discuss their communities and the strengths and assets that contribute to their health and well-being. Eight groups of approximately 110 people shared their thoughts, which are highlighted in yellow throughout the Belonging section, and in Appendix D. Group conversations findings.

- **Public comment**: MDH will post this first draft of the 2023 Minnesota statewide health assessment for public review and feedback. This is an early draft, and MDH and the Healthy Minnesota Partnership will review feedback and incorporate it into the final statewide health assessment.

Policy area overviews

This assessment also includes policy area overviews for the first time, each of which define a policy area and discuss how it impacts health. Each section of the assessment contains a policy area overview:

- **Paid leave** (opportunity): This policy area expands on past work on paid family leave and health, including an MDH white paper[14] and a Healthy Minnesota Partnership narrative. [15] Read this policy area: Policy area overview: Paid leave.

- **Tree canopy cover** (nature): Tree canopy cover lends itself to many health benefits. The Healthy Minnesota Partnership chose this policy area as a more specific way to reflect the health impact of climate change. Read this policy area: Policy area overview: Tree canopy cover.

- **Universal broadband internet access** (belonging): In December 2020, the Healthy Minnesota Partnership recognized that a broad policy of universal broadband and virtual access could have reduced the impact of the COVID-19 pandemic by strengthening response activities and community resilience. Read this policy area: Policy area overview: Universal broadband internet access.

These policy areas reflect the Partnership's interest in using a Health in All Policies approach[g] for the statewide health improvement framework that flows from this assessment, and are a result of past Partnership work and discussion.

Reflections and limitations

Conducting a statewide assessment of health is complex, and includes the following limitations:

This assessment can only say a little about a lot of things

This statewide health assessment provides snapshots of many data points to draw an overall picture of health and the conditions that create it. There is a wide body of research and writing on many topics in detail; for more information, see End notes and references in this assessment.

Only limited statewide data is available for some populations, such as people with disabilities, the LGBTQ+ community (lesbian, gay, bisexual, transgender, and queer/questioning), and specific ethnic and cultural groups like Somali and Hmong populations. This makes it challenging to make population-level comparisons and provide a complete picture of the health and health inequities experienced by these populations.

Data is subjective, not objective

The people and groups that created this assessment made a multitude of decisions throughout its development. Humans made these decisions and, as much as we strive for inclusivity, intentionality, and equitable balances of power, the people and groups involved in this project acknowledge our biases and how they impact our decisions.

Data is often thought of as objective, but we should not ignore the human factor in data. Humans decide who is involved in data projects, what questions to ask, how to collect data, how to perform analyses, and how to interpret data. It is impossible for humans to be completely objective, as that would exclude them from the activity itself.

Data categorizes us but we live intersectional lives

Each person is unique, each population is unique, each community is unique, and each has value. Many people have multiple identities and multiple experiences. However, quantitative research methods

[g] Health in All Policies is a concept defined by the American Public Health Association as "a collaborative approach to improving the health of all people by incorporating health considerations into decision-making across sectors and policy areas." Rudolph, L., Caplan, J., Ben-Moshe, K., & Dillon, L. (2013). Health in All Policies: A Guide for State and Local Governments. Washington, DC and Oakland, CA: American Public Health Association and Public Health Institute.

require researchers to create categories for analysis and grouping people, populations, and communities in such a way that hide some of our real and important differences while allowing comparisons (for more context, see There is deep diversity within diversity, below).

In addition, many issues in this assessment could fit in more than one section, because many issues overlap and have multiple dimensions. Staff made certain editorial choices to increase this assessment's readability.

A statewide assessment can only start the conversation about health in the community. The work of advancing health equity requires engaging with people and communities to understand our unique circumstances more fully, and to shape action for change.

Race and class impact health in distinct ways

This assessment provides information by race/ethnicity as often as possible, to reveal structural racism and sustain the conversation about race and health in Minnesota. In some places, the assessment also presents data by income. While society sometimes uses income to signify social class, income and class are not the same; social class or socio-economic status includes additional factors like occupation and education.

Race, income, and social class are related, because racism and its effects have relegated BIPOC and American Indian populations to a lower socio-economic status in the United States.[h] It can be tempting to assume that talking about poverty alone is sufficient in considering the effects of race/ethnicity on health, but to do so would ignore the separate effect of racism on health, which is significant in and of itself.

In some Minnesota counties, the populations of American Indians and people of African, Hispanic/Latine, or Asian descent are quite small (2% or less). In these regions, it is essential to consider the role of social class in shaping health inequities through generations of white families.

There is deep diversity *within* diversity

Although much of the data here is presented by race/ethnicity to reflect the diversity of the state's populations, the differences **within** each population group can be as great as the differences **between** different population groups.[i] While public health as a field has made progress in differentiating between different groups (like African-born people from U.S.-born African Americans, for example, and

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[h] Krieger and Bassett state: "The facts of being Black derive from the joint social relations of race and class: racism disproportionately concentrates Blacks into the lower strata of the working class and further causes Blacks in all class strata to be racially oppressed." For more information, see: Krieger, N. and Bassett, M. (1986). "The health of Black folk: Disease, class, and ideology in science." *Monthly review, 38*, 74-85.

[i] The category of Asian or Asian Pacific Islander (API), for example, encompasses over 40 different countries with very different languages and cultures. For more information, see: About the Council on Asian Pacific Minnesotans (https://mn.gov/capm/council/).

identifying significant Asian groups like Hmong Americans), in general the data available for a statewide health assessment does not permit the analysis of all possible differences within every population. Data throughout the assessment should be understood as a starting place for understanding the health of different populations, but does not tell the whole story.

Trauma and resilience are part of change and hope

The story of health is one of both trauma **and** resilience. When looking at disparities by race and ethnicity, it is easy to feel that everything about Minnesota's BIPOC and American Indian populations must be cause for concern. However, focusing solely on despair is inaccurate and unhelpful, because it perpetuates prevalent models and narratives that focus on deficits and don't take community strengths into account.

Vulnerability and resilience both come with trauma. Minnesota's BIPOC and American Indian populations have endured both recent trauma and generations of trauma. Vulnerabilities (or risks) of trauma include health, socioeconomic, and educational disparities. Resilience factors resulting from trauma include community assets like preserving language and culture, strong and close-knit cultural communities, and adaptability and determination in the face of adversity. Efforts to advance health equity must create culturally-grounded solutions by considering vulnerabilities stemming from trauma while supporting the resilience that exists within communities.

Focusing on individuals can overshadow the role of systems

Most of what we know about health comes from data collected on individual people: individual rates of disease or injury, individual behaviors like smoking and exercise, and more. When we emphasize personal choice as *the* only strategy for improving health, we attribute health problems to a single person alone, rather than seeing each person within the surroundings that influence their health. However, as we grow our understanding of the factors that create health, we can better identify the systems and structures that shape individual and community health.

The tension between studying the health impacts of individuals vs. systems persists because so much of what we know about health comes from research on individual people, and because the person and their ability to make choices is still important. We are challenged to move from focusing on individuals to analyzing communities, and to grow better at addressing the policies and systems (economic, educational, social, and more) that create or hinder health.

Across time

This assessment embraces the multiple perspectives of past, present, and future. It includes references to past actions and historical trauma. By highlighting current inequities, we set the stage for a different tomorrow.

- **We must learn about and understand the past to confront the issues of today**. If we cannot or will not see how historical policies impact health, we cannot understand health inequities or make good decisions for the future. The past also gives us examples of hope and progress.
- **We must act in the present**. Historical reflection and understanding should lead to today's concrete steps for change. We can always do something now.
- **We must engage in the work of advancing health equity with hope for the future**. It is easy to grow overwhelmed by the severity of health inequities. With growing partnerships and the wisdom of many, we can build our collective efforts toward meaningful change.

People

In 2021, 5,742,036 people lived in Minnesota.[16] Just over half of the state's population (over 3 million) live in the seven-county Twin Cities metropolitan area, while about 45% (over 2 million) live in Greater Minnesota (the area outside of the seven-county Twin Cities metro).[17]

Experts project our state's population will grow. According to a 2020 report[18] from the Minnesota State Demographic Center:

- Overall, Minnesota is projected to gain nearly 900,000 residents between 2018 and 2053.
- Minnesota's oldest residents—those aged 85 and above—are expected to more than double in the next 35 years, from 120,000 to over 270,000.
- Populations of Color and American Indians, are projected to grow by more than one million residents between 2018 and 2053—exceeding one-third of the total population. Virtually all the state's net population growth in the coming decades will be from Populations of Color.

Figure 3. Minnesota population in the Twin Cities metro area vs. Greater Minnesota, 2021

Differences among us: Challenge of COVID-19

Where we grow up, where we live, work, and play all deeply influence our identities, values, opportunities, and ultimately our health. People in Minnesota are all ages, sizes, appearances, abilities, genders, and sexual orientations, and follow different beliefs and practices. While Minnesota's communities have their own histories, personalities, and other unique characteristics, together we are Minnesota. Minnesota is urban *and* rural. Counties in the Twin Cities metropolitan area include farmland and large open areas. Cities and towns in greater Minnesota share many of the same challenges as the Twin Cities metro.

The lives of all people in Minnesota are intertwined. Health and well-being, sickness and death, courage and strength, trauma and resilience: none of these are constrained by geographic or social categories. The COVID-19 pandemic created a deeper shared experience for all people in Minnesota—stay safe at home orders, working from home, family members who became sick or died. It also exacerbated differences. Front-line and service workers did not have the opportunity to work from home and faced increased risk of catching COVID-19. People in rural areas without access to broadband could not easily attend school or work from home. People in urban areas had the risk of exposure to more people.

- People who identify as BIPOC (Black, Indigenous, and People of Color) and American Indian in Minnesota had an increased risk from COVID-19 due to longstanding inequities, including higher rates of heart disease, obesity, diabetes, high blood pressure, and kidney or liver disease; higher concentrations in jobs that are considered essential, do not allow working from home or cannot be done remotely (thus increasing face-to-face contact); living quarters that do not allow for social distancing; and less access to health care.[19]

COVID-19 challenged our ability to think as "one Minnesota." The pandemic also showed us how we can, and do, work together through adversity:

- People across the state lost loved ones because of COVID-19. We grieved together, commemorating the growing death toll and remember those who died.
- In efforts to protect their health and lives, older adults were isolated in their homes and congregate settings, including hospitals. Families and service providers attempted to find creative ways to connect people when they couldn't be face-to-face.
- Teachers, students, and parents in every community shifted to online learning, through unprecedented challenges.
- Employers quickly enabled employees to work from home where possible.
- Communities and organizations were quick to point out inequities that put many populations at greater risk from COVID-19, including those marginalized and/or experiencing inequities, even as systems were slow to adjust.

- Faith communities streamed services and ceremonies to continue to meet our spiritual needs.
- We recognized and honored our health care workers for their heroic efforts to respond to the pandemic, even as their lives were put at risk.
- Emerging data shows long-term, negative health outcomes resulting from people having delayed medical care due to the pandemic, from inaccessible or unavailable care, stay-at-home orders, and the health care system's need to focus on COVID-19.
- The long-term impact of the pandemic on children' and youth's mental health and social development remains to be determined.
- The pandemic brought new attention to inequities across the state, country, and world, while also exacerbating those inequities.

The pandemic changed and challenged us. These years were not smooth or without conflict. Going forward, we must harness our commitment and shared vision to create and sustain a Minnesota where we work together to assure everyone can thrive.

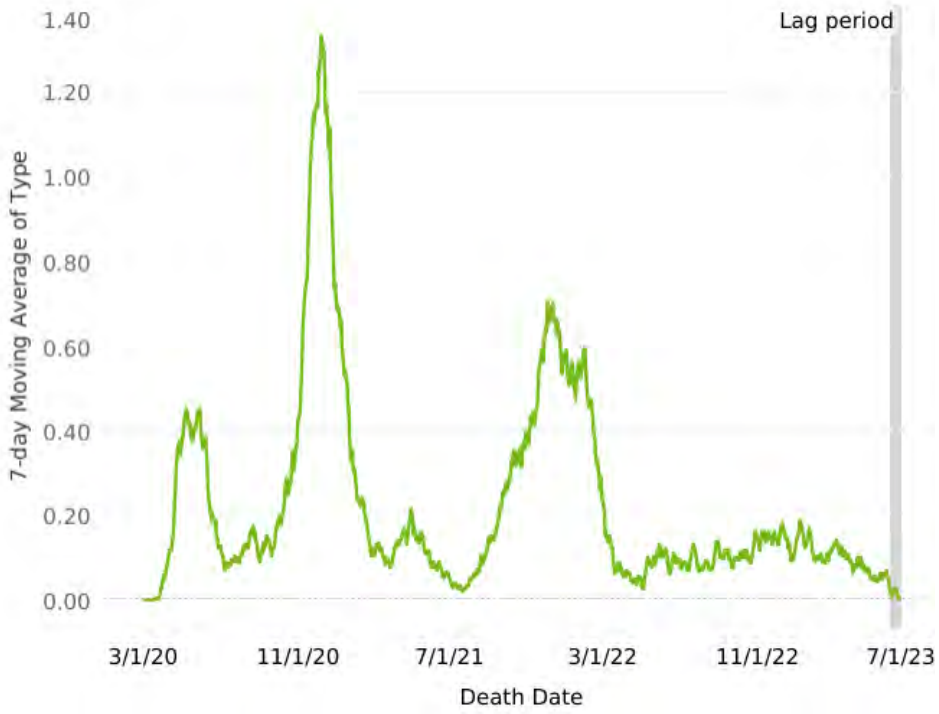
COVID-19 data[j]

Minnesota reported 1,799,421 confirmed cases of COVID-19 from March 2020 to June 2023, and 14,875 deaths for the same time frame. COVID-19 was the third-leading cause of death in Minnesota in 2020 (10.0% of all deaths), behind cancer (19.0%) and heart disease (16.4%). For those for whom we have data on hospitalization, 85,609 people were hospitalized and 14,421 were admitted to intensive care.

Early in the COVID-19 pandemic and during the fall 2020 surge, prior to a vaccine and therapeutic treatments, a smaller number of cases resulted in much higher rate of hospitalization and death. As vaccines and therapeutics became widely available, rates of hospitalization and death shrank during the surge in cases between fall 2021 and February 2022. Several studies demonstrate that vaccines, boosters, and therapeutics reduce COVID-19 severity and mortality.

[j] Healthy Minnesota Partnership staff may update this data prior to releasing the final statewide health assessment.

Figure 4. COVID-19 mortality rate in Minnesota, 7-day moving average, March 2020 to June 2023



Children and adolescents

In 2022, almost 23% (1.3 million) of the state's population was under 18. Over half of our state's children (56%) live in the seven-county Twin Cities metro, and the remaining 44% live in the remaining 80 counties.[20]

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Children and youth with special health needs have a chronic physical, developmental, behavioral, or emotional condition (or are at increased risk for one). Children with a disability, like all children, bring joy to their families and communities. They can also face a lifetime of social challenges, including discrimination and isolation. Other challenges include stress on the family, increasing financial burdens, and difficulties accessing adequate physical and mental health care and social support.

- In 2020/2021, 17.5% of children and youth living in Minnesota (226,402) reported having a special health care need.[21]

Understanding how many people in Minnesota experience poverty is essential to identifying health disparities and inequities; this is especially true for younger people. It is critical to address these challenges facing our children, so every child has the opportunity to grow up healthy. Although Minnesota has a lower proportion of people living in poverty than the U.S. average, in 2019 it affected about one in eleven people in Minnesota and one in nine children in Minnesota.[22]

- In 2021, 11% of children in Minnesota lived in poverty. This ranged from 4% to 30% of children across counties in the state.[23]

Aging

From 2030 to 2050, Minnesota is projected to have a larger proportion of people over 65 than ever before. The number of Minnesotans over 65 is projected to be larger than that of school-age children by 2025.[24]

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- Currently, about 17% of the state's population are people aged 65 and older. However, this population is not distributed evenly across geography or race. In 2023, 32% of residents of Greater Minnesota counties are projected to be 65+ vs. 19% for urban counties. About 7% of are adults who are from communities of color.[25]

- A little over half (54%) of people 65 and older in Minnesota identify as female.[26]

This stage of life presents new opportunities and challenges for health. Many older adults find a renewed sense of purpose. Some continue careers, applying knowledge and expertise gained over many years. Others embrace new opportunities to volunteer in the community, to lean into different work, or to take on a new role in their family.

- In 2021, 33.3% of Minnesota residents aged 65-74 had volunteered in the past year.[27]

As people in Minnesota age, they are more likely to be affected by one or more disabilities. (For more data, see People with disabilities in this assessment.) The most common disabilities among those over 65 are difficulty walking, hearing, and performing basic activities outside the home.[28]

It can also be challenging for older adults to secure adequate income after they move out of the workforce and depend on other sources of income, like Social Security.

- Women 65 and older have long experienced higher rates of poverty than men of the same age; this rate increased in 2021. About 40% more women 65 and older in Minnesota are living in poverty compared to a decade ago, while the overall population in that age group has grown only about 25%.[29]

- When factoring in race, disparities compound: The median income for white adults over age 65 in Minnesota is $52,600; the median income for Black adults of the same age is $23,211.[30]

Minnesota and its communities can build infrastructure to maximize the strengths of Minnesotans 65 and older, to allow people to age well and prevent social isolation. Areas of action to consider include access to broadband internet and using it to strengthen connections, existing housing maintenance and new housing design to allow aging in community, flexible work arrangements to use expertise and skills, and communities designed to support social connectedness and physical well-being.

