DEPARTMENT OF HEALTH

MINNESOTA

STATEWIDE HEALTH ASSESSMENT

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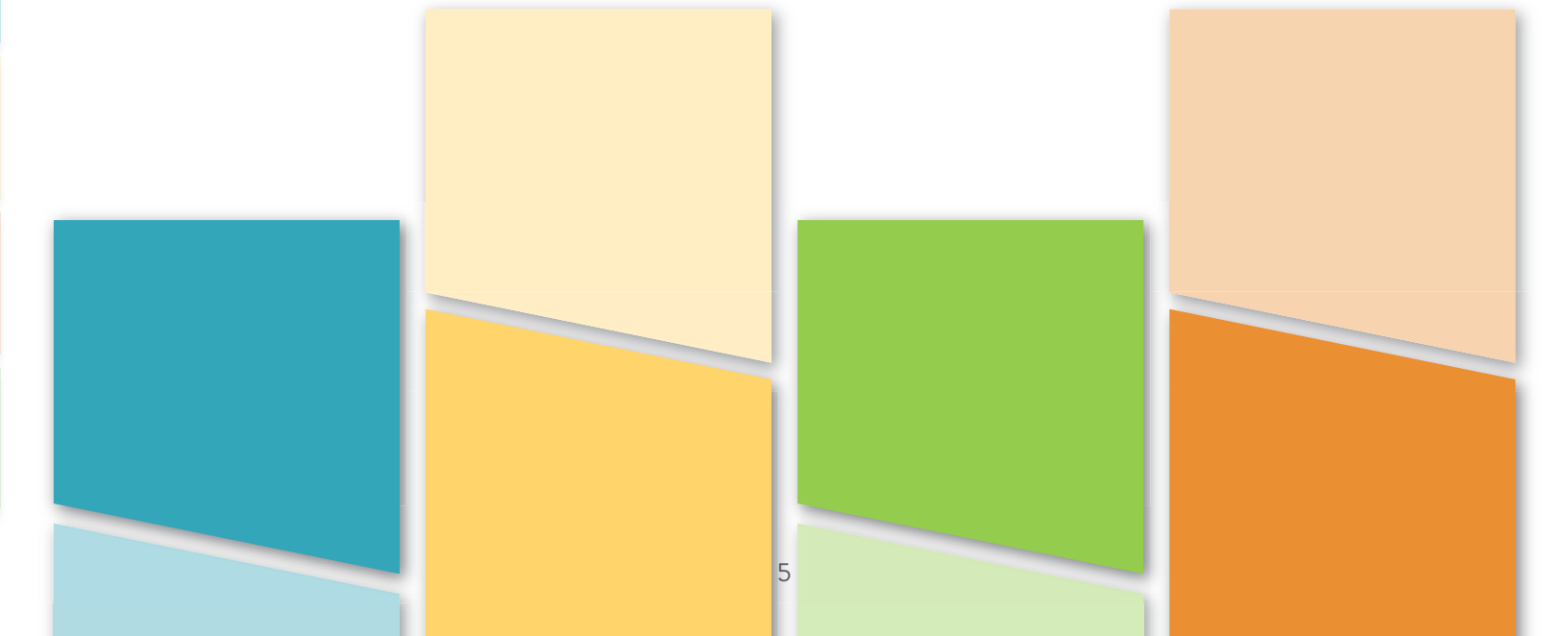


EXECUTIVE SUMMARY

The story of our state's health is not just the presence or absence of disease or injury. Our health includes how different conditions allow us to live healthy lives (where we live, how we get to places, the air we breathe, etc.).

This assessment weaves together data from different areas across the state so we can understand what impacts our health. It aims to do the following:

- Explain how conditions like social factors, systems, and structures impact the health of people in Minnesota.
- Elevate data on systems, which show how policies and programs create and sustain conditions for health.
- Explicitly call out where and how structural racism is impacting health in Minnesota.
- Highlight assets, strengths, and resources of communities as they relate to health.
- Show where organizations and groups can get involved to address inequities, thus addressing health inequities and improving health.

A note about COVID-19: This assessment includes some data about the COVID-19 pandemic, but COVID-19 is not the main focus. The challenge for this assessment is not only to document the direct impact of COVID-19 on Minnesota and those living in Minnesota, but to recognize the influence of COVID-19 on many issues highlighted in the assessment.

Data availability: 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. This lack of representation makes it challenging to accurately report health and health inequities experienced by these populations. More work is needed and is underway to address these data gaps.

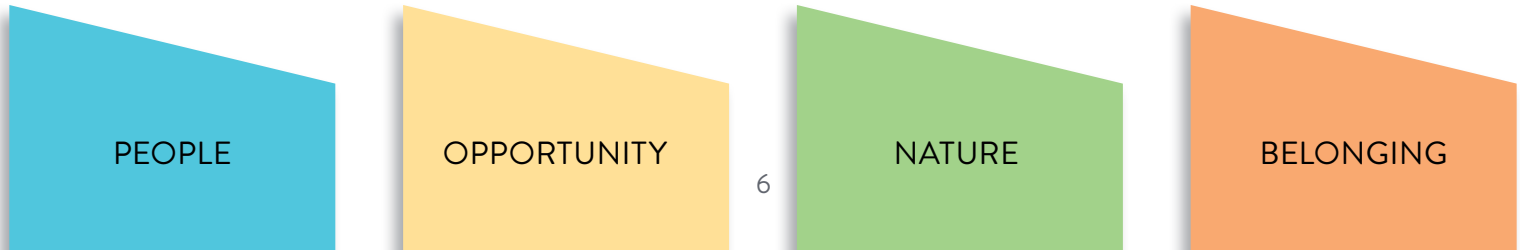
The statewide health assessment gives us a picture of our state's health.

It tells the story, at this point in time, of the different factors impacting our health in Minnesota. These factors include our environment, education, housing, transportation, social circles, and more.

The statewide health assessment is completed roughly every five years. It looks at data across time and by different groupings to better understand how a topic might influence our health. The assessment is not a complete collection of all data available. Rather, it collects some information across various topics that should be seen as starting points for where to dig in deeper.

The assessment looks at the people in Minnesota and how opportunity, nature, and belonging impacts our health.

The assessment uses the same four sections from the 2017 assessment—people, opportunity, nature and belonging. These sections look across different conditions and how they impact our health.



People

Who we are, where we've come from, and our real and perceived differences play a role in shaping our health.

Between 2018 and 2053:

- Overall, Minnesota is projected to gain nearly 900,000 residents.
- The number of Minnesotans ages 85 and older is expected to more than double, from 120,000 to more 270,000.
- The seven-county metro region is projected to gain about 924,000 residents and Greater Minnesota will shrink by about 27,000 residents.[1]

Populations of color and American Indians are projected to grow by more than **1 million residents** – 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.

NEW FOR THIS ASSESSMENT:
Demographic information is included for people experiencing homelessness and people experiencing incarceration in our state. These populations are often invisible, though they face health inequities in accessing resources and support for living healthy lives.

Opportunity

Inequitable social and economic opportunities impact our health – in education, employment, income, housing, transportation, and more. Data exposes the persistent inequities that continue to affect some groups more than others, and cause generations of poor health.

In 2021:

- 20.2% of people in Minnesota reported not seeking health care (dental, mental, prescriptions, routine medical, or specialist care) due to cost. Some groups of people were more likely not to seek care, including people who were uninsured; had individual or public insurance plans; American Indian, Hispanic/Latine between the ages of 26 and 64; had a chronic condition; or had income at or below 200% of the federal poverty guidelines.[3]

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.[2]

NEW FOR THIS ASSESSMENT:
A policy profile on paid family and medical leave describes why it matters for health, what inequities exist, and what policies are in place (at local, state, national and institutional levels).

Nature

Our health is shaped by our connection to and interactions with the natural environment. This includes environmental benefits (such as green spaces, tree canopy, clean air, and clean water) and exposure to environmental dangers (such as air pollution, waste, and contaminated water).

- In the Twin Cities, about half of the seven-county metro area is in or within one mile of an environmental justice area: areas that are either within a Federally recognized tribal area or have a high proportion of residents who are not white, low-income, or have limited English proficiency[a].[4] This covers about 1.6 million people, or just over half of Twin Cities residents.[5] In Greater Minnesota, approximately 55% of census tracts are in environmental justice areas, including 1.3 million people (51% of all Greater Minnesota residents).[6]

NEW FOR THIS ASSESSMENT:
A policy profile on tree canopy cover, or how much of an area is shaded by trees, describes why it matters for health, what inequities exist, and what policies are in place (at local, state, and national levels).

Minnesota warmed by **3.0 degrees** Fahrenheit between 1895 and 2020, while annual precipitation increased by an average of 3.4 inches.[7]

Belonging

Being included in our communities, and our connections with each other, can improve or weaken our lifelong health.

- According to the 2023 senior report, Minnesota ranks number four as one of the healthiest states in the nation for older adults. However, Minnesota's normalized value (a method that crunches data to a common scale) for risk of social isolation for people aged 65 is 32, with one being the best and 100 the worst or more at risk for social isolation.[9]
- In 2022, 61% of eligible people in Minnesota voted, the highest rate of voter turnout in the nation.[10]

In 2021, Minnesotans reported an average of **4.3** mentally unhealthy days in the past 30 days, more than twice as many per month as they reported in 2013.[8]

NEW FOR THIS ASSESSMENT:
A policy profile on universal broadband internet access describes why broadband matters for health, existing inequities, and policies in place at corporate, local, state, and national levels.

a In 2023, the Minnesota Legislature created and defined "environmental justice areas" in Minnesota law. These areas were created to address health problems that disproportionately hurt Black, Indigenous, and People of Color in Minnesota, like those resulting from air pollution levels above state guidelines. The full list of criteria for these areas is available in the assessment.

How was this assessment put together?

The assessment was developed under the guidance of the Healthy Minnesota Partnership and Minnesota Department of Health. 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. It is comprised of leaders from different sectors and areas of Minnesota, brought together by the commissioner of health. The Partnership is charged with developing a statewide health improvement framework, which is an action plan to help all people in Minnesota live a healthy life. The phrase "Partnership staff" in this assessment refers to MDH staff who are members of the Healthy Minnesota Partnership. These staff are identified in Appendix A.

The process of developing 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.

- **Data collection:** The assessment relies on data from many organizations and sources across the state and nation. This data already exists. This data was not collected for the sole purpose of the assessment. For more details about data collection, please see Appendix A.
- **Community engagement:** Healthy Minnesota Partnership staff conducted multiple community engagement activities to include input while developing the assessment. These activities included a community engagement inventory, group conversations, a survey on state strengths, and public comment. Staff planned activities with the understanding that communities have engagement fatigue and do not want to be defined solely by deficits. Demographics were only collected for the state strengths survey and for people who filled out the written form for public comment. These demographics demonstrate that these samples are not a representative sample of the state. For more details about community engagement, please see Appendices A, B, C, D, and E. engagement fatigue and do not want to be defined solely by deficits. For more details about community engagement, please see Appendices A, B, C, D, and E.

What's next?

This assessment provides information that will be used to develop a statewide health improvement framework. The framework lays out health priorities and strategies for addressing them. The Healthy Minnesota Partnership will convene in 2024 to plan and develop this framework. MDH and the Minnesota Healthy Partnership encourage community organizations, government agencies, and other partners to join in on this process.

FORWARD: LETTER FROM COMMISSIONER CUNNINGHAM

We are excited to share Minnesota's Statewide Health Assessment. The Healthy Minnesota Partnership and MDH Partnership staff have produced a robust report, full of data and insights about the health status of people in Minnesota. The health issues that we highlight reflect feedback from the Partnership, review of select community health needs assessments, survey data, and public comment. A "snapshot" of health in Minnesota at this moment in time, the assessment is intended to be a resource for anyone who wants to improve health in our state and the foundational document upon which we will build our State Health Improvement Plan.

Not surprising, much of the data is consistent with what we have seen before. Our state compares quite well compared to other states on health metrics, in part due to overall high educational attainment, low unemployment, and low rates of uninsurance. However, the data again show people identifying as Black and American Indian in Minnesota have worse health outcomes across most metrics, reflecting the persistent challenges of eliminating health inequities in our state. The data only partially reveal the impact of the COVID-19 pandemic, which we know has left a wake of increased health needs. Those increased needs stem from foregone care during the pandemic; declines in mental health because of stress, isolation, and the loss of loved ones; worse access to care due to the reduction of the health care workforce, hospital and clinic closures, and the termination of services; the pandemic's socio-economic impacts, which led to unemployment, homelessness, and worsened food insecurity for many; and long Covid. And this is on top of other ongoing social problems – such as mass incarceration, gun violence, and poverty – which create their own health problems, not just for individuals but also for families and for communities.

The Healthy Minnesota Partnership again has highlighted racism as one of the fundamental drivers of poor health outcomes. As we move forward with our State Health Improvement Plan, if the goal is to dismantle racism, we will need to be quite specific about the pathways through which racism impacts health. Regrettably, it is still the case that we have a lot of race data but very little racism data. That's part of the history of health assessment with which we must reckon — that we collect information about respondents' social identities rather than data about the practices and policies contributing to substantial racial differences in access to resources, opportunity, information, and power. We must clarify the who, what, when, where, and how of racism, recognizing that racism can mutate like a virus.

It shows up differently for people and communities of color across time, geography, gender, ethnicity, age cohort, religious affiliation, citizenship, immigration status, sexual orientation, disability status, and duration and history in this place we now call Minnesota. Hence, the calls to work more closely with those who are most negatively impacted by racial disparities in health so that we can understand with greater precision the various ways in which racism works, fill the gaps in our traditional data collection methods, and more confidently identify priorities for health programs and policy change.

We must also steadfastly reject some core premises that undergird racism. To partner more powerfully to improve health and safety, we must reject division, "us vs. them," and cast off our fears of scarcity. As we develop targeted solutions for local communities, we must also come together across differences and geography to hammer away at the shared barriers to optimal health. We must remember that we can do both. We can attend to different lived experiences and double-down on those community risk factors that contribute to adverse health outcomes in both predominantly White communities in rural Minnesota and in predominantly Black and Brown neighborhoods in the Metro. Together, we can support asset-based approaches that increase social connection and belonging, empower people and communities, increase self-determination, improve civic engagement, and honor, rather than stigmatize, culture – all methods proven to protect health.

Together, we can build a future state in which public health departments, hospitals and clinics, especially safety-net providers, community-based organizations, and families do not have to carry the heavy loads of a broken system.

As we gear up for the road ahead, we can find hope in our state's strengths. We know from the engagement that went into this assessment that Minnesota continues to excel in several ways. People in Minnesota benefit from the many programs that support families; the numerous parks, playgrounds, and other outdoor spaces that are accessible, well-maintained, and protected; an active, diverse, and community-oriented non-profit sector; and ample opportunities to volunteer or get involved in one's community. These are state characteristics we can be proud of and build upon as we promote health and well-being.

The assessment is a resource for the many people in Minnesota who are working together within and across communities and in multiple sectors to create a state where every person can truly thrive, no matter who they are, where they live, the body that they are in, the work they do, how much money they make or wealth they have, or who they love. I am so grateful for of all who have participated in the Healthy Minnesota Partnership thus far and am excited about plans to expand and diversify the Partnership so that more community voices are at the table. A big "thank you" to all the Partnership staff who produced this excellent report and to all who believe that we can make a difference.

ABOUT THIS ASSESSMENT

Setting the stage

Assessment structure and background

The collective health of all people in Minnesota is assessed[b] every five years by the Minnesota Department of Health (MDH), with guidance from the Healthy Minnesota Partnership.[c] The Minnesota statewide health assessment, like the assessments before it, tells the story of our health today and how opportunities we have to thrive, our sense of belonging, and our interactions with nature have shaped our health over time.

This assessment sheds light on the connection between our health and the conditions that surround our lives. By looking across these conditions, it also shows some of the sources of health inequities experienced by many people in Minnesota.

The assessment sets the stage for a statewide framework to improve health that 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 to benefit 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.

However, for many of the reasons noted in this assessment, this is untrue in Minnesota today.

b The statewide health assessment is required by the national Public Health Accreditation Board for state health department accreditation. Being accredited means an agency has met certain quality standards. The assessment, done about every five 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 that a cross-sectoral Partnership guide the development of a statewide health assessment. Cross-sectoral means that representatives participate from health, housing, human services, education, transportation, and other sectors that contribute to health.

c The Healthy Minnesota Partnership is a collection of cross-sectoral leaders from across Minnesota brought together by the commissioner of health. A list of members is in Appendix A. Detailed methods of the statewide health assessment, in this assessment.

The assessment is divided into four sections that reflect on what we need to be healthy:

PEOPLE:

Who we are, where we have come from, and our differences (real and perceived) play a role in shaping our health.

OPPORTUNITY:

Inequitable social and economic opportunities impact our health—in education, employment, income, housing, transportation, and more. Data exposes the persistent inequities that continue to affect some groups more than others, and cause generations of poor health.

NATURE:

Our health is shaped by our connection to and interactions with the natural environment. This includes environmental benefits (such as green spaces, tree canopy, clean air, and clean water) and exposure to environmental dangers (such as air pollution, waste, and contaminated water).

BELONGING:

Being included in our communities, and our connections with each other, can improve or weaken our lifelong health.

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."[11] 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.[12] If we are healthy, we can be present with our family and friends, attend school, go to work, play, and actively participate in society by volunteering, voting, and more.

Health is something we shape together. Health is tied in large part to how we connect and interact with the people and both the human-made and natural worlds around us.[13,14] Each of us is part of many communities, and every other person's health affects our own health.

What creates health?

Many of us assume that our health is a matter of individual responsibility, and that health is primarily determined by each person's individual efforts to make healthy choices and live a healthy lifestyle. For many years, the field of public health reflected this attitude by focusing on improving health through changing individual behaviors.

However, research shows that our social conditions—the conditions in which we are born, grow, work, live, and age[d] — determine our health, in addition to personal preferences and lifestyle decisions.[15] No matter how well-intentioned or motivated we are to be healthy, our social conditions and the political, social, and economic systems that create them influence and limit our choices. These systems help determine whether healthy food is available and affordable where we live, whether the air we breathe is clean, and what educational and job opportunities are available to us.

Systems, as described in the section below, help determine what resources and opportunities are available to individuals and groups within a population. For example, some health care resources are available in metropolitan areas but not rural. Systems also determine how easy or difficult it is to take advantage of the resources and opportunities that ***appear*** to be available. For example, an immigrant community may have difficulty taking advantage of government programs if government agencies do not provide materials in their native language, have failed to build trust with that community, or have instilled fear about the possible repercussions of accessing services.

As part of this assessment, Healthy Minnesota Partnership staff held conversations with different groups 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

d In the field of public health, these are called Social Determinants of Health. This description of the Social Determinants of Health comes from the World Health Organization: World Health Organization (n.d.) Social Determinants of Health Retrieved on February 27, 2024, from World Health Organization (https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1) .

Below, we will discuss how political, social, and economic systems are often designed to provide people identifying as white with resources and benefits that are not distributed equitably to Black or African American, American Indian, Latino/Latine, or Asian American residents.

Because systems and social conditions have a strong influence on health, we must explore them to understand the health of Minnesotans. This assessment provides information on the social conditions and systems that impact our health related to opportunity, nature, and belonging.

Systems impact health

A system is an interconnected set of elements that work together to achieve some function or purpose, whether intentional or not. We interact with multiple systems every day, like the transportation system, health care system, justice system, and more. The purpose of the transportation system is to get people to specific places, and the health care system aims to prevent illness, diagnose it, and treat it when it occurs. Systems can be interconnected, which impacts how they create or sustain conditions for health.

People and groups try to understand and change systems in a number of different ways. One model identifies six conditions of systems that need to shift in order for a system to change:

1. The **policies** that guide institutions within a system;
2. The **practices** of those institutions, including officially stated activities and informal habits;
3. The **resource flows** that determine how resources are distributed and allocated;
4. The **power dynamics** that determine who has decision-making authority;
5. The **relationships and connections** that shape how we communicate and relate to each other; and
6. The **mental models,** or subconscious beliefs and narratives, that influence our thoughts and actions as individuals and groups.[16]

These conditions help determine who benefits from opportunities and services. For instance, economic opportunity partly depends on education opportunities. Education systems are shaped in part by policies and resource flows that determine how education is funded. Property tax is one of the primary funding sources for public education, which means that areas with higher property values often have better-funded schools and other educational supports than areas with lower property values. This limits access to high-quality education for people who live in areas with lower property values. Another example is medical care. In the United States, insurance policies and practices influence the flow of health care resources. Private and public options are available, but most Americans receive insurance through their employer.[17] A “better” job often results in greater access to health care, with lower-paying jobs often providing less desirable, more costly insurance options.[18]

It is challenging to identify data on systems and structures that impact health. It involves examining past and current policies and practices, who is (was) involved in the decision that shaped the policies and practices, and the intended and unintended outcomes. Some of this data may not currently be collected. Those involved with collecting and managing data should continue to question their methods to help identify where we have gaps in data, and to understand why gaps in data exist and how to fill them.

How racism impacts health

When we acknowledge that systems and social conditions influence health, we must examine how they impact the health of different groups in a population. Inequitable health outcomes—that is, when different groups are more or less healthy in a way that's unjust, avoidable, unnecessary and unfair—occur when systems do not distribute the benefits and resources communities need to be healthy in an equitable manner.

Data shows that health differs significantly across different racial, cultural, and ethnic groups. For instance, in the U.S., life expectancy is lower for Black or African American residents than for white residents[19], and Black or African American residents experience higher rates of serious illness like heart disease[20] and cancer[21]. We must seek to understand how these differences are brought about by the kinds of systems described above. To explore this, we need to understand the concepts of race and racism.

Understanding race

Race is a societal creation, which means it is something created by people and society rather than something that exists naturally.[e] Easily observable physical characteristics, like skin color, eye color and shape, and hair color and texture, have been used to group people into races, and races have been conceived as innately different from each other. However, research shows that people **within** the same racial group can be more genetically different than people from **different** racial groups,[f] and genetic differences are not generally aligned with racial differences.[22] Socially and politically, race has been used to dehumanize/devalue less powerful groups, to justify the unequal distribution of rights and resources, and to maintain power. For example, in the United States, white people used the concept of race to justify the forced labor and enslavement of African people.[23]

Several events in public health and medicine in the United States also illustrate the dehumanizing effects of racial grouping: forced sterilization of American Indian and 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 telling 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.[24]

e The American Medical Association (AMA) acknowledged this in 2022: American Medical Association. (2022). New AMA policies recognize race as a social, not biological, construct. American Medical Association (https://www.ama-assn.org/press-center/press-releases/new-ama-policies-recognize-race-social-not-biological-construct)

f The genetic variation within one population group is 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.

Understanding racism:

Racism is something that exists within individuals, but it also exists within institutions and broader social, political, and economic systems.

- **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.[g] Some individual racism is expressed openly in the form of prejudicial comments or discriminatory actions, while some individual racism is implicit, like when a person's unspoken attitudes or feelings influence their behaviors but they are not aware of their biases.
- **Institutional and systemic (or structural) racism** is present when race as a societal creation is embedded into policies, practices, and procedures that work better for one group of people than for others—when they work better for white people than for communities of color, including American Indian, Asian, Black, and Latino/Latine. [25,26] Race can be embedded in this way in individual institutions (institutional racism) and in social, political, and economic systems comprised of many individuals and institutions (systemic racism). Structural or systemic racism can be intentional or unintentional, like individual racism.

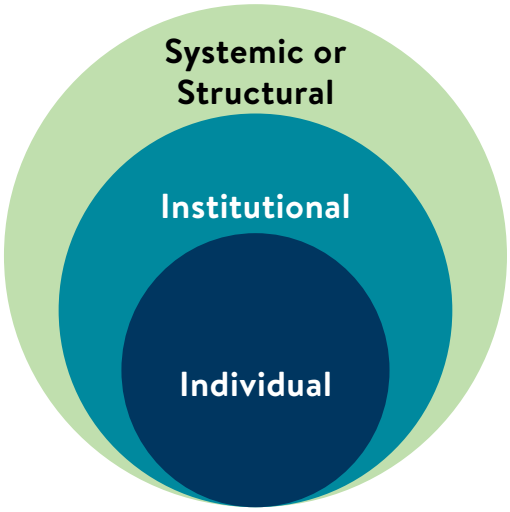


Figure 1: Levels of Racism

Racism occurs at individual, institutional, and systemic levels and is mutually reinforcing across levels. For example, racially biased mental models at the individual level can shape how we think about ourselves, others, and the reasons for social disadvantage,[h] and structural features of the system—such as policies, practices, and resource flows—can create and reinforce biased mental models.