Race and ethnicity

Minnesota's population continues to grow more racially and ethnically diverse. In Minnesota, people who are BIPOC and American Indian make up 20% of the total population. The state demographer estimates that the number of people from communities of color and American Indians in Minnesota will increase by more than one million between 2018 and 2035.[31]

Placeholder:
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This change is taking place statewide but looks different depending on age and location.

- More than 33% of Minnesota's children are from communities of color or are American Indian. In contrast, about 20% of adults age 18-64 and just 7% of adults 65 and older identify as BIPOC.[32]
- Minnesota's racial and ethnic diversity is distributed unevenly across the state; communities of color are more likely to live in metro areas than rural areas.[33]

Race and ethnicity are powerful indicators of the opportunity people have to be healthy. Data shows that people in Minnesota of American Indian, African American, Hispanic/Latine, Asian, and African descent experience poorer outcomes in education and economic status than people who are white, and consequently poorer health outcomes. Understanding systemic racism and generational structural (social, economic, political, and environmental) inequities are key to understanding how different factors create or limit health. These inequities have a greater influence on health outcomes than a person's choices or their ability to access health care, and are distributed unevenly across communities.

Historical trauma and threats to health

Historical trauma refers to the collective emotional and psychological injury from this catastrophic history over the life span, across generations, and continuing today. Effects of trauma impact health and well-being today; this trauma is the effect of systemic inequities inflicted on groups of people and their

descendants because of their race, creed, and ethnicity. As a result, many people who experience generational trauma also have higher rates of mental and physical illness, substance abuse, and erosion of family and community structures.

This persistent cycle of trauma destroys family and communities and threatens the vibrancy of entire cultures. Historical trauma is not completely relegated to the past; its impacts and effects still resonate today.[34] It is imperative to develop ways to support community healing and well-being, like culturally specific services, and recognize communities' inherent resilience.

American Indian[k]

There are over 574 federally recognized tribes within the United States, and 11 federally recognized tribes within the state of Minnesota.[35] There are seven Anishinaabe reservations that are in the more northern part of the state, and four Dakota communities that are in southern Minnesota. The Anishinaabe and Dakota tribes and their ancestors have lived in and called this area home long before European settlements and the establishment of the State of Minnesota in 1858. The current locations of the Anishinaabe reservations and Dakota communities were established either during a period of treaty making with the United States, by Executive Order of the President of the United States, or by other agreements.[36]

Tribal nations have inherent sovereignty, which was codified through treaty-making with the U.S. federal government. The tribes in Minnesota are sovereign nations with their own governments and their own public health authority. Each tribe has its own relationships with local, state, and federal governments, as well as with other Tribal partners, to best serve the members of its community in the way it determines is best.[37]

Each sovereign Tribal nation determines Tribal membership or citizenship within a Tribal community. Not all people in Minnesota who identify as American Indian may be members of a Tribal community. Additionally, due to population migration through forced relocation by government policy or voluntary relocation due to lack of opportunity, not all American Indians who live in Minnesota identify as Anishinaabe or Dakota, the two largest cultural groups of American Indians sharing geography with Minnesota.[38]

- In 2022, American Indians comprised about 1% of Minnesota's total population.[39]

[k] The term "Indian" was given to the Indigenous people of North America by the European explorers when they first encountered the New World, mistakenly thinking they had reached the Indies. Individual people have different preferences for the term used to describe Indigenous people in the United States, including the names they call themselves in their own languages, American Indian, and Native American. This publication follows the convention of using "American Indian," as that is the term used in some state laws and in the U.S. Census for Indigenous people to identify themselves.

- Most American Indians in Minnesota live in Greater Minnesota (68.7%), on either federal-designated reservation lands or off the reservation.[40]
- Minneapolis, Saint Paul, Bemidji, Duluth, and other urban locations have a high density of American Indians or American Indians who live off federally-designated land.[41]
- In 2020, about 12,000 American Indians lived in Hennepin County, and about 5,000 lived in Ramsey County.[42]

Black or African American

Between the 16th and 18th centuries, hundreds of thousands of Africans were enslaved in establishing the United States and its colonies. Historians estimate that 6 to 7 million enslaved African people were forcibly transported to the Americas and Caribbean during the 18th century alone.

From 1916 to the 1980s, millions of African Americans, descended from those enslaved people, migrated from the southern United States to northern cities, dramatically transforming the demographics and social structures of major U.S. cities, including Detroit, Chicago, Cleveland, and New York. During this period, the population of African Americans in Minnesota also grew by nearly 100,000 people. African Americans moved from the south to the north to escape state and local laws enforcing racial segregation (known as Jim Crow laws), but nonetheless encountered racism and policies of exclusion in the north, including in Minnesota.[43]

Minnesota is also home to foreign-born people and people with ancestries from Somalia, Ethiopia, Liberia, and other African countries. As stated previously, different data sets use different categories or response options, and some may not capture the multiple ethnic or cultural groups that people identify with (for more information, see A note about racially and ethnically diverse populations in this assessment in this assessment).

- In 2022, about 7% of people in Minnesota identified as Black or African American.[44]
- In 2021, approximately 350,000 people living in the Twin Cities identified as Black and about 75,000 in Greater Minnesota.[45]

Immigration

Minnesota's population includes people from all over the globe. Immigrants bring traditions and languages from across the world into their neighborhoods and workplaces and may also bring insights and connections to local and global communities and markets. Children of immigrants can navigate multiple cultures, which can be an economic asset.

Refugees are people who were forced to leave or escaped their home countries, often because of war, disaster, or oppression. Refugees face unique challenges, including the trauma and upheaval of the refugee experience and challenging conditions in refugee camps.

Today, the largest populations of foreign-born people in Minnesota were born in Mexico, Somalia, India, Laos, China, Ethiopia, and Thailand. Minnesota is also home to a large population of Hmong[l] people (more than 86,000, including first, second, and third generations of Hmong Minnesotans).[46]

- About 9% of the Minnesota population is foreign born.[47]
- About 4% of the population is native born (born in the U.S.) with at least one parent foreign born.[48]
- Cumulatively, 111,109 primary refugees arrived in Minnesota between 1979 and 2020.[49]

LGBTQ+

Population-based data on people who identify as lesbian, gay, bisexual, transgender, queer or questioning, and more (LGBTQ+) more available today than in the past. In July 2021, the U.S. Census Bureau started collecting information on respondents' sexual orientation and gender identity in its Household Pulse Survey. The Minnesota Student Survey continues to include questions on sexual orientation, gender identity, and gender expression in surveys for eighth-, ninth-, and 11th-graders.

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- A 2019 Gallup poll found that 4.1% of Minnesota's population overall identified as LGBT+.[50]
- In the 2022 Minnesota Student Survey, 8% of responding students identified as bisexual, 3% as gay or lesbian, and 1-2% as transgender.[51]

Data from the Minnesota Student Survey, the Behavioral Risk Factor Surveillance System, and surveys conducted by the Rainbow Health Initiative shows significant health concerns for LGBTQ+ youth and adults in Minnesota. In 2021, Rainbow Health Initiative found that 77% of LGBTQ+ respondents surveyed had experienced some type of anti-LGBTQ+ behavior from others in the past year and 35% had been physically attacked or threatened because they were LGBTQ+ at some point in their lifetime.[52]

[l] Hmong people are an ethnic group originally from the mountainous regions of China, Vietnam, Laos, and Thailand.

People with disabilities

People with disabilities have diverse experiences and needs, as disabilities can affect a person's vision, movement, thinking, remembering, learning, communicating, hearing, mental health, or social relationships.[53]

Definitions of disability vary among researchers, policymakers, and the public; some definitions are narrow and only include disabilities we can see, and other definitions are broader and include disabilities that can be invisible, like intellectual disabilities. Without a universal definition, the reported rates of people with disabilities in Minnesota vary. Disability communities advocate for better data collection.

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- As of 2021, 11.5% of the population in Minnesota were living with one or more disability.[54]
- 51% of people with disabilities live in the Twin Cities area and 49% live in Greater Minnesota.[55]
- 13% of Minnesota students surveyed in 2022 reported having a physical disability or long-term health problem (e.g., asthma, cancer, diabetes, epilepsy, or something else) lasting 6 months or more.[56]

People with disabilities belong to families and many communities, including communities already impacted by health inequities. The intersection of race, ethnicity, age, language, gender, or social economic status can also impact people with disabilities. As of 2021, the following populations had similar or higher rates of people with disabilities than the overall state rate (11.5%):

- 17.4% of American Indians, 12% of Black people in Minnesota, and 12% of white people in Minnesota reported having a disability.
- The rate of people living with one or more disabilities is higher among older adults, with 28.6% of adults over 65 living with a disability, compared to 4.5% of children under 18 years old and 9.6% of working-age adults.[57]
- Almost one in five people in Minnesota with a disability (23%) live below the Federal Poverty Level, which is double the statewide poverty rate.[58]

Having a disability doesn't mean a person isn't healthy. Being healthy means the same for all of us—getting and staying healthy, and having supports to lead full and active lives.[59] However, some challenges for people with disabilities arise because physical environments and social settings are not structured to support their full participation—like the lack of adequate accessible transportation, limited housing, unequal access to programs and facilities, barriers to education and employment, and reduced income.[60,61]

People experiencing homelessness

Nationwide, the rate of people experiencing homelessness has increased since 2017 by 6%.[62] Though increasingly visible, the number of people who are experiencing homelessness and people who are unsheltered in our state can be difficult to capture and this can render them to be seemingly invisible to researchers looking at health inequities. Several organizations are working to understand the systemic causes of homelessness and the number of people affected, but much work remains.

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- People experiencing homelessness increased by 10% between 2015 and 2018.[m,63]
- In 2018, 11,371 people were experiencing homelessness during a point in time count; this included a count of people experiencing homelessness on American Indian reservations for the first time.[64]
- In 2022, 7,917 people reported experiencing homelessness during a January point-in-time count.[65]
- In 2018, 32% of those experiencing homelessness were children (17 or younger) living with their parents. This number has remained relatively flat since 2015.[66]

American Indians, Black and African American people are more likely to experience homelessness than white non-Hispanic counterparts.

- In 2019, American Indians are 30 times more likely to experience homelessness than their white non-Hispanic counterparts.[67]
- In 2019, Black or African American people were 12 times more likely to experience homelessness than their white non-Hispanic counterparts.[68]

There is also a rising rate of homelessness in older adults.

- Since 2015, the rate of adults over 55 experiencing homelessness has increased by 25%.[69]

People experiencing incarceration

There are 2 million people in the nation's prisons and jails, a 500% increase from 40 years ago. People experiencing incarceration or who have experience with the U.S. justice system come from our families

[m] At the time of this report, Wilder Research was planning its 2023 Minnesota Homeless Study for October 2023. Wilder will release updated data before the next statewide health assessment in approximately five years.

and communities. We know incarceration impacts a person's health, their families, and their communities.[70] High incarceration rates and the cycle of incarceration harm communities by increasing family and neighborhood instability, reducing community attachment and investment, and reducing expectations and hopes for the future.

Placeholder:
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African American, American Indian, and Hispanic/Latine populations are vastly overrepresented in Minnesota's prison and jail populations. This is not because of greater rates of crime in these populations, but due to inequities in arrests, convictions, and sentencing (especially for drug-related crimes). For example, white people distribute and use drugs at the same or higher rates than other racial and ethnic groups but are arrested and convicted far less often because policing efforts are concentrated in low-income areas and on street-level drug use. Moreover, African Americans are more likely than white people in Minnesota to be arrested, and once arrested are more likely to be convicted. If convicted, African Americans are more likely to face stiffer sentences.[71]

- As of January 2023, there were just over 8,000 adults in prison in Minnesota.[72]
- People who identify as white make up 83% of the state's population, but represent only 51% of the prison population in Minnesota. People who identify as Black make up 7% of Minnesota's population, but represent 37% of the prison population.[73,74]
- In 2021, youth from communities of color were twice as likely to have experienced having a parent incarcerated.[75]
- Youth in Greater Minnesota were 1.2 times more likely to have experienced having a parent incarcerated or to have experienced homelessness compared to youth in the seven-county Twin Cities metro area.[76]

Opportunity

The concept of the American dream, as we traditional understand it, describes a country where all of us should have the opportunity to make a life for ourselves and to improve our lives and the lives of next generations.[n] Ideally, "opportunity" means having the chance to experience success at every stage of life, from early childhood to growing old. However, the conditions of our lives constrain or expand our available choices and opportunities. These conditions, largely created and shaped by policy decisions made over time, include the schools we can attend, the jobs open to us, how we're able to move around in our communities, and the kinds of food available to us.

Our opportunities are interconnected. For example, employment drives income. Housing depends on income, employment, and transportation opportunities. Employment depends on our opportunities for training, education, transportation, and our social connections. Our ability to manage the demands of family or to care for our health is influenced by whether our jobs offer benefits like health insurance and paid leave.

The following data shows these interconnections:

- In the area around the Twin Cities, transportation is more financially burdensome for lower-income, single-parent households (i.e., those with an income of $33,376 versus those with an income of $66,751).[77]
- In 2021, the combined cost of transportation and housing for the typical family in Minnesota (two adults, one child, 1.5 workers) accounted for 21.8% of median household income.[78]
- In 2021, 20.2% of people in Minnesota reported foregoing health care (dental, mental, prescriptions, routine medical, or specialist care) due to cost. Some groups of people were more likely to report foregoing care, including people who were: uninsured, had individual or public insurance plans, American Indian, Hispanic/Latine, age 26-64, with a chronic condition, with income at or below 200% of the federal poverty guidelines.[79]

Opportunity and our health

The opportunities envisioned in the American dream—to earn a living, to own property, to determine the course of one's own life—are also important for health. Research is very clear that several related things can either improve or reduce our changes to be healthy: a good education, a permanent home,

[n] The American Dream originated in 1931 in James Truslow Adams' *The Epic of America*. He called it "that dream of a land in which life should be better and richer and fuller for everyone, with opportunity for each according to ability or achievement." For more information, see: The American Dream (https://www.loc.gov/classroom-materials/american-dream/).

work with good pay and health insurance, sufficient and regular food, and safe places to play, among others. It is also clear that many entire populations in Minnesota do not have these key opportunities to shape a healthy life, as this assessment shows.

Opportunity and COVID-19

COVID-19 had an immediate and direct impact on opportunities for people in Minnesota. Children and families were confronted with multiple challenges: most schools moved online, and some parents juggled working from home while caring for children; other parents had to find different ways to care for their children; children were thrust into a new learning environment. This resulted in a decline in the number of people in Minnesota in the workforce, especially among women.

Many businesses had to close, for at least a short while. Even temporary closures led to increases in unemployment. The nature of some people's jobs exposed inequities; some employers allowed people to work remotely, some jobs more easily allowed for remote work, some people continued in jobs that increased their risk of contracting COVID-19, and some people lost their jobs altogether.

The pandemic worsened housing shortages and systemic housing inequities: some people (like older adults, for example) were isolated in their homes; others, like newer immigrants, worked in jobs that increased their risk of contracting COVID-19 and of bringing COVID-19 home where it was impossible to socially distance. People who lost their jobs struggled to pay rent and mortgages. Health care settings became sources of both healing and disease, as health care workers struggled to care for people among increased exposure to the virus. Transportation systems underwent major shifts, including reduced demand for public transportation, a rapid increase in demand to ship essential goods, and relying on a smaller workforce to keep a core transportation system functioning.

State strengths survey: Opportunity

As part of the 2023 statewide health assessment, the Healthy Minnesota Partnership surveyed Minnesotans about state strengths that support health. Respondents reviewed strengths noted in the 2017 Minnesota statewide health assessment, shared their agreement or disagreement whether those strengths supported health, and identified missing strengths. Although the survey does not necessarily include a representative sample of all Minnesotans, 583 people completed it.

Overall, survey respondents agreed that several strengths support the health of people in Minnesota. However, respondents noted that those strengths benefit some people and groups more than others depending on who they are or where they live. Respondents noted that some strengths are not available to all people in Minnesota and that many disparities exist.

For more detailed methods and results from this survey, see Appendix C. State strengths survey findings in this assessment.

Table 5. State strengths related to opportunity

State strength	Agreed or strongly agreed	Neutral	Disagreed or strongly disagreed
Availability of jobs	78.7%	14.6%	6.7%
Social programs for families	70.1%	20.0%	9.9%
Support from local health and state departments	69.5%	20.2%	10.3%
Strong educational system	67.4%	17.2%	15.5%
Many people have health insurance	66.4%	18.7%	15.0%
Access to transportation	40.3%	23.7%	36.0%

Source: Minnesota Department of Health, 2023

Survey respondents shared feedback on several strengths related to Opportunity, like the education system, health insurance, jobs, social programs for families, support from local and state departments, and transportation. Most respondents agreed that the availability of jobs and social programs for families were state strengths. Respondents also suggested other strengths that support health, like thriving local businesses, health care systems (Mayo, University of Minnesota), a mix of public and private colleges, and libraries.

Respondents were most likely to disagree that access to transportation, having a strong educational system, and people with health insurance were state strengths. Many respondents noted the lack of transportation in Greater Minnesota is especially challenging. Many also suggested the state needs more affordable housing statewide.

Education

Education is one of the clearest and strongest predictors of lifelong health. When we have more education, we are more likely to live longer, healthier lives. Success in school leads to higher income, which can improve living conditions. Education allows us to find better-paying jobs, with healthier working conditions and benefits like health insurance and paid leave. Our children are more likely to be healthy, too.[80,81]

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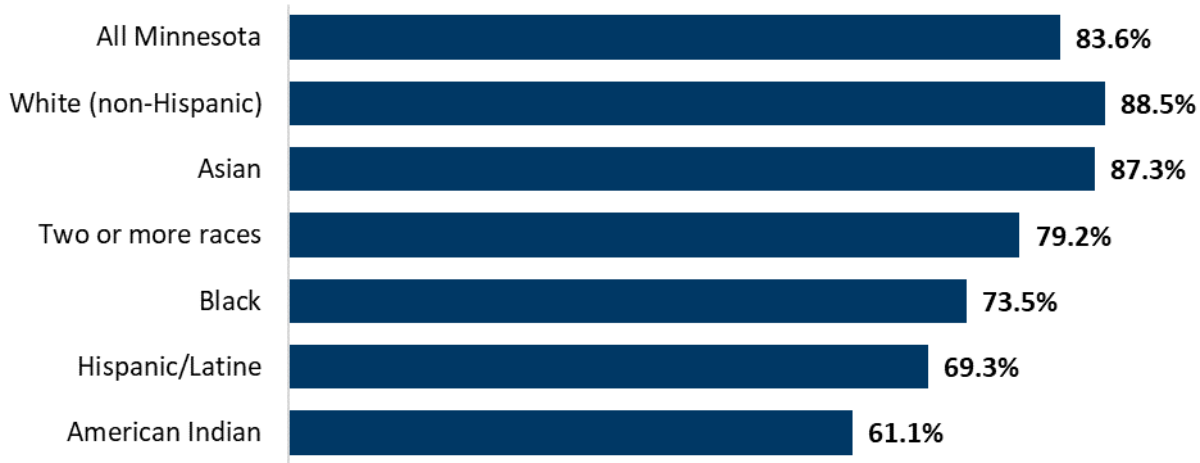
Though Minnesota's on-time graduation rate is high (83% in 2022), disparities exist:

- In 2022, rate of students graduating on time was lower among some populations than the statewide rate (83%), including for those identifying as American Indian (61%), Hispanic (69%), and Black (74%). Those identifying as Asian (87%) and white non-Hispanic (89%) graduated on time at rates slightly higher than the overall state rate.[82]

Figure 6. Rate of high school graduation in four years ("on time") in Minnesota, by race/ethnicity, 2022



Source: Minnesota Department of Education, 2023

- Students with higher income were more likely to graduate on time than those with lower income.[83]

- Less than half (48%) of tested Minnesota's third-graders[o] are proficient in reading[84]
- A larger share of white non-Hispanic third-graders are proficient in reading compared to third-graders of other races and ethnicities. Third-graders from families with higher-incomes were also more likely to be proficient in reading than those from families with lower income.[85]
- Education also impacts generations. Children of mothers with more education read more proficiently by third grade than their peers with mothers with less education.[86]

Since education is a major predictor of health outcomes, we should also support Minnesota children in their career and college paths. For more information about students' sense of belonging in school, see Belonging in school in this assessment.

- 45% of students completing the Minnesota Student Survey in 2022 reported that they planned to attend a 4-year college; 8% planned to attend a 2-year technical or community college; and 8% planned to get a job.[87]

Income

Income shapes many areas of our lives: where we live and the stability of our living arrangements, the condition of our homes, the schools we attend, the kinds of recreation in which we can participate, care options for our family members, and more.

On average, if we earn more money, our overall health is better. Wealth and the accumulation of income impacts health; research shows people with greater wealth generally live longer and have lower rates of chronic disease.[88]

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Low-income households face difficult choices when using their limited resources to support health and well-being.

- Inflationary pressures have compounded economic challenges for families with children. In July 2022, 45% of Minnesota respondents with children under 18 in their home reported a somewhat or very difficult time paying for usual household expenses in the past 7 days (compared to just 24% for those without children)[89]

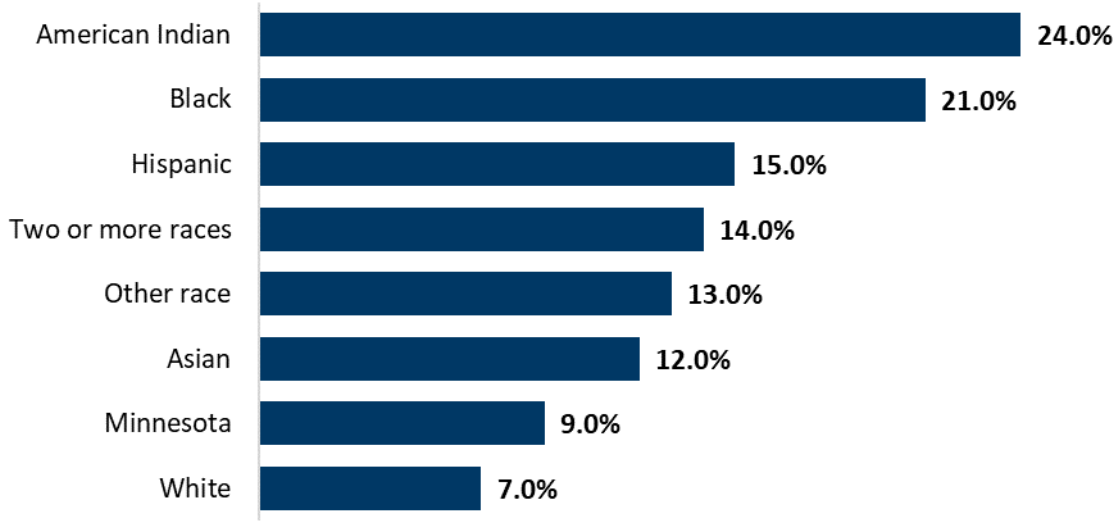
[o] In the 2020-21 school year, 85% of third-graders participated in math and reading assessments. Historically, over 95% of third-graders have generally participated.

- Some groups are more likely to have lower income than others. The average income gap in Minnesota between Black and white people is the second-highest in the nation.[90]
- Some groups are more likely to earn less than others. Compared to white people in Minnesota, Asian people earn 94 cents on the dollar, Black people earn 71 cents, Latine people earn 70 cents and Indigenous people earn 68 cents.[91]

The Federal Poverty Guidelines are issued each year by the U.S. Department of Health and Human Services, and used by a number of organizations and government agencies to determine eligibility for certain programs and benefits. In 2023, an annual income of $14,580 a year for a single person marked the line at 100% of the Federal Poverty Level (also sometimes called the federal poverty line).[92]

- In 2021, 9.3% of all people in Minnesota were at or below this base Federal Poverty Level. This is approximately 519,731 of our family, friends, neighbors, and community members. Digging deeper: the proportion of people below the Federal Poverty Level varied by racial groups and geographic region.[93]

Figure 7. Proportion of people in Minnesota living below the Federal Poverty Level, by race/ethnicity, 2021



Source: American Community Survey, 2021

Some people live in deep poverty, meaning their income is below 50% of the Federal Poverty Level. In 2023, this is equal to a monthly income of $607.50 a month. In a 2019 report on Deep Poverty and Health, the Minnesota Department of Human Services reported:

- Adults in deep poverty have higher rates of every chronic condition measured in this study, including a mortality rate two times higher than adults who are not as poor. They experience 40% more preventable emergency department visits, and 23% more preventable hospitalizations than

those who are not as poor. The mortality rate for children living in deep poverty is twice as high as those not, and the rate of PTSD for children in deep poverty is also higher than other children.[94]

Systemic racism has and continues to generate income inequities in our state. A 2020 report by the Federal Reserve Bank of Minneapolis explored how cumulative disadvantages create a challenging employment landscape for people in Minnesota who identify as BIPOC (Black, Indigenous, or People of Color) or American Indian.

- Today, people from communities of color make up about one-fifth of Minnesota's workforce, more than twice as many as 25 years ago (7.7% in 1995 to 19.3% in 2019). Along with the benefit of their skills, talents, and work ethic, people from communities of color in Minnesota bear the burden of cumulative disadvantages—from more limited educational opportunities to disproportionate criminal justice involvement—in their experience in the labor market.[95]

Housing

Stable housing provides a critical foundation for daily living and health. When stable housing is out of reach, we may live in places that are overcrowded or do not meet basic health and safety standards. Housing instability can come from trouble paying rent, overcrowding, moving frequently, spending most of one's income on housing, substandard housing, eviction, and experiencing homelessness.[96]

Housing impacts health in four broad ways: a lack of stable housing, housing costs that are high and financially burdensome, unsafe conditions inside a home, safety of neighborhoods where people live.[97]

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Homelessness

A safe home and stable housing are essential for everyone. The threat of losing your home or living without a home directly impacts both physical and mental health. Some groups are especially vulnerable to these experiences, like children and people experiencing incarceration.

- In 2022, landlords filed 22,455 evictions in Minnesota. Evictions have increased 33% in 2022 compared to pre-pandemic historic state filings.[98]
- In a one-night count in 2018, 32% of people counted experiencing homelessness were children (age 17 or younger) living with their parents. This number has remained relatively stable since 2015.[99]
- Minnesota Department of Corrections (DOC) operates 11 state prison facilities. In 2021, there were 4,658 total releases to supervised release. Almost 25% of total releases were to sheltered and unsheltered homeless addresses.[100]

- 81% of adults experiencing homelessness have at least one significant health issue: 57% have a chronic physical health condition, 64% have serious mental illness, 24% have substance use disorder. 50% have more than one of these serious issues at the same time.[101]

Homeownership

Owning a home is a significant way that people in Minnesota build wealth. Homeownership provides stability and minimizes disruptions that result from unstable housing and are detrimental to health and well-being, like changing schools, changing jobs, or frequent moves. This stability allows us to increase trust among neighbors, create lasting friendships, and build community cohesion. Homeowners move less frequently than renters and have more control over their home environment.

- The gap in homeownership in Minnesota based on race is one of the widest in the nation. While 77% of white households own their home, 57% of Asian, 46% of Native American, 45% of Latine, and just 24% of Black households own their home.[102]

This large homeownership disparity is a direct result of years of systemic discrimination in housing policies, real estate, and lending practices. People who identify as BIPOC and American Indians continue to experience discrimination and segregation in housing, making it difficult to obtain traditional mortgages; similarly, they are also targeted by organizations with predatory lending practices.[103]

Affordable housing

We all need a safe, affordable place to live that allows us to also afford other necessities. Households are considered cost-burdened if they spend more than 30% of their income on housing, and severely cost-burdened if they spend more than 50% of their income on housing.

- Using these metrics, 26.4% of Minnesota households were cost-burdened in 2021.[104]
- Housing cost burden disproportionately affects some groups more than others: more than 75% of low-income people in Minnesota are cost-burdened, as are 63% of renters who are older adults. Additionally, 57% of Black renters and 45% of white renters experienced cost burden related to housing.[105]
- According to a U.S. Census Household Pulse Survey in June 2023, 15% of Minnesota renter households were not caught up on the prior month's rent.[106]
- Between 2000 and 2019, the median renter income in Minnesota increased by just 1%, while the median gross rent for the state increased by 14%.[107]

Housing conditions and safety

The safety and the conditions of housing can affect a person's health now and in the future.

- In 2016, 16,400 households in Minnesota needed home rehabilitation or improvement work for older adults to remain in their homes for the next five years—10,400 households in Greater Minnesota and 6,000 in the seven-county Twin Cities metro. This was 32% of households with extremely low-income older adult homeowners.[108]

Radon is a colorless, odorless radioactive gas that naturally comes from the soil. In winter, heating systems tend to draw in radon gas from the soil, increasing radon levels inside our homes, schools, and other buildings.

- Radon is the leading cause of lung cancer in nonsmokers, and 40% of Minnesota homes have elevated levels of radon.[109]

Lead-based paint was phased out of residential use in the U.S. starting in 1950, and was eventually banned in 1978. When children under 6 ingest lead, usually through the dust from lead paint, they can develop problems with brain function and behavior that last for life. Elevated blood lead levels in young children are linked with adverse health effects, including learning and behavioral problems. Children under 6 are at greater risk for lead poisoning because their bodies absorb lead more easily and their brains are still developing.[110]

Children in Minnesota should have blood lead levels tested at 1 and 2 years old. Older children should also be tested if they missed their earlier tests or have ongoing risks for exposure to lead.

- In 2022, about 8 out of 1,000 children under 6 who were tested had an elevated blood lead level (0.01% of children tested). This number has decreased in past decades.[111]
- Children living in neighborhoods with higher rates of childhood poverty are more than 3.5 times as likely to have lead poisoning compared to children living in neighborhoods with lower-than-average poverty rates.[112]

Transportation

Transportation is key to all our daily activities, including access to food, health care, and employment; and connections to family, friends, and faith communities. Transportation connects people, natural resources, and businesses to each other, and to markets and resources outside the state and country.[113] Minnesota's roadway network has evolved over time to meet changing needs.

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Vehicle miles traveled impact health: as they increase, greenhouse gases, other emissions, and crashes also increase.[114] In 2021, the average Minnesotan traveled 9,957 miles by car. The COVID-19 pandemic

dramatically reduced vehicle miles traveled in 2020, which have gradually returned to pre-pandemic levels since then.

Different communities also travel differently. For example, communities in Greater Minnesota drive more due to greater distances between destinations, fewer options for non-car transit, and less access to high-speed internet (which requires a person to travel to find high-speed internet). Urban communities with denser development can have more opportunities for walking, bicycling, and using different kinds of transit, which can lead to lower average vehicle miles traveled.

- From 2000 to 2019, overall statewide total vehicle miles traveled rose approximately 16.5%.[115] Due to the COVID-19 pandemic, 2020 saw an unprecedented drop throughout the state. In the early months of the pandemic, the volume of vehicles on Minnesota roadways dropped in some areas by 30% to 50%.[116]

Active transportation

Active transportation integrates physical activity into daily routines, such as walking or biking to destinations like work, school, or a transit stop. Providing ways to walk, bike, and use transit plays a critical role in community health. For example, walkable, bikeable, and transit-oriented communities support physical activity, which can improve people's health and decrease health care costs. Transit and mobility options can advance equity for those who cannot drive due to disability, age, economics, or personal preference. All people need access to transportation that connects them to education, employment, friends, and family.

- The rate of public transit (local and express bus, commuter rail, light rail, Metro Mobility, and Transit Link) use in the seven-county Twin Cities metro has remained steady between 2010 and 2019, according to the Metropolitan Council's Travel Behavior Inventory Household Survey. Of those who use transit, 7% use it weekly and 44% only use it when attending an event. The COVID-19 pandemic significantly decreased transit ridership and service.[117] Ridership fell in 2021 on all public transit services—by as much as 60% on local bus routes, 70% on light rail, and 95% on express bus routes and commuter rail.[118]
- Total transit ridership in Greater Minnesota has decreased in past years, from 12.2 million in 2015, to 11.5 million in 2019, to 6.3 million in 2020 due to the COVID-19 pandemic.[119]
- In the Twin Cities in 2019, 17% of people traveled by bicycle at least once per month, and 7% once per week. Almost 2% of Twin Cities commutes were completed by bike or on foot.[120] During the first five weeks of the COVID-19 pandemic, there was an increase of 51% in people walking and bicycling when comparing 2017 to 2019 at the same time.[121]
- In 2021, 34% of people surveyed in Minnesota walked or biked at least weekly for traveling to and from places (work, school, grocery store, etc.). [122]

- In 2022, about 17% of students reported traveling either to or from school regularly by foot or by bike. More eighth-graders (17.5%) reported using active transportation (that is, non-motorized transportation) than fifth-graders (16.3%). Many students used different and multiple ways to travel to and from school during a typical week.[123]

Transportation safety and use

Several transportation-related factors can make communities more or less safe: the condition of sidewalks, bikeways, roads and bridges, concentrated emissions from vehicles, the availability pedestrian crossings, adequate lighting and signage, adequate bus shelters, and traffic speeds and controls, and more. Pedestrian and bicyclist crashes have increased over time, and serious (life-altering) injuries continue to rise year-over-year.