It is important to examine racism at all levels, but this assessment shows examples of systemic racism: it focuses on factors that influence health at the population level, and systemic racism plays a central role in producing inequitable health outcomes for different racial and ethnic groups within Minnesota's population.

g Putting things in categories is a human trait. But choosing to put other people in categories according to a few superficial physical characteristics (skin color, hair and eye color, hair texture, and/or facial features) and then deciding that those characteristics make people more or less valuable is racism. Historically, in the United States, people with lighter-colored skin, eyes, and hair get favored 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.

h See the model of systems change described above (with citation in endnote 16).

Infamous and devastating examples of systemic racism come from the history of housing discrimination in the United States. In the 1930s—when homeownership rates were increasing for white Americans due to New Deal legislation like the National Housing Act—federal lending policies actively prevented Black Americans and other communities of color and American Indians from accessing loans and owning homes. At that time, it was legal to include race-based restrictions in property deeds, called restrictive covenants.[i] These restrictive covenants typically prevented anyone who was not white from owning the property. Federal lending guidelines discouraged approval for mortgage loans in racially diverse areas and encouraged the use of restrictive covenants to maintain racially "stable" neighborhoods.[27] The U.S. Federal Housing Administration "redlined" neighborhoods with a high proportion of Black residents and people of color, designating them as areas with a high risk of default, while white neighborhoods with restrictive covenants were marked as desirable and low-risk.[28] As a result, communities of color and American Indian communities, especially Black Americans, were denied mortgage loans or were forced into high-interest loans. This resulted in large inequities in homeownership that persist to this day (see the section on housing in "Opportunity" in this assessment for current data on homeownership in Minnesota). Inequities in homeownership have wide-ranging ripple effects, contributing to huge inequities in wealth: in 2021, white families in the U.S. had 9.2 times more wealth than Black families.[29] Inequities in wealth, in turn, contribute to health inequities because people with greater wealth generally live longer and have lower rates of chronic disease.[30]

The COVID-19 pandemic highlighted and exacerbated racial health inequities. For example, Black Americans experience higher rates of COVID-19 positivity and higher disease severity than white Americans.[31] Higher rates of chronic disease in different races and ethnicities contributed to more severe cases of COVID-19, and inequities in employment contributed to higher risk of exposure: Black Americans were overrepresented in the COVID-19 "essential" workforce and were less likely than white Americans to have the option and privilege of working from home.[32] This is an example of how our economic, political, and social systems present benefits and risks inequitably, resulting in inequities in health outcomes.

Systemic racism can be intentional, but can also be carried out by people, organizations, and government agencies without explicit racist intent by neglecting to take a race-conscious approach that considers possible negative consequences for communities of color and American Indian communities. One example of this is overly difficult application requirements for public assistance programs or tax benefit programs on which Black, Brown, and immigrant communities are more likely to rely.[33]

> *Racism continues to shape society in powerful ways, and we cannot ignore the negative impact of racism on health.*[34, 35]

To better understand these impacts, the field of public health must move beyond measuring race and examining data by race and ethnicity, to measuring racism. Scholars are beginning to develop methods of measuring systemic racism,[36] and a growing body of research shows how systemic racism is a root cause of health inequities.[37,38] This assessment identifies some inequities in social conditions that influence health, but more work must be done nationally and in Minnesota to better understand and demonstrate the influence of racism on health.

i In 1926, the Supreme Court (Corrigan v. Buckley) affirmed the right of homeowners to include restrictive covenants in the deed to a home.

Racism and classism impact health in distinct ways

This assessment provides information by race and ethnicity whenever possible to reveal structural racism and to sustain the conversation about race and health in Minnesota. The assessment also presents some 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, education, and wealth. Race, income, and social class are related. Because of racism and its effects, American Indian, Black, and Latino/Latine populations hold lower socio-economic status in the United States.[j] Talking about poverty alone is insufficient in considering the effects of race and ethnicity on health. To do so is to ignore the separate effect of racism on health, which is significant in and of itself. At the same time, health often differs for white Americans occupying different social classes, socio-economic statuses, and places of residence, and it is important to explore how these factors influence health inequities.

Achieving health equity

Health equity is the idea that everyone has what they need to be healthy, and that no unjust or unfair barriers exist that prevent a person from being healthy. We can achieve health equity only when the systemic problems described above are resolved—when all children get a loving and healthy start, when everyone is able to get a good education and has a 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 populations are less healthy than they could be, it is typically because of inequities in these areas.

We can eliminate inequities only when each of us has the opportunity to realize our potential without limits imposed by systemic inequities.

To achieve health equity, we need to understand how health goes beyond the individual person and to take a closer look at what really creates health.

We need to 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.

Assets and strengths that contribute to health

The Healthy Minnesota Partnership and its staff used an asset-based approach for this assessment to examine health in Minnesota. An asset-based approach identifies and supports a community's own local resources that promote health, which could include cultural, social, and physical assets and capital.[39] Instead of restating 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.

Healing from trauma leads to resilience

The story of health is often one of trauma **and** resilience. Experiencing harmful events or circumstances often can lead to poor health outcomes and contribute to health inequities. However, focusing solely on the health risks and negative outcomes—a deficit approach—can limit our understanding of the factors that contribute to health and limit the types of solutions we explore. As we aim to improve health, we must also identify community strengths and assets.

j Krieger and Bassetdist 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: Krieger, N. and Bassett, M. (1986). The health of Black folk: Disease, class, and ideology in science. Monthly review, 38, 74-85.

Resilience is defined by the American Psychological Association as "the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioral flexibility and adjustment to external and internal demands."[40] The resilience that results from successfully adapting to difficult and traumatic experiences is an asset that should be acknowledged and supported.

Black and American Indian populations in Minnesota have endured both recent trauma and generations of trauma. Many refugee and immigrant populations have experienced the trauma of violence, including war. Vulnerabilities (or risks) of trauma include worse health, socio-economic, and educational outcomes. Resilience factors include efforts to preserve language and culture, maintain 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 resilience within communities.

Intersecting forms of discrimination

Discrimination is not always based on race—other biases are also present, based on disability, gender identity, sexual orientation, religion, and culture, and more. All these biases impact health equity. 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 for adults.[41]

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 being unseen or unheard, being subjected to derogatory comments, and having their needs ignored. Institutional, systemic, and structural racism compound these challenges.

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 three years, COVID-19 still 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 on Minnesota and Minnesotans from COVID-19 illness and death, but also to recognize the influence COVID-19 had on the many issues highlighted in the assessment. However, this is not a report solely about COVID-19.

COVID-19 also directly impacts the data within this assessment. This and past assessments focus on providing a snapshot of health in Minnesota rather than making health comparisons between current and former assessment years. Staff have included comparisons when possible; however, comparisons between time periods before or during the pandemic should be interpreted with caution. Researchers and data scientists have found that many different factors introduced between 2020 and 2022 affected how we lived our lives Therefore, data from this time should be viewed differently. Researchers around the world are still studying the long-term effects of COVID-19 on not just the health of individual people but on society.

Audiences and uses

Different people and groups can use the statewide health assessment in a variety of ways to consider what creates health inequities and why they persist:

- As a snapshot and story of health in Minnesota, this assessment can serve as the spark or seed to learn and understand more. 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 the information and data is understood, the assessment invites audiences to consider the **"so what"** (or why this information matters), and then the **"now what"** (or what should happen next to change the trends and disparities).

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

Table 1: Audiences and uses for the Minnesota 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 and tribal public health, health care organizations, and health plans: Governmental and tribal 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 the way 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 about 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 for specific issues, groups collaborating around a specific cause, and groups joining 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

Process and content

Gathering information for the assessment

The Minnesota statewide health assessment uses existing data and information to explain how conditions impact the health of all people in Minnesota. It 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 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 used a strengths-based approach to review and present the data. More information on the groups involved and their methods is in Appendix A. Detailed methods of the Minnesota statewide health assessment of this assessment.

- TRIANGLE BULLETS like the one at the beginning of this sentence call attention to data points throughout the assessment report.

The Partnership also sought increased community engagement with this assessment. The health equity bureau of the Minnesota Department of Health[k] supported the planning and implementation of community engagement activities. Although these activities allowed for more input and perspectives, future statewide health assessments can improve on these efforts to engage more diverse audiences. More information on methods and levels of community engagement used is in Appendix A. Detailed methods of the Minnesota statewide health assessment.

Community engagement activities for this statewide health assessment 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 other research or public health activities, especially due to the COVID-19 pandemic. To avoid duplicating efforts, MDH and Partnership staff reviewed health-related plans and community assessments from across and outside of Minnesota and refined their community engagement activities. More detailed methods and findings from this inventory are in Appendix B. Community engagement inventory of 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. About 538 responded and shared their thoughts, which staff have collected and shared throughout this assessment. These excerpts are highlighted within a dark blue box and appear at the beginning of sections called Opportunity, Nature, and Belonging 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 about 110 people shared their thoughts. These thoughts are highlighted in orange throughout the section called Belonging and in Appendix D. Group conversations findings.
- **Public comment:** MDH posted a first draft of the 2023 Minnesota statewide health assessment for public review and feedback. MDH and Partnership staff incorporated feedback into the final statewide health assessment.

k In 2022-2023, the MDH health equity center 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.

Policy profiles

Each section of the assessment includes a policy profile that defines a policy area and discusses how it impacts health.

- **Paid family and medical leave** (opportunity) is discussed in the Policy profile: Paid family and medical leave .
- **Tree canopy cover** (nature) is discussed in the Policy profile: Tree canopy cover.
- **Universal broadband internet access** (belonging) is discussed in the Policy profile: Universal broadband internet access.

These policy areas reflect the Partnership's interest in using a health-in-all-policies approach[I] for the statewide health improvement framework that flows from this assessment. They are a result of past Partnership work and discussion.

I "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.

Glossary of identity terms

Throughout this assessment, we discuss different populations and how conditions impact their health. We use the following terminology to refer to different groups and recognize that some people and groups may not identify with these labels or may identify with multiple labels at the same time. We use these terms with guidance from MDH's health equity bureau and communications staff and their work with community partners.

American Indian: The term "Indian" was given to the Indigenous people of North America by European explorers when they first came to the New World; they mistakenly thought that they had reached the Indies. People have different preferences for the term used to describe Indigenous people in the United States, including American Indian and Native American or by the names they call themselves in their own languages. This publication uses the term "American Indian" to collectively refer to Indigenous people of North America and Minnesota. This publication also follows the convention used in nearly all federal and state laws, referring collectively to all the Indigenous people of North America and Minnesota as "Indians" when describing statutory or legal identification. In certain instances, the term "American Indian" is used in conjunction with Alaskan Natives, as that is the term used in some state laws and the U.S. Census for Indigenous people to identify themselves.[42]

Asian American: People identifying as Asian or Pacific Islander are referred to in the narrative text as Asian American.

Black or African American: People who identify as Black or African American are identified as such throughout the narrative text. The combination aims to include those who identify as Black and who were not born in America.

Greater Minnesota: Throughout this assessment we use Greater Minnesota when referring to the geography outside of the seven-county metro area.[m] We acknowledge people may not identify with the term rural, and data categories for rural are complex and can vary between data sources. Specific data sources cited may still use the term "rural" in this assessment.

Latino/Latine: People identifying as Hispanic or Latino/Latina/Latinx are identified as such throughout the narrative text. The term "Latine" is the gender-neutral form of Latino/Latina used by some.

LGBTQ+: This term is used for people identifying as lesbian, gay, bisexual, transgender, queer, and more. We acknowledge there are other sexual identities that are not explicitly represented in this terminology.

m Seven-county metro area includes Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington counties.

Older adults: People who are about 50 years old or older are referred to as older adults. We acknowledge different data sources use different age categories and terminology.

People with disabilities: This term is used for people experiencing a physical or mental condition that substantially affects one or more major life activities. Disabilities can be temporary or permanent, and apparent and non-apparent.

Two-spirit: This is used to describe a person who is American Indian, 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.

White: We do not capitalize "white" because white people generally do not share the same history and culture or the experience of being discriminated against because of skin color.

The data shared in this assessment adheres to each original source's terms 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 is available only for the five racial/ethnic groups collected historically by the U.S. Census (American Indian, Asian, Black, Hispanic, and white). Other data sources include data by birthplace and deeper disaggregation of 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.

This assessment acknowledges the gaps and limitations in statewide data availability for groups such as people with disabilities, the LGBTQ+ community, and specific racial and ethnic groups.

Resource flags

This assessment communicates complex information in a limited amount of space and reflects only one way to look at a large amount of data. Strategic work and collaboration are ongoing across the state to address many topics in the assessment. The two flags to the right denote additional resources to **learn more** or **take action.** These resources are just a starting place for readers to dig deeper.

Learn more

These are links to data dashboards and interactive tools where data can be broken down in different ways. For instance, by different demographics (age, race/ethnicity, disability status, income, etc.) and/or geography (county or census tract).

Take action

These links lead to strategic plans or action-orientated documents from government agencies and community organizations working to address one or more conditions for health.

Reflections and limitations

Conducting a statewide assessment of health is complex and has a number of limitations built into it.

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

This statewide health assessment is a snapshot of many data points used to draw a general picture of health and the conditions that create it. A wide, detailed body of research and writing exists on many topics in this assessment. More information is under End notes and references in this assessment.

Our state's data has gaps which limit our understanding

Data is often not collected on sexual orientation, gender identity, disability status, or ethnicity. This means that we have limited data about the health status of people living 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.

Our state's data is both objective and subjective

Data is often considered objective, but we must acknowledge the human factor in data. People decide who is involved in data projects, what questions to ask, how to collect data, how to perform analyses, and how to interpret data. This makes total objectivity impossible. Being aware of this limitation, while efforts were made to be inclusive and intentional and to have an equitable balance of power during decisions, we recognize our own biases as limitations.

Our state's data puts Minnesotans into categories, but we each live intersectional lives

Each person, population, and community is unique and has value. Many people have multiple identities and experiences. However, quantitative research methods require researchers to create categories for analysis. Grouping people, populations, and communities in this way often hides some of our real and important differences to make it possible to make comparisons (Our state's data often does not account for within-group diversity; below, offers more context).

In addition, many topics in this assessment could fit into more than one section because many 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.

Our state's data often does not account for the within-group diversity

Although much of the data here is presented by race and 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.[n] 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 identifying significant Asian American 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 in the assessment is only a starting place for understanding the health of different populations; it does not tell the whole story of population health.

Our state's data is collected at the individual level, which overshadows the role of systems

Most of what we know about health comes from data collected on an individual person's health—a disease or injury, for example, or their individual behaviors like smoking and exercise. A person's ability to make healthy choices is important. However, when we emphasize individual, 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. As we grow our understanding of the conditions that create health, we can better identify the systems and structures (economic, educational, and more) that shape individual and community health.

Consideration for work across time

This assessment embraces the perspectives of past, present, and future. It includes references to past actions and historical and ongoing 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 and current 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 and ongoing reflection 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 become overwhelmed by the severity of health inequities. With growing Partnerships and the wisdom of many, we can build our collective efforts toward meaningful change.

n The category of Asian or Asian Pacific Islander (API), for example, encompasses more than 40 different countries with very different languages and cultures. More information is at About the Council on Asian Pacific Minnesotans (https://mn.gov/capm/council/).


CEDAR RIVER
Red Lake River Crookston

PEOPLE

About 5.74 million people lived in Minnesota in 2021.[43] Of these 5,742,036 people, just over half (more than 3 million) live in the seven-county Twin Cities metropolitan area and about 45% (more than 2 million) live in Greater Minnesota (the area outside of the seven-county Twin Cities metro).[44]

Experts project our state's population will grow. According to a 2020 report[45] from the Minnesota State Demographic Center:

- Overall, Minnesota is projected to gain nearly 900,000 residents between 2018 and 2053.
- The number of Minnesotans ages 85 and older is expected to more than double in the next 35 years, from 120,000 to more 270,000.
- Populations of color and American Indians are projected to grow by more than 1 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.
- The seven-county metro region is projected to gain about 924,000 residents and Greater Minnesota will shrink by about 27,000 residents between 2018 and 2053.

IN 2021...

The Greater Minnesota area population was

2.6 MILLION.

The Twin Cities area population was

3.2 MILLION.

Differences among us: challenge of COVID-19

Where we grow up, live, work, and play all deeply influence our identities, values, opportunities, and ultimately our health. People in Minnesota are of all ages, 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 shared experiences for people in Minnesota—following stay-at-home orders; working or learning from home; and caring for family members who became sick or mourning those who died. It also called attention to differences. Many front-line and service workers could not work from home and faced a greater risk of catching COVID-19. People in rural areas without reliable broadband access could not easily attend school or work from home. People in urban areas risked exposure to more people.

People who identify as American Indian, Black, or Latino/Latine are at higher risk from COVID-19 due to longstanding inequities, including higher rates of heart disease, obesity, diabetes, high blood pressure, and kidney or liver disease (factors that can make COVID-19 infection more severe); higher concentrations in jobs that are considered essential and cannot be done remotely; living quarters that do not allow for social distancing; and less easy, consistent, or affordable access to health care.[46]

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.
- In efforts to protect their health and lives, older adults were isolated in their homes and congregate settings, including hospitals. Families and service providers looked for creative ways to connect people when they were unable to meet face-to-face.
- Teachers, students, and parents in every community shifted to online learning and navigating new challenges.
- Employers quickly made it possible for employees to work from home where possible.
- Communities and organizations were quick to point out inequities that put many groups of people at greater risk from COVID-19, 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.
- Many of us faced delayed, inaccessible, or unavailable medical care because of stay-at-home orders and the health care system’s need to focus on COVID-19. Ongoing data collection is beginning to shed light on the negative effects of this.
- The pandemic affected our mental health and especially the social development of our youth; its long-term effects remain to be determined.
- The pandemic brought new attention to pre-existing inequities across the state, country, and world, while also making those inequities worse.

The pandemic changed and challenged us, and its effects are still felt and being discovered today.



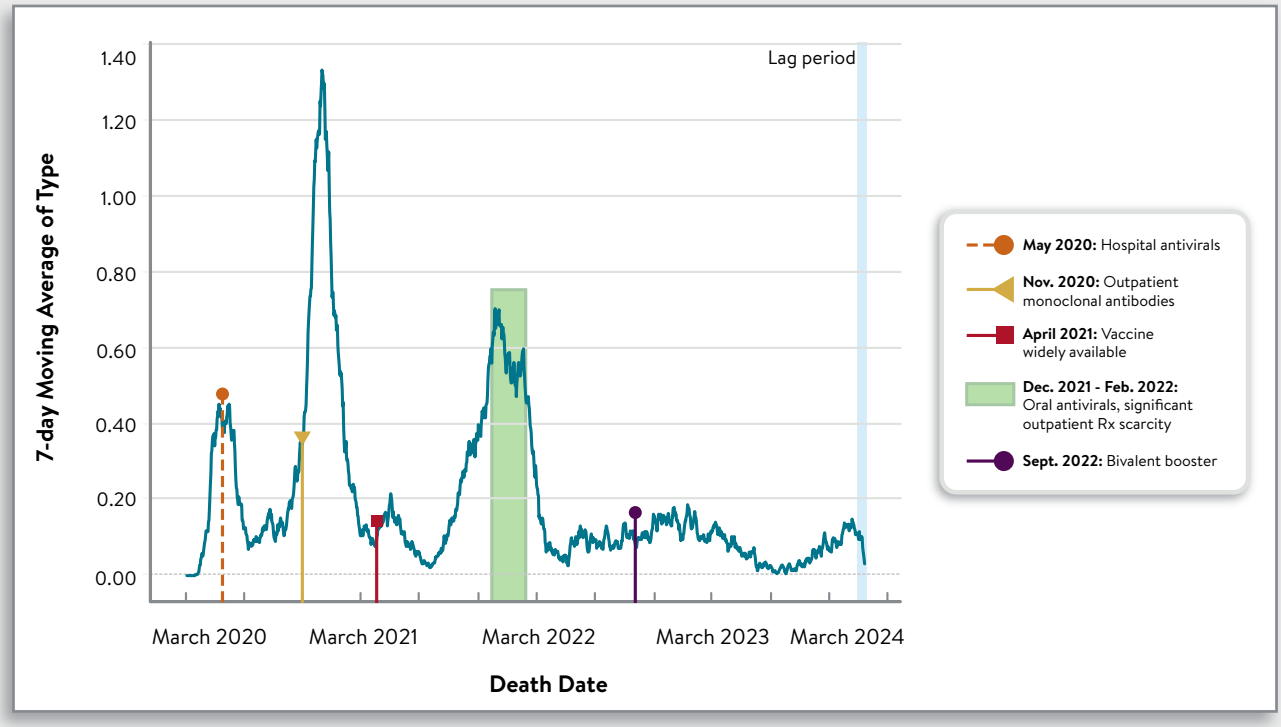

COVID-19 data[o]

Minnesota has reported[p] over 1.7 million confirmed cases and 15,505 deaths from March 2020 to December 2023. According to the Office of Vital Records, COVID-19 was the third leading cause of death in Minnesota in both 2020 and 2021. In 2020, it accounted for 10% of all deaths, behind cancer (19%) and heart disease (16.4%). For those whom we have hospitalization data, 92,324 people were hospitalized and 15,402 were admitted to intensive care between March 2020 and December 2023.

Early in the COVID-19 pandemic and during the fall surge in 2020, before vaccines and treatments were developed, a smaller number of infections caused a much higher rate of hospitalization and death. Hospitalization and death rates declined sharply during the surge in cases between fall 2021 and early spring 2022, as vaccines and treatments became widely available. Several studies demonstrate that vaccines and treatments reduce COVID-19 severity and death.

Getting vaccinated is one of the best things you can do to protect yourself from COVID-19. Over 13 million COVID-19 vaccines have been administered to approximately 4 million Minnesotans since the initial vaccine roll out in December 2020, with the highest vaccination rates seen for the oldest age groups. Uptake of the newest COVID-19 vaccines in 2023 has been slower, as Minnesota nears a 20% up-to-date rate towards the end of 2023.

Figure 2: COVID-19 mortality rate in Minnesota, 7-day moving average, March 2020 to 2024



To get the 7-day moving average for deaths rates, we add all the rates (number of deaths divided by the total Minnesota population, multiplied by 100,000) from the previous 7 days (including the current date) and divide by 7.

o Healthy Minnesota Partnership staff may update this data before releasing the next statewide health assessment.
p These numbers are provisional or subject to change.

Long COVID

While most people make a full recovery from COVID-19, acute infections like COVID-19 can lead to long-term complications, including lasting symptoms or new chronic diseases. Long COVID is an umbrella term used to describe symptoms that happen four or more weeks after an acute COVID-19 infection. Symptoms can include extreme fatigue, shortness of breath, dizziness, or difficulty thinking and concentrating, but people with long COVID report many different symptoms. For some people, long COVID is severe enough to get in the way of work, school, and daily activities. Long COVID may follow or worsen existing health inequities in Minnesota.

MDH is steadily working to understand the impacts of long COVID across Minnesota and to improve care and support for the people and communities most affected. This requires a comprehensive approach to collecting and analyzing data, spreading awareness about long COVID and available resources, and providing guidance for people with long COVID, caregivers, health systems, employers, schools, and other sectors. We continue to build partnerships with health care providers and systems, community organizations, people with long COVID and their caregivers, state agencies, and many others to do this work.

Children and adolescents

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

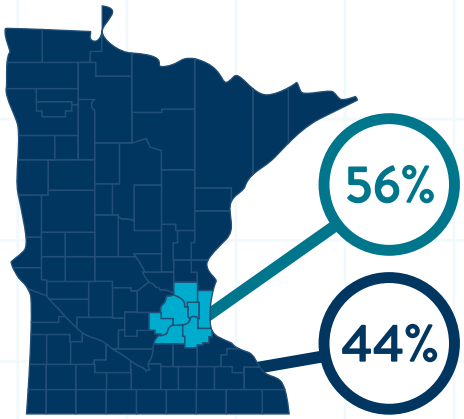
- In 2020-2021, 17.5% of children and youth living in Minnesota (226,402) reported having a special health care need.[48]

To identify health disparities and inequities, it is essential to understand how many people in Minnesota experience poverty, especially younger people. Although Minnesota has a lower proportion of people living in poverty than the rest of the United States, in 2019 about one in 11 people in Minnesota and one in nine children in Minnesota lived in poverty.[49]

- In 2021, 11% of children in Minnesota lived in poverty. Depending on the county, this rate ranged from 4% to 30% of children.[50]

IN 2022...