- From 2016 to 2020, approximately 48 pedestrians and eight bicyclists were killed each year.[124]
- 2021 was the deadliest year on Minnesota's roads in over a decade. Minnesota Department of Public Safety preliminary data shows 488 people died due to motor vehicle crashes compared with 394 in 2020, a 24% increase.
- Public perception of bicycling and walking safety has varied in past years. In 2020, perception of walking safety sank to its lowest rate on record; in 2021 it had increased back to 2019 levels.[125]
- Greater Minnesota experiences a higher rate of traffic fatalities than Twin Cities metro counties. Most Minnesota traffic fatalities from 2015 to 2019 occurred in rural areas of the state with under 1,000 people. In addition, people walking and biking in rural Minnesota communities are more likely to be struck and killed by drivers than in Minnesota metro communities.[126]
- Speed (171 deaths), unbuckled motorists (110), driving while drunk (74), and distractions (27) contributed to the most traffic fatalities in Minnesota in 2021.[127]

Low-income populations—which includes people who identify as BIPOC and American Indian—more frequently live in neighborhoods close to industry and near busy roads and freeways (which serve people who own cars and may live in areas away from those roads and freeways). Heavy traffic can be unsafe and can limit opportunities for walking and physical activity. Residents of high-traffic areas also are exposed to more noise and air pollution than those in lower-traffic areas.[128]

Minnesota's growing population also shapes transportation needs, including more older adults, more people with limited English proficiency, and a greater interest in driving less and walkable communities among people of all ages.[129]

- People aged 65 and older travel less than other adult age groups in Minnesota. Older adults in Minnesota take an average of three trips per day, traveling 27 miles on average. In comparison, adults aged 40-64 take an average of four trips per day, of 38 miles on average. Older adults also

rely on cars more than younger people and take 93% of trips by car—a higher proportion than any other age group.[130]

Employment

Paid work provides both income and a connection to other people as a source of support, while also offering a sense of purpose, meaning, and belonging in the community. Employment provides us with opportunities to feel success and is the primary way most people in Minnesota access health insurance, which is often sponsored and subsidized by employers.

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Teleworking

Teleworking, when a person works from home or another remote location and communicates with colleagues via phone or email, was slowly growing more popular in Minnesota prior to the COVID-19 pandemic and has accelerated sharply since then. Current research on teleworking highlights some benefits for health.[131,132] Teleworking provides the opportunity for employers to increasingly include people with disabilities, people living in Greater Minnesota, and families with young children. However, teleworking is not available in all lines of work and is limited to those who have access to reliable internet—because of that, people living in Greater Minnesota may not have the option to telework. Some people and groups also suggest that teleworking can increase a sense of social isolation.

- In 2014, 5.1% of workers in Minnesota teleworked. In 2018, 6.1% did; in 2020, over 19% of workers in Minnesota teleworked.[133]

Unemployment

Unemployment reduces access to income, which can have negative health consequences including physical pain and feelings of depression, anxiety, low self-esteem, and worry. Job insecurity, downsizing, workplace closure, and underemployment can also negatively impact physical and mental health.[134]

- From March to August 2020, 627,267 people in Minnesota eligible for unemployment insurance filed for benefits (20% of the workforce).[135]

Employment benefits: Paid leave

- Paid leave improves beneficial health behaviors like breastfeeding, and reduces infant mortality.[136]

- Access to paid vs. unpaid leave varies widely. Between 2016 and 2021, most people giving birth only had access to unpaid leave (41.5%); 35.1% only had access to paid leave, and 20.7% used both paid and unpaid leave. Nearly 3% had no access to leave.[137,p]

Employment benefits: Health insurance

A greater share of Minnesotans have health insurance compared with the rest of the United States, partly because a greater share are employed in Minnesota than in other parts of the nation. While people can access health insurance as individuals, most use employer-sponsored insurance through full-time employment. People with part-time, contract, or low-paying jobs may not have access to health care insurance coverage or may lack adequate coverage—this makes it more difficult to get needed or affordable care for them or their families. People who are uninsured or underinsured tend to get sicker before seeing a doctor and have a harder time recovering.

- In 2021, 4.0% of people in Minnesota had no health insurance coverage. Among Minnesotans born outside the U.S., 13.6 were uninsured.[138]
- People in Minnesota who work for employers with between 51-500 employees are more likely to have health insurance than those who are self-employed, who work for an employer with 11-50 employees, or who work for an employer with more than 500 employees.[139]

Figure 8. Proportion of residents under 65 years old without health insurance coverage, by race

Source: Minnesota Compass, 2021

[p] Starting in 2026, people in Minnesota will have access to statewide Paid Family and Medical Leave, which provides paid time off when a serious health condition prevents you from working, when you need time to care for a family member or a new child, for certain military-related events or for certain personal safety issues.

Health care system

It is important that our health care system supports all people in Minnesota, given all of our health challenges and especially the disparities experienced by people who are BIPOC and/or American Indian. If people feel like health care providers or systems don't understand or respect them, their culture, or their unique health issues and needs, people are reluctant to seek care and it is likely their care will not be optimal. Responsive health care allows providers to detect problems earlier and connect people more quickly to resources that will help them recover and thrive.

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Health care systems support people when they can get the right care at the right time, in a convenient location, with a caring and competent provider, resulting in a positive outcome. The health care system includes the number and type of providers located in every community; the range of services available; whether providers reflect populations served; and whether providers render services in culturally appropriate ways. We can improve health care when providers have ready access to current health information and when different providers coordinate care.

Access to services

Whether care is available depends on a person's location, income, the number of providers in the community, and more. Racial/ethnic, age, and income disparities exist in people forgoing care due to cost and overall health care use.

- Minnesota has 55 geographic areas designated as Health Professional Shortage Areas, due to a shortage of primary care providers.[140]
- The physician-to-patient ratio varies widely across the state. Urban areas have one physician for every 226 people (1:226), large rural areas 1:542, small town/small rural areas 1:645, and rural or isolated areas only 1:1,714.[141]
- In 2021, 88.1% of people in Minnesota reported using any health care in the past 12 months. White people and wealthier people in Minnesota were significantly more likely to have accessed any health care in the past 12 months. Asian and Hispanic/Latine people and those below the Federal Poverty Level in Minnesota were significantly less likely than the state average to have used any health care in the past 12 months.[142]

Quality of health care

Health care is quality when it is safe, effective, patient-centered (respectful and responsive), timely, efficient, and equitable.[143]

- 80% of licensed physicians in Minnesota speak only English in their practice.[144]
- In 2021, 18% of LGBTQ+ people surveyed by Rainbow Heath Initiative had a provider refuse to treat them in the past year because they were LGBTQ+. 23% reported there was a time in the past when they needed to see a doctor but did not go because they thought they would be disrespected or mistreated as an LGBTQ+ person.[145]
- In 2021, 19% of LGBTQ+ people surveyed have been verbally harassed in the past year by staff or other patients in a health care setting, and 17% have had a provider who was physically rough or abusive with them in the past year.[146]
- In 2021, 24% of LGBTQ+ people surveyed reported having to teach their provider in the past year about LGBTQ+ people so they could receive appropriate care, and 19% have had a provider ask intrusive or unnecessary questions in the past year about their LGBTQ+ identity unrelated to the purpose of the appointment.[147]

Access to specific types of health care

The following specific types of care and associated health outcomes demonstrate the importance of accessible health care.

Preventive screenings, monitoring, and management

- In 2021, 26.6%[q] of Minnesota adults had been told they have high blood pressure by their doctor or another health professional (about 1.3 million people).[148]
- In 20202, Just over half of Minnesotan adults who need their blood glucose (sugar) checked had done so in the prior 3 years. Without this screening, diabetes might be diagnosed later and people with prediabetes miss an opportunity to lower their risk of developing diabetes.[149]
- Slightly less than half of adults in Minnesota living with diabetes achieve all five diabetes management goals (blood pressure control, blood sugar control, statin prescribed if needed, aspirin prescribed if needed, and not using tobacco); this rate has changed little in the past decade. Some

[q] (95% confidence interval: 28.9-27.4%)

systems-level approaches could change this, including more broadly adopting whole person care,[r] implementing culturally-responsive systems within and outside of the health care system, and increasing efforts to address social needs and social determinants of health.[150]

Prenatal care

- In 2019 in Minnesota, 82.4% of pregnant people received prenatal care within their first trimester of pregnancy. Inadequate prenatal care poses risks for pregnant people and children, and has been linked to increased rates of infant morbidity and mortality.[151] For more information on maternal and infant mortality rates, see Prenatal and early life experience in this assessment.

Vaccination

- In 2022, only 63.6% of children in Minnesota aged 24 to 35 months had completed the childhood immunization series, which includes seven vaccines that should be given by age 2 if following CDC recommendations.[152]

Policy area overview: Paid leave

This policy area is still under development and will be included in the final statewide health assessment.

[r] Whole person care is patient-centered optimal use of diverse health care resources to deliver the physical, behavioral, emotional, and social services required to improve care coordination, well-being, and health outcomes while respecting patients' treatment choices.

Nature

Our feelings about nature are shaped by our families, jobs, culture, and society, as are our access to and how we treat our natural surroundings. Depending on their interests and values, people have very different ideas about what it means to own land, how we should use nature (or not use it), who is responsible for ensuring clean air and water, and how to reconcile complex issues and competing interests involving nature.

For example, some people and groups view nature as a source of materials (like mining or logging industries or hunters), or physical activity and recreation (a place for parks, bike paths, and walking trails). Others view nature as intrinsically valuable and see immeasurable and often unmeasurable connections between human health and the health of the natural world. Some people hold all these beliefs together.

Some American Indians in Minnesota see nature as kin and define it by relationship instead of ownership. The term for nature in the Dakota language, uŋčí makhá, translates as "grandmother earth," viewing all of nature (the earth) as sacred, the source of life, and worthy of respect and protection. In Anishinaabemowin (the Anishinaabe language), nature is conveyed by saying gaa miinigooyang, or "that which is given to us." This term reflects an Anishinaabe worldview: "the individual is dependent on the group, the group is dependent on nature, and nature is dependent upon the supernatural for survival" (Norrgard, 2017).[153]

Nature and our health

A myriad of research links human health and well-being to our relationship with nature, including from diverse fields like landscape architecture, agriculture, sociology, psychology, anthropology, health care, and education. We impact the natural world and human health as we design cities, homes, and workplaces. These places shape our interactions with nature. When people and groups decide the location and size of roads, buildings, and industries, they determine who can access a healthy natural environment and who cannot. As a society, we choose how to use land and water, and what we put into the air. We make decisions every day that ultimately shape our health, in agriculture, development, construction, land management, and food processing. Being mindful of our actions and interactions with nature—whether they remove us from the natural environment, create inequities in access to water and land, or threaten the quality of our surroundings—is essential to assure our health.

Environmental justice[s]

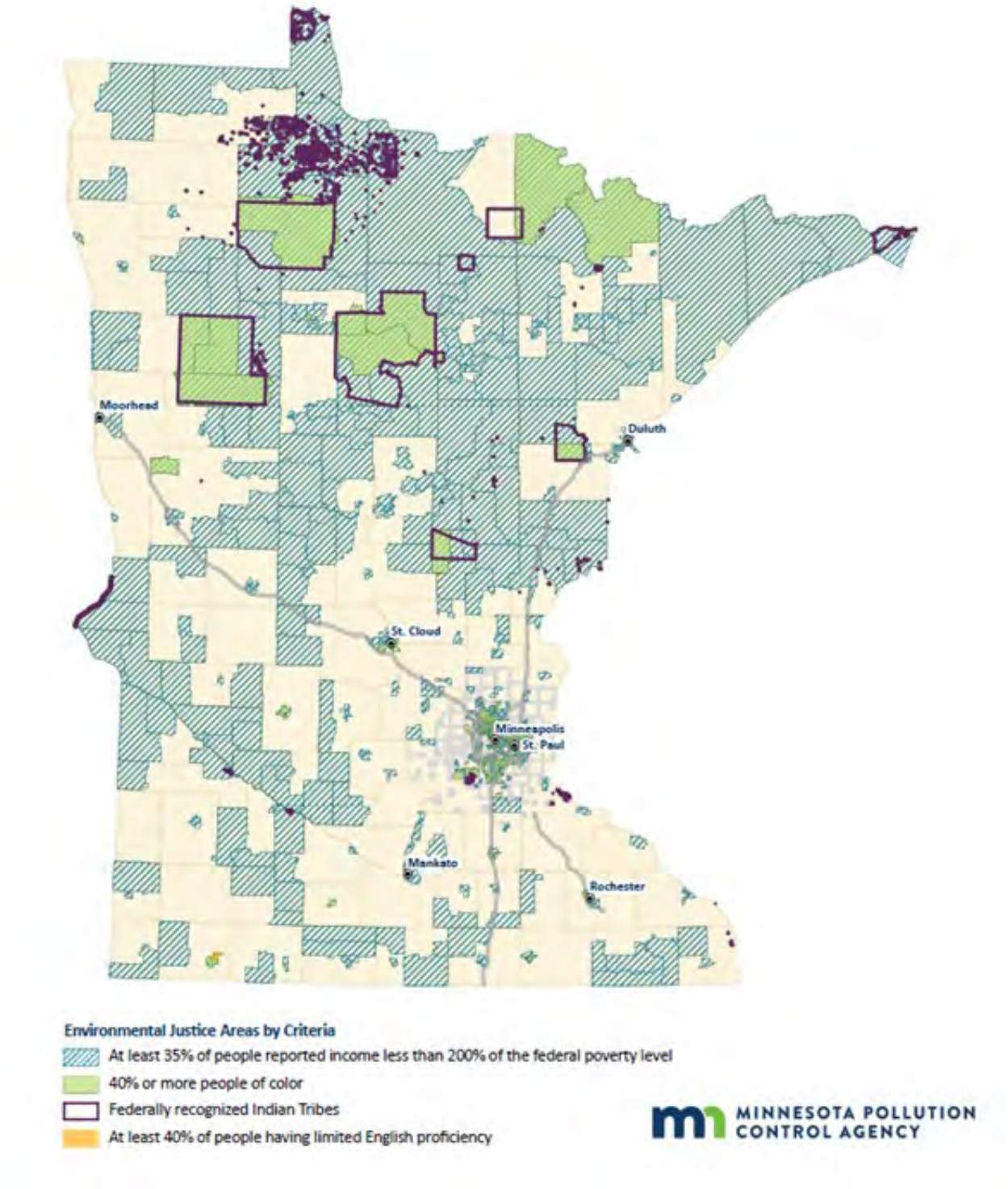
Environmental justice is a state of being where all people benefit from equal levels of environmental protections and have opportunities to participate in decisions that may affect their environment or health, regardless of race, color, national origin, or income.[154] Policies, practices, and structures based on racism and discrimination have disproportionately exposed some populations to environmental hazards, creating injustices for these communities. For example, underserved communities are more likely to live near toxic waste sites, in areas with high air pollution from traffic and industries, and in low-quality housing due to discriminatory policies like redlining and the historical placement of highways and hazardous facilities in these neighborhoods.

In 2023, the Minnesota Legislature created and defined "environmental justice areas" in Minnesota law. An environmental justice area is one or more census tracts—small, permanent subdivisions of a county or city—meeting any of the following criteria: 40% or more of the population is nonwhite, 35% or more of the households have an income at or below 200% of Federal Poverty Guidelines ($60,000 for a family of four), 40% or more of the population over the age of five has limited English proficiency, and/or within federally recognized Indian Tribal areas.[t,155] To work in these environmental justice areas, some business will need to study the impact of pollution over time; these areas were created with the aim of addressing health problems that disproportionately hurt BIPOC and American Indian people in Minnesota, like those resulting from air pollution levels above state guidelines, for example.

- In the Twin Cities, about half of the seven-county metro area is in, or within one mile of, an environmental justice area.[156] This covers about 1.6 million people, or just over half of Twin Cities residents.[157]
- In Greater Minnesota, approximately 55% of census tracts are in environmental justice areas, including 1.3 million people (51% of all Greater Minnesota residents).[158]

[s] To learn more about Environmental Justice in Minnesota see: Environmental justice (https://www.pca.state.mn.us/about-mpca/environmental-justice).
[t] To see these areas in closer detail, see the Minnesota Pollution control interactive story maps at: Cumulative impacts (https://www.pca.state.mn.us/get-engaged/cumulative-impacts).

Figure 9. Environmental justice areas in Minnesota, 2023



Source: Minnesota Pollution Control Agency, 2023

State strengths survey: Nature

As part of the 2023 statewide health assessment, the Healthy Minnesota Partnership surveyed Minnesotans about state strengths that support health. Respondents reviewed strengths noted in the 2017 Minnesota statewide health assessment, shared their agreement or disagreement whether those strengths supported health, and identified missing strengths. Although the survey does not necessarily include a representative sample of all Minnesotans, 583 people completed it.

Overall, survey respondents agreed that several strengths support the health of people in Minnesota. However, respondents noted that those strengths benefit some people and groups more than others depending on who they are or where they live. Respondents noted that some strengths are not available to all people in Minnesota and that many disparities exist.

For more detailed methods and results from this survey, see Appendix C. State strengths survey findings in this assessment.

Table 10. State strengths related to nature

State strength	Agreed or strongly agreed	Neutral	Disagreed or strongly disagreed
Access to parks and trails	92.2%	5.4%	2.4%
Access to lakes and rivers	86.1%	10.4%	3.6%
Availability of farmers markets	80.1%	12.0%	7.8%
Availability of home garden or community gardens	67.5%	21.5%	11.0%

Source: Minnesota Department of Health, 2023

Survey respondents shared feedback on several strengths related to Nature, including parks and trails, lakes and rivers, gardening, and farmers markets. Most respondents agreed that access to parks and trails, access to lakes and rivers, availability of farmers markets were state strengths. Respondents also suggested other strengths that support health, like a lack of many catastrophic weather events.

While most survey respondents agreed that parks, trails, lakes, and rivers support health, several noted that not all people in Minnesota have the same access, resources, or support to use these natural resources. Others shared that climate-related events impact some communities more than others, like air quality issues from 2023 Canadian wildfire smoke.

Nature and COVID-19

The COVID-19 pandemic impacted the environment in positive and negative ways. Several studies noted that early in the pandemic, there was an immediate, positive impact on air quality, noise levels, and water pollution in different cities around the world. Even birds were affected when noise levels abated.[u] However, most of these changes disappeared when pandemic restrictions ended. The pandemic increased outdoor recreation for some people with higher incomes, but reduced it for others. The pandemic also created a temporary increase in medical waste, including the haphazard use and disposal of disinfectants, masks, and gloves.[159]

Climate

Climate change impacts human health in many ways, including extreme weather events, wildfires, poor air quality, threats to mental health, and illnesses transmitted by food, water, and vectors (disease-carriers) like mosquitoes and ticks.[160]

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In Minnesota, we've experienced the following changes in our climate:

- Minnesota has warmed by 3.0 degrees Fahrenheit between 1895 and 2020, while annual precipitation increased by an average of 3.4 inches.[161]
- Since 2000, Minnesota has seen a significant uptick in devastating, large-area extreme rainstorms.[162]
- The rate of warming weather in the winter has risen even more sharply than summer in recent decades. From 1970 through 2021, the average daily winter low temperature rose over 15 times faster than average daily summer high. It's 90% less likely for northern Minnesota to see readings of 35 below zero and southern Minnesota to see 25 below zero.[163]

Rising greenhouse gas emissions lead to increased temperatures, which in turn lead to extreme precipitation, impacting air, heat, floods, droughts, and ecosystems.

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[u] Science magazine noted that "growing noise pollution has forced male, white-crowned sparrows to sing louder, less effective songs in order to be heard by rivals and mates. During the pandemic lockdown this spring, however, the background din quieted, and a new study shows that, in just a matter of weeks, the sparrows' songs recovered the acoustic quality of songs sung decades ago, when city life was less noisy." For more information, see: When COVID-19 silenced cities, birdsong recaptured its former glory (https://www.science.org/content/article/when-covid-19-silenced-cities-birdsong-recaptured-its-former-glory).

- In 2020, three sectors were responsible for 74% of greenhouse gas emissions: transportation, electrical utility, and agriculture.[164]
- Minnesota is working to address the causes of climate change. Minnesota's greenhouse gas emissions have fallen 23% since 2005. Changes in economic sectors related to the COVID-19 pandemic also caused greenhouse gas emissions in the state to drop significantly in 2020. However, future data will determine if these trends continue.[165]

Although Minnesota is typically associated with cold weather, the summer heat can significantly impact our health. Nationally, heat events—prolonged periods of hot weather—cause more deaths than any other natural disaster.[166] Warmer nights cause homes without air conditioning to stay hot; people who don't have air conditioning, who are isolated, or unable to get out of their homes are at greater risk of heat-related illness.

Some of us are more vulnerable to effects of climate change, like people experiencing poverty or homelessness, older adults, young children, and people who have chronic health conditions like allergies and asthma. The effects also create stress for people whose livelihoods are dependent on the weather, like farmers and people who work outdoors. Older people in Minnesota are especially at risk of heat-related illness, because as people age their body's ability to adjust to high temperatures decreases—a concern, given Minnesotan's growing aging population.[167]

- Heat-related illness directly accounted for 75 deaths in Minnesota from 2000-2022.[168]
- In 2020, 613 people in Minnesota went to the emergency department from heat-related illnesses.[169]
- Climate change disrupts weather patterns and increases severe weather events that lead to flooding and drought, negatively impacting human health, social networks, land, plants, and wild and domestic animals. One-time and recurring natural disasters also create widespread stress and challenge the mental well-being of entire communities.
- The 2021 drought was the most severe in Minnesota since at least 1988.[170]

Air

Poor outdoor air quality makes it more difficult to spend time outdoors for work and recreation, especially for children, older adults, and people with respiratory conditions like asthma.[171,172] Outdoor air pollution includes naturally-occurring and human-made gases and particles. Two main pollutants of concern for health are ozone and fine particles, because they can trigger asthma attacks and contribute to pneumonia, bronchitis, and heart attacks. Outdoor air pollution can come from motor vehicles and heavy diesel equipment and trucks; emissions from home heating; burning (garbage and wood); large industrial facilities; and smaller sources like gas stations, char-broilers, dry cleaners, and auto body

shops. Wildfire smoke is a complex mix of fine particles, and is largely responsible for the increasing frequency, duration, and severity of air quality alerts across the state.[173]

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- At the time of this report, 2023 had seen 19 air alerts[v] in Minnesota, breaking a previous record number of 13 alerts in 2021.[174,175]

While all people in Minnesota are susceptible to the health impacts of air pollution, these impacts do not affect all people in Minnesota equally. Structural inequities formed through institutional systems like city planning, transportation infrastructure, and policies have led to disparities in local pollution.[176] Air pollution is more likely to affect populations with higher rates of heart and lung disease, which includes people who identify as BIPOC (Black, Indigenous, and People of Color) and American Indian, older adults, children with uncontrolled asthma, and people living in poverty.[177]

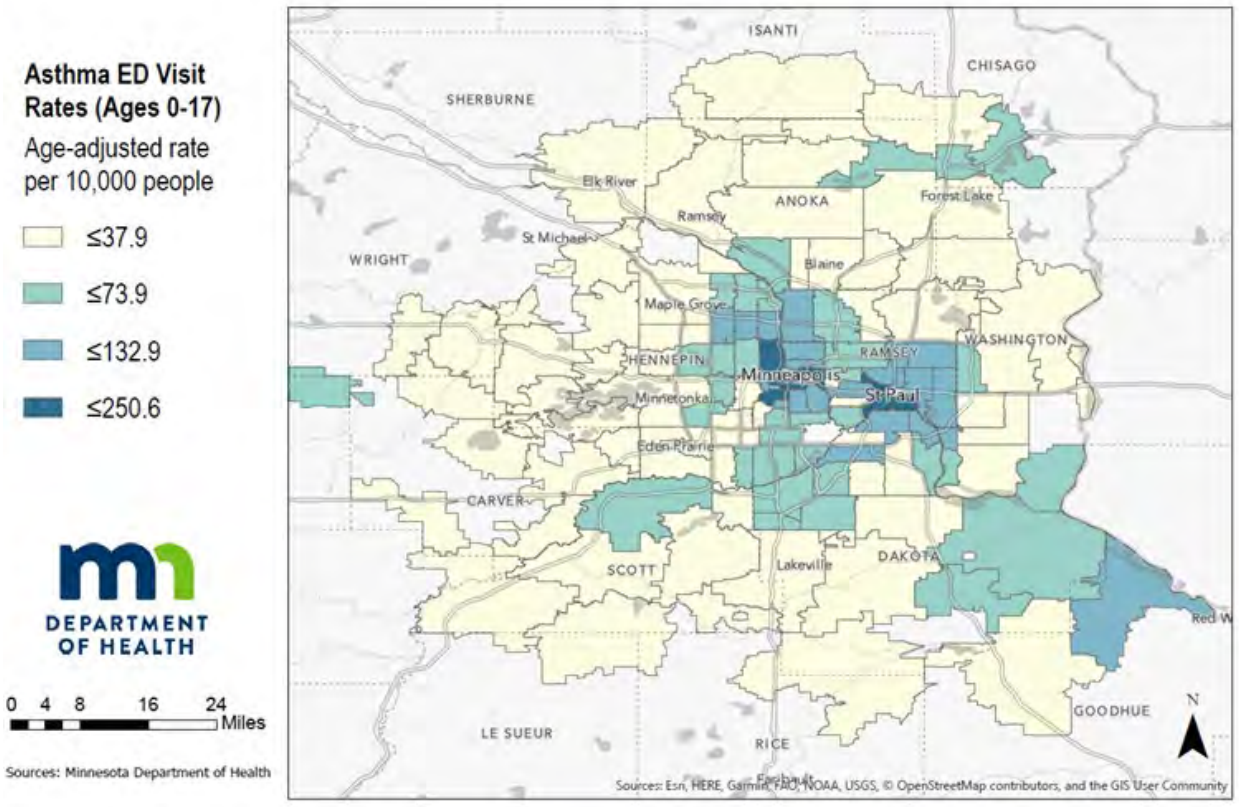
- Research from 2015 estimates that air pollution contributed to 10% of all deaths in the Twin Cities metro area (about 1,600 people), and that nearly 500 hospitalizations and emergency room visits for heart and lung problems were related to particulate and ozone pollution.[178]

Air pollution is especially harmful for people living with asthma. Asthma attacks are more common among people living near busy roads, who are less able to choose where they live, or who have little control over the conditions of their homes (like renters) or their surroundings.[179]

- In Minnesota, one in 24 children (4.2%)[180] in 2020, and one in 11 adults (8.8%) in 2021, had active asthma.[181]
- Asthma prevalence among Minnesota adults is slowly increasing. Overall, asthma prevalence in people in Minnesota is low compared to other states; however, prevalence among people who identify as Black, American Indian, and as multi-racial non-Hispanic is consistently higher than prevalence among white people in Minnesota.[182]
- In the Twin Cities, ZIP codes with the highest percentage of people who identify as BPOC and American Indian have more than five times the rate of asthma-related emergency room visits related to air pollution compared to areas with more white residents.[183]

[v] The Minnesota Pollution Control Agency changed their methodology for calculating air alert days in 2023 to just include the initial issuance of an alert and not extensions/expansions.

Figure 11. Twin Cities metro asthma emergency department visit rates by ZIP code, 2016-2020



Source: Minnesota Department of Health, 2023

Indoor air pollutants and allergens include asbestos, carbon monoxide, dust mites, formaldehyde, lead dust, mold, fine particles, radon, commercial tobacco smoke, and volatile organic compounds.[w] Some pollutants or allergens in indoor air occur naturally (such as radon and dust mites), while others are the product of human activities in indoor environments, like fumes from gas stoves, smoking, incense or air fresheners, and materials used in home construction and furnishings. We benefit from homes, schools and workplaces built with radon mitigation, adequate ventilation, and plenty of natural lighting.[184]

Water

Clean water is essential for all life. Minnesota is home to thousands of lakes, rivers, streams, wetlands, and extensive aquifers. This water is important for drinking water, ecosystems, recreation, tourism,

[w] For more information on radon, see Housing conditions and safety in this assessment.

agriculture, and industry, and are an important part of our quality of life. We thrive when our waters are clean and healthy, but threats degrade our water and negatively impact our health.

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- Just over 8% of Minnesota is covered in water.[185]

Approximately 75% of Minnesota sources its drinking water from groundwater, and groundwater provides almost all of the water used to irrigate crops.[186] Our groundwater is under threat of contamination from a number of sources, and its volume is negatively impacted by drought, overuse, and the effects of climate change, creating scarcity in some parts of the state.

- Minnesota currently has 6,649 public water systems, including 964 community water systems[x].
- Nearly 98% of the drinking water provided by the state's public water systems meets all federal health-based standards. [187]
- 1.2 million people in Minnesota rely on private wells for which they are responsible for testing and maintaining.[188]

Nitrogen

The way we use land greatly impacts the quality of our water. When found in water, nitrate (a form of nitrogen) is toxic to fish and other aquatic life and can be harmful to humans at elevated levels.

Nitrate is a particular health concern for infants under six months. Ingesting nitrate at that age can interfere with red blood cells' ability to carry and share oxygen, which results in methemoglobinemia, or "blue baby syndrome." Infants with methemoglobinemia have skin that looks blue, and may also have an elevated resting heart rate, weakness, nausea and, in severe cases, may die.[189]

We see high levels of nitrate in water from fertilized soil runoff or leakage, wastewater, landfills, animal feedlots, septic systems, or urban drainage. It can be difficult to pinpoint the source of nitrate in drinking water from so many possibilities.

- In rural areas, runoff from cropland contributes more than 70% of the nitrate that pollutes Minnesota waters.[190]

[x] A community public water supply provides water to the public in primary living spaces (where people live and sleep), like homes, apartments, nursing homes, prisons, etc. A noncommunity public water supply provides water to the public in places other than their homes—where people work, gather, and play.

- In Minnesota, wells are tested for nitrate levels at construction. Since testing began in 1992, 1,521 (0.6%) newly constructed wells have had a level of nitrate concentration that exceeds drinking water standards of 10 parts per million, presenting a health risk.

Since Minnesota adopted the Well Code in 1974, new wells are constructed in a way that minimizes the risk of unsafe nitrate levels. Shallow wells in areas with sandy soils or karst geology are more vulnerable to nitrate. Improper well construction or a damaged well can also allow nitrate to reach otherwise protected groundwater sources. As such, it is likely that far more than the previously stated 0.6% of private wells have a concentrations of nitrate exceeding drinking water standards. Home treatment to remove nitrate can be expensive.[191]

Lead in water

Research shows there is no safe level of lead in drinking water, although the U.S. Environmental Protection Agency (the federal agency whose mission is to protect human health and the environment[192]) has set a level of 15 parts per billion as safe. Possible sources of lead contamination in water include lead pipes, lead plumbing solder, and certain fixtures. For more information about how lead impacts health, see Housing in this assessment.

- The number of people with reported high blood lead levels in Minnesota has been decreasing since the 1990s.[193]
- In 2021, only 4 out of 1,441 tested public water systems in Minnesota exceeded the EPA's action level for lead.[194] When communities replace lead service lines, it decreases lead exposure in drinking water.

Per- and polyfluoroalkyl substances (PFAS)

Per- and polyfluoroalkyl substances (PFAS) are a large class of chemicals widely used in products and industrial processes. They are often called "forever chemicals" because they do not readily break down in the environment.

Since first detection in the early 2000s, officials have found PFAS in ground water, sediment, soil, air, and fish all across Minnesota. Research has shown some PFAS to be harmful to public health.[195] PFAS exposure is not limited to those near a known contaminated location; they are also found in several consumer products like older carpeting, furniture, cookware, and clothing. Home drinking water systems that filter PFAS can be expensive and, like all home treatment, require investment and maintenance. Most consumer products do not currently carry labels on whether they contain PFAS.

- Initial testing in 2022 showed that some PFAS are commonly found at low levels in Minnesota drinking water.[196]

- Groundwater testing at 102 of 111 closed landfill sites detected PFAS at 100 sites; 62 sites had PFAS levels exceeding drinking water guidance levels.[197]

Recently, Minnesota has adopted policies restricting and banning the use of PFAS, to help reduce future exposure. Research shows the best way to reduce levels of PFAS in people is to stop exposure, and this can happen by banning nonessential uses.

Arsenic

Exposure to arsenic in drinking water over many years can increase the risk of cancer and other serious health effects. Because arsenic is a carcinogen, public health aims to have no arsenic in drinking water. Federal drinking water standards are set as close to the public health goal as possible and consider drinking water treatment, costs and benefits, feasibility, and health risks. The federal standard for arsenic concentrations in public water systems is 10 parts per billion (ppb).

Arsenic treatment can be expensive for households using a private well. The Minnesota Department of Health encourages private well households to reduce exposure to any concentration of arsenic in their water.

Arsenic occurs naturally in rocks and soil across Minnesota and can dissolve into groundwater. The way glaciers moved across Minnesota affects where arsenic is found in sediment and groundwater. Because of the complex nature of arsenic occurrence, it is difficult and sometimes impossible to avoid arsenic when constructing a new well.

- As of 2008, all new private wells in Minnesota must be tested for arsenic. As a result of this, testing has detected arsenic in 49% (38,739) of newly constructed wells since 2008; 12% (9,207) have concentration levels higher than the federal standard.[198]

Food

Food is connected to the ways we use land and water, and these decisions impact the natural environment. Food also connects people in community. People also enjoy a wide variety of food from all cultures, supporting their overall well-being.