Nearly **23% (1.3 MILLION)** of the state's population was under 18 years old.



More than 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.[47]

Impact of COVID-19 on children and K-12 education

From fall 2020 through spring 2022, schools and childcare centers reported that 279,814 students and staff had COVID-19. Beyond causing illness, COVID-19 affected children in Minnesota through their education. MDH monitored COVID-19 cases and outbreaks in schools and childcare settings; gave advice on appropriate learning models; consulted with facility staff; and provided technical help to school leadership and childcare providers. Weekly webinars with school nurses enabled the health department to give updates on COVID-19 trends and best practices to take against the disease and it helped develop relationships and communication channels with schools. MDH also partnered with the Minnesota Department of Education to distribute face masks and test kits to schools that asked for them, which helped schools slow the spread of COVID-19 in their buildings.

Aging

The proportion of Minnesotans older than 65 is expected to increase between 2030 to 2050 more than ever before. By 2025, Minnesotans older than 65 will outnumber school-age children.[51]

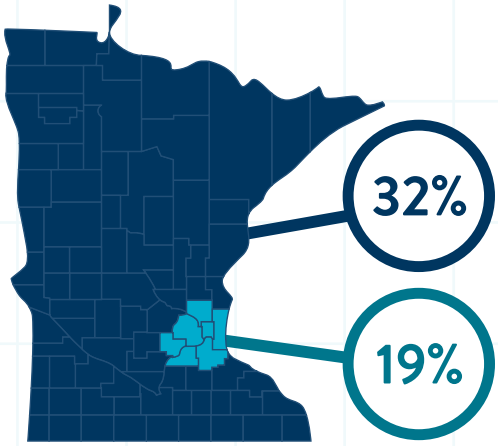
- Currently, about 17% of the state's population is 65 years and older, and this population is distributed unevenly across geography and race. About 7% are adults who are from communities of color.[52]
- A little more than half (54%) of people ages 65 and older in Minnesota identify as female.[54]

Aging presents new opportunities and challenges for health. Many older adults find a renewed sense of purpose. Some continue their careers, applying knowledge and expertise gained over many years. Others embrace volunteering, do different work, or take on a new role in their family.

- In 2021, 33.3% of Minnesota residents ages 65 to 74 had volunteered in the past year.[55]

IN 2033...

32% of residents of Greater Minnesota counties are projected to be older than 65 years, compared to **19%** for urban counties.[53]



As people in Minnesota age, they are more likely to be affected by one or more disabilities. The most common disabilities among people older than 65 are difficulty walking, hearing, and doing basic activities outside the home.[56] Aging also increases the risk of chronic diseases.[57] For adults already living with a chronic condition, aging extends the time they live with these symptoms and impacts their quality of life.[58]

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

- Women ages 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 ages 65 and older in Minnesota are living in poverty compared to a decade ago, while the overall population in that age group has grown by about only 25%.[59]
- When factoring in race, disparities compound. The median income for white adults older than 65 in Minnesota is $52,600; the median income for Black adults of the same age is $23,211.[60] Median income is the middle income in a range, meaning half of the incomes in the range are more and half are less than the median.

Minnesota and its communities can build infrastructure to maximize the strengths of Minnesotans ages 65 and older to allow people to age well and prevent social isolation. Areas of action include expanding access to broadband and using it to strengthen connections; improving housing maintenance and new housing design to allow aging in the community; integrating flexible work arrangements; and designing communities to support social connectedness and physical well-being.

COVID-19 and aging adults

The evidence is clear that age is a major risk factor for COVID-19 death, even though the distribution of COVID-19 deaths across age groups has evolved throughout the pandemic due to factors like population immunity, public health measures like social distancing and stay-at-home orders, and the severity of different strains. Among those who had COVID-19 infections during the pandemic, people ages 65 and older were five times more likely to be hospitalized and 27 times more likely to die compared to people under age 65. The risks for hospitalization and death increase substantially as age increases. COVID-19 cases among those ages 85 and older were nine times more likely to be hospitalized and 91 times more likely to die than those under age 65.

Disease severity is a primary reason to seek vaccination. It dramatically increases positive results for the older adult population. Despite their higher risk overall due to age, people ages 65 and older who were vaccinated were much less likely to be hospitalized or die compared to people who were not vaccinated. The risk of hospitalization and death was reduced even more for people over age 65 who stayed up to date on their vaccines by receiving the regularly recommended doses.

COVID-19 cases and deaths were particularly high in long-term care facilities during the first few months of the pandemic. This is because the resident populations were more vulnerable and close contact was necessary between residents and health care workers, who were potentially exposed to COVID-19 outside of work hours. The primary focus during this time was direct outreach and support to the estimated 365 skilled nursing facilities and 2,000 assisted living facilities in Minnesota. Work continues in infection control and health regulation for long-term care facilities. Later, focus shifted to monitoring individual infections of residents and staff working in facilities before moving to reporting totals that aligned with overall COVID-19 surveillance.

Including both case-based and total reporting systems, 50,329 resident cases of COVID-19 infection in long-term care facilities have been reported to MDH to date. Technical assistance and guidance for long-term care residents and staff, along with their continued adaptability, eventually made COVID-19 surveillance easier in particularly vulnerable populations.

Race and ethnicity

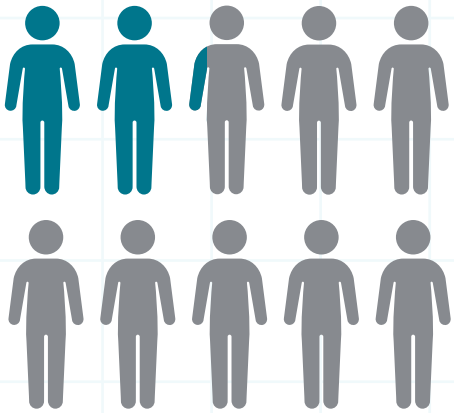
Minnesota's population continues to grow more racially and ethnically diverse. The state demographer estimates that the number of people from communities of color and American Indians in Minnesota will increase by more than 1 million between 2018 and 2035.[62]

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

- More than 33% of Minnesota's children are from communities of color or are American Indian. In contrast, about 20% of adults ages 18 to 64 and just 7% of adults 65 and older identify as American Indian, Asian American, Black or African American, Hispanic/Latine, or person of color.[63]
- Minnesota's racial and ethnic diversity is distributed unevenly across the state; communities of color are more likely to live in metro areas than in rural areas.[64]

In Minnesota...

People who identify as American Indian, Asian American, Black, two or more races, and people who are Hispanic of any races make up **22%** of the total population.[61]



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

American Indian[q]

More than 574 federally recognized tribes live within the United States. Eleven of the tribes live in the state of Minnesota.[65] Seven Anishinaabe/Ojibwe/Chippewa reservations are in the northern part of the state and four Dakota/Sioux communities are in southern Minnesota. The Anishinaabe and Dakota people have lived in and called this area home long before European settlements and the 1858 statehood of Minnesota. 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 federal agreements.[66]

Tribal nations have inherent sovereignty, which was codified through treaty-making with the 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 and serves the members of its community in the way it determines is best.[67]

q See note on terminology on Page 8

Each sovereign tribal nation determines tribal membership or citizenship. Not all people in Minnesota who identify as American Indian are necessarily members of a tribal community. Additionally, due to population migration through forced relocation by government policy or voluntary relocation, not all American Indians who live in Minnesota identify as Anishinaabe or Dakota.[68]

- In 2022, American Indians comprised about 2% (more than 100,000 people) of Minnesota's total population. This includes people who identify as American Indian alone or with one or more other races, which aligns with the broader definition of who the Indian Health Service treats under its mandate.[69,70]
- Most American Indians in Minnesota live in Greater Minnesota (68.7%) on either federally designated reservation lands or off the reservation.[71]
- 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.[72]
- In 2022, about 28,000 American Indians lived in Hennepin County and about 12,000 lived in Ramsey County. This includes people who identify as American Indian alone or with one or more other races.[73]

Black or African American

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

Millions of African Americans who descended from those enslaved people migrated between 1916 and the 1980s 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.[74]

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 (more information at A note about racially and ethnically diverse populations in this assessment).

- In 2022, about 7% of people in Minnesota identified as Black or African American.[75]
- In 2021, approximately 350,000 people living in the Twin Cities and about 75,000 in Greater Minnesota identified as Black.[76]

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 asset.

- Between 2017-2021, Spanish was the most common non-English language spoken at home by people in Minnesota, followed by Cushite-Beja-Somali and Hmong.[77]

Refugee, immigrant, and migrant communities also face many health disparities, including lack of health insurance, barriers to access to quality health care, workplace conditions, education, and income and wealth gaps.[78] 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.

Though we have some data describing refugees, immigrants, and migrants and their access to social determinants for health, the immigrant population in the United States is dynamic and always changing. Today, Minnesota's largest populations of foreign-born people were born in Mexico, Somalia, India, Laos, China, Ethiopia, and Thailand. Minnesota is also home to a large population of Hmong[r] people (more than 86,000, including first, second, and third generations of Hmong Minnesotans).[79]

- About 9% of the Minnesota population is foreign born.[80]
- About 4% of the population is native born (born in the United States), with at least one parent born outside the U.S.[81]
- In total, 111,109 primary refugees arrived in Minnesota between 1979 and 2020.[82]
- In 2019, the estimate for the unauthorized population in Minnesota was 81,000.[83]

Historical trauma and threats to health

Historical trauma refers to the collective emotional and psychological injury from a catastrophic history over the life span, across generations, and continuing today. Effects of historical 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 families 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.[69] It is essential to develop ways to support community healing and well-being, such as providing services specific to cultures and by recognizing community resilience as an asset.

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

COVID-19 and racial and ethnically diverse communities

Throughout the pandemic, American Indian, Black/African American, and Latino/Latine populations consistently had higher hospitalization rates from COVID-19. American Indian, Black/African American, and Latino/Latine groups also had higher age-adjusted rates of death throughout the pandemic; most striking was the consistently higher mortality rate among American Indians. The COVID-19 pandemic is also negatively and disproportionately impacting Asian Minnesotans, who have high rates of infection and death. When data is disaggregated (that is, divided by demographic characteristics), the Hmong, Karen, and Karenni were more negatively impacted by COVID-19 in 2020 than other Asian ethnic groups. American Indian and Black/African American populations had consistently higher age-adjusted hospitalization rates. Latino/Latine populations had higher age-adjusted hospitalization rates in 2020. The overall patterns (across time) of hospitalization were similar for all the racial and ethnic populations, but American Indian, Black/African American, and Latino/Latine hospitalization rates were two to four times higher than those of the white population.

For vaccinations, Minnesota continues to see inequities in up-to-date rates among American Indian, Black, and Latino/Latine populations. Vaccination and testing trends are likely influenced by mistrust of the health care system by populations who are American Indian, Black/African American or Latino/Latine. Mistrust is built on traumatic historic events and ongoing racism and on social and economic exclusion.[86,87] For example, the murder of George Floyd in May 2020 and attention on police violence may have further impacted Black and African American communities and their use of testing and vaccination sites when police were present. Taken together, these trends highlight flaws in our health care system that can lead to health inequities in accessing care.

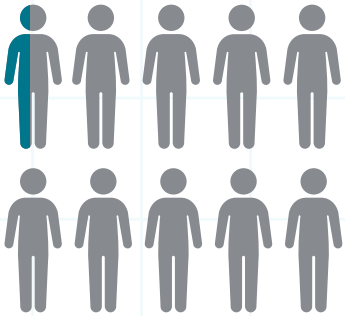
LGBTQ+

Population-based data on people who identify as lesbian, gay, bisexual, transgender, queer, or questioning (LGBTQ+) is more available today than in the past. In July 2021, the U.S. Census Bureau started collecting information on sexual orientation and gender identity in its Household Pulse Survey. The Minnesota Student Survey includes questions on sexual orientation, gender identity, and gender expression in surveys for students in grades eight, nine and 11.

- In 2022, 8% of Minnesota students responding to a statewide survey identified as bisexual, 3% as gay or lesbian, and 1-2% as transgender.[89]
- A 2022 needs assessment for LGBTQ older adults found that participants were more likely to be a caregiver than the general population. They were also less likely to have a caregiver and children.
- In the same needs assessment, participants were also more likely to have completed a health care directive and were more likely to volunteer than the general population.[90]

IN 2019...

4.1% of Minnesota's population identified as LGBT.[88]



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, 77% of more than 1,300 LGBTQ+ people surveyed had experienced some type of anti-LGBTQ+ behavior from others in the past year and 35% had been physically attacked or threatened at some point in their lifetime because they were LGBTQ+.[91]

COVID-19 and the LGBTQ+ community

The LGBTQ+ community faces unique challenges as people are often members of several communities that experience overlapping inequities. COVID-19 has disproportionately impacted and continues to impact the LGBTQ+ community. According to a research brief published by the Human Rights Campaign in March 2020, those in the LGBTQ+ community are more likely to work in industries that have high exposure rates (such as the restaurant industry), are less likely to have adequate health coverage, and have higher rates of chronic illnesses, such as asthma and other health conditions that increase the likelihood of COVID-19 complications and poorer health.

While social isolation was happening to all people who were practicing stay-at-home precautions, staying at home was particularly difficult for some LGBTQ+ people because they may have been living with people unsupportive of their identities or in locations where they felt disconnected. Nationally, three-fourths of LGBT people surveyed (74%) say worry and stress from the pandemic has negatively impacted their mental health compared to 49% of those who are not LGBT. LGBT people are also more likely to say that negative impact has been major (49% compared with 23% among those not LGBT). Lastly, a larger share of LGBT adults compared to non-LGBT adults report that they or someone in their household has experienced COVID-19-era job loss (56% versus 44%).

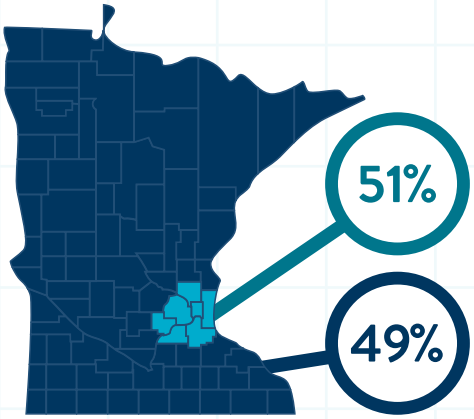
People with disabilities

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.[92]

Disability is defined by the Americans with Disabilities Act (ADA) as a physical or mental condition that substantially affects one or more major life activities. Disabilities can be temporary or permanent, and they can be apparent and non-apparent. People with disabilities have been overlooked and ignored in data collection efforts due to historical ableism, such as: beliefs that people with disabilities are not important to society, policies like the failure of the U.S. Census to count people living in congregate settings, and failure to use recognized definitions of disability such as those in the ADA and the UN Convention on the Rights of Persons with Disabilities. It is up to the public health system to recognize and address the impact of historical ableism on data collection by including people with disabilities in data and using methods informed by the disability community.

IN 2022...

51% of people with disabilities live in the Twin Cities area and **49%** live in Greater Minnesota.[94]



- As of 2021, 11.5% of the population in Minnesota were living with one or more disability. This does not take into account individuals who live in a congregate care setting.[93]
- Thirteen percent 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 six months or more.[95]

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%):

- Among people in Minnesota who reported having a disability, 17.4% are American Indians, 12% are Black people, and 12% are white.
- The rate of people living with one or more disabilities is higher among older adults, with 28.6% of adults over age 65 living with a disability compared to 4.5% of children under age 18 years and 9.6% of working-age adults.[96]
- Almost one in five people in Minnesota with a disability (20%) live below 100 percent of the federal poverty level[s].[97]

s The Census Bureau uses a set of dollar value thresholds that vary by family size and composition to determine who is in poverty. For example, for a family interviewed in July 2022, the federal poverty threshold was about $28,588 for a family consisting of two adults and two minor children. The poverty threshold for a family of this size and composition will vary slightly depending on the month in which the family member was interviewed. For more information see American Community Survey and Puerto Rico Community Survey 2022 Subject Definitions (https://www2.census.gov/programs-surveys/acs/tech_docs/subject_definitions/2022_ACSSubjectDefinitions.pdf)

Having a disability does not mean a person is unhealthy. Being healthy means the same for all of us—becoming and staying healthy and having support to lead full and active lives.[98] 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.[99,100]

COVID-19 and people with disabilities

The impact of the COVID-19 pandemic and the public health response has been significant, and people with disabilities experienced and continue to experience severe hardship.

However, data availability to describe the experiences of people with disabilities and the exact impact of the COVID-19 virus has been and continues to be limited. Research has shown people with intellectual and developmental disabilities were at greater risk for infection and adverse health outcomes. However, no standardized national framework exists for collecting and sharing COVID-19-related data for this population.[101]

MDH has observed that the COVID-19 response resulted in major disruptions and challenges to the lives of people with disabilities in areas like transportation; technology; education; medical care; caregiver support and stress; mental health; accessibility to essential services; supports; testing and vaccinations; masking; housing; employment; and basic rights.

People experiencing homelessness

Nationwide since 2017, the rate of people experiencing homelessness has increased by 6%.[102]

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.

- In 2018, 32% of those experiencing homelessness were children (17 or younger) living with their parents. This number has remained relatively flat since 2015.[104]

American Indians, Black, or 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.[105]
- In 2019, Black or African American people were 12 times more likely to experience homelessness than their white non-Hispanic counterparts.[106]

The rate of homelessness in older adults is also a rising, and the risk of death is higher for people experiencing homelessness.

- Since 2015, the rate of adults over age 55 experiencing homelessness has increased by 25%.[107]
- Data from 2017-2021 shows the rate of death among people experiencing homelessness is three times higher than the Minnesota average.[108]
- People in Minnesota who experience homelessness and who also identify as American Indian have a rate of death that is 1.5 times higher than other people experiencing homelessness and five times higher than the Minnesota average.[109]

IN 2022...

7,917

people reported experiencing homelessness during a January point-in-time count[t].[103]

t 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. The 2018 count included a count of people experiencing homelessness on American Indian reservations for the first time.

COVID-19 and people experiencing homelessness

More than 1,127 programs in Minnesota serve people experiencing homelessness, and more than 3,700 COVID-19 cases and more than 120 facility outbreaks among program participants were observed. Measures to reduce the impact of COVID-19 for people experiencing homelessness included making sure shelter providers had up-to-date public health guidance and resources to protect staff and residents from COVID-19. Organizations provided consultation and support to shelter providers during outbreaks by distributing more than 35,000 COVID-19 tests, supporting more than 200 vaccination clinics, providing free masks, and working to make sure that shelter residents had access to COVID-19 therapeutic medications.

State, local, and tribal health departments were able to track and respond to COVID-19 cases and outbreaks because of relationships they retained with homeless service facilities staff. MDH and partners tracked and responded to cases in emergency shelters; day centers; outreach facilities; group homes; youth shelters; domestic violence shelters; and supportive housing facilities. MDH staff worked closely with partners in the Minnesota Office of Economic Opportunity to connect shelters to more than $7 million to respond to outbreaks in their facilities. MDH staff also worked closely with the Minnesota Interagency Council on Homelessness to present COVID-19 updates during weekly provider webinars and in newsletters.

People experiencing incarceration

There are two million people in the nation's prisons and jails, a 500% increase from 40 years ago. We know incarceration and experience with the U.S. justice system impacts a person's health, their families, and their communities. 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.[110]

As of January 2023...

Slightly more than

8,000

adults were in prison in Minnesota.[113]

Black or African American, American Indian, and Latino/Latine populations are vastly overrepresented in Minnesota's prison and jail populations. This is not because of greater crime rates 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 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.[111] Moreover, Black or African Americans are more likely than white people in Minnesota to be arrested, and once arrested they are more likely to be convicted. If convicted, Black or African Americans are more likely to face stiffer sentences.[112]

- In 2022, 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.[114,115]
- In 2021, youth from communities of color were twice as likely to have experienced having a parent who was incarcerated.[116]
- 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.[117]

COVID-19 and people experiencing incarceration

More than 23,000 COVID-19 cases and more than 250 outbreaks were reported in Minnesota's 11 state prisons, 82 jails, and 65 juvenile and community correctional facilities. Relationships were built throughout the pandemic between correctional facility administrators and health care staff, the Department of Corrections, the Minnesota Department of Health, local public health departments and others. These relationships strengthened the impact of COVID-19 recommendations and broadened the reach of COVID-19 resources and supports. MDH staff tracked COVID-19 cases and outbreaks in correctional facilities; created setting-specific COVID-19 guidance; consulted on cases and outbreaks; and helped facility staff access resources like vaccines, testing supplies, and personal protective equipment. As of spring 2023, more than 139,000 COVID-19 tests, 174,000 masks, and $2,678,000 in grants to were distributed to correctional facilities for COVID-19 mitigation.

OPPORTUNITY

The concept of the American dream as we traditionally understand it describes a country in which every American has equal opportunity to achieve their own idea of success through hard work.[u] Ideally, "opportunity" means having the chance to be successful throughout our lives and being able to make our lives and the lives of next generations better. However, the conditions of our lives can limit or expand the choices and opportunities available to us. These conditions, largely created and shaped by policy decisions made over time, include the schools we can attend, the jobs that are open to us, how we able to move around in our communities, and the food that is available to us.

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.[118]

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.

- In 2021, 20.2% of people in Minnesota reported not seeking health care (dental, mental, prescriptions, routine medical, or specialist care) due to cost. Some groups of people were more likely not to seek care, including people who were uninsured; had individual or public insurance plans; American Indian or Hispanic/Latine between the ages of 26 and 64; had a chronic condition; or had income at or below 200% of the federal poverty guidelines.[118]

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 important for health. Research is clear that several related factors can either improve or reduce our chances to be healthy: a good education, a permanent home, work with good pay and health insurance, sufficient and regular food, and safe places to play, among others.[120] 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 faced 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; and children were thrust into a new learning environment. This resulted in a decline in the number of people in the workforce in Minnesota, especially among women.[121,122]

Many businesses had to close for at least a short period. Closing even for a short time led to increased unemployment. The nature of people's jobs exposed inequities: only some jobs could be done from home; only some employers allowed remote work to continue after the federal work-from-home order ended; some people continued in jobs that increased their risk of getting 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 getting COVID-19 and spreading it at 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 while increasing their own chances of getting 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 running.

u The term "American dream" was first used in 1931 in "The Epic of America," written by historian James Truslow Adams. 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." More information is at The American Dream (https://www.loc.gov/classroom-materials/american-dream/).

State strengths survey: Opportunity

As part of the Minnesota statewide health assessment, the healthy Minnesota Partnership surveyed Minnesotans about state strengths that support health. People who took the survey reviewed strengths noted in the 2017 Minnesota statewide health assessment, shared whether they agreed or disagreed that 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, people who took the survey agreed that several strengths support the health of people in Minnesota. However, they noted that those strengths benefit some people and groups more than others, depending on who the people are or where they live. They also noted that some strengths are not available to all people in Minnesota and that many disparities exist.

More detailed methods and results from this survey are in Appendix C. State strengths survey findings in this assessment.

Table 2: 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

People who took the survey shared feedback on several strengths related to opportunity, such as the education system; health insurance; jobs; social programs for families; support from local and state departments; and transportation. Most of them agreed that the availability of jobs and social programs for families were state strengths. They also suggested other strengths that support health, such as thriving local businesses, health care systems (Mayo, University of Minnesota), a mix of public and private colleges, and libraries.

People who took the survey were most likely to disagree that state strengths included access to transportation, having a strong educational system, and people having health insurance. Many of them noted that 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.[123,124] More information about students' sense of belonging in school is in this assessment under Belonging in school.

Though Minnesota's on-time high school graduation rate is increasing since it dipped in 2021 (83% in 2022), inequities still exist:

- In 2022, the rate of students graduating on time was lower among some populations than the statewide rate (83%), including 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.[125]

IN 2022...

Minnesota's on-time graduation rate was

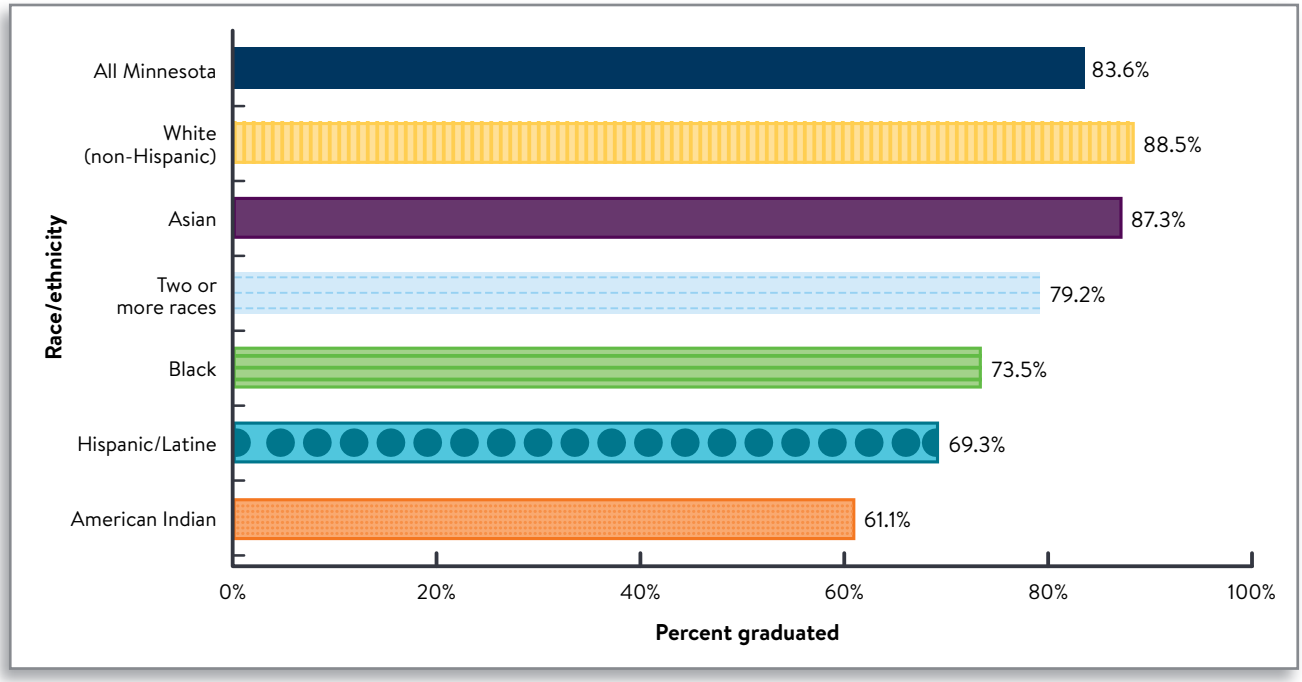
83%

However, disparities among other populations still exist.

Learn more

Graduation rate report card Minnesota Report Card (https://direc.to/kRpT)

Figure 3: Rate of high school graduation in four years ("on time") in Minnesota, by race/ethnicity, 2022



Source: Minnesota Department of Education, 2023

- Students from higher-income families were more likely to graduate on time than those from lower-income families.[126]
- In 2022, the graduation rate for students in special education[v] was 66%.[127]
- Less than half (48%) of tested Minnesota third graders[w] are proficient in reading.[128]
- 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 incomes.[129]

Education also impacts generations:

- Children of mothers with more education read more proficiently by third grade than their peers with mothers with less education.[130]

Education also goes beyond what is learned in the classroom and student's college and career paths.

- In 2022, 50% of fifth graders and 72% of 11th graders said their school or community offered a variety of programs for people their age to participate in outside of the regular school day. Fewer students in special education and fewer students identifying as BIPOC and American Indian said their schools offered these enrichment opportunities compared to students identifying as white.[131]

Learn more

MN student survey reports Data Reports and Analytics (https://direc.to/kRRm)

- In 2022, 45% of students reported they planned to attend a four-year college; 8% planned to attend a two-year technical or community college; and 8% planned to get a job. Among 11th graders, a greater proportion of Black or African American students (63%) and Asian American students (67%) planned to attend a four-year college and a greater proportion of American Indian students (19%) and Hispanic/Latine students (20%) planned to attend a two-year technical or community college compared to other race/ethnicities.[132]
- In 2021, of people with one or more disabilities and who were 25 years or older, 32% had some college or associate degree and 23% had a bachelor's degree or higher.[133]

v Students who said "yes" to the question, "Do you receive special education services as part of an IEP (individual education program)?"
w In the 2020-21 school year, 85% of third graders participated in math and reading assessments. Historically, more than 95% of third graders generally have participated.

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.[134]

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

- The pressure of inflation has compounded economic challenges for families with children. In July 2022, 45% of Minnesota people with children under age 18 in their home reported a somewhat or very difficult time in the past seven days paying for usual household expenses (compared to just 24% for those without children).[135]

IN 2022...

9.6%
of all people in Minnesota were below the federal poverty level.

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.[1368]
- More than three out of four people living in rural areas have household incomes below the statewide median income. An estimated 122,000 people are living in concentrated poverty areas in rural Minnesota.[137]
- Asian people in Minnesota earn 94 cents for every dollar earned by white people in Minnesota. By comparison, Black people earn 71 cents, Latine people earn 70 cents, and Indigenous people earn 68 cents.[138]

Each year, the U.S. Department of Health and Human Services issues federal poverty guidelines that organizations and government agencies use to determine who is eligible for certain programs and benefits. In 2023, the federal poverty line was $14,580 for a single person. The poverty line is considered the least amount of income a person needs to meet their basic needs.[139]

- In 2022, 9.6% of all people in Minnesota were below the federal poverty level, compared to 12.6% of people nationally. This is about 519,731 of our families, friends, neighbors, and community members. Digging deeper, the proportion of people below poverty varied by racial groups and geographic region.[140]
- In 2022, a greater share of individuals with a disability lived below the poverty line compared to the population as a whole.[141]

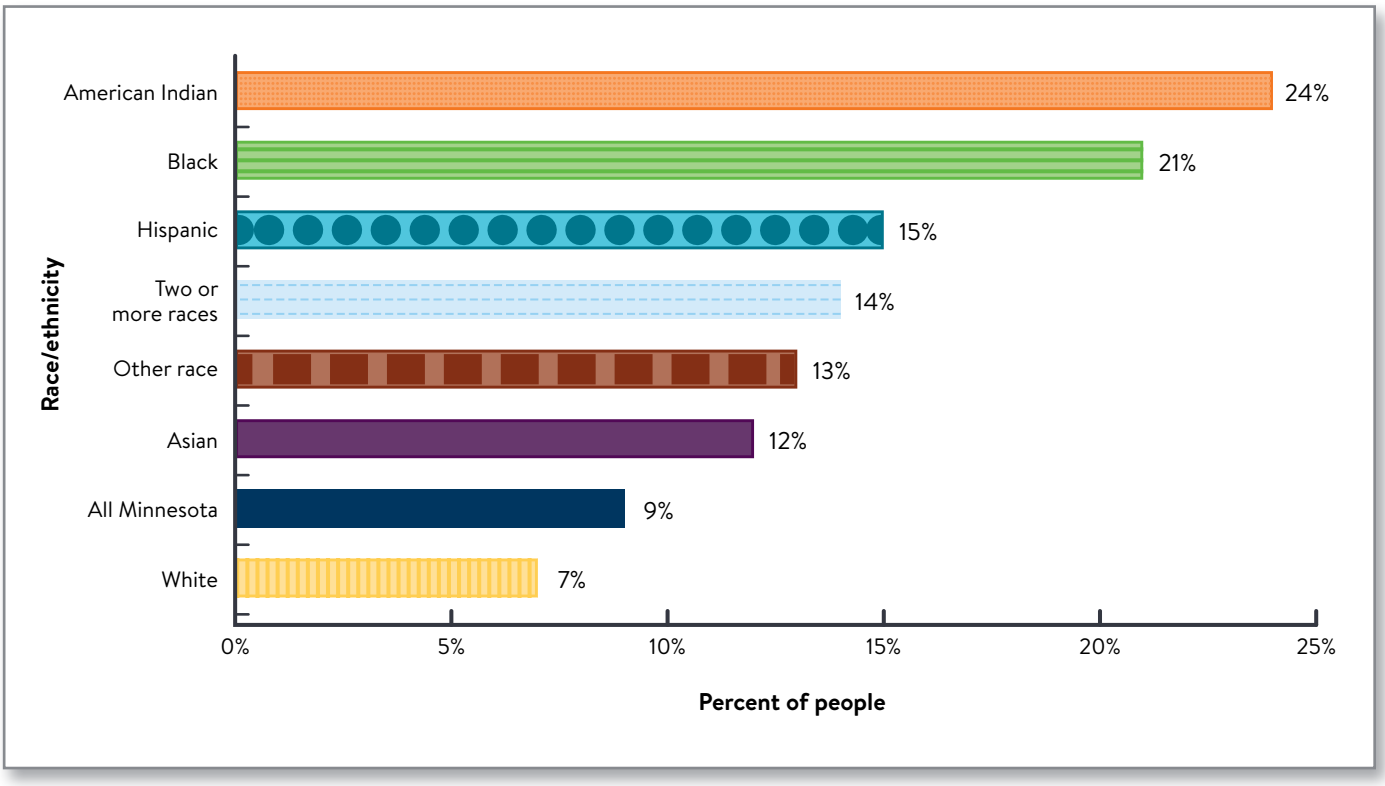
Learn more

DEED data tools
MN county profiles map (https://direc.to/kRR3)

DEED data tools
MN cost of living map (https://direc.to/kRRy)

MN Compass
Economy (https://direc.to/kRTz)

Figure 4: Proportion of people in Minnesota living below poverty level, by race/ethnicity, 2021



Source: American Community Survey, 2021

Some people live in deep poverty, meaning their income is 50% or more below the poverty line. In 2023, this is equal to a monthly income of $607.50.

- Adults in deep poverty have higher rates of every chronic condition measured in a study on deep poverty and health in Minnesota, including a death rate two times higher than adults who are less poor.
- Adults in deep poverty experience 40% more preventable emergency department visits and 23% more preventable hospitalizations than those who are less poor.
- The rate of death for children living in deep poverty is twice as high as other children, and the rate of PTSD for children in deep poverty is also higher.[142]

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.[143]

Four broad housing issues impact health:

1. The availability of stable housing;
2. The cost of housing;
3. Safety conditions inside a home; and
4. The safety of neighborhoods.[144]

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, an increase of 33% compared to the number of pre-pandemic, historic filings.[145]
- Minnesota Department of Corrections operates 11 state prison facilities. In 2021, nearly 25% of all releases were to sheltered and unsheltered homeless addresses.[146]
- Of adults experiencing homelessness, 81% have at least one significant health issue: 57% have a chronic physical health condition; 64% have serious mental illness; 24% have substance use disorder; and 50% have more than one of these serious issues at the same time.[147]

Homeownership

Owning a home is a major way that people build wealth. Homeownership provides stability and minimizes disruptions that result from unstable housing and that are harmful 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 all white households own their home, 60% of Asian, 50% of Hispanic, 49% of Native American, and just 25% of Black households own their homes.[148]

This large homeownership inequity is a direct result of years of systemic discrimination in housing policies, real estate, and lending practices. People who identify as American Indian, Black, or person of color 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.[149]

Learn more

MN Compass
Housing
(https://direc.to/kRT5)

MN Dashboards
Minnesota's HMIS
(https://direc.to/kRT7)

Take action

MN Dashboards
Minnesota's HMIS
(https://direc.to/kRT7)

Affordable Housing Plan
2022-2023 plan
(https://direc.to/kRRv)

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.[150]
- Housing cost burden disproportionately affects some groups more than others: more than 75% of low-income people in Minnesota are cost-burdened by housing, 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.[151]
- In June 2023, 15% of Minnesota renter households surveyed were behind on the prior month's rent.[152]
- 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%.[153]

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.[154]

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 in 2020, 40% of Minnesota homes had elevated levels of radon.[155]

Lead-based paint was phased out of residential use in the United States starting in 1950 and was eventually banned in 1978. When children under 6 years old ingest lead, usually through the dust from lead paint, they can develop lifelong problems with brain function and behavior. 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.[156]

MDH recommends that children have blood lead levels tested at 1 and 2 years old. They should also be tested when they are older if they missed earlier tests or have ongoing risk of exposure to lead.

- In 2022, about eight out of 1,000 children under age 6 who were tested had an elevated blood lead level (0.01% of children tested). This number has decreased in past decades.[157]
- 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.[158]

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.[159] Minnesota's roadway network has evolved over time to meet changing needs of all road users, including pedestrians, bicyclists, transit riders, and drivers.

Miles traveled by vehicle is correlated with health: as miles increase, greenhouse gases, other emissions, and crashes also increase.[160] Different communities see different travel behavior depending on destination and the transportation options available. Vehicle miles traveled when paired with data about transit ridership, bicyclists, and pedestrians, is a measure that can reveal how the transportation system is serving travelers across the state based on what modes people choose. Lower vehicle miles traveled and higher transit, bicycle, and pedestrian data typically indicates less reliance on personal vehicles and the more availability of transportation options besides driving. Spending less time in cars and having more options for transit, biking, and walking benefits health, equity, and the environment.

IN 2020...

More people were counted[x] walking and biking outside than during each of the previous three years.

Households in Greater Minnesota drive on average 25,350 miles a year. This is due to greater distances between destinations, fewer options for multimodal transit, and less access to high-speed internet (which limits opportunities to telework and requires a person to travel to find internet).

Urban and suburban communities with denser development have more options for walking, bicycling, and using different kinds of transit, which can lead to lower vehicle miles traveled. The average suburban household drives 21,585 miles a year, and the average urban household drives 14,359 miles a year.

- From 2000 to 2019, overall statewide total vehicle miles traveled rose approximately 16.5%.[161] Changes in travel patterns during the COVID-19 pandemic led to 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%.[162] Though this did not mean people were staying inside. Rather, more people were counted[x] walking and biking outside in 2020 than during each of the previous three years.[163]

Changes in travel patterns helped improve air quality and lower exposure to transportation pollution-related health risks, while also showing that it is possible to both reduce congestion and support the economy.

Learn more

MinnesotaGo Performance dashboard (https://direc.to/kR9n)

Take action

MinnesotaGo Statewide Multimodal Transportation Plan (https://direc.to/kR9Q)

MinnesotaGo Performance dashboard (https://direc.to/kR9n)

x Minnesota Department of Transportation uses a network of automated people and vehicle counters throughout Minnesota.

Transit and 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 choices 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) among people surveyed in the seven-county Twin Cities metro remained steady between 2010 and 2019. Of those who use transit, 7% use it weekly and 44% use it only when attending an event. The COVID-19 pandemic significantly decreased transit ridership and service.[164] 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.[165]
- 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.[166]
- 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.[149] During the first five weeks of the COVID-19 pandemic, the number of people walking and bicycling increased 51% when comparing 2017 to 2019 at the same time.[168,169]
- In 2021, 34% of people surveyed in Minnesota walked or biked at least weekly to travel to and from places (work, school, grocery store, etc.).[170]

The pandemic also impacted the school bus system, on which many families rely. Buses were allowed to carry only half the number of students, and bus driver shortages limited the number of routes that could run. Impacted families chose to walk, bike, or drive.[171,172]

- 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, nonmotorized transportation) than fifth graders (16.3%). Many students used different and multiple ways to travel to and from school during a typical week.[173]

Transportation safety and use

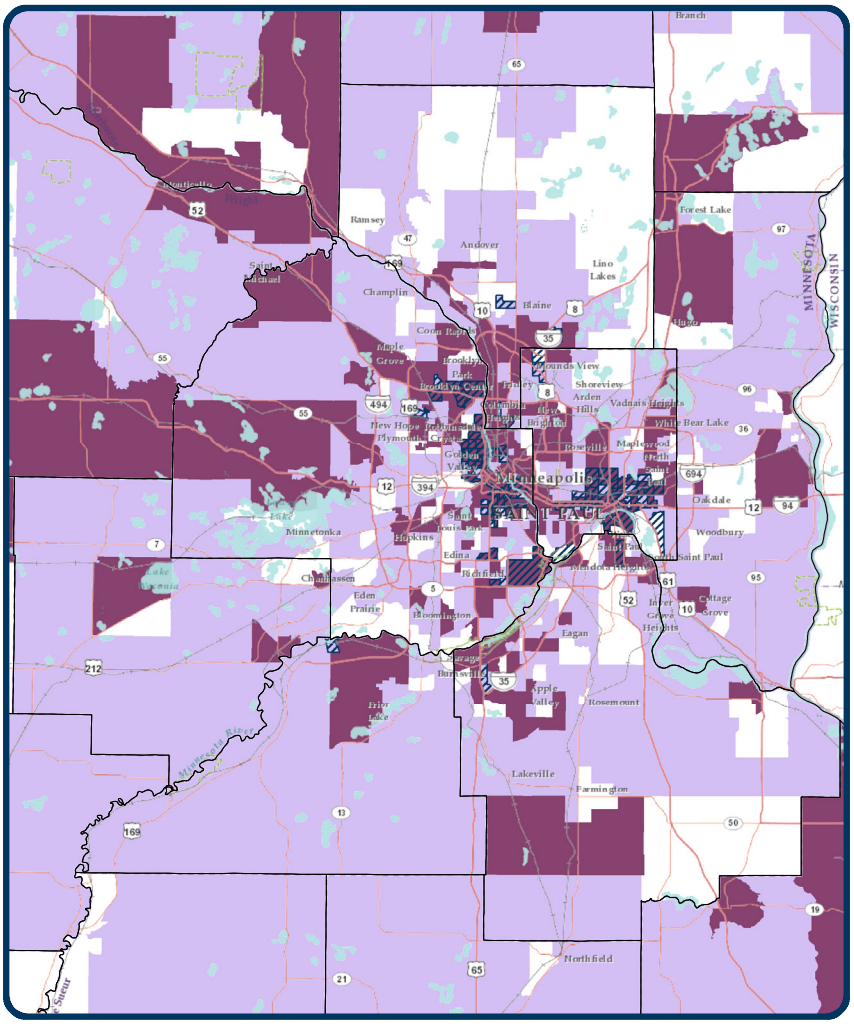
Several transportation-related factors impact community safety: the number and condition of sidewalks; bikeways, roads and bridges; concentrated vehicle emissions; availability and types of pedestrian crossings; context-sensitive lighting and signage; comfortable bus shelters; traffic controls; and more. 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.[174]
- 2021 was the deadliest year on Minnesota's roads in more than 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.[175]
- 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.[176]
- 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 populations of less than 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.[177]
- Contributed to the most traffic fatalities in Minnesota in 2021 are speed (171 deaths), unbuckled motorists (110), driving while drunk (74), and distractions (27).[178]

Populations with lower income—including people who identify as BIPOC and American Indian—more frequently live in neighborhoods close to manufacturing 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.[179]

- Areas with lower income and higher percentages of people of color have a disproportionately higher number of pedestrian crashes. Areas with high poverty rates have 3.9 times as many fatal injury pedestrian crashes per square miles as high income/low poverty areas. Areas where a majority of residents are BIPOC and American Indian have almost 9 times as many fatal and injury pedestrian crashes per square mile as majority white areas.[180]

Figure 5: Non-motorist traffic safety by Minnesota community census tracts - Twin Cities metro area, 2017-2023



Disadvantaged communities were identified through US Census tract areas and Justice40 criteria. Criteria includes housing burden, energy burden, chronic disease prevalence, low life expectancy, air pollution, and other factors. Learn more about these criteria at the Climate and Economic Justice Screening Tool website (https://screeningtool.geoplatform.gov/en/methodology). These criteria are designed to highlight when a community exceeds some threshold that sets it apart on a national level. The Justice40 initiative is a Federal initiative with a goal that 40 percent of the overall benefits of certain Federal investments flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution.

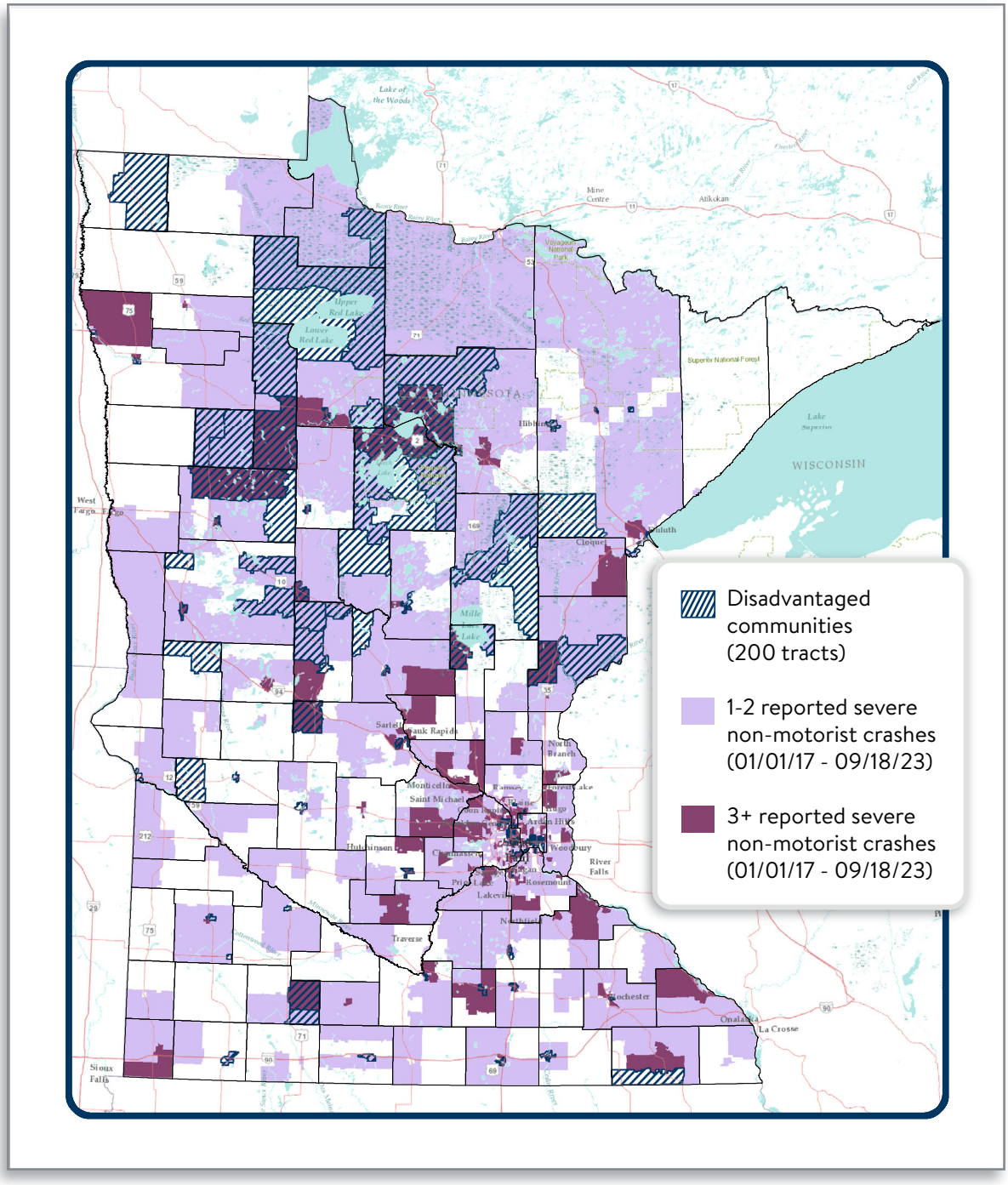


Figure 6: Non-motorist traffic safety by Minnesota community census tracts, 2017-2023

Transportation needs are shaped by Minnesota's growing population that includes more older adults and more people with limited English proficiency, and by a greater interest among people of all ages in driving less and having walkable communities.[181]

- People ages 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 ages 40 to 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.[182]

Employment

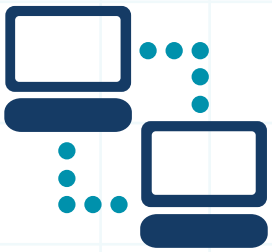
Paid work provides both income and connection to other people while also offering a sense of purpose, meaning, and belonging in the community. Employment provides us with opportunities to feel success and is the primary way most people in Minnesota access health insurance, which is often sponsored and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

Structural racism continues to generate employment 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 Black, Indigenous, or as a person of color.

- In 2020, people from communities of color made 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).[183]

IN 2014...

5.1% of workers in Minnesota teleworked. This jumped to **6.1%** in 2018.



BY 2020...

19% of Minnesota workers teleworked.[187]

Communities of color and American Indians in Minnesota face the impacts of systemic racism through discrimination and unequal opportunities of employment and earnings. Though they bring their skills, talents, and work ethic to their experience in the labor market. They also carry the burden of cumulative disadvantages—from more limited educational opportunities to disproportionate criminal justice involvement.[184]

Employment inequities are linked to health inequities. For example, a 2018 study looked at workplace environments and health outcomes for Black and white workers. The study found that workers identifying as Black reported more stressful work environments and poorer self-reported health outcomes.[185] The study also recommended further research on inequities in perception of the workplace environment and how they contribute to inequitable heart health and mental health outcomes for Black Americans.