National guidelines recommend that people eat a variety of foods high in nutrients, while limiting foods and beverages higher in added sugars, saturated fat, and sodium.[y] A healthy eating pattern including nutrient-rich foods like fruits and vegetables, which is low in added sugars, saturated fat, and sodium,

[y] The first and best food for humans for the first six months is breastmilk or, when that is not possible, infant formula.

reduces the risk for chronic diseases like heart disease, diabetes, stroke, and some cancers, and helps manage body weight.[199]

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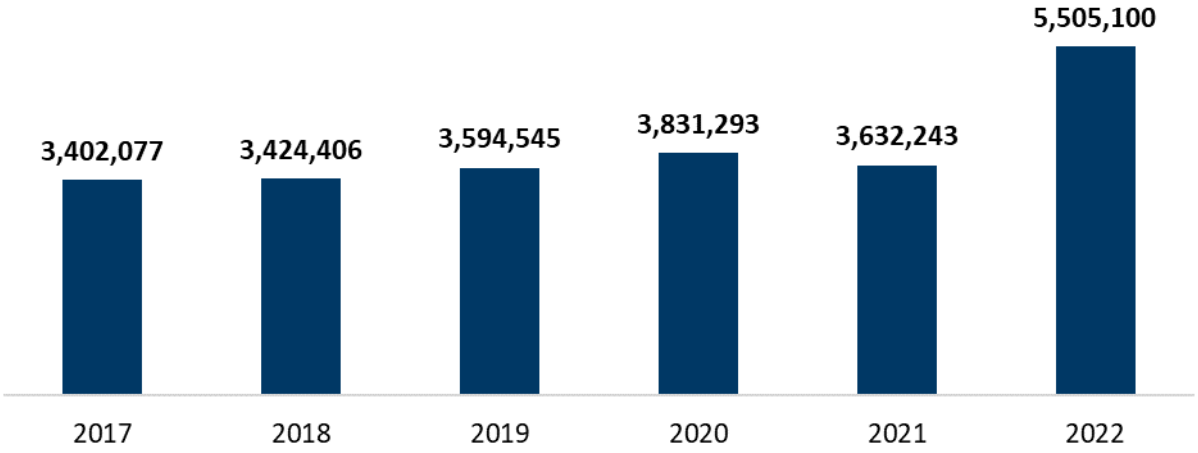
- Significantly fewer Minnesotans report eating at least one vegetable and at least one fruit a day in 2021 compared to 2017. Significantly more adults consumed 3 or fewer sugary beverages per week in 2021 compared to 2018.[z, 200]
- Fewer students in ninth and 11th grade report eating fruits daily in 2022, compared to 2016 or 2019, but consumption of vegetables and sugar-sweetened beverages remains the same as in previous years.[201]

Food insecurity occurs when access to nutritionally adequate and safe food is limited or uncertain. Food insecurity can be temporary or persist over time. A person's income and life circumstances can make it difficult to choose healthy foods, especially when these foods are not readily available or affordable. In the United States, processed foods and beverages high in calories, added sugars, sodium, and added fats are cheap and readily available, while nutrient-rich fresh foods like fruits and vegetables can be less available and less affordable.[202]

- Black and Latine people in Minnesota are more than twice as likely to report food insecurity than white people in Minnesota.[203]
- Studies show that TV advertisements for children's sweetened drinks are highly targeted to preschoolers, children, and Black and Hispanic youth. Additional research shows that advertising children's beverages on TV may disproportionately influence purchases by low-income households.[204]
- The number of people visiting food shelves in Minnesota has increased to 5.5 million in 2022, from 3.4 million 2017, likely because of the rising cost of food due the COVID-19 pandemic and inflation impacting the supply chain.[205]

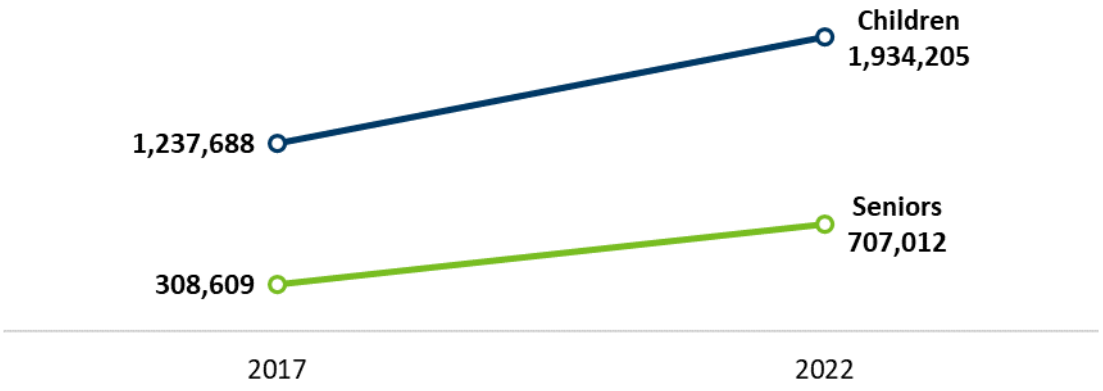
[z] Vegetable: (79.4%; 95% confidence interval: 78.6-80.3%) compared to 2017 (82%; 95% CI: 81.2-82.9%); Fruit: (63.6%; 95% CI: 62.6-64.6%) to 2017 (67.8%; 95% CI: 66.8-68.7%); Sugary Beverages: (50.2%; 95% CI: 49.2-51.3%), compared to 2018 (47.8%; 95% CI: 46.8-48.8%)

Figure 12. Number of food shelf visits, Minnesota, 2017-2022



Source: Hunger Solutions, 2023

Figure 13. Number of food shelf visits in Minnesota among seniors and children, 2017-2022



Source: Hunger Solutions, 2023

Recreation

Outdoor and indoor recreation are good for the mind, body, and spirit. Minnesota is rich in parks and trails, with opportunities to get outside alone or with friends and family. Access to facilities in the built environment influence a person's participation in exercise, like parks, walking paths, and bike trails. A person's free time also influences participating in exercise, and working in multiple jobs, long commutes, or child care can limit available time.

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- Minnesota has 75 state park and recreation areas, 24 state trails, 62 state forest recreation areas, 1,500 public water access points, 350 fishing piers, and 33 water trails.[206]
- In 2020, 90.3% of Minnesota adults lived within half a mile of a park, compared to 77.5% in 2015.[207]
- Adult trail visitors in Minnesota are typically older, have higher incomes, higher educational attainment, and are much more likely to identify as white. Most visitors use the state trails alone or with one other person.[208]
- Minnesota populations show consistent trends over time regarding physical activity not related to jobs or work. Such physical activity is highest among people with higher income and education and people who are 18 to 14 years old, and is lowest among adults aged 65 and over. Adults who are non-Hispanic white and non-Hispanic Asian American are more likely to be physically active (outside of jobs and work) than adults who are Hispanic, non-Hispanic American Indian, or Alaskan Native.[209]

Physical activity reduces the risk of many adverse health outcomes, including heart disease, stroke, many kinds of cancer, diabetes, obesity, hypertension, depression, anxiety, and declined cognitive function. Even a couple of hours of moderate physical activity per week can add quality and length to our lives.

- In 2021, 79.5% of Minnesota adults participated in any physical activity.[aa,210]
- Just over 10% of ninth-grade students participated daily in at least an hour of physical activity between 2016 and 2022.[211]
- In 2022, nearly 20% of male eighth-, ninth-, and 11th-grade students reported being physically active every day of the past week for at least 60 minutes. Less than 10% of female eighth-, ninth-, and 11th-grade students reported the same.[212]

Policy area overview: Tree canopy cover

This policy area is still under development and will be included in the final statewide health assessment

[aa] 75.4% (95% confidence interval: 74.5-76.2%); 79.5%[aa] (95% CI: 98.7-80.2%); 2019: (25.5%; 95% CI: 24.6-26.3%) 2017: (21.8%; 95% CI: 21-22.7%)

Belonging

When a population or community experiences a sense of belonging, they don't feel marginalized or excluded. A community's collective voice can help shape the conditions that affect their lives and their health.[213] Belonging and inclusion determine how we interact with each other individually, in our families, in the community, and in society. Belonging improves the nature of our relationships, expands our access to resources, improves our resilience, and increases our opportunities for educational and economic success. We are social creatures, and belonging creates meaning, purpose, and hope for the future.

Forming relationships and learning how to be part of families and communities are critical for health in early childhood. Children find their place in society through their experiences and relationships in their families and communities. Babies, children, and pregnant people experience stress and trauma when they or their families are marginalized. When children are marginalized, they may struggle to connect with others and are more likely to experience alienation and depression in adolescence and adulthood.[214]

Belonging and our health

Healthy, positive relationships and meaningful inclusion in society can prevent disease, disability, injury, and premature death. According to the U.S. Surgeon General, individual and community social connections are critical to our health.[215] Minimization and exclusion is a source of health inequity.

When a person does not feel heard by neighbors, employers, government, or those in power, it's more difficult to fully participate in society, excludes them from important decisions, and causes stigma, which can result in a higher likelihood of injury, addiction, abuse, joblessness, homelessness, incarceration, trauma, depression, disease, disability, and death.

Belonging and COVID-19

The COVID-19 pandemic profoundly impacted people feeling a sense of belonging. A massive, shared experience of social isolation resulted from shelter-in-place orders, social distancing, distance learning, working from home, and business shutdowns. Groups already marginalized felt this isolation at an even greater level than others.

As people wrongly targeted and blamed Asian Americans for the spread of COVID-19, Asian Americans faced increased racism and violence.[216,217] Social distancing and shelter-at-home precautions were particularly hard for people who are LGBTQ+ if they sheltered with people unsupportive of their identities. Children experienced new and increased stressors, including the death of a parent or family member, learning environment changes, and social isolation. Teens lost in-person social connections and support from caring adults at school. College students also struggled with online learning and housing transitions. Adults in long-term care facilities were isolated by restricted visiting protocols.

State strengths survey: Belonging

As part of the 2023 statewide health assessment, the Healthy Minnesota Partnership surveyed Minnesotans about state strengths that support health. Respondents reviewed strengths noted in the 2017 Minnesota statewide health assessment, shared their agreement or disagreement whether those strengths supported health, and identified missing strengths. Although the survey does not necessarily include a representative sample of all Minnesotans, 583 people completed it.

Overall, survey respondents agreed that several strengths support the health of people in Minnesota. However, respondents noted that those strengths benefit some people and groups more than others depending on who they are or where they live. Respondents noted that some strengths are not available to all people in Minnesota and that many disparities exist.

For more detailed methods and results from this survey, see Appendix C. State strengths survey findings in this assessment.

Table 14. State strengths related to belonging

State strength	Agreed or strongly agreed	Neutral	Disagreed or strongly disagreed
Access to voting	82.0%	14.0%	3.9%
Many charitable organizations that support communities	74.4%	20.9%	4.7%
Opportunities to volunteer or get involved	74.4%	20.1%	5.4%
Growing diversity	70.2%	21.5%	8.2%
Active faith-based communities	68.8%	24.1%	7.1%
People feel welcome	57.6%	26.9%	15.5%
Opportunities for immigrants	50.8%	37.1%	12.0%

Survey respondents shared feedback on several strengths related to Belonging, including people feeling welcome, growing diversity, opportunities to volunteer, access to voting, opportunities for immigrants, faith-based communities, and charitable organizations. Most respondents agreed that access to voting is a state strength. Fewer respondents agreed that feeling welcome or opportunities for immigrants are state strengths.

Respondents also suggested other strengths that support health, like social movements advocating for policy change, communities building capacity for advocacy, a growing awareness and focus on equity, and active citizenry. Others suggested elders are a strength, for the ways people can learn from them. Many respondents cited access and availability of mental health services as missing from state strengths.

Group conversations: Community and health

"I feel supported. I feel I belong. I feel valued. I can contribute my talents, skills, ideas. It makes me feel worthwhile." – group conversation participant

Social connectedness impacts our health. In 2023, the Healthy Minnesota Partnership hosted group conversations to learn from people how the communities to which they belong support their health and well-being. Eight groups met and talked about several issues.

Conversation participants shared examples of the multiple communities to which they belong. A community is a group of people who have a relationship or connection, and can form around work, social and advocacy activities, physical activities, faith, family, education, culture, neighborhoods, and friends. During several conversations, participants shared that being part of a community provides a sense of belonging and purpose. Feeling belonging leads to positive life outcomes and is a protective factor to help manage stress and coping with difficult times.[a,a]

Participants shared several ways that communities support their health and well-being:

- **Interpersonal relationships** with others create togetherness, connection, and friendship. People don't feel alone. Communities help create relationships across generations.
- **Affirmations and support** are important, both given and received. Mental and emotional affirmations and support include a community's role in listening, sharing advice, and problem-solving together. Communities encouraged members to take physical and mental care of themselves. Participants shared that being part of a community is healing, therapeutic, and "like medicine," especially when providing safety in shared experiences and shared trauma.
- **Learning** and growing together, both personally and professionally, was valuable to group members. Communities provide knowledge about history, culture, language, and family values, especially during upbringing.
- **Resources** that communities share and provide can help each other during times of need, including professional services or informal ways that community members help one another.
- **Group activities** in community bring people together to connect and support healthy lifestyles, through things like being physically active, growing vegetables, and worshiping or praying together.
- **Culture** connections happen in community, including connections to language, food, and values.

Three of the eight group conversations highlighted the strengths and benefits of living in Greater Minnesota, including the physical environment (like access to nature and open spaces, and less traffic), and the interpersonal relationships and close connections to other people who can provide mutual aid during challenges.

Mental health and well-being

Mental health is more than the absence of disease; not having a mental illness does not guarantee good mental health. Similarly, having a mental illness does not guarantee poor mental health. Everyone has a state of mental health, and this can change across the lifespan. Mental health includes life satisfaction, self-acceptance, sense of purpose, identity, feeling connected and belonging, empowerment, and resilience (the ability to bounce back after setbacks).

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Mental and physical health are closely connected. Mental illnesses like depression and anxiety can affect people's ability to engage in healthy behaviors. Similarly, physical health problems can make it harder for people to get treatment for mental illnesses. Increasing screening for mental disorders can help people get the treatment they need.[218]

Overall, people in Minnesota are reporting more frequent mental distress and poor mental health:

- In 2021, 12.6% of people in Minnesota reported frequent mental distress, almost double the rate from 2013.[219]
- In 2021, Minnesotans reported an average of 4.3 mentally unhealthy days in the past 30 days, over twice the rate reported in 2013.[220]
- In 2022, about 29% of Minnesota students responding to the Minnesota Student Survey reported that they lived with someone who is depressed or has another mental health issue.[221]

Different groups experience mental health in different ways:

- Some groups in Minnesota are more likely to experience mentally unhealthy days than others, including people aged 26-54, with a high school degree or less, at or below 200% of the Federal Poverty Guideline, with public health insurance, who are American Indian, or who are two-spirit[bb] or nonbinary or two-spirit.[222]
- More students reported long-term mental health problems in 2022 (29%) compared to 2019 (23%) or 2016 (18%), which means mental health problems lasting six months or more.[223]

[bb] Two-spirit is a North American Indigenous word used to describe a person whose gender identity is a mixture of male and female or masculine and feminine, or a person who is a different gender that is not male or female.

- Nearly 11% of people giving birth reported experiencing postpartum depression after childbirth from 2016 to 2021, peaking at 14% in 2020. Rates also varied by age: People under age 20 were 2.7 times more likely to report experiencing postpartum depression compared to respondents above age 35.[224]
- As of 2021, 30% of adult males, 60% of adult females, and 50% of juvenile males use ongoing mental health services in correctional facilities in Minnesota.[225]

Mental well-being and resilience can ease the lifelong effects of trauma, and are can be nurtured through relationships or resources available in most communities. However, most Minnesota youth with adverse childhood experiences (ACEs) do not have sufficient opportunities to nurture the mental well-being and resilience that can help them thrive.

- Of 82,000 Minnesota students surveyed in 2022, 47% reported experiencing at least one ACE; in particular, the rate of students experiencing sexual abuse or living with someone with mental health issues increased from 2019 to 2022.[226]
- According to a U.S. Census Bureau Household Pulse Survey in June 2023, 34% of people in Minnesota were very stressed by the increase in prices in the two months prior; this proportion was higher among LGBTQ+ people (43%), BIPOC people (50%), and people with disabilities. One-fifth of people in Minnesota have coped with price increases by delaying medical treatment (like refilling a prescription or getting surgery).[227]

Prenatal and early life experience

Relationships, experiences, and the environment impact our lives before we're born and as we grow.

Group conversations: Prenatal and early life experience

Participants in group conversations shared how their communities help children grow and thrive, including:

- Helping children understand their culture, religion, and/or language
- Supporting new parents/caregivers with information and resources
- Empowering and educating parents to navigate systems and advocate for their needs
- Helping parents care for children
- Providing love, emotional support, and spiritual guidance
- Providing activities and spaces for kids to be active and play

Racism during pregnancy, childbirth, and infancy

Racism is one of the most powerful social exclusionary forces. Experiencing racism over a lifetime and over generations raises stress hormones in the body and has a toxic effect on a person's health and the health of future generations.[228,229] In the United States, Black women face a rate of material mortality three to four times higher than other groups, and a rate of severe maternal morbidity 203 times higher.[230] Research shows that structural racism may contribute to persisting racial inequity in infant mortality.[231]

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- Among pregnant women in Minnesota, 6% surveyed by MDH felt emotionally upset (angry, sad, or frustrated, for example) because of how they were treated based on their race in the 12 months before their baby was born; American Indian (24%) and U.S.-born African American (25%) women were most likely to report this.[232]
- In the years 2017-2018, Minnesota's pregnancy-related mortality ratio[cc] was 8.8 deaths per 100,000 live births. While Black birthing people (13%) and American Indian birthing people (2%) are a small portion of the birthing population, they are disproportionately represented among the pregnancy-associated deaths, making up 23% and 8% respectively.[233]
- In 2021, 310 infants born in Minnesota died before their first birthday. While Minnesota's infant mortality rate has declined 34.2% since 1990, from a high of 7.3 deaths per 1,000 live births to 4.8 in 2021, the state's overall rate disguises substantial variation by race/ethnicity—the burden of infant mortality is not shared equally across population groups.[234]
- Overall, from 2016-2017, over 7% of pregnant women surveyed by MDH reported experiencing five or more stressful events in the year before their baby was born.[dd] Rates varied by race/ethnicity with nearly 29% of American Indian and 21% of U.S.-born African American respondents reporting five or more stressful events in the year before their babies were born.[235]

[cc] MDH anticipates new data prior to the next statewide health assessment.
[dd] These could include (but are not limited to) having lost a job, having a close family member very sick and going into the hospital, becoming separated or divorced, having problems paying rent, mortgage, bills, someone close having a problem with drinking/drugs, and partner or self going to jail.

Belonging in school

Belonging as an adolescent sets the stage for belonging and participating in society as an adult. A welcoming and supportive school environment, where every child knows they belong and are valued, can have positive effects throughout life.