Teleworking

Teleworking has accelerated rapidly since the COVID-19 pandemic. Teleworking is when a person works from home or another location other than their workplace and communicates with colleagues by phone or email. Research on impacts to health from teleworking is still limited. However, some research suggests teleworking may lower the risk of overall poor health and lower blood pressure. Other research suggests the impact of teleworking on psychological health depends on the job itself and one's teleworking arrangement (job resources, child care, family demands, etc.).[167]

Teleworking gives employers more staffing options by making it possible to hire people who live too far away to commute regularly or who may have transportation, health, mobility, or other barriers that prevent working on site. However, teleworking is limited to certain lines of work because it is available mainly to those who have access to fast, reliable internet service.

Unemployment

Unemployment reduces access to income, which can have negative health consequences that include 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.[188]

- From March to August 2020, about 20% of the workforce (627,267 people) in Minnesota eligible for unemployment insurance filed for benefits.[189]

Industries, earnings, and vacancies

Job availability and type can affect our health.[190,191]

- The highest percentage of employment across most of Minnesota continues to be in the education and health services industry sector. However, agriculture becomes more prominent in western counties, leisure and hospitality in a few northern counties, and manufacturing in central and southern Minnesota.
- A 2020 report noted that the highest job vacancy rates and largest increases in wages for job vacancies have occurred in Greater Minnesota.[192]

Employment benefits: parental paid leave

Parental leave or time off from work after having a baby is important for health,[193] though not all people in Minnesota have access to it. More information on paid leave, including sick leave, is in this assessment under Policy profile: paid family and medical leave. Parental paid leave improves beneficial health behaviors like breastfeeding and reduces infant death before one year old.[194]

- Access to paid or unpaid leave varies widely. Between 2016 and 2021 in Minnesota, 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[y].[195]

y 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.

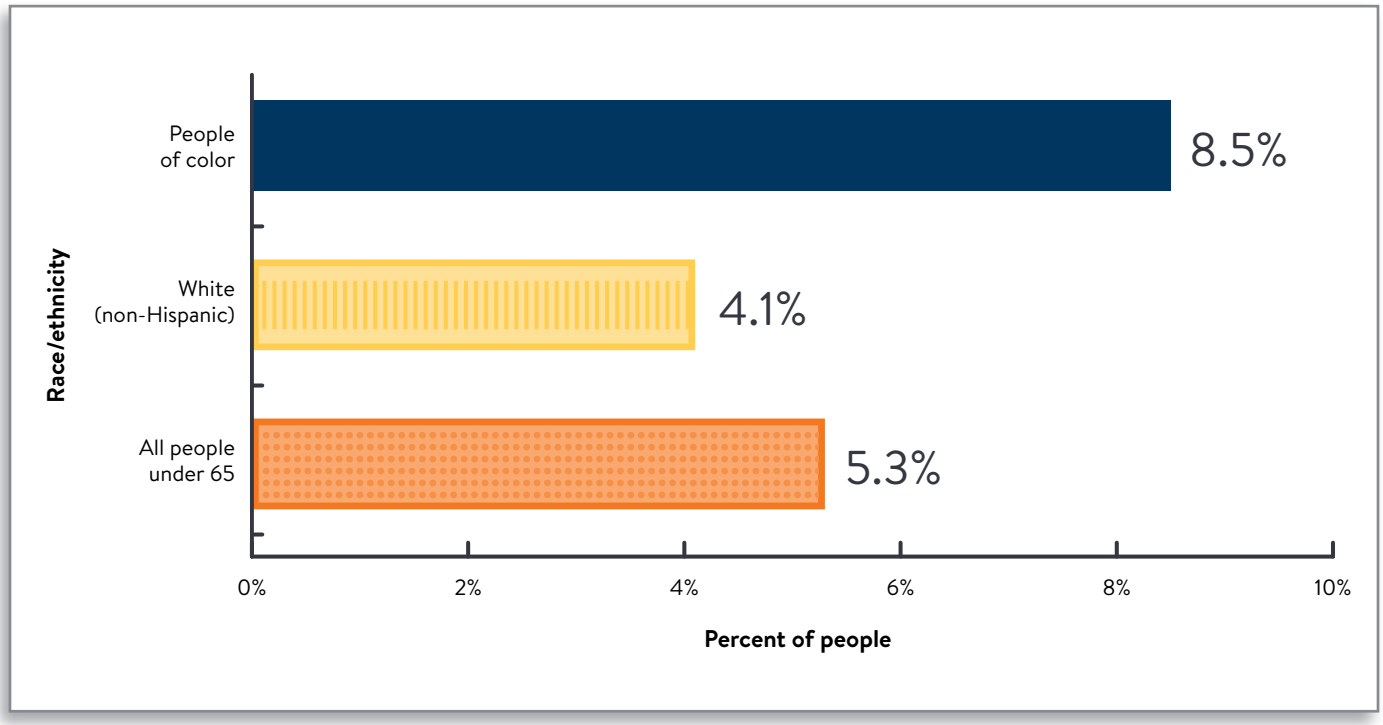
Employment benefits: health insurance

A greater share of Minnesotans have health insurance compared with the rest of the United States, partly because a greater share of Minnesotans are employed 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, temporary, or low-paying jobs may not have access to health care insurance coverage or may lack adequate coverage—this makes it more difficult for them and their families to get needed or affordable care. People who are uninsured or underinsured tend to get sicker before seeing a doctor and have a harder time recovering. Rural residents are more likely to get health care through public sources, such as Medicare, Medicaid, and MinnesotaCare.[196]

- In 2021, 4.0% of people in Minnesota had no health insurance coverage. Among Minnesotans born outside the United States, 13.6% were uninsured.[197]
- In 2022, 5.8% of people with one or more disabilities were uninsured.[198]
- 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.[199]

Figure 7: Proportion of residents under age 65 without health insurance coverage, by race



Source: Minnesota Compass, 2021

Health care system

It is important that our health care system supports all people in Minnesota, given all people's health challenges and especially the inequities experienced by people who are American Indian, Asian American, Black or African American, Latino/Latine, or people of color. When people feel like health care providers or systems fail to understand or respect them, their culture, or their unique health issues and needs, they are reluctant to seek care and it is more likely that their care will not be the best. Responsive health care allows providers to detect problems earlier and connect people more quickly to resources that will help them recover and thrive.

Health care systems are supportive when the people who rely on them can get the right care at the right time, in a convenient location with a caring and competent provider, and the outcome is positive. The health care system is made up of many parts, such as the number and types of providers available in each community; the range of available services; if and how providers reflect populations served; and whether providers serve people in culturally appropriate ways. We can improve health care when providers have ready access to current health information and when different providers coordinate care.

IN 2021...

88.1% of people in Minnesota reported using any health care in the past **12** months.

Access to services

Whether care is available depends on a person's location, income, the number of providers in the community, and more. Inequities of race/ethnicity, age, and income exist because people go without care due to cost and overall health care use.

- Minnesota has 55 geographic areas designated as having health professional shortages because they lack enough primary care providers to serve their populations. These areas have a shortage of primary, dental, or mental health care providers.[200]
- Of the 127 community hospitals in Minnesota, 76[z] are designated critical access hospitals. In total, 90 of these hospitals are in rural areas.[201] As of 2022, 37% of all primary care clinics were in rural areas and 20% of all specialty care clinics were in rural areas.[202]
- The physician-to-patient ratio varies widely across the state. Urban areas have one physician for every 226 people; large rural areas have one for every 542; small town/small rural areas have one for every 645; and rural or isolated areas have only one for every 1,714.[203]
- 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 people with low incomes in Minnesota were significantly less likely than the state average to have used any health care in the past 12 months.[204]

z Minnesota has 77 critical access hospitals; however, one is an Indian Health Services hospital. This is not included in the count of community hospitals, which are limited to nonfederal short-term general and other special hospitals and are accessible by the general public. Minnesota Critical Access Hospital list (https://www.health.state.mn.us/facilities/ruralhealth/flex/mnhospitals.html)

Access to care and quality of care is influenced by multiple factors, one being the people providing health care services. The COVID-19 pandemic illuminated the impact of staffing shortages and physician burnout on our health care system. Beyond this a growing body of literature shows that a more diverse health workforce creates better health outcomes in communities of color and American Indian communities.[205]

- Although the supply of health care providers has continued to increase, even during the pandemic. Between 2019 and 2023 we've lost the net supply to retirement, other fields, and non-patient care roles. Meaning the number of health care providers has continued to increase, but when comparing 2019 to 2023 the percentages of licensed health care professionals involved in patient care is lower in 2023.[206,207]
- Across health care professions, more than double (5% in 2019 compared to 12% in 2023) of the planned exits are due to burnout, compared to pre-pandemic levels.[208]
- People of color are underrepresented in Minnesota's health care workforce, though diversity varies across different health care professions.[209,210]

Quality of health care

Health care is considered quality when it is safe, effective, patient-centered (respectful and responsive), timely, efficient, and equitable.[211]

- 80% of licensed physicians in Minnesota speak only English in their practice.[212]

IN 2021...

18% of LGBTQ+ people surveyed had a provider refuse to treat them in the past year because they were LGBTQ+.

As many as **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.[213]

19% of LGBTQ+ people surveyed had been verbally harassed in the past year by staff or other patients in a health care setting.

17% had a provider who was physically rough or abusive with them in the past year.[214]

24% of LGBTQ+ people surveyed reported having to teach their provider in the past year about LGBTQ+ people so they could receive appropriate care.

19% had a provider ask intrusive or unnecessary questions in the past year about their LGBTQ+ identity unrelated to the purpose of the appointment.[215]

Access to specific types of health care

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

Dental services

- In 2023, 42% of dental facilities in health professional shortage areas were rural health clinics.[216]

Mental health services

- In 2022, 80% of Minnesota counties qualified as mental health professional shortage areas.[217]

Preventive screenings, monitoring, and management

- In 2021, 26.6%[aa] of Minnesota adults were told by their doctor or another health professional that they have high blood pressure (about 1.3 million people).[218]
- In 2020, just above half of Minnesotan adults who needed their blood glucose (sugar) checked had done so in the prior three years. Without this screening, people with prediabetes may not have been diagnosed and may have missed a chance to lower their risk of developing diabetes.[219]
- Slightly less than half of adults in Minnesota living with diabetes achieve all five diabetes management goals (controlling blood pressure and blood sugar, taking statins and aspirin if needed, and no tobacco use); this rate has changed little in the past decade.[220]
- Rural Minnesotans were more likely to say they were unable to get an appointment with a primary care provider or a dentist when needed. Rural Minnesotans also had more problems finding dentists that were accepting new patients.[221]

Take action

Minnesota Department of Health
State Oral Health Plan (https://direc.to/kRxq)

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 unborn babies and has been linked to increased rates of infant illness and death.[222] More information on maternal and infant rates of death is in this assessment under the prenatal and early life experience section.

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.[223]

aa (95% confidence interval: 28.9-27.4%)

Policy profile: paid family and medical leave

Paid family and medical leave

The Minnesota Department of Employment and Economic Development defines paid family and medical leave as a policy or program that "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."[224]

Why paid family and medical leave matters for health

Paid leave allows people to take care of sick family, newborn children, or themselves. When paid leave is unavailable, people frequently must choose between working or tending to people in their lives who need care. Having to choose between the two means risking income, health, or both.[225]

Both MDH and the Healthy Minnesota Partnership have focused on identifying the impacts of paid leave on health outcomes and health equity.[207,208] Both have recognized the role paid family and medical leave plays in creating the financial stability and security that is necessary for people to be healthy and to care for one another.

Systems and policies that shape paid family and medical leave

For some people, workplace policies provide a private family and medical leave benefit. As of March 2021, paid sick leave was available to 79% of civilian workers in the United States and paid family leave was available to 23% of civilian workers.

Nationally, the Family and Medical Leave Act allows up to 12 weeks of unpaid family or medical leave for certain workers at public agencies and local education agencies (schools) and for those who work for private-sector employers who employ 50 or more employees.[228] The United States has no national standard for paid family or sick leave.

An exception to this rule took place from April 1 to Dec. 31, 2020, when the federal government required many employers to provide their employees with paid sick leave or expanded family and medical leave for quarantine, isolation, sickness, or family care related to COVID-19.[229] In states where this requirement was implemented, it is estimated that this newly provided paid sick leave prevented about 15,000 cases per day during the initial months of the pandemic.[230,231] Between April and December 2020, an estimated 8 million workers used sick leave through this policy.[232]

Inequities that exist around paid family and medical leave

Use of paid family and medical leave is uneven in Minnesota. Generally, workers who are white, higher-paid, and have more formal education take larger amounts of paid leave compared to those in other racial/ethnic groups, who are lower-paid and are less educated.[233]

Data shows that from 2016 to 2020, 42% of Minnesotans used only unpaid leave after childbirth, compared to 34% using only paid leave. People with lower income reported taking half as much time off (5.5 weeks) on average compared to those with higher incomes (11.1 weeks). Additionally, while the median amount of leave taken by race/ethnicity was 10.6 weeks by white mothers, this length dropped to between 5-5.8 weeks among all other racial/ethnic groups. The top three most common influences on the amount of leave taken after childbirth were a lack of paid leave offered at work (33.3%), a lack of financial ability to take leave (26.7%), and not accruing enough time to take leave (21.8%).[234]

A 2023 state law provides for universal paid leave in Minnesota starting in 2026 and sick and safe time[bb] beginning in 2024, but access to paid family and medical leave currently remains uneven and uncertain. At the time of writing in 2023, more than one-third of working people in Minnesota had no access to paid time off when sick or caring for a sick family member.[235]

Minnesota's policy response to the need for paid family and medical leave

People across Minnesota joined together in advocacy and organizing efforts for many years. These efforts gave the issue of paid family and medical leave enough attention to prompt local elected officials, state legislators, and others to draft and pass measures and bills that addressed these issues.

Between 2016 and 2022, four cities in Minnesota—Minneapolis, Saint Paul, Bloomington, and Duluth—adopted local measures mandating that employers provide sick and safe time for all workers. In 2023, expanding upon local laws, the Minnesota State Legislature passed an earned safe and sick leave law, effective for the whole state, due to take effect on Jan. 1, 2024. Under the law, workers can earn up to 48 paid leave hours each year to use for illness or violence recovery, to receive care and assistance, or to care for family member(s).

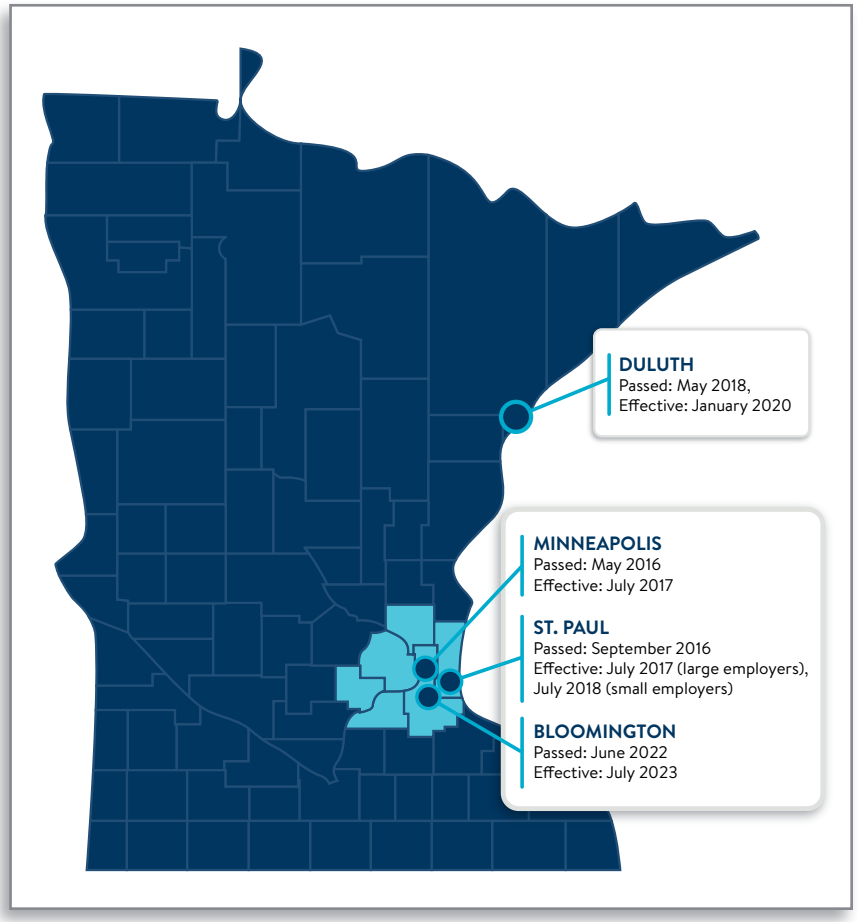


Figure 8: Safe and sick time effective dates, 2016-2023

bb Sick and safe time is time off that employees can use to care for themselves or a family member for health or safety reasons.

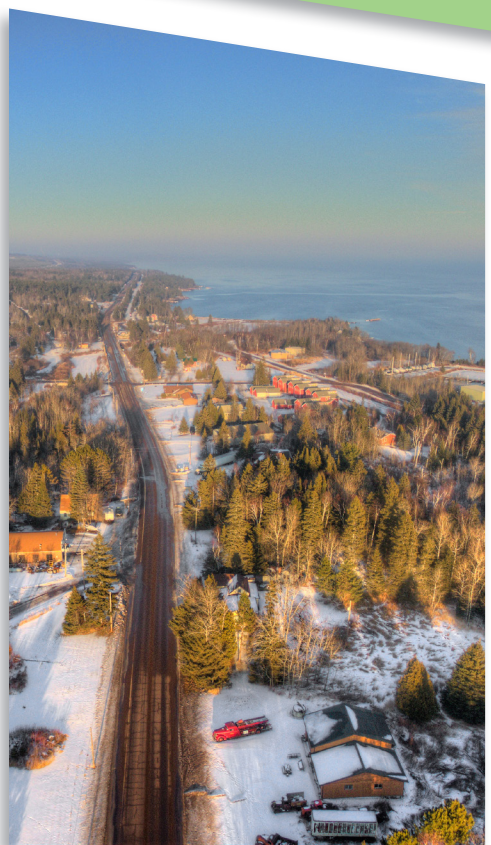
NATURE

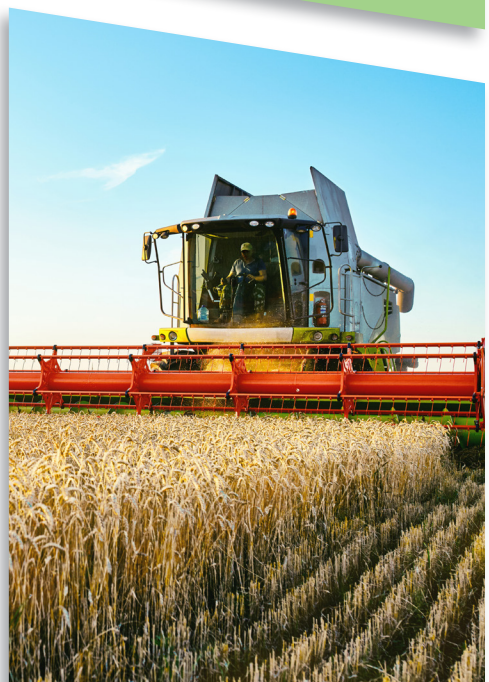
Our feelings about nature are shaped by our families, jobs, culture, and society as is our access to our natural surroundings and how we treat it. Depending on personal interests and values, people have very different ideas about what it means to own land, how we should use nature (or not use it), who 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 or resources (like mining or logging industries or hunting) or a place for physical activity and recreation (parks, bike paths, and walking trails). Others view nature as a most basic value with infinite and unmeasurable connections between human health and the health of the natural world. Some people hold all these beliefs at the same time. Regardless of how we view and value nature, healthy communities need diverse, well-functioning ecosystems that provide clean air, fresh water, medicines, and food security.[236]

> “...the individual is dependent on the group, the group is dependent on nature, and nature is dependent upon the supernatural for survival.”

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” and means 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 that “the individual is dependent on the group, the group is dependent on nature, and nature is dependent upon the supernatural for survival.”[237]





Nature and our health

In the Twin Cities, about **1.6 million** people are within one mile of an environmental justice area. In Greater Minnesota; **1.3 million.**

A huge amount 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 when 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 about agriculture, development, construction, land management, and food processing that ultimately shape our health. 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 our health.

Environmental justice[cc]

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.[238] Policies, practices, and structures based on racism and discrimination have disproportionately exposed some populations to environmental dangers, creating unjust conditions for these communities.

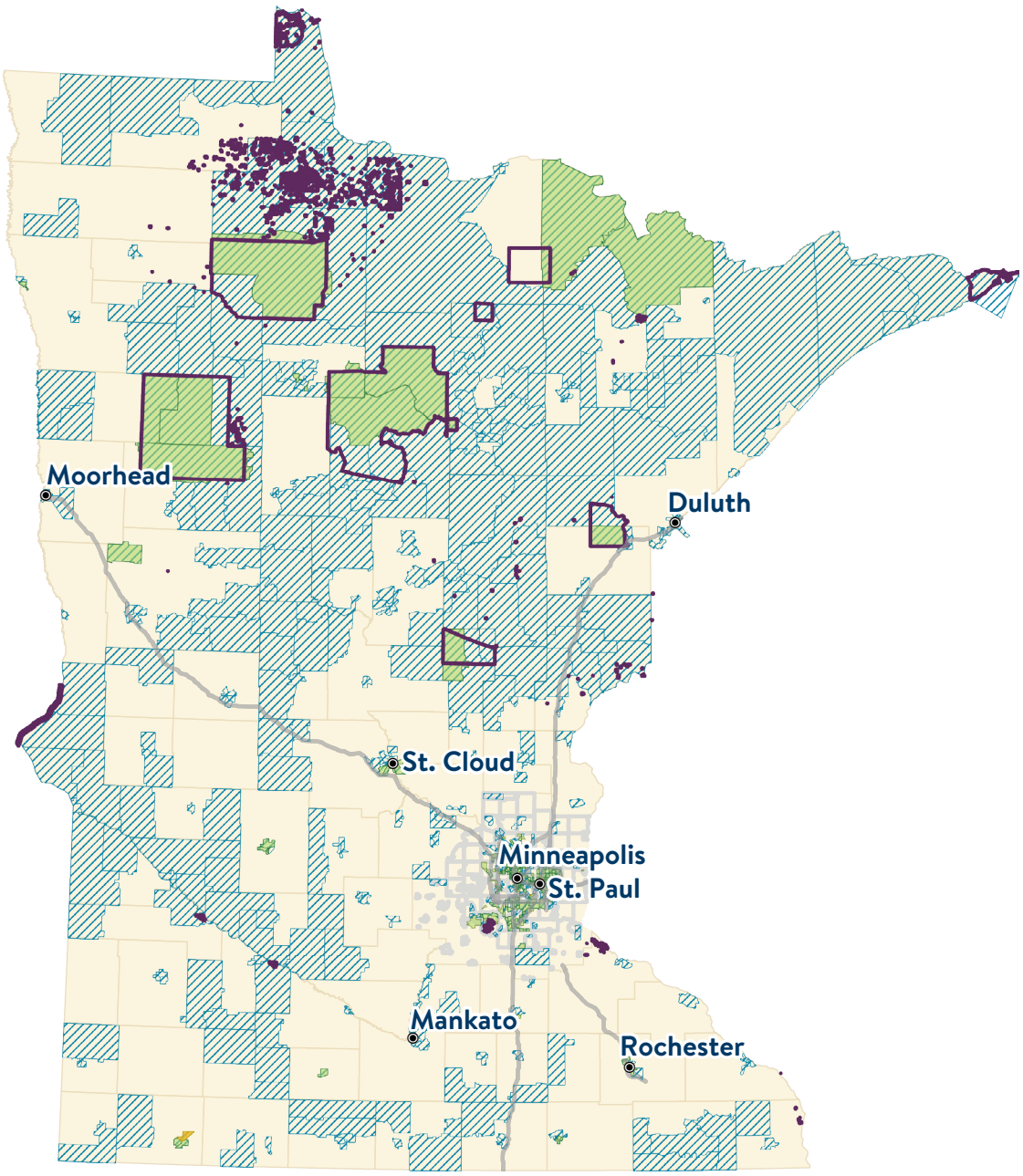
The concept of environmental justice grew out of research on racial inequities in toxic waste exposure. Scholars like Robert D. Bullard and Benjamin Chavis have extensively shown that communities of color and American Indians in the Unites States are more likely than predominantly white communities to be concentrated in areas close to a hazardous waste facility, and that these inequities are related to systemic racism in fields like zoning, housing policy, and corporate practice.[239,240,241,242]

The Minnesota Legislature in 2023 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 are within federally recognized Indian tribal areas[dd].[243] These areas were created to address health problems that disproportionately hurt American Indian, Black or African American, and people of color in Minnesota, like those resulting from air pollution levels above state guidelines. To conduct business in these environmental justice areas, some employers need to study the impact of pollution over time.

- In the Twin Cities, about half of the seven-county metro area is in or within one mile of an environmental justice area.[244] This covers about 1.6 million people, or just over half of Twin Cities residents.[245]
- In Greater Minnesota, approximately 55% of census tracts are in environmental justice areas, including 1.3 million people (51% of all Greater Minnesota residents).[223]

cc Learn more about Environmental Justice in Minnesota at Environmental justice (www.pca.state.mn.us/about-mpca/environmental-justice).
dd These areas are available in closer detail on Minnesota Pollution control interactive story maps at: Cumulative impacts (www.pca.state.mn.us/get-engaged/cumulative-impacts). It should be noted that the federal government may view environmental impact areas of various tribes using a different definition and include, for example, an entire treaty area. Actions in an entire area that impact trust resources and their availability may impact tribal members health.

Figure 9: Environmental justice areas in Minnesota, 2023



Source: Minnesota Pollution Control Agency

State strengths survey: nature

As part of the Minnesota statewide health assessment, the healthy Minnesota Partnership surveyed Minnesotans about state strengths that support health. People who responded reviewed strengths noted in the 2017 Minnesota statewide health assessment, shared their agreement or disagreement about 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, people who took the survey agreed that several strengths support the health of people in Minnesota. However, they noted that those strengths benefit some people and groups more than others, depending on who they are or where they live. They noted that some strengths are not available to all people in Minnesota and that many disparities exist.

More detailed methods and results from this survey are in Appendix C. State strengths survey findings in this assessment.

Table 3: 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

People who took the survey shared feedback on several strengths related to nature, including parks and trails, lakes and rivers, gardening, and farmers markets. Most of them agreed that access to parks and trails, access to lakes and rivers, and availability of farmers markets were state strengths. They also suggested other strengths that support health, like a lack of many catastrophic weather events.

While most who took the survey 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, such as 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 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.[ee]

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.[247]

ee 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." More information is available: 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).

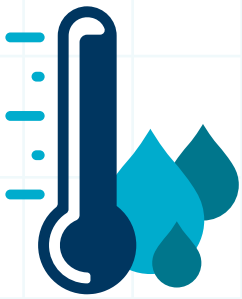
Climate

For decades, Minnesota monitored changes in temperature and precipitation, snow depth and lake ice, storms and droughts, the growing season, and more.[248] 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.[249]

We have experienced the following changes in Minnesota's climate:

- Since 2000, Minnesota has seen a significant uptick in large-area, extreme rainstorms.[251]
- The rate of warming weather in the winter has risen even more sharply than in the summer in recent decades. From 1970 through 2021, the average daily winter low temperature rose more than 15 times faster than the average daily summer high. It is 90% less likely for northern Minnesota to see readings of 35 degrees below zero and for southern Minnesota to see readings of 25 degrees below zero.[252]

Minnesota warmed by **3.0° F** between 1895 and 2020. Annual precipitation increased by an average of **3.4 inches.**[250]



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

- In 2020, three sectors were responsible for 74% of greenhouse gas emissions: transportation, electrical utility, and agriculture.[253]
- 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.[254]

Take action

Our Minnesota Climate [Climate Action Framework (https://direc.to/kRMp)]

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.[255] Warmer nights cause homes without air conditioning to stay hot; people without air conditioning, who are isolated, or who are unable to leave their homes are at greater risk of heat-related illness.

Some of us are more vulnerable to the effects of climate change, such as 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 farmers, people who work outdoors, and others whose livelihoods depend on the weather. 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.[256]

- Heat-related illness directly accounted for 75 deaths in Minnesota from 2000-2022.[257]
- In 2020, 613 people in Minnesota went to the emergency department because of heat-related illnesses.[258]

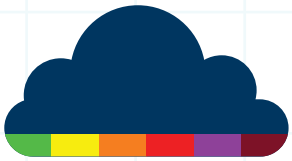
Climate change disrupts weather patterns and increases severe weather events that lead to flooding and drought, negatively impacting human health, social networks, land, plants, and wild and domestic animals. One-time and recurring natural disasters also create widespread stress and challenge the mental well-being of entire communities.

- The 2021 drought was the most severe in Minnesota since at least 1988.[259]

Air

Poor outdoor air quality makes it harder to spend time outdoors for work and recreation, especially for children, older adults, and people with respiratory conditions like asthma.[260,261] 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.[262]

At the time of this report, **19 air alerts**[ff] had been issued in 2023 in Minnesota, breaking a previous record of **13 air alerts** in 2021.[263,264]



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.[265] Air pollution is more likely to affect populations with higher rates of heart and lung disease, which includes people who identify as BIPOC and American Indian, older adults, children with uncontrolled asthma, and people living in poverty.[266]

- 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.[267]

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.[268]

- In Minnesota, one in 24 children (4.2%)[269] in 2020 and one in 11 adults (8.8%) in 2021 had active asthma.[270]
- The proportion of Minnesota adults with asthma is slowly increasing. Overall, the rate of asthma in Minnesota is low compared to other states; however, people who identify as American Indian, Black, and as multiracial non-Hispanic are consistently more likely to have asthma than white people in Minnesota.[271]
- ZIP codes in the Twin Cities with the highest percentage of people who identify as American Indian, Black or African American, or people of color have five times more asthma-related emergency room visits related to air pollution compared to areas with more white residents.[272]

Learn more

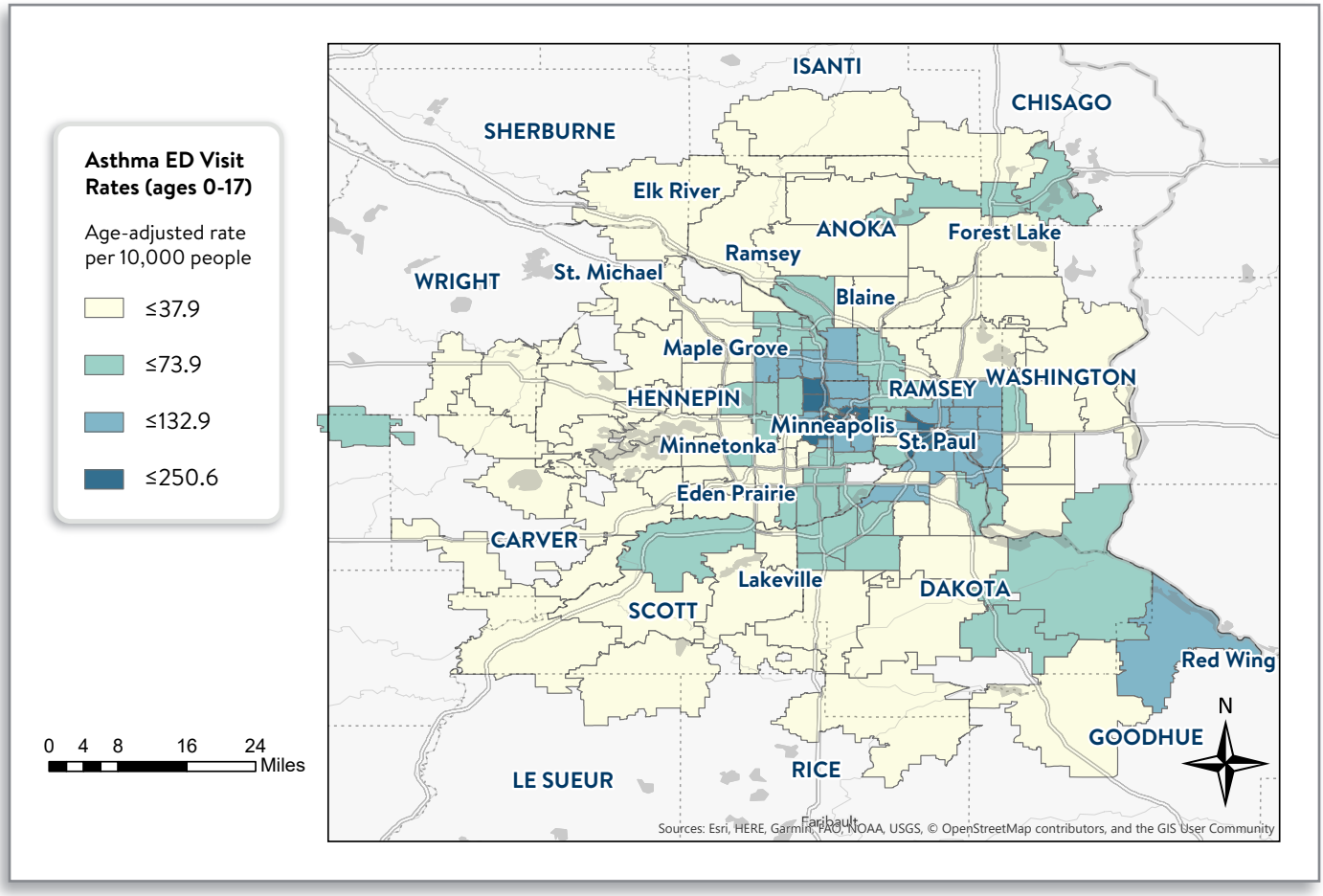
MN Public Health Data
Data access portal (https://direc.to/kRHN)

Take action

Asthma in Minnesota
Strategic Framework 2021-2023 (https://direc.to/kRHK)

ff The Minnesota Pollution Control Agency changed its methodology for calculating air alert days in 2023 to include only the initial issuance of an alert and not extensions/expansions.

Figure 10: 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.[gg] 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.[273]

gg More information on radon is in this assessment under housing conditions and safety.

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, 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.

- Just above 8% of Minnesota is covered in water.[274]

Approximately 75% of Minnesota gets its drinking water from groundwater, and groundwater provides almost all the water used to irrigate crops.[275] 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.[hh]
- Nearly 98% of the drinking water provided by the state's public water systems meets all federal health-based standards.[276]

In Minnesota,

1.1 million people rely on private wells and are responsible for testing and maintaining them.[277]

Learn more

MN Public Health Data
Drinking water quality (https://direc.to/kRHD)

Nitrogen

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

Nitrate is a particular health concern for infants under six months old. Ingesting nitrate at that age can interfere with the ability of red blood cells 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 a fast resting heart rate, weakness, nausea and, in severe cases, may die.[278]

We see high nitrate levels 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.[279]
- About 4% of new wells have nitrate concentrations above 3 mg/L in Minnesota. While 3 mg/L is less than the standard set by the U.S. Environmental Protection Agency (EPA), it suggests human-made sources of nitrate have contaminated the water and the level could increase over time. Most concentrations above 3 mg/L are in central and southeastern Minnesota. Concentrations above 10 mg/L are mainly in central and southwestern Minnesota.[280]

hh 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.

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 nitrate concentration exceeding drinking water standards. Home treatment to remove nitrate can be expensive.[281]

Lead in water

Research shows there is no safe level of lead in drinking water, although the EPA 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. More information about how lead impacts health is in this assessment under housing.

- The number of people with reported high blood lead levels in Minnesota has been decreasing since the 1990s.[282]
- In 2021, only 4 out of 1,441 tested public water systems in Minnesota exceeded the EPA's action level for lead.[283] 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 across Minnesota in ground water, sediment, soil, air, and fish. Research has shown some PFAS to be harmful to public health.[284] 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.[285]
- Groundwater testing at 102 of 111 closed landfill sites detected PFAS at 100 sites; 62 sites had PFAS levels exceeding drinking water guidance levels.[286]

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).

MDH encourages private well households to reduce exposure to any concentration of arsenic in their water, but arsenic treatment can be expensive for households using a private well.

Arsenic occurs naturally in rocks and soil across Minnesota and can dissolve into groundwater. How 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.[287]

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.[ii] A healthy eating pattern that includes nutrient-rich foods like fruits and vegetables, which is low in added sugars, saturated fat, and sodium, reduces the risk for chronic diseases like heart disease, diabetes, stroke, and some cancers, and helps manage body weight.[288]

IN 2022...

34%

of adults were obese based on self-reported weight and height.[291]

- Significantly fewer Minnesotans reported eating at least one vegetable and at least one fruit a day in 2021 compared to 2017. Significantly more adults consumed three or fewer sugary beverages per week in 2021 compared to 2018.[jj,289]
- Fewer students in ninth and 11th grade reported eating fruits daily in 2022 compared to 2016 or 2019, but consumption of vegetables and sugar-sweetened beverages remained the same as in previous years.[290]

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 and with added sugars, sodium, and fats are cheaper and more readily available, while nutrient-rich fresh foods like fruits and vegetables can be less available and less affordable.[292] 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.[293]

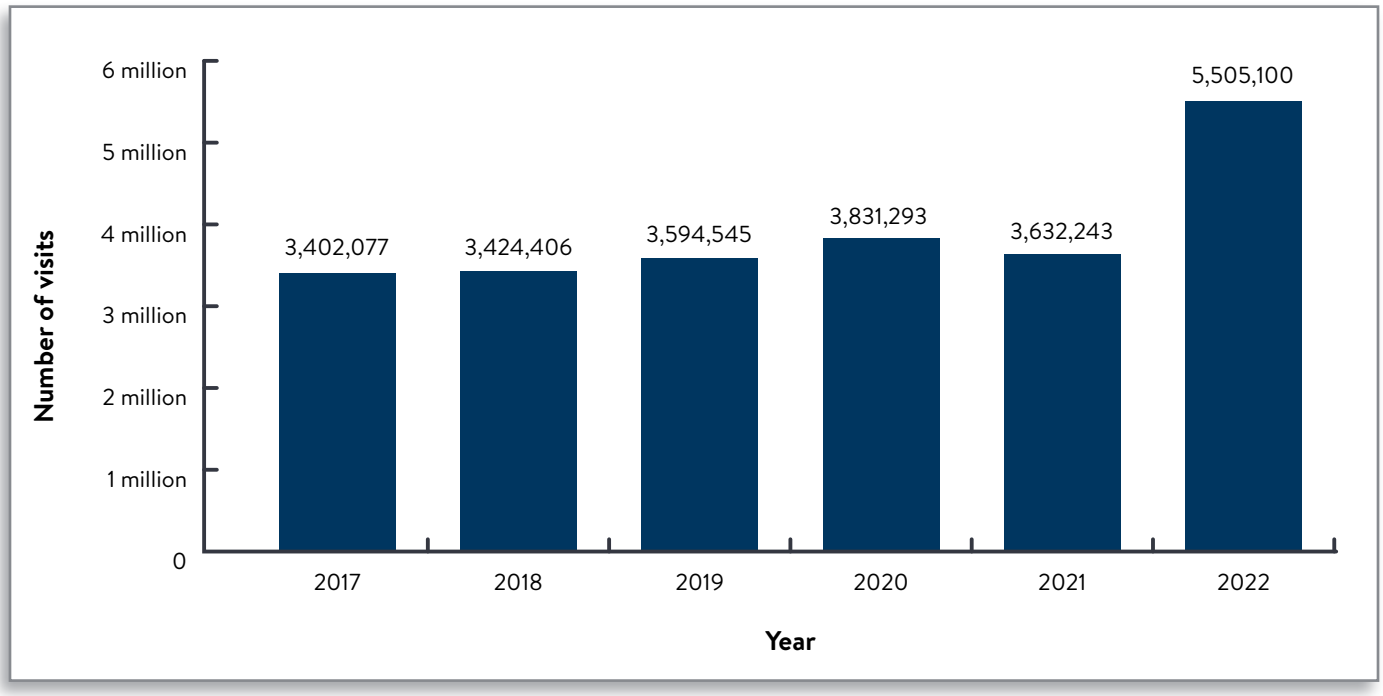
- Minnesota has experienced dramatic changes in food security since the outset of the COVID-19 pandemic in early 2020, with food insecurity surging by as much as 40%.[294]
- In 2020, Black and Latine people in Minnesota are more than twice as likely to report food insecurity than white people in Minnesota.[295]
- The number of people visiting food shelves in Minnesota has increased to 5.5 million in 2022, from 3.4 million in 2017, likely because of rising food costs due the COVID-19 pandemic and inflation impacting the supply chain.[296]

Learn more

UofM Healthy Foods, Healthy Lives Institute Food Security Dashboard (https://direc.to/kRGb)

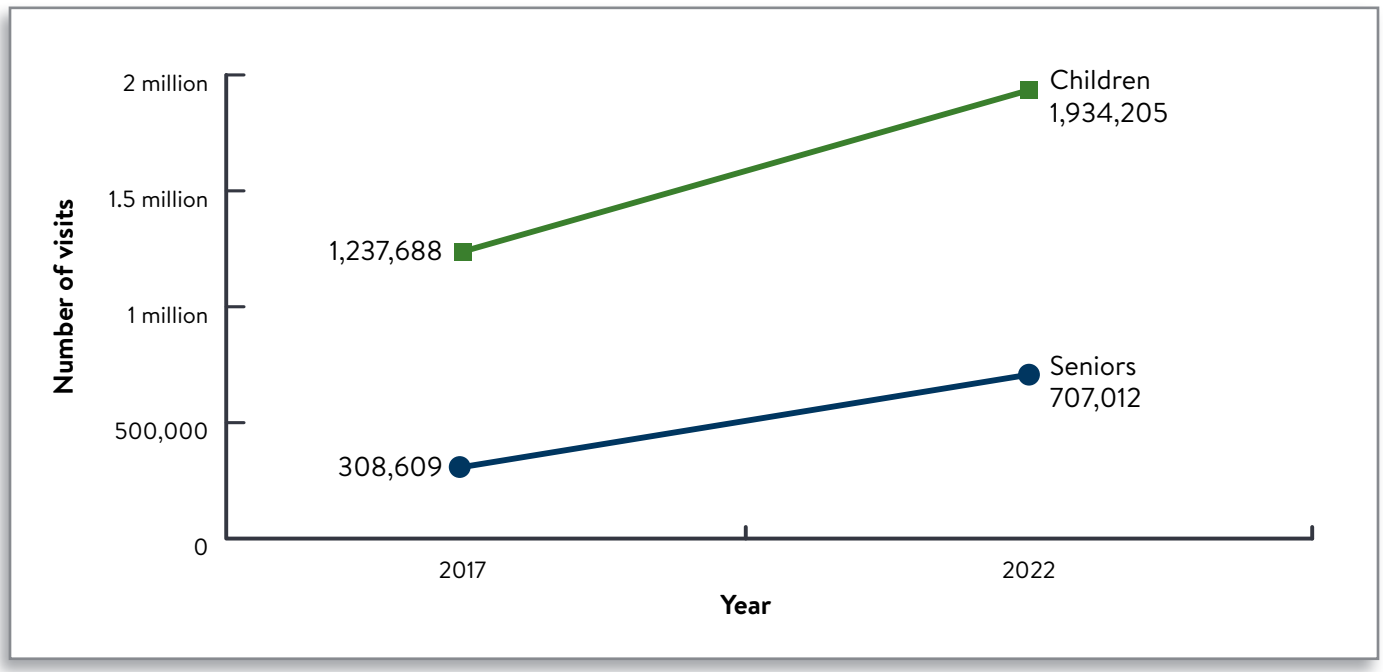
ii The first and best food for humans for the first six months is breast milk or, when that is not possible, infant formula.
jj Vegetable: (79.4%; 95% confidence interval: 78.6-80.3%) compared to 2017 (82%; 95% CI: 81.2-82.9%); Fruit: (63.6%; 95% CI: 62.6-64.6%) to 2017 (67.8%; 95% CI: 66.8-68.7%); Sugary Beverages: (50.2%; 95% CI: 49.2-51.3%), compared to 2018 (47.8%; 95% CI: 46.8-48.8%)

Figure 11: Number of food shelf visits, Minnesota, 2017-2022



Source: Hunger Solutions, 2023

Figure 12: Number of food shelf visits in Minnesota among older adults 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 parks, walking paths, bike trails and other areas built in our environment for human activity influences a person's participation in exercise. A person's free time also influences exercise habits, and working in multiple jobs, long commutes, or childcare can limit available time.

- 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.[297]
- Adults visiting state trails in Minnesota are typically older, have higher incomes, higher educational attainment, and are far more likely to identify as white. Most visitors use the state trails alone or with one other person.[299]
- Physical activity trends unrelated to jobs or work are consistent over time among Minnesota populations. Such physical activity is highest among people with higher income and education and people ages 18 to 14 and is lowest among adults ages 65 and older. 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.[300]

IN 2020...

90.3% of Minnesota adults lived within half a mile from a park, compared to **77.5%** in 2015.[298]

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.[kk,301]
- Just above 10% of ninth-grade students participated daily in at least an hour of physical activity between 2016 and 2022.[302]
- In 2022, nearly 20% of males in eighth, ninth, and 11th grade reported being physically active for at least 60 minutes every day of the past week. Less than 10% of females in eighth, ninth, and 11th grade reported the same.[303]

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

Policy profile: tree canopy cover

Tree canopy cover is the area that tree leaves and branches cover on the ground when viewed from above. Tree canopy shades the ground.[304]

Why tree canopy matters for health

Minnesota is home to 53 native tree species, and tree canopy covers nearly a third of the state. Trees provide economic benefits through recreation, timber and lumber, food, and wood products.[305] They also provide many natural benefits, from producing oxygen, storing atmospheric carbon, and filtering drinking water to providing habitat for animals and moderating temperatures.[306]

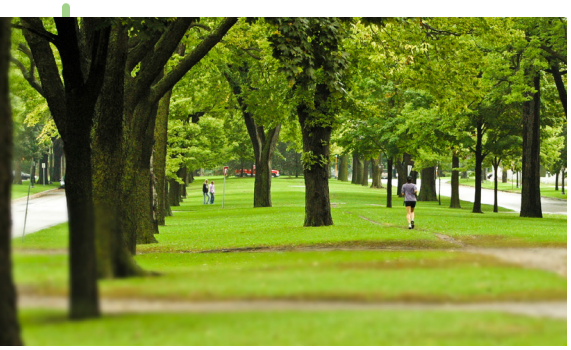
Tree canopy cover benefits both mental and physical health and encourages physical recreation on parks and streets.[307,308] Being near trees, including in urban settings, improves social cohesion, reduces stress, and improves mental health.[309,310,311,312,313]

Tree cover also reduces the impact of events that can harm human health. Trees filter air and water to reduce the impact of air and water pollution and their cooling effects also reduce the impact of extreme heat.[314] Trees also support energy conservation in buildings by shading buildings in the summer and blocking winds in winter.[315]

Systems and policies that shape tree canopy cover

Many policies shape the amount and health of tree canopy cover.