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- In 2022, 74% of students felt some sense of belonging (vs. little or none) when thinking about how much they believe their parents, adult relatives, friends, teachers, other adults at school, and adults in the community care about them as individuals.[236]
- In 2022, 85% of students reported positive student-teacher relationships at school. Young people who feel connected to school are less likely to consume alcohol or other drugs, and to experience depression or anxiety.[237]
- In 2022, 63% of students reported their school or community offer a variety of programs for people their age to participate in outside of the regular school day.[238]

Despite the overall high sense of belonging among responding students, students identifying as BIPOC and American Indian face additional challenges:

- In Minnesota, American Indian students are ten times more likely to be expelled or suspended than their white peers. Black students are eight times more likely to be expelled or suspended than their white peers.[239]

Bullying also negatively affects belonging, whether it happens in school or another setting. Bullying is intentional physical, verbal, or psychological tormenting, and can range from hitting, shoving, name-calling, threats, and mocking to extorting money and treasured possessions.[240] Some kids bully by shunning others and spreading rumors; others use email, social media, and text messages to taunt others or hurt feelings online.

- In 2019, one in 10 fifth- and eighth-graders reported being bullied frequently (at least once per week) because of their size or weight. At all sizes, children need acceptance, opportunities to be healthy, and to learn to care for their bodies.[241]
- In 2022, nearly 50% of students reported being bullied at least once in the last 30 days. About 40% of economically disadvantaged students and 31% of LGBQ+ students reported being bullied more frequently than once per month.[242]

Civic participation

Participation in civic life takes many forms, including community-building activities, political and electoral participation, influencing policies and systems change, cooperating to improve working conditions, and more.

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In 2022, the Healthy Minnesota Partnership identified civic participation as a strength of the state, citing specific examples: a community providing dental services for low-income community members, organizing for fair wages and good working conditions, and advocating for smoke-free environments.

Statewide data confirms that Minnesota has strong levels of civic participation.

- In 2021, 36.7% of Minnesotans aged 16 and older had volunteered in the past year.[243]
- In 2021, 61.8% of residents donated $25 or more to non-profits and other charities.[244]
- In 2022, 61% of eligible people in Minnesota voted, the highest rate of voter turnout in the nation.[245]
- In 2022, 382,000 Minnesotans belonged to labor unions (15.2% of the total state workforce[246]), the 10th-highest rate in the country.[247] Minnesotans living in rural areas participate in unions at a higher rate than those living in urban and suburban areas.[248]
- In 2020, 75% of Minnesotans participated in the U.S. Census, a rate akin to previous years.[249]

Local and state government, community and statewide organizations, businesses, faith communities, informal networks and others create civic infrastructure and opportunities to come together to create better health for everyone. Minnesota can continue to build civic infrastructure to provide opportunities for people to take action to stay connected and healthy.

Sexual health

Sexual health is part of a whole person and is a state of physical, emotional, mental, and social well-being in relation to sexuality. It includes positive and respectful attitudes, approaches, and relationships, not just an absence of disease or dysfunction.[250] Some things that impair sexual health and disproportionally impact some populations include a lack of comprehensive education, and scarce or disrupted prevention and care services.

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Sexually transmitted diseases

Women and particularly BIPOC women disproportionately bear the long-term consequences of STDs. Women are biologically more prone to contracting a STD, but less likely to have symptoms. Untreated STDs can have serious consequences on their health and future reproductive ability.[251]

- Over the past 10 years, the rate of chlamydia in Minnesota has increased 15%, and gonorrhea by 110%, with large disparities between populations based on race/ethnicity, gender, and age.[252]
- The rate of syphilis in Minnesota also increased between 2012 and 2021, including among women and people who can become pregnant.[253]

HIV/AIDS

At the time of this report, there are multiple HIV outbreaks in Hennepin and Ramsey counties and in the Duluth area, despite efforts to prevent new HIV transmission. The outbreaks impact people already facing stigma, rejection, and other negative attitudes, including men who have sex with men, people who inject drugs, and people experiencing unsheltered homelessness.[254]

- In 2022, 9,802 people were living in Minnesota with HIV/AIDS.[255]
- In 2022, 262 people were diagnosed with HIV. The majority (57%) of new diagnoses were in people between 20 and 39 years old.[256]

Ensuring that people living with HIV know their HIV status and are rapidly linked and retained in care are critical steps to caring for people and preventing new transmissions.[257] The goal of HIV treatment is to achieve viral suppression, meaning the amount of HIV in the body is very low or undetectable. This is important for people living with HIV, because people cannot pass HIV through sex when they have undetectable levels of HIV so long as they take their medication as prescribed and stay undetectable.[258]

- 90% of people who were diagnosed with HIV in 2020 were linked to care within 30 days.[259]
- 71% of people living with HIV in Minnesota were retained in care.[260]
- 64% of people living with HIV were virally suppressed (virus load was low or undetectable).[261]

Substance use

Using substances like alcohol, commercial tobacco, opioids, and cannabis can impact our social function, how we interact with people around us, and our environments. Emerging research shows that substance use or substance use disorders may be linked to socially-based stressors like socially toxic childhood environments, racism, and discrimination.[262] According to the Kaiser Family Foundation, 12% of U.S. adults say their alcohol consumption and substance use has increased because of pandemic-related

stress.[263] In Minnesota, alcohol remains the primary substance used when adults are admitted to substance use disorder treatment.

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- As of 2019, about 90% of Minnesota people who are incarcerated are diagnosed with a substance use disorder.[264]
- Among people experiencing homelessness, the rates of reported substance use disorder have remained consistent since 2000; 18% reporting drug use disorder and 14% reporting alcohol use disorder.[265]

Alcohol

- From 2016-2021, nearly 7% of people in Minnesota reported using alcohol in the final three months of pregnancy. American Indian respondents reported the lowest levels of alcohol use during pregnancy (2.8%) compared to all other racial/ethnic groups. Respondents with more education reported higher percentages of alcohol use (7% versus 5% respectively).
- In 2022, 12% of ninth- and 11th-grade students said they have used alcohol within the last 30 days, down from 21% in 2013.
- In 2021, most adult people in Minnesota (59.5%) said they drink alcohol. 63% of men and 57% of women 18 and older reported alcohol use.
- Minnesota had one of the highest rates of binge drinking among adults (17.9%) in the nation in 2021.[266]

Commercial tobacco

- Birthing people reported smoking during pregnancy less in 2021 (4.5%) than in 2016 (9.4%). People with less than 12 years of education smoked during pregnancy at higher rates (18%) compared to those with 12 or more years of education (6.5%).[267]
- Student use of commercial tobacco products during the past 30 days varied substantially, both among grades and between years. Use of commercial tobacco sharply increased between 2016 and 2019 but decreased in 2022. In 2022, a greater share of 11th-graders reported using commercial tobacco than ninth-graders.[268]
- As of May 2023, 10 Minnesota cities and counties had enacted a comprehensive policy that prohibits sales of all flavored tobacco, including menthol; 17 cities or counties addressed/restricted flavor tobacco and/or e-cigarette products in some manner.[269]
- As of 2021, 13.7% of people in Minnesota smoke, a stable rate since 2017.[270]

Opioids

The most common way that people access opioids is through a medical prescription.

- Among Minnesota students, the percentage of eighth- and ninth-graders who reported inappropriate use of pain medications (e.g., OxyContin, Percocet, Vicodin) in the past 12 months has increased from 2019 to 2022, but remained steady among 11th-graders.[271]
- Nonfatal emergency department visits for opioid-involved overdose increased from 2020 to 2021. This increase was driven by nonfatal overdoses involving opioids other than heroin, whereas nonfatal overdoses involving heroin decreased.[272]
- In 2021, people in Minnesota aged 25 to 34 had the greatest number (count) of nonfatal emergency department visits for opioid-involved overdoses.[273]

Cannabis

Starting in August 2023, adults 21 and older can legally use and possess certain amounts of cannabis in Minnesota; however, cannabis is still illegal on federal property.[274]

Physical and sexual violence

Physical and sexual violence are a means of maintaining power or control over another person. The effects of this violence on a person's mind and body lasts for a lifetime. There are significant gaps in data availability, data access, and data tracking of sexual and intimate partner violence.

Placeholder:
The final statewide health assessment will include a visual component here, highlighting relevant/important data in this section.

As with other health issues, specific groups are more likely to experience violence:

- In 2019, there were over 13,000 emergency department visits for assaults, 396 of these were perpetuated by an intimate partner.[275]
- In 2018, there were over 80 visits to the emergency department for elder abuse.[276]
- In 2018, there were over 100 visits to the emergency department for abuse during pregnancy.[277]
- In 2022, 13.5% of Minnesota students in grades 9 and 11, had experienced one or more types of sexual violence. This means that roughly one in eight students have experienced some form of sexual harm by the end of 11th grade. Students most commonly reported sexual violence as being perpetrated by an intimate partner.[278]

- Indigenous women, girls, and two-spirit people are far more likely to experience violence, be murdered, or be missing than other demographic groups in Minnesota.[279]
- In 2018, 58% of surveyed adults experiencing homelessness reported having experienced physical or sexual violence; women (76%) and people who identify as LGBTQ (71%) experience this violence at higher rates.[280]

Isolation

People who are physically or socially isolated are at greater risk of abuse, loneliness, depression, and injury. As people grow older and lose life partners or family members, they may become more isolated. The proportion of older people who are expected to be living alone is anticipated to increase significantly among baby boomers, partly because they have fewer children than preceding generations.

Placeholder:
The final statewide health assessment will include a visual component here, highlighting relevant/important data in this section.

Social isolation and loneliness are difficult to measure. The *2023 Senior Report* by Americas Health Rankings produced an index for ranking for states across social and economic factors, physical environment, clinical care, behaviors, and health outcomes for risk of social isolation for those aged 65 and older:

- Minnesota ranks as one of the healthiest states in the nation for older adults (fourth), yet also one of the highest in risk of social isolation for older adults (sixth).[281]

With isolation comes a greater risk of falls, the aftermath of which can negatively impact older adults' quality of life.

- In Minnesota, 29.1% of adults aged 65 and older fell in 2020.[282]

Additionally geography and race/ethnicity also influence isolation.[283] Immigrants and refugees who lack English language skills and American cultural knowledge face additional hurdles to belonging. The loss of a shared culture, lack of access to familiar foods, and missing the companionship of friends and loved ones contributes to isolation. For older adults in Greater Minnesota, the risk of isolation is compounded by geographic distance from family, communities, or needed services. Disability at any age increases the likelihood for physical and social isolation.

Group conversations: Isolation

Participants group conversations shared how their communities support people as they age, through interpersonal relationship, resources, and emotional support—all of which can help decrease isolation. Some communities care for older adults in intergenerational and multicultural families, often providing direct care and emotional support at home. Others provide opportunities for elders to share wisdom and stories with children, youth, and other adults, or in other intergenerational activities that support people of all ages.

Despair and disconnection

Belonging is linked not only to higher rates of chronic disease and other poor health outcomes, but also to deaths from suicide, homicide, drugs, and alcohol—sometimes called deaths of despair and disconnection. These also include deaths caused by an intimate partner (e.g., boyfriend, girlfriend, partner, or spouse), deaths due to child maltreatment, unintentional firearm injury death, and deaths where people are killed by law enforcement.[284] These causes of death all are associated with the disruption and hopelessness engendered by exclusion and disconnection.

Placeholder:
The final statewide health assessment will include a visual component here, highlighting relevant/important data in this section.

Some groups are more likely to experience higher rates of mortality due to despair and disconnection:

- Data from 2017-2021 shows the mortality rate is three times higher among people experiencing homelessness than the Minnesota average.[285]
- People in Minnesota who experience homelessness and who also identify as American Indian have a mortality rate that is 1.5 times higher than other people experiencing homelessness and 5 times higher than the Minnesota average.[286]

Gun violence

The rate of gun violence is higher in the United States than other comparable developed counties. Nationwide, approximately 100 people die due to gun violence, and the frequency of mass shootings is increasing each year. Gun violence is a complex issue caused by many factors.[287]

- In an average year, 442 people in Minnesota die and 680 are wounded by guns. Minnesota has the sixth-lowest rate of gun violence in the U.S.

- In Minnesota, the rate of gun deaths increased 20% from 2010 to 2019, compared to a 17% increase nationwide. The rate of gun suicides increased 15% and gun homicides increased 51%, compared to a 13% increase and 26% increase nationwide, respectively.[288]

Suicide

Suicide can reflect a deep sense of despair. Historical trauma, experiences of racial and other prejudice, physical, sexual, or emotional abuse, the experience of being addicted to drugs or alcohol, chronic pain, mental illness, or an immediate crisis can all lead to suicidal thoughts or actions. Hope and help are available, and recovery is possible and common.

- In 2021, 808 people in Minnesota died from suicide, for an age-adjusted rate of 13.9 per 100,000, continuing a 20-year trend of increasing rates. For every death there are more than a dozen non-fatal self-harm injuries each year.[289]
- In 2022, 9% of students reported having ever considered suicide. Of these, over two-thirds identified as a person of color, not straight, or both.[290]

Many things can lead to suicidal thoughts and attempts, including the loss or absence of meaningful work, difficulty with school, the trauma of frequent exposure to violence, an assault, post-traumatic stress, financial troubles, broken relationships, experiences of mental illness, chronic pain, and other challenges. Crushing personal circumstances can limit mental well-being and affect the ability to sleep, to eat and to work.

Homicide

Homicides are typically categorized as a public safety or criminal justice issue. Violence in a community, especially violent death, has immediate and long-lasting effects on the physical and mental health of all community members. Violence anywhere in the community increases anxiety and stress.

- Offenses involving murder totaled 201 in 2021 in Minnesota, compared to 185 in 2020.[291]

One effect of community violence is poor quality or less sleep; when youth experience this, it hurts their school performance.[292]

Racial disparities in homicide continue to reflect the exclusion, lack of opportunity, and racism experienced by people who are BIPOC and American Indian. The message that “you do not belong” is amplified by the systemic and institutional racism of the criminal justice system through actions like racial profiling, the killing of African Americans by police, and the inequities in incarceration noted elsewhere in this report. In May 2020, George Floyd was killed by Minneapolis police, and his death ignited a global movement and roused many in Minnesota and people around the world to see the systemic racism that Black communities have known for centuries.[293]

- From 2018 to 2021, Black or African American people in Minnesota continued to be more likely to die by homicide.[294]
- In 2021, 56 victims of homicide in Minnesota were white and 123 were African American; 78% of the state's population is white and 7% is African American.[295]

Alcohol and drug overdose deaths

Like the rest of the United States, Minnesota has seen a dramatic increase in deaths due to opioid overdose (some of these deaths may be suicides) and alcohol abuse. The opioid epidemic continues to affect all people in Minnesota. The growing death rate is evidence of growing addiction to prescription opioids such as oxycodone, hydrocodone, and fentanyl, and the concurrent growth in addiction to heroin. Many people first become addicted to a prescription opioid but may later seek out and use heroin as a cheaper and more readily available substitute.

- Opioid-involved overdose deaths among people in Minnesota increased 43% from 2020 to 2021, and the number of deaths has more than doubled since 2019.[296]

Drug overdose deaths also highlight Minnesota health disparities:

- Minnesota's overall drug overdose mortality rate masks increasing racial disparities since 2018. In 2021 in Minnesota, African Americans were more than three times as likely to die of a drug overdose than people who are white, and American Indians were ten times more likely to die of a drug overdose than white people.[297]
- Deaths from substance use are 10 times higher among people experiencing homelessness than the general Minnesota population; one in 10 substance use deaths in Minnesota are among people experiencing homelessness, and one in three of all deaths among people experiencing homelessness are caused by substance use, especially opioids including fentanyl.[298]

Deaths that are solely attributable to alcohol include accidental and intentional alcohol poisoning, or chronic conditions of the liver, heart, pancreas, stomach, and nervous system. Data suggests that the COVID-19 pandemic impacted the number of people in Minnesota dying due to fully alcohol-attributable causes; this rate was fairly similar to the prior three years at the beginning of 2020, but increased after and continued to do so through 2021.

- The number of deaths in Minnesota fully attributable to alcohol increased by one-third between 2000 and 2010, and more than doubled between 2010 and 2020.[299]
- Each year in Minnesota, about 2,082 people die from alcohol-related causes. Nearly two-thirds of these deaths are due to chronic conditions and are related to alcohol use over the person's lifetime.[300]

Policy area overview: Universal broadband internet access

What is universal broadband internet?

Universal broadband internet access is defined as all people having access to broadband internet communications services.[301]

Why does broadband internet matter for health?

The Federal Communications Commission has identified broadband connectivity as a super determinant of health and a gateway to other social determinants of health like education and employment.[302] From this point of view, access to broadband internet is the connector—to health services, social services, work, and each other.

Lacking of fast and reliable internet access is a clear barrier to belonging for many people in Minnesota, given its necessity to apply for jobs and for work, to do school homework, and to connect with others. The increase and necessity of remote work, education, and social arrangements during the COVID-19 pandemic, usually conducted via the internet, underscored the necessity of fast and reliable internet access to participate in many aspects of modern life.

What systems and policies shape broadband internet?

Public policy decisions at the national, state, and local levels impact support for and distribution of broadband infrastructure and access.

Minnesota has a goal of universal broadband access at specific download and upload speeds by 2022 and by 2026.[303] These goals shape how the state and local communities direct funding dedicated to improving access. Recently, both state and federal government have allocated funding to achieve these goals.

- In May 2023, Minnesota adopted an agriculture and broadband law, which included $100 million, to expand high-speed broadband internet in Minnesota.[304]
- In June 2023, the federal government allocated over $600 million in funding to Minnesota to administer local grant programs from the wider Broadband Equity Access and Deployment program.[305]
- Rural and Tribal areas are less likely to have the infrastructure for broadband internet services compared to urban and suburban areas, owing to the limited profitability for corporate internet providers to build infrastructure in less populated areas.

- Corporate policy decisions on where to build infrastructure, the cost to consumers, and the speeds of broadband service to also impact access.

What inequities exist around broadband internet?

Cost of purchasing internet services and decisions on where to invest in infrastructure impact broadband access.

- A national survey in 2020 found that half of lower-income broadband users (52%) say they worry a lot or some about being able to pay for their high-speed internet connection over the coming months, compared with 26% of those with incomes in the middle and just 9% of those in the high-income tier.
- 54% of Hispanic broadband users say they worry about being able to pay for their home internet services, compared with 36% of Black users and 21% of white users.[306]

Current availability of broadband service in Minnesota depends on one's location, as well as the definition one is using for "reasonable and timely" broadband service.

- Across all of Minnesota, 92% of Minnesota housing units can access wireline broadband service (25/3 Mbps standard). However, only 74% of rural Minnesota housing units have access to this speed of broadband, and only 63% have access to faster speeds (100/20 Mbps).[307]

Trends in Minnesota broadly correlate with national trends in who is more or less likely to have access to broadband internet.

- 80% of white adults in the U.S. say they have a broadband connection at home; this drops to 71% among Black Americans and 65% among Hispanic Americans.[308]
- 92% of Americans with a household income of over $75,000 can access broadband at home; this drops to less than 60% for households with incomes under $30,000.
- 94% of college graduates are connected to broadband at home, while only 46% of people who did not graduate high school report the same.
- Compared to the 77% of Americans overall who report access to broadband internet at home, less than half of American Indian/Alaska Natives have access to high-speed internet.[309]

Since 2022, the Minnesota Department of Education (MDE) has a new requirement to collect data about students' ability to access the internet at home. This has the potential to yield more detailed and up-to-date data about the state of broadband connectivity equity in Minnesota. While this section has highlighted policy discussions that focus on access to high-speed broadband, others are looking for policy solutions to a household's ability to purchase and use computer equipment.

Appendices

Appendix A. Detailed methods of the 2023 statewide health assessment

The process to develop the statewide health assessment is as important as the report itself. It is a collaborative process involving multiple partners, relying on feedback loops and input from these groups.

Groups supporting the statewide health assessment

Healthy Minnesota Partnership: The Healthy Minnesota Partnership brings together community partners and the Minnesota Department of Health (MDH), to improve the health and quality of life for people, families, and communities in Minnesota. The Partnership is charged with developing a statewide health improvement plan around strategic initiatives that ensure the opportunity for healthy living for all Minnesotans, and that engages multiple sectors and communities across the state to implement the plan. Member organizations include:

- American Heart Association
- Blue Cross and Blue Shield of Minnesota
- Center for Community Health (vacant as of September 2023)
- Council on Asian Pacific Minnesotans
- Eliminating Health Disparities grantees (vacant as of September 2023)
- Local Public Health Association
- Minnesota Board on Aging
- Minnesota Council of Health Plans
- Minnesota Council on Latino Affairs
- Minnesota Department of Corrections
- Minnesota Department of Health
- Minnesota Department of Human Services
- Minnesota Department of Transportation
- Minnesota Hospital Association
- Minnesota Housing Finance Agency
- Minnesota Public Health Association
- National Rural Health Resource Center
- State Community Health Services Advisory Committee (SCHSAC) (vacant as of Sept. 2023)
- TakeAction Minnesota
- University of Minnesota Boynton Health Services
- University of Minnesota College of Design
- University of Minnesota School of Public Health
- Voices for Racial Justice (vacant as of September 2023)
- Health plan representatives

Healthy Minnesota Partnership subcommittees: Healthy Minnesota Partnership subcommittees acted on behalf of the Partnership to guide the development of the 2023 statewide health assessment. National standards for public health accreditation require the state health department to co-create the assessment with a cross sectoral partnership. These subcommittees are:

- Steering Committee: Directing development of the assessment and ensuring framing and narratives are consistent with larger the Partnership's vision for the assessment.
- Assessment Group: Ensuring the statewide assessment aligns with local public health and hospital assessment work across the state.

MDH workgroups: An MDH Statewide Health Assessment Workgroup helped identify and gather data for possible inclusion in the 2023 statewide health assessment. Members served as a liaison between the project team and state department of health programs. A COVID group was also convened to identify COVID data for this assessment.

Data collection

A statewide health assessment gathers a select amount of data on people, the environment, health status, health behaviors, health care, social and economic forces, and community resources all in one place, to tell the story of health in the state and to prepare for planning and action. The intent of the statewide health assessment, rather than being a single comprehensive source of data, is to convey a picture of health and well-being across the state of Minnesota, providing links to many different data sources.

The assessment relies on data from many organizations and sources across the state. This data already exists. This data was not collected for the sole purpose of the assessment. Rather, Partnership staff collects, reviews, and elevates data in the assessment that is relevant to understanding how conditions impact a health in Minnesota. Most data within this assessment should be considered as a piece within a larger puzzle. Since the last assessment in 2017, data across Minnesota is increasingly available to the public through dashboard and summary websites.

- **MDH data collection**: A group of representatives from across MDH reviewed and identified potential data for this next assessment. Using the list of indicators from the last statewide health assessment, this group engaged their divisions, sections, and programs in reviewing the old indicators they submitted and asked which data is still relevant or needed updating for telling the story of health in Minnesota. This group was also asked to identify system-level data (data reflecting activities of systems, organizations, or policies; not always individual people) if possible. This group met over the course of three months to identify indicators for consideration and brought questions back to their teams and divisions within the larger department of health.

  After this group identified data, Partnership staff invited people across the organization to upload data to a web platform for consideration for the statewide health assessment, along with the key findings or take-aways, interpretation notes, limitations of the data, and different ways data could be broken down. Participants also tagged data with its source, year, and how frequently it is updated. MDH built this data collection website to support future assessments and tracking data within the 2023 assessment.

- **Data collection from outside MDH**: Collecting additional data from outside MDH followed a similar process, using the 2017 data as a starting point. Partnership staff reviewed Minnesota government agency websites and reports for updated data from the 2017 assessment. Then, staff convened the agencies noted below to discuss the most relevant indicators for explaining how their work impacts health, any additional data sources that should be reviewed for the assessment, and any important framing considerations for how to present their data. A number of these agencies are members of the Healthy Minnesota Partnership. Agencies engaged in these conversations included:
    - Minnesota Board on Aging
    - Minnesota Council on Disability
    - Minnesota Department of Corrections
    - Minnesota Department of Education
    - Minnesota Department of Employment and Economic Development
    - Minnesota Department of Human Services
    - Minnesota Department of Natural Resources
    - Minnesota Department of Transportation
    - Minnesota Housing Finance Agency
    - Minnesota Pollution Control Agency

Community engagement

Healthy Minnesota Partnership staff conducted several community engagement activities to include input while developing the assessment. Staff planned activities with the understanding that communities have engagement fatigue and do not want to be defined solely by deficits. Staff consulted with the Healthy Minnesota Partnership Steering Committee and the MDH Health Equity Bureau throughout the process. The community engagement activities included:

1. Community engagement inventory: A review of community engagement efforts conducted for other local and statewide assessments, to inform the assessment and future engagement efforts
2. Group conversations: Eight facilitated discussions with advisory boards, committees, and other groups (approximately 110 people) to identify how communities support health and well-being
3. State strengths survey: Brief public survey to check on and identify state strengths for health and well-being (538 respondents)
4. Public comment: Open review to receive input on the draft assessment
5. Dissemination input: Facilitated questions during meetings with the Partnership, subcommittees, other state agencies and partners for input on the dissemination plan

The table below shows the levels of community engagement from the International Association of Public Participation and how the Partnership engaged groups involved in developing the assessment.[310] For

future assessments, community engagement efforts should strive to fall under even more of the collaboration and empower rows.

Table 15. Engagement during 2023 assessment development

	Engagement goal (from IAP2 spectrum)	Key players involved	This assessment's activities have included…
Inform	To provide balanced and objective information to help them understand the problem, alternatives, opportunities, and/or solutions	Healthy Minnesota Partnership (full partnership including general public / those subscribed to communications Additional partners: ▪ Minnesota Department of Health staff ▪ State Community Health Services Advisory Committee (SCHSAC) ▪ Center for Community Health ▪ Minnesota Public Health Association (MPHA) ▪ Urban and Tribal health directors	Communications via: ▪ Healthy Minnesota Partnership email list ▪ Healthy Minnesota Partnership website ▪ Minnesota Department of Health Intranet ▪ Presentation at partner meetings
Consult	To obtain feedback on analysis, alternatives, and/or decisions	Healthy Minnesota Partnership (those attending meetings) Additional partners: ▪ Other collaborative groups (group conversations, HEAL Council, etc.) ▪ SCHSAC and local public health ▪ Public individuals and communities	▪ Statewide health assessment questions at 2021-2022 HEAL Council meeting ▪ Key informant interviews through public health student ▪ State strengths survey ▪ Group conversations ▪ Dissemination questions at June 2023 SCHSAC meeting ▪ Public comment

	Engagement goal (from IAP2 spectrum)	Key players involved	This assessment's activities have included…
Involve	To work directly with them throughout the process to ensure that their concerns and aspirations are consistently understood and considered	Healthy Minnesota Partnership (those attending meetings) Additional partners: ▪ Other state agencies ▪ MDH Office of American Indian Health ▪ Local public health	▪ MDH data workgroup ▪ Data conversations with other state agencies ▪ Meetings with MDH Office of American Indian Health ▪ Assessment and alignment committee ▪ COVID ad hoc group meetings and conversations
Collaborate	To partner with them in each aspect of the decision, including developing alternatives and identifying preferred solution	Healthy Minnesota Partnership (those attending meetings) Additional partners: ▪ MDH Health Equity Bureau	▪ Healthy Minnesota Partnership meetings ▪ Statewide health assessment steering committee meetings ▪ Monthly MDH Health Equity Bureau engagement workgroup meetings
Empower	To place final decision-making power in their hands	Healthy Minnesota Partnership (those attending meetings)	▪ Healthy Minnesota Partnership meetings ▪ Statewide health assessment steering committee meetings

Appendix B. Community engagement inventory

Useful definitions[ee]

- **Community**: Community is a group of people who have common characteristics or shared identity; communities can be defined by location, race, ethnicity, age, occupation, interest in particular

[ee] These definitions come from the Minnesota Department of Health Community Engagement Plan, 2016-2019.

problems or outcomes, or other similar common bonds. Ideally, there would be available assets and resources, as well as collective discussion, decision making and action.

- **Community engagement**: The process of working collaboratively with groups of people who are affiliated by geographic proximity, special interests, or similar situations with respect to issues affecting their well-being.

Background and purpose

During March-April 2023, Partnership staff conducted an initial inventory of community engagement efforts presented in various health assessments, to explore how community engagement is incorporated into health assessments. This also happened in response to receiving feedback that communities are feeling engagement fatigue from numerous, concurrent engagement efforts. Staff used findings from this inventory to inform this statewide health assessment's community engagement activities.

Methods

These assessments reviewed for this inventory included community health needs assessments, community health assessments, and other assessments conducted by the Minnesota Department of Health and other state agencies in the past 5 years. To learn from other states, Partnership staff also reviewed a few recent health assessments from states other than Minnesota. As of June 30, 2023 the inventory includes a total of 24 assessments. This appendix contains a list of assessments inventoried and questions asked.

Staff used the following methods to identify assessments for inclusion in the inventory:

- Assessments provided by MDH public health system consultants that were identified to have particularly strong community engagement methods
- Suggestions from the Healthy Minnesota Partnership
- Community health needs assessments provided by the Partnership[ff]
- Other assessments identified by the Partnership and subcommittees

Preliminary findings

The following list describes the main findings and highlights from our inventory.

[ff] In Fall 2022, Partnership staff conducted an inventory of community health needs assessments completed by non-profit hospitals, to identify health indicator priorities. However, the Partnership also reviewed community engagement efforts. Partnership staff reviewed these community health needs assessments for this community engagement inventory.

- Many organizations developed assessments and reports with some form of community input.
- Common community engagement efforts from the assessments examined include focus groups, listening sessions, online surveys, and key informant interviews. Despite these similarities, there are still vast differences in assessment design and community engagement methods and questions across these assessments. Due to these differences, it is difficult to compare this information.
- Many assessments include an emerging focus on systems and policies that create health, rather than individual behaviors.
- Through community input, assessments commonly identified social connectedness and access to resources and education as factors that create health.
- Across the assessments, there was a general lack of input collected around community assets and strengths, particularly with communities experiencing health inequities. Most assessments were framed using a deficit perspective.
- There was also a lack of discussion across assessments around how communities prefer to be informed of and use health assessment reports.

Notable assessments

Some assessments included particularly strong community engagement efforts. These may be useful in informing community engagement and messaging for the 2023 Minnesota statewide health assessment. They include:

- **2022 Horizon Community Health Assessment** includes a strong focus on strengths and assets of communities, rather than deficits.
- **We Plan 2025 Community Themes and Strengths Assessment from Cook County, Chicago** includes a list of questions focused on community strengths and what creates health.
- **Reducing the Impact of Cancer: Listening to American Indians in Minnesota** provides an example of engaging a community experiencing health inequities on community strengths.

Future directions

The current inventory is not meant to be a final version nor include an exhaustive list of assessments.

This document reflects findings as of April 28, 2023. Partnership staff can continually update this inventory throughout and beyond the 2023 assessment process.

Some questions and future directions that arouse from the preliminary inventory include:

- What can be learned for future community engagement efforts? What new questions does this inventory raise?
- What does shared learning of community engagement processes look like?
- What are potential ways the Healthy Minnesota Partnership could explore collaboration around community engagement processes?
- How can one assess who was reached and who wasn't in community engagement efforts? Are there specific strategies that would be beneficial?

Assessments reviewed

Partnership staff included the following assessments in the inventory, as of April 28, 2023. This is not a final list of assessments, as the inventory is meant to be continually updated throughout and beyond the 2023 assessment.

Community health assessments:

- Cook County Minnesota 2019 Community Health Assessment and Community Health Improvement Plan
- Horizon 2022 Community Health Assessment
- Kandiyohi-Renville 2019 C Community Health Assessment and Community Health Improvement Plan

Community health needs assessments:

- Aitkin County 2022 Community Health Needs Assessment
- Cambridge Medical Center 2020 Community Health Needs Assessment
- Central Minnesota Alliance 2019 CH Community Health Needs Assessment NA
- Lakes Medical Center 2021 Community Health Needs Assessment
- Lake Region and Prairie Ridge Healthcare 2022 Community Health Needs Assessment
- Olmsted County 2019 Community Health Needs Assessment

Statewide health assessments:

- Colorado 2018 Statewide Health Assessment
- New York 2018 Statewide Health Assessment
- Washington 2018 Statewide Health Assessment

Other assessments/plans:

- Advancing Health Equity in Minnesota: Report to the Legislature February 2014
- Cancer Plan Minnesota 2022: A framework for action
- Minnesota Go Statewide Multimodal Transportation Plan
- Minnesota 2020 Title V Maternal and Child Health Needs Assessment
- We Plan 2025 Cook County Chicago Community Themes and Strengths Assessment
- We Plan 2025 Cook County Chicago Forces of Change Assessment

- Minnesota State Oral Health Plan 2020-2030
- Minnesota Climate Action Framework
- Reducing the Impact of Cancer: Listening to American Indians in Minnesota
- Working Toward Health Equity: Critical Conversations with American Indians in Minnesota
- Assets and Unmet Needs of Diverse Older Adults: Perspectives of community-based service providers in Minnesota
- Minnesota 2022 LGBTQ+ Needs Assessment Report

Community engagement questions

The following questions aim to assess two main aspects of community engagement: 1) community engagement methods and 2) community input on strengths and assets. Community members and groups are experiencing growing community engagement fatigue, which makes looking at methods of engagement particularly important. Finding novel methods for engagement in these assessments could inform future assessment engagement, with the hope of not further burdening communities. Additionally, this inventory has built a base understanding of the utility of an assets-based approach.

Partnership staff asked of each assessment:

- Who was engaged?
- When did community engagement activities take place?
- How were groups engaged?
- What supports health in different communities?
- Was any input collected regarding strengths of state?
- How do communities prefer to be informed or use reports such as a statewide health assessment?
- Is there anything that may point to how to make the statewide health assessment useful? (Formatting, messaging, etc.)
- Was there input collected on community strengths/assets that promote health?
- If yes, for communities experiencing health inequities—what are the strengths/assets?

Appendix C. State strengths survey findings

The final 2023 statewide health assessment will include full findings from the state strengths survey, including respondent demographics.

Appendix D. Group conversations findings

The final 2023 statewide health assessment will include full findings from group conversations. Participating groups are currently reviewing the findings.

Appendix E. Assessment alignment

The final 2023 statewide health assessment will include full findings from the work and discussions of the Healthy Minnesota Partnership Assessment and Alignment Subcommittee.

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