- Local governments play a role. For example, since 2006, the City of Minneapolis has provided trees to residents and businesses at low or no cost in historically disadvantaged neighborhoods. More than 25,000 trees have been planted through the program,[316] including more than 1,500 in 2023.[317]
- The Minnesota Department of Natural Resources gives grants to local governments, tribal governments, and nonprofit organizations to help with forest management activities. The Minnesota State Legislature provided more than $25 million for this work in 2023.[318]
- Nationally, the U.S. Forest Service's Urban and Community Forestry Program offers assistance for building and maintaining tree canopies in the cities and towns, where more than 84% of Americans live. In fiscal year 2023, the federal forest service assigned $250 million to increase and maintain healthy urban tree canopies in disadvantaged communities, which included $5.25 million for Minnesota.[319]



Inequities in tree cover

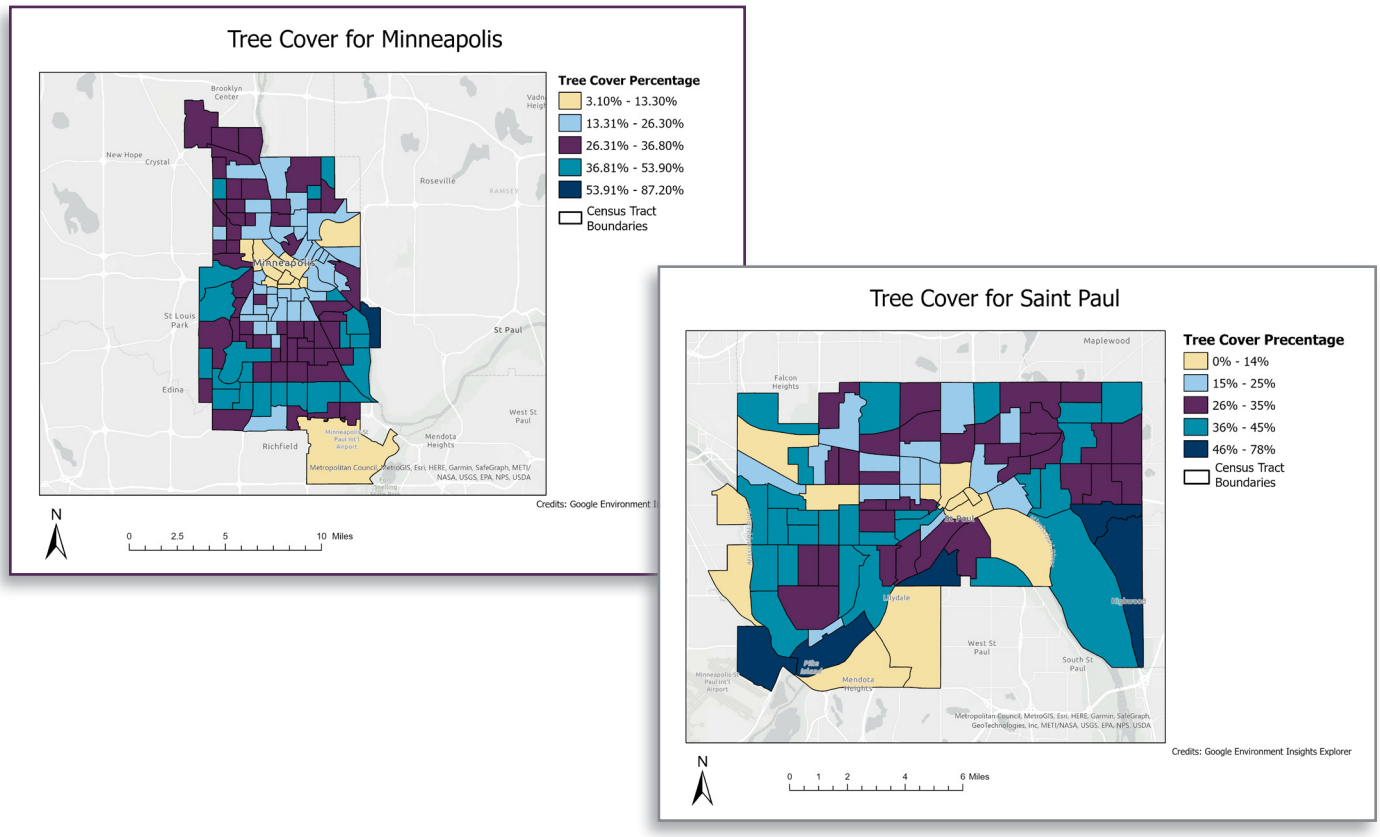
Generally, neighborhoods with a higher proportion of lower-income residents and residents identifying as BIPOC and American Indian tend to have less tree cover than neighborhoods with higher average incomes and a higher proportion of white residents. Neighborhoods that were redlined in the 1930s[II] frequently have smaller tree canopies than neighborhoods that were not redlined.[320]

A 2021 study of tree cover for thousands of communities in the United States with a combined population of 167 million found that:

- Neighborhoods with a higher proportion of white residents are more likely to have more tree cover.
- Lower-income census blocks have 15.2% less tree cover and higher temperatures (by 2.7 degrees Fahrenheit) than higher-income census blocks.[321]

These patterns also appear in the Twin Cities metro area, where neighborhoods with less tree cover have a higher proportion of residents of color, lower rates of homeownership, and lower median comes than neighborhoods with more tree cover.[322] These differences in demographics and tree canopy cover can exist in neighborhoods just a few miles apart.[3323] The proportion of tree cover in the seven-county metro area ranges as low as zero percent in some parts of Minneapolis to as high as 67% in parts of North Oaks.[3324]

Figure 13: Percentage of tree cover by census tract, Minneapolis and Saint Paul



II The Federal Reserve describes redlining as "the practice of denying people access to credit because of where they live, even if they are personally qualified for loans. Historically, mortgage lenders redlined core urban neighborhoods and Black-populated neighborhoods in particular."

Figure 14: Percentage of tree cover by census tract, city of Duluth

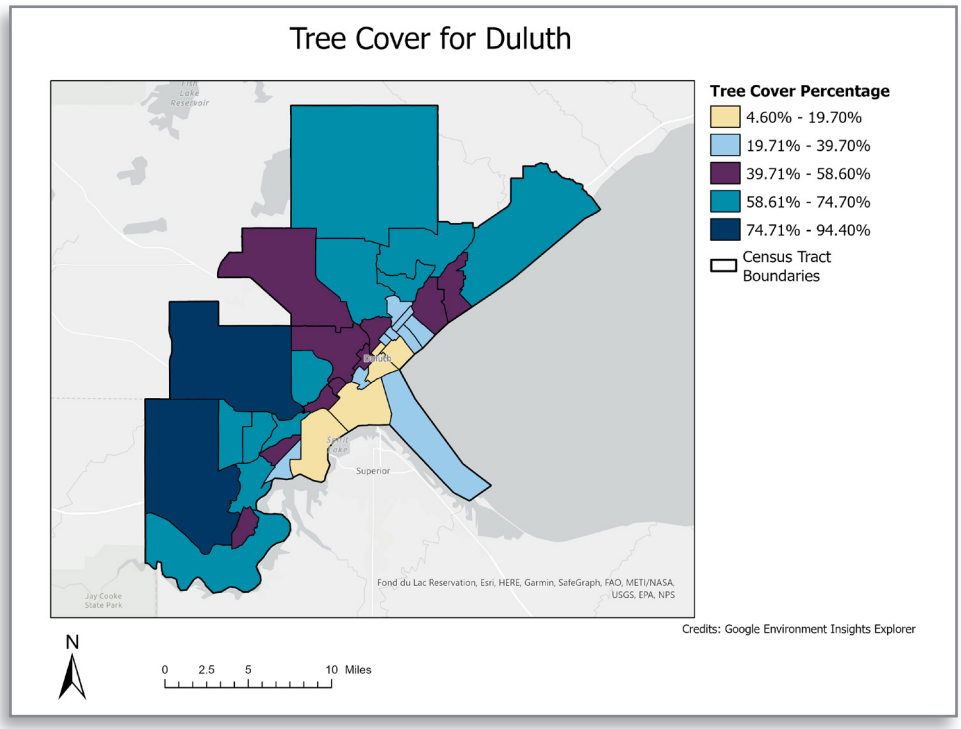
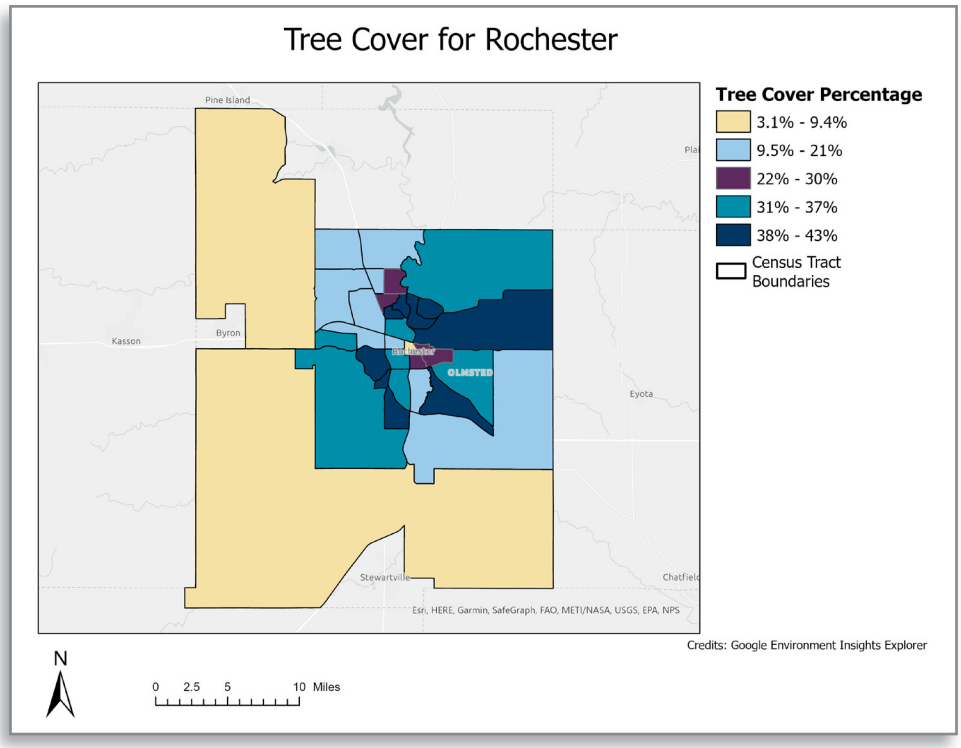


Figure 15: Percentage of tree cover by census tract, city of Rochester



Minnesota's response to the need for tree cover

State, local, and regional governments have recognized the need for more equitable distribution of tree cover across Minnesota.[325,326,327] Minnesota's new Climate Action Framework includes a summary of proposed action steps for the state, communities, and individuals, and more than a dozen of the steps involve trees.[328]

BELONGING

Belonging and inclusion determine how we interact with each other as individuals, 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 our communities are critical across the life span.[329] Children and adolescents find their place in society through their experiences and relationships in their families and communities. Adults find connection with people across their different environments, from their workplaces to their neighborhoods. Older adults may experience shifts in their social environments and relationships as they age. Throughout our lives, we remain social creatures with a fundamental need for connection.

> We are social creatures, and belonging creates meaning, purpose, and hope for the future.

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.[330] Exclusion or marginalization (being in a position of lesser importance, influence, or power) are sources of health inequity.[331]

Populations and communities experience a sense of belonging when they are not marginalized or excluded.[332] When a person or population is stigmatized (labeled in a way that is limiting) or when they are not seen or heard by neighbors, employers, government, or those in power, it is harder to take part fully in society. This can result in a higher likelihood of poor health conditions (more information is in this assessment under opportunity) and poor health outcomes like injury, addiction, abuse, trauma, depression, disease, disability, and death.[333]

A community's collective voice can help shape the conditions that affect their lives and health. When people of different backgrounds are included in decision-making, they can help direct decisions that shape their communities, workplaces and the institutions that serve them. Our sense of belonging is what creates healthy communities.

Our sense of belonging is what creates healthy communities.

Belonging and COVID-19

Peoples' sense of belonging was impacted deeply by the COVID-19 pandemic.[334] A massive, shared experience of social isolation resulted from stay-at-home orders, social distancing, distance learning, working from home, and business shutdowns. Groups already marginalized felt this isolation to an even greater degree than others.

Some people targeted and blamed Asian Americans for the spread of COVID-19 without any evidence to support this false belief, and Asian Americans met increased racism and violence.[335,336] Social distancing and shelter-at-home precautions were particularly hard for people who are LGBTQ+ who sheltered with people unsupportive of their identities. Children experienced new and increased stressors, including the death of a parent or family member, changes to their learning environment, and social isolation. Teens lost in-person social connections and support from caring adults at school. College students struggled with online learning and housing transitions. Restricted visiting protocols isolated adults living in long-term care facilities.

State strengths survey: belonging

As part of the Minnesota statewide health assessment, the healthy Minnesota Partnership surveyed Minnesotans about state strengths that support health. People who responded reviewed strengths noted in the 2017 Minnesota statewide health assessment, shared their agreement or disagreement about 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, people who took the survey agreed that several strengths support the health of people in Minnesota. However, they noted that those strengths benefit some people and groups more than others, depending on who they are or where they live. They noted that some strengths are not available to all people in Minnesota and that many disparities exist.

More detailed methods and results from this survey are in Appendix C. State strengths survey findings in this assessment.

Table 4: 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%

Source: Minnesota Department of Health, 2023

People who took the survey 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 people who took the survey agreed that feeling welcome or that opportunities for immigrants are state strengths.

They 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 an active citizenry. Others suggested elders are a strength because of what they can teach others. Many 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.

People who took part in the conversations shared examples of the multiple communities to which they belong. A community is a group of people who have a relationship or connection. A group 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 like you belong leads to positive life outcomes and helps to manage stress and coping with difficult times.

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

- **Interpersonal relationships** with others create togetherness, connection, and friendship. People do not 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).

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.[337]

IN 2021...

Minnesotans reported an average of **4.3** mentally unhealthy days in the past 30 days, more than

2x

as many as they reported in 2013.[338]

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.[338]
- In 2022, about 29% of Minnesota students reported that they lived with someone who is depressed or has another mental health issue.[340]

Take action

Minnesota Thrives
Building connections for mental well-being and resilience (https://direc.to/kRCs)

Different groups experience mental health in different ways:

- Some groups in Minnesota are more likely to experience mentally unhealthy days than others, including people ages 26-54, with a high school degree or less, at or below 200% of federal poverty guidelines, with public health insurance, who are American Indian, or who are two-spirit or nonbinary.[341]
- 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.[342]
- 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 those above age 35.[343]
- 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.[344]

Mental well-being and resilience can ease the lifelong effects of trauma, and relationships and resources in most communities can nurture that well-being and resilience. However, most Minnesota youth with adverse childhood experiences 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 adverse childhood experience; in particular, the rate of students experiencing sexual abuse or living with someone with mental health issues increased from 2019 to 2022.[345]
- In June 2023, 34% of people in Minnesota reported feeling very stressed by the increase in prices in the two months prior; this proportion was higher among LGBTQ+ people (43%), people identifying as American Indian, Black, or as a person of color (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).[346]

Prenatal and early life experience

Relationships, experiences, and the environment impact our lives before we are 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

Data collected for this assessment and presented below demonstrates that experiences and outcomes associated with pregnancy, childbirth, and infancy are not equitable across racial groups. We must examine the role systemic racism plays in bringing about these health inequities.

Studies have found that race-related stressors can occur in our neighborhoods, schools, workplaces, relationships, social roles, and media consumed throughout a person's life span[347] and that exposure to racial bias from birth to old age "can contribute to racial inequities in life expectancy and other health outcomes across the life course and over generations."[348]

- For example, race-related stressors can arise from a person's treatment during pregnancy and childbirth, and Black and American Indian respondents to an MDH survey shared they felt emotionally upset about how they were treated, based on their race, at higher rates than white respondents.
- In the United States, Black women face a rate of death during pregnancy and childbirth that is three to four times higher than other groups, and, during hospitalization for childbirth are two to three times more likely to experience events that negatively impact their health or threaten their lives.[349]
- In a similar vein, a 2017 study used racial disparities in income, employment, education, incarceration, and juvenile custody as indicators of structural racism. The study found that racial disparities in unemployment and education were correlated with higher Black infant mortality[mm] but those disparities were not correlated with white infant mortality, leading researchers to conclude that "Structural racism may contribute to the persisting racial inequity in infant mortality."[350]

In Minnesota, inequities in employment and education could be contributing to the stark racial inequities in infant mortality: those rates for Black and American Indian Minnesotans are more than twice the rate for white Minnesotans.[351] See more details in the chapter on Opportunity in this assessment.

mm Infant mortality is the death of an infant before their first birthday.

- 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.[352]
- In the years 2017-2018, the rate of death for pregnant people[nn] was 8.8 deaths per 100,000 live births. While Black people (13%) and American Indian people (2%) are a small portion of the state's birthing population, they are disproportionately represented among the pregnancy-associated deaths, making up 23% and 8% respectively.[353]
- In 2021, 310 infants born in Minnesota died before their first birthday. While Minnesota's rate of infant death before one year of age 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 death is not shared equally across population groups.[354]
- Overall, from 2016-2017, more than 7% of pregnant women surveyed by MDH reported experiencing five or more stressful events in the year before their baby was born.[oo] Rates varied by race/ethnicity, with nearly 29% of American Indian and 21% of U.S.-born African Americans reporting five or more stressful events in the year before their babies were born.[355]

nn MDH anticipates new data prior to the next statewide health assessment.
oo 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.

- In 2022, 74% of students reported feeling some sense of belonging (versus 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.[356]
- 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.[357]
- In 2022, 63% of students reported their school or community offered a variety of programs for people their age to participate in outside of the regular school day.[358]

IN 2022...

74% of students reported feeling some sense of belonging (versus little or none).[356]

Despite the overall high sense of belonging among responding students, students identifying as American Indian, Black, or as a person of color face additional challenges:

- In Minnesota in 2020, American Indian students were 10 times more likely to be expelled or suspended than their white peers. Black students were eight times more likely to be expelled or suspended than their white peers.[359]

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.[360] Some kids bully by shunning others and spreading rumors; others use email, social media, and text messages to taunt others or hurt feelings.

- 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.[361]
- 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.[362]

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. Representation is also important because elected officials make decisions that form the systems and structures of society. Civic participation improves health by building social networks and trust and facilitates community coordination and cooperation.[363] In 2022, the American Medical Association declared voting to be a social determinant of health, and states with lower voter participation are associated with worse health outcomes.[364]

In 2022, the Healthy Minnesota Partnership identified civic participation as a state strength, citing specific examples like 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.[366]
- In 2021, 61.8% of residents donated $25 or more to nonprofits and other charities.[367]
- In 2022, 382,000 people in Minnesota belonged to labor unions (15.2% of the total state workforce[368]), the 10th highest rate in the country.[369] People in Minnesota living in rural areas participate in unions at a higher rate than those living in urban and suburban areas.[370]
- In 2020, 75% of Minnesotans participated in the U.S. Census, a rate similar to previous years.[371]

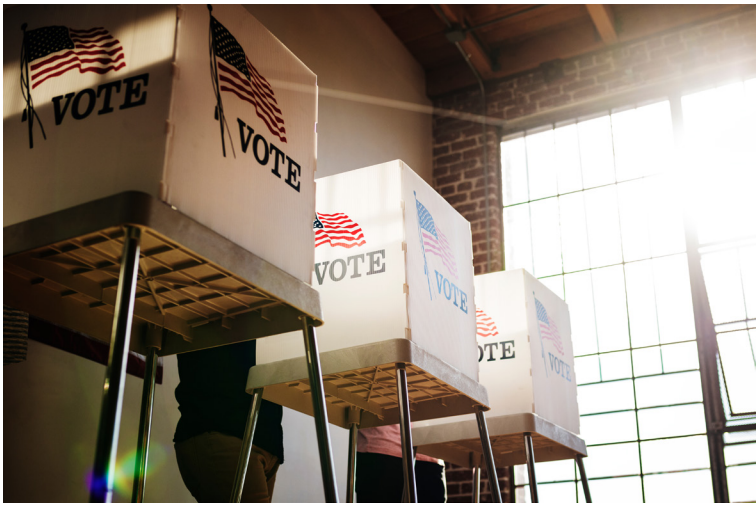
Local and state government, community and statewide organizations, businesses, faith communities, informal networks, and others create civic infrastructure and opportunities to come together to create better health for everyone. Minnesota can continue to build civic infrastructure to provide opportunities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

IN 2022...

61% of eligible people in Minnesota voted, the highest rate of voter turnout in the nation.[365]

Learn more

MN Compass
Civic engagement
(https://direc.to/kRBZ)



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.[372] 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.

Sexually transmitted diseases

Women and particularly American Indian, Black or African, and women of color disproportionately bear the long-term consequences of sexually transmitted diseases (STDs). Women are biologically more prone to contracting an STD but less likely to have symptoms. Untreated STDs can have serious consequences on their health and future reproductive ability.[373]

- The rate of syphilis in Minnesota also increased between 2012 and 2021, including among women and people who can become pregnant.[375]

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.[374]

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.[376]

- In 2022, 9,802 people were living in Minnesota with HIV/AIDS.[377]
- In 2022, 262 people were diagnosed with HIV. The majority (57%) of new diagnoses were in people between 20 and 39 years old.[378]

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.[379] 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 as long as they take their medication as prescribed and stay undetectable.[380]

- In 2020, 90% of people who were diagnosed with HIV were linked to care within 30 days, 71% of people living with HIV in Minnesota were retained in care, and 64% of people living with HIV were virally suppressed (virus load was low or undetectable).[381]

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 communities. Substance use can also directly impact health (for instance, in cases of accidents, chronic illnesses, and fatal overdoses, for example).

In Minnesota, there are clear racial inequities in fatal overdose rates: American Indians are 10 times as likely to die from drug overdose than white Minnesotans, and Black Minnesotans are three times as likely to die from drug overdose than white Minnesotans.[382]

In Minnesota...

Alcohol remains the primary substance used when adults are admitted to substance use disorder treatment.

Factors behind inequities in substance use behaviors and outcomes may include the experience of institutional racial biases, the effect of racism-related stressors on the mental and physical health of people of color, and the conscious and unconscious biases that shape how people of color are treated, including by health care professionals.383 More information on alcohol and drug overdose deaths is on pages 103 and 104.

- As of 2019, about 90% of Minnesota people who were incarcerated were diagnosed with a substance use disorder.[384]
- 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.[385]

Alcohol

According to the Kaiser Family Foundation, 12% of U.S. adults say their alcohol consumption and substance use have increased because of pandemic-related stress.[386] In Minnesota, alcohol remains the primary substance used when adults are admitted to substance use disorder treatment.

Take action

MDH Response
Substance use and overdose across Minnesota (https://direc.to/kRBW)

- From 2016-2021, nearly 7% of people in Minnesota reported using alcohol in the final three months of pregnancy. American Indians reported the lowest levels of alcohol use during pregnancy (2.8%) compared to all other racial/ethnic groups. Those with more education reported higher percentages of alcohol use during pregnancy (7% versus 5% respectively).[387]
- In 2022, 12% of students in ninth and 11th grade said they 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.[388]

Cannabis

As of August 2023, adults 21 and older may legally use and possess certain amounts of cannabis in Minnesota when not on federal property.[389] As this law takes effect, more data will likely become available, giving a better understanding of rates of use, policy impact, risk factors, and benefits.

- Marijuana use among 11th graders dropped to 12% in 2022, from 16% in 2019.[390]
- In 2022, more than 39,000 patients were approved in the state medical cannabis registry. The two most common qualifying medical conditions in 2023 were chronic pain and post-traumatic stress disorder.[391]

Commercial tobacco and nicotine

- People who give birth 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%).[392]
- In 2022, student-reported 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.
- Fourteen percent of Minnesota 11th graders reported using an e-cigarette in the past 30 days in 2022, compared with 26% in 2019 and 17% in 2016. Use among eighth graders in 2022 slid back to the 2016 rate of 6%, compared with 11% in 2019.[393]
- As of May 2022, 10 Minnesota cities and counties had enacted a comprehensive policy that prohibits the sale of all flavored tobacco, including menthol; 17 cities or counties addressed/restricted flavor tobacco and/or e-cigarette products in some manner.[394]
- As of 2021, 13.7% of people in Minnesota smoke, a stable rate since 2017.[395]

Learn more

MN Medical Cannabis Dashboard (https://direc.to/kRB4)

Opioids

The opioid epidemic affects all people in Minnesota. Preventable harms include more than just deaths. Hospitalizations, injuries, and adverse childhood experiences are among examples of preventable harms related to the opioid epidemic and substance use. Increasing rates of these preventable harms are linked closely to the health and prosperity of communities.

Fentanyl is a powerful synthetic opioid that is up to 50 times stronger than heroin and 100 times stronger than morphine. It comes in two forms—prescription and illicitly manufactured. Illicitly manufactured fentanyl is driving much of the increase in overdoses seen in recent years in Minnesota and nationally.

Focusing on improving community conditions like job opportunities, quality of education, affordability of childcare, and community connectedness can help decrease the number of preventable harms—like opioid overdoses—that occur in Minnesota.

- 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.[396]
- In 2021, people in Minnesota ages 25 to 34 had the greatest number of nonfatal emergency department visits for opioid-involved overdoses.[397]
- 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 has remained steady among 11th graders.[398]

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.

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

- In 2022, there were more than 11,000 emergency department visits for assaults, more than 70 visits to the emergency department for elder abuse, and just above 60 visits to the emergency department for abuse during pregnancy.[400]
- In 2022, 13.5% of Minnesota students in grades 9 and 11 reported having 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.[401]
- Indigenous women, girls, and two-spirit people are far more likely to experience violence, be murdered, or go missing than other demographic groups in Minnesota.[402]
- 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.[403]

IN 2022...

At least **21** people died from intimate partner violence in Minnesota.[399]

Take action

Injury and violence prevention [State Plan (https://direc.to/kRB8)](https://direc.to/kRB8)

Living with chronic conditions

Chronic conditions are health conditions or diseases that can last a year or more and may require ongoing medical treatment. Most chronic conditions can be managed, so you can live a long and healthy life, but some people may still develop other health conditions, complications, or disabilities, regardless of medical care or treatments. Social isolation and loneliness have been linked to increased risk for heart disease and stroke, Type 2 diabetes, depression and anxiety, addiction, suicide and self-harm, dementia, and earlier death.[404]

About **800,000** older adults in Minnesota are living with at least one chronic condition.

Chronic conditions unfairly affect some people in Minnesota more than others due to many long-standing structural and social inequities, biases, and barriers. Bias and social inequities often determine a person's income level, the conditions and environments where they are born, live, work, and learn, and even the health care they receive. These basic life circumstances influence health and well-being, whether a person develops heart disease or diabetes, and the resources they possess to manage their illnesses.[405]

- Nearly 310,000 (5.5%) people in Minnesota are living with a new or previous cancer diagnosis.[406]
- Between 2015 and 2019, American Indian males and females had the highest cancer incidence rate for all sites combined compared to all other Minnesota populations.[407]
- In 2021, more than 46,000 people were hospitalized for heart disease (668 per 100,000 Minnesotans) and nearly 13,000 were hospitalized for stroke (185 per 100,000 Minnesotans).[408]

Older adults in Minnesota and their care givers also live with chronic conditions. As people age, their quality of life is impacted by the length of time they live with chronic conditions. Addressing chronic conditions can improve quality of life and maintain social connection.

- Caregivers in Minnesota are more likely to live with a chronic disease than non-caregivers (55% versus 48%).[409]

Take action

MN action plan to address cardiovascular disease, stroke and diabetes
2035 Plan (https://direc.to/kRBx)

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 living alone is expected to increase significantly among baby boomers, partly because they have fewer children than preceding generations.

Care for older adults

Social isolation and loneliness are difficult to measure. The 2023 Senior Report by America's Health Rankings produced an index to rank states by how healthy they are for people ages 65 and older. The index uses 35 measures across five categories of health: social and economic factors; physical environment; clinical care; behaviors; and health outcomes. Risk of social isolation for those aged 65 and older is part of the report.

According to the 2023 senior report...

Minnesota ranks **#4** as one of the healthiest states in the nation for older adults. However, Minnesota's normalized value (a method that crunches data to a common scale) for risk of social isolation for people aged 65 is 32, with one being the best and 100 the worst or more at risk for social isolation.[410]

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 ages 65 and older fell in 2020.[411]
- Rural counties[pp] have about 30% of all nursing homes but accounted for most of the closed nursing homes in the state between 2012 and 2021. In total, rural counties lost 19 nursing homes and had a nearly 10% decline in nursing home beds.[412]

Cultural isolation

Geography and race/ethnicity also influence isolation.[413] 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 contribute 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 in group conversations shared how their communities support people as they age through interpersonal relationships, 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 other intergenerational activities that support people of all ages.

pp Rural counties are those that are either entirely rural, or a rural/town mix (49 counties), as defined by the Minnesota Population Center in Greater Minnesota: Refined and Revisited (https://mn.gov/admin/demography/reports-resources/greater-mn-refined-and revisited.jsp), page 33.

Disconnection

Belonging is also important in terms of other poor health outcomes and to deaths from gun violence, suicide, homicide, drugs, and alcohol—sometimes called deaths of despair and disconnection.

Social connectedness is as important as individual behaviors in shaping health. Having support and care from relationships around us can help us manage difficult conditions and experiences in our lives.[414]

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 United States.

Gun violence

The rate of gun violence is higher in the United States than other comparable developed countries. Nationwide, approximately 100 people die each day due to gun violence, and the frequency of mass shootings is increasing each year. Gun violence is a complex issue caused by many factors.[415]

- The rate of gun deaths In Minnesota 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% and 26% increase nationwide, respectively.[416]

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.

Take action

MN Suicide Prevention [State Plan (https://direc.to/kRBu)](https://direc.to/kRBu)

- In 2021, 808 people in Minnesota died from suicide, or about 13.9 people per 100,000, continuing a 20-year trend of increasing rates. For every death there are more than a dozen nonfatal self-harm injuries each year.[417]
- In 2022, 9% of students reported ever having considered suicide. Of these, more than two-thirds identified as a person of color, not straight, or both.[418]

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, eat, and 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. One effect of community violence is poor quality or less sleep; when youth experience this, it hurts their school performance.[419]

- Offenses involving murder totaled 201 in 2021 in Minnesota, compared to 185 in 2020.[420]

Racial inequities in homicide continue to reflect the exclusion, lack of opportunity, and racism experienced most acutely by people identifying as American Indian, Black or African American, or people of color. A study in 2021 looked at homicide mortality in metropolitan U.S. cities and found "firearm homicide disproportionately impacts communities of color and is associated with measures of structural racism, such as White-Black segregation index."[421]

- From 2018 to 2021, Black or African American people in Minnesota continued to be more likely to die by homicide than other races.[422]
- 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.[423]

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.

- 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.[424]
- In 2021, an average of nearly four people in Minnesota died each day from a drug overdose, with the total annual number of drug overdose deaths increasing 29% from 2020. The continued increase was driven by synthetic opioids (e.g., fentanyl), psychostimulants (e.g., methamphetamine), and cocaine.[425]

Drug overdose deaths also highlight Minnesota health disparities:

- Minnesota's overall rate of death from drug overdose masks growing racial inequities 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 10 times more likely to die of a drug overdose than white people.[426]
- 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.[427]

Deaths that are attributable solely 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 causes fully attributable to alcohol. This rate was similar at the beginning of 2020 to the three previous years but increased after 2020 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.[428]
- About 2,082 people die each year in Minnesota 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.[429]

Leading causes of death

A population's leading causes of death can vary depending on a variety of factors (age, sex, race/ethnicity, geography, etc.). These variations show how inequities in the conditions for our health (explored throughout this assessment) impact our lifespan. Our environments, access to resources, and treatment by others based on our identities can indicate we are more or less likely to die from certain causes of death.

In 2021, the three leading causes of death in Minnesota were cancer, cardiovascular disease, and COVID-19. Varying rates of death among different population groups can show how social factors or conditions impact health and likelihood of death. The most frequent causes of death for adults in different age groups area: accidents, ages 49 and younger; cancer, ages 50-79; and heart disease, ages 80 and older. People identifying as white or American Indian had higher rates of death from cancer or heart disease compared to other race/ethnicities. People identifying as American Indian also had higher rates of death from COVID-19 and accidents, and people identifying as African American had higher rates of death from homicide compared to other race/ethnicities.[430]

Table 5: Leading causes of death in Minnesota, 2021

Cause of death	Count	Adjusted rate per 100,000
Cancer	10,178	143.2
Cardiovascular (heart) disease	8,570	123.9
COVID-19	4,439	64.0
Unintentional injuries	3,752	61.4
Stroke	2,384	34.5
Alzheimer's	2,251	33.1
Unspecified dementia	2,118	30.8
Chronic lower respiratory disease	2,066	29.1
Diabetes	1,575	22.6
Intentional self-harm	809	13.9
Chronic liver disease and cirrhosis	885	13.5

Policy profile: universal broadband internet access

Universal broadband internet access is defined as all people having access to broadband internet communications services.[431] Broadband high-speed internet is significantly faster than "dial-up" services.

Why broadband internet matters for health

The Federal Communications Commission has identified broadband connectivity as a super determinant of health and a gateway to education, employment, and other social determinants of health.[432] From this point of view, access to broadband internet is the connector to health services, social services, work, and each other.

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

Systems and policies that shape broadband

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

It is Minnesota's goal for all homes and businesses to have access to fast, universal broadband access, at specific speeds, by 2026.[433] This goal shapes how government funds are used. Both state and federal governments recently made funding available to reach this goal.

- In May 2023, Minnesota adopted an agriculture and broadband law that included $100 million to expand high-speed broadband internet in Minnesota.[434]
- In June 2023, the federal government assigned more than $600 million to Minnesota to fund local grant programs through the wider Broadband Equity Access and Deployment Program.[435]
- Rural and tribal areas are less likely than urban and suburban areas to have the infrastructure for broadband internet services because of limited profits for corporate internet providers from building infrastructure in less populated areas.
- Corporate policy decisions about where to build infrastructure, the cost to consumers, and available broadband speeds also impact access.

Inequities of broadband internet

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

- In a 2020 national survey, half of lower-income broadband users (52%) said they worried a lot or some about being able to pay for their high-speed internet connection over the coming months, compared with 26% of users with incomes in middle income tiers and just 9% of those in the top income tiers.
- Fifty-four percent 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.[436]

Current availability of broadband service in Minnesota depends on one's location and on how one describes "reasonable and timely" broadband service.

- Across all of Minnesota, 92% of Minnesota housing units can access wireline (cable or data lines) broadband service at federal standard speeds of at least 25 Mbps for downloads and 3 Mbps for uploads. However, only 74% of rural Minnesota housing units have access to these standard speeds and only 63% have access to the state's 2026 broadband speed goal of 100/20 Mbps.[437]

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

- Eighty percent of white adults in the United States say they have a broadband connection at home; this drops to 71% among Black Americans and 65% among Hispanic Americans.[437]
- Ninety-two percent of Americans with a household income above $75,000 can access broadband at home; this drops to below 60% for households with incomes under $30,000.
- Ninety-four percent of college graduates are connected to broadband at home while only 46% of people without a high school diploma report the same.
- Compared to the 77% of Americans overall who report access to broadband internet at home, fewer than half of American Indian/Alaskan Natives have access to high-speed internet.[439]

Since 2022, the Minnesota Department of Education is required to collect data about students' ability to access the internet at home. This has the potential to yield more detailed and current 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.

WHAT COMES NEXT?

Now what? Informing health improvement efforts

The statewide health assessment highlights some of the available data to describe how systems, structures, and conditions impact health in Minnesota. For a summary of data from each section, see this assessment's executive summary. Information from the assessment will be used to inform decisions on health priorities and actions to address those health priorities.

In 2024, the Healthy Minnesota Partnership and community partners will choose health priorities and develop a statewide health improvement framework based on the findings in this assessment. A health priority is a prioritized issue or topic from the statewide health assessment identified through a collaborative process. The framework will describe strategies and provide an action plan to address those health priorities by strengthening communities' assets and addressing challenges.

Data by itself cannot answer all our questions and may present new questions to explore. Community voices and perspectives will be important as the Healthy Minnesota Partnerships identifies priorities and creates action plans in the statewide health improvement framework and other activities. To further understand how these conditions impact health and identify possible solutions, the Healthy Minnesota Partnership will engage community organizations to develop and implement its health improvement framework. The Partnership's publicly posted annual reports will document progress on the framework development and implementation.

Given persistent inequities and complex overlapping conditions, no single organization or partnership holds responsibility for improving health. This assessment aims to inspire collaborative action and solutions from groups across the state. Across all health conditions, there is opportunity to share data, strategize, and hold each other accountable. The Healthy Minnesota Partnership will continue to provide space and opportunities to identify and implement cross-sectoral strategies together. Collaboration across sectors, agencies, and organizations is essential to improve health for all people in Minnesota.

Groups that might use this assessment are:

- Local and tribal public health, health care organizations, and health plans who conduct health assessments and implement health improvement plans
- Minnesota Department of Health leadership and staff—many department programs develop and implement health improvement plans
- Other state agencies whose work can impact the conditions for health, and
- Community organizations, advocacy groups, advisory boards and councils, and professional associations

Finally, this assessment contains a large amount of information on a variety of topics. The Healthy Minnesota Partnership will share translations, presentations, and other supporting materials to share with your networks on the Statewide Health Assessment website (www.health.mn.gov/statewidehealthassessment).

Now what? Improving future assessments

This is the third statewide health assessment developed by the Healthy Minnesota Partnership and MDH since 2012. Each round reveals opportunities for process improvement. Five years from now, new data and new research may provide a clearer picture of the health of Minnesota.

Assessment process: Collaboration is key in developing this assessment. Assessment authors can especially improve engagement activities.

- The next statewide health assessment will be informed and shaped at a greater level by community organizations, as well as statewide groups.
- We will engage community-based groups earlier, representing people of color, American Indians, people with disabilities and LGBTQIA+, to help shape the assessment.
- We will design community engagement efforts to deepen collaboration and shared decision-making with partners. This will include a plan for diversifying survey and public comment respondents, as well as participants in future engagement activities.
- We will learn from other Minnesota assessment processes, and other states' assessment processes, to inform process improvements.
- We will monitor how this assessment is used (or not) by partners and communities to increase the utility of future assessments.

Data: As this assessment was conducted, data requested by the Partnership and suggested by public comment was not always available. Over the next five years, we will look for:

- Data that can increase understanding of the root causes of health inequities and the measurable impact of those root causes.
- Data that is disaggregated by race/ethnicity, sexual orientation, gender identity, and disability status
- Data that further explores the health of those experiencing intersectional health inequities
- Research on how social structures and conditions impact population health
- Research that sheds light on how policies impact health

This statewide health assessment, and past assessments, show that Minnesota is a healthy place to grow, work, live, and age. These assessments also continue to expose how persistent systemic inequities create and sustain health inequities among specific communities.

People in Minnesota have a track record of success when working together to address challenges. This assessment presents opportunities to advance health equity and to strengthen community assets that support health.

We encourage people and groups reading this assessment to support these efforts by joining together with individuals and groups that share a passion for health equity and supporting the health of all people in Minnesota. For instance, consider working together with the Minnesota Department of Health or other state agencies, with your local or tribal public health department, with the Healthy Minnesota Partnership, with other statewide and community-based organizations, or with people and groups in your communities.

Together, we can make a difference.

APPENDIX A. DETAILED METHODS OF THE 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

MDH staff to the Partnership

- Audrey Hanson
- Austin Wu
- Deanna White
- Jeannette Raymond
- Paul Bolin
- Ruby Roettger
- Tara Carmean

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Healthy Minnesota Partnership subcommittees

Healthy Minnesota Partnership subcommittees acted on behalf of the Partnership to guide the development of the 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 the development of the assessment and ensuring framing and narratives are consistent with the larger Partnership's vision for the assessment.
  - Kelley Heifort, Minnesota Department of Corrections
  - Kelly Nagel, Minnesota Department of Health
  - Maureen Kenney, Minnesota Board on Aging
  - Nissa Tupper, Minnesota Department of Transportation
  - Rosa Tock, Minnesota Council on Latino Affairs
  - Sarah Grosshuesch, Healthy Minnesota Partnership Co-chair, Wright County, and Local Public Health Association
- Assessment group: ensuring the statewide assessment aligns with local public health and hospital assessment work across the state.
  - Ann March, Minnesota Department of Health
  - Annie Halland, UCare
  - Chelsea Georgesen, Minnesota Council of Health Plans
  - Christy Dechaine, Minnesota Hospital Association
  - Katie Peck, Wilderness Health & Bridging Health Duluth Steering Committee
  - Maria Malinowski, Blue Cross Blue Shield
  - Patrick Stieg, Carver County
  - Richard Scott, Carver County

MDH workgroups

An MDH statewide health assessment workgroup helped identify and gather data for possible inclusion in the statewide health assessment. Members served as a liaison between the project team and state department of health programs. A COVID-19 group was also convened to identify COVID-19 data for this assessment.

- Angela Noll
- Anne Kukowski
- Ashley Chavez
- Chris Brueske
- Dan Fernandez-Baca
- Denny Vang
- Emily Becher
- Hannah Woods
- Jacy Walters
- Jessie Carr
- Kelsey Kannenberg
- Liana Schreiber
- Madison Anderson
- Mia Robillos
- Mira Sheff
- Molly Meyer
- Pam Willow
- Rachel Cahoon

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 is to convey a picture of health and well-being across the state of Minnesota, providing links to many different data sources (rather than being a single comprehensive source of data).

The assessment relies on data from many organizations and sources across the state and nation. 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 health in Minnesota. Most data within this assessment should be considered 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 of MDH staff 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, MDH staff uploaded key 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 to track data within the 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

MDH 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 people responded).
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.

Demographics were only collected for the state strengths survey and for people who filled out the written form for public comment. These demographics demonstrate that these samples are not a representative sample of the state. Future community engagement activities will strive for demographic categories of respondents to reflect the demographics of the state.

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

Table 6: Engagement during 2023 assessment development

IAP2 SPECTRUM GOAL	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 (those attending meetings) 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, health equity advisory council, etc.) • SCHSAC and local public health • Public individuals and communities	• Statewide health assessment questions at 2021-2022 health equity advisory council meeting • Key informant interviews through public health student • State strengths survey • Group conversations • Dissemination questions at June 2023 SCHSAC meeting • Public comment

IAP2 SPECTRUM GOAL	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 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-19 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[qq]

- **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 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 and April 2023, Healthy Minnesota 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

Assessments reviewed for this inventory included community health needs assessments, community health assessments, and other assessments conducted by the Minnesota Department of Health (MDH) and other state agencies in the past five 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.[rr]
- Other assessments identified by the Partnership and subcommittees.

qq These definitions come from the Minnesota Department of Health Community Engagement Plan, 2016-2019.
rr In fall 2022, Partnership staff conducted an inventory of community health needs assessments completed by nonprofit 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.

Preliminary findings

- 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 on 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. Organizations framed most assessments with 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 to 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 arose 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 was not 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 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 NR
- 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 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

Survey overview

The Minnesota Department of Health (MDH) and the statewide health assessment steering committee conducted a survey in June 2023 for the statewide health assessment. It aimed to identify state strengths that support health and well-being and to use an asset-based approach in developing the health assessment.

Limitations of this survey

Not all populations could access this survey, so respondents are not a representative sample of the state. Accessibility limitations included:

- It was available in English only, creating barriers for people who read or speak other languages.
- It was available online only, decreasing access for people with limited internet access or who are less comfortable engaging with online technology.

Additional factors that limited who responded to this survey included the limited time the survey was open (approximately one month) and the limited resources for promoting the survey more broadly and amongst additional groups outside health Partnership and Minnesota Department of Health circles.

Methods

Staff created this survey in consultation with the steering committee and the MDH health equity bureau. It built on a survey conducted for the previous statewide health assessment from 2017.

The survey asked respondents (people who answered the survey) how strongly they agreed or disagreed that strengths identified from the 2017 survey currently support people's health and well-being in Minnesota. Two open-ended questions asked if any strengths were missing and if respondents had other comments. The survey included optional demographic questions to understand who completed the survey.

The healthy Minnesota Partnership launched the survey at a Partnership meeting on June 8, 2023, and closed it on June 30, 2023. Partnership staff shared the survey with member organizations, the Partnership email list, the community health services newsletter, 15 groups engaged through other community engagement activities, the health equity bureau newsletter, the state advisory committee for community health services, and MDH social media posts. In total, 538 people completed the survey.

Summary of responses

Survey respondents

Staff included optional demographic questions at the end or the survey to help understand who responded to the survey. Of the 538 people who completed the survey:

Table 7: Which county do you live in? N=538

Response	Frequency	Count
Seven-County Metro Area (Ramsey, Hennepin, Anoka, Washington, Carver, Scott, Dakota)	32.90%	177
Greater Minnesota (from over 40 MN counties across the state outside of the metro area)	38.48%	207
Other (did not name a Minnesota County)	10.04%	54
No response	18.59%	100

Proportion and number of reported Counties by SVI

Communities with a high social vulnerability index generally have higher rates of poverty; crowded housing; a lack of access to transportation; and a high proportion of residents who are Black, American Indian, Asian, or Hispanic/Latine when compared to communities with a low index.

Table 8: Proportion and number of reported counties by SVI N=538

Response	Frequency	Count
Low 0.0-0.25 (least vulnerable 25%)	9.67%	52
Low-Medium 0.2501-0.50	8.36%	45
Medium-High 0.5001-0.75	35.50%	191
High 0.7501-1.0 (most vulnerable 25%)	17.84%	96
Other (did not name a Minnesota county)	10.04%	54
No response	18.59%	100

Table 9: Are you Hispanic, Latino, or Spanish? N=538

Response	Frequency	Count
Yes	1.49%	8
No	85.87%	462
Unknown	0.56%	3
No response	12.08%	65

Table 10: Select your age range N=538

Response	Frequency	Count
Younger than 18 years	0.00%	0
18-24 years	3.40%	17
25-44 years	35.30%	176
44-64 years	45.80%	228
65 years and older	11.80%	59
No response/declined	3.60%	18

Table 11: How would you describe your gender today? N=538

Response	Frequency	Count
Male	12.90%	64
Female	81.90%	407
Transgender man	0.60%	3
Transgender woman	0.40%	2
Genderqueer/ gender non-conforming	1.00%	5
Non-binary	0.60%	3
Two-spirit (Indigenous Specific Gender)	0.20%	1
Gender not listed above	0.20%	1
Unknown	0.60%	3
No response/ declined	4.00%	20

Table 12: How do you describe yourself? N=538

Response	Frequency	Count
American Indian or Alaska Native	0.74%	4
Asian	1.49%	8
Black or African or African American	2.04%	11
Native Hawaiian or Other Pacific Islander	0.00%	0
White	77.14%	415
Race Not Listed Above, please specify: Other	1.12%	6
Unknown	0.56%	3
Multi-racial (2 or more races)	3.35%	18
No response	13.57%	73

State strengths

Minnesota has many assets and strengths that support health and well-being. The survey included a range of items that spanned across the opportunity, nature, and belonging sections in the assessment.

Table 13: State strengths related to opportunity

State strengths from 2017 survey	Agreed or strongly agreed	Neutral	Disagreed or strongly disagreed
Strong educational system	67.4%	17.2%	15.5%
Many people have health insurance	66.4%	18.7%	15.0%
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%
Access to transportation	40.3%	23.7%	36.0%

Table 14: State strengths related to nature

State strengths from 2017 survey	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 home garden or community gardens	67.5%	21.5%	11.0%
Availability of farmers markets	80.1%	12.0%	7.8%

Table 15: State strengths related to belonging

State strengths from 2017 survey	Agreed or strongly agreed	Neutral	Disagreed or strongly disagreed
People feel welcome	57.6%	26.9%	15.5%
Growing diversity	70.2%	21.5%	8.2%
Opportunities to volunteer or get involved	74.4%	20.1%	5.4%
Access to voting	82.0%	14.0%	3.9%
Opportunities for immigrants	50.8%	37.1%	12.0%
Active faith-based communities	68.8%	24.1%	7.1%
Many charitable organizations that support communities	74.4%	20.9%	4.7%

Open-ended responses

Minnesota's strengths are not shared equally

Overall, survey respondents largely agreed that Minnesota has many strengths that support people's health.

However, strengths and assets for one community may not be a strength or asset for all communities. Several respondents commented on how the list of survey strengths are not equitably available to all Minnesotans and many inequities exists for people living in Greater Minnesota or rural areas, American Indian communities, Black or African American communities, communities of color, people with lower incomes, and people with disabilities. Some respondent quotations follow::

Minnesota is touted for being an outdoor activities state. However, in my experience of being outdoors frequently, this is an activity that lacks diversity and equity. Many of the outdoor experiences are shared amongst white individuals of privilege. Additionally, marginalized communities often suffer from climate-related and changing environmental events and do not have the resources to properly adapt.

Although we have a strong educational system and many people have access to health insurance, we know that these systems are only serving white Minnesotans.

Minnesota is full of amazing opportunities for all of the variables listed above, but there is a lack of equal access to these benefits. ...For example, BIPOC [people] have significantly less access and sense of welcome to local parks, trails, waterbodies, and locally grown food, something that I believe is a highly significant aspect of health and well-being in Minnesota.

All the above questions/answers are relevant to what part of MN you live in. If you live in a metro area—then I would say the chances are greater you have access to the choices offered. When you live in rural MN—not so much. Resources in rural MN are slim to none.

Strengths of Minnesota missing from the 2017 statewide health assessment

The survey also asked respondents what strengths, assets, or resources that support health and well-being in Minnesota were missing. The original intent of this question was to identify additional strengths that were not included on the survey list from the 2017 survey. However, other respondents commented on what strengths (resources, groups, activities, etc.) are missing in Minnesota.

Staff sorted these responses into the two groups below, though responses were not always clear.

Strengths missing from the 2017 survey: Several respondents suggested additional strengths that support health and well-being in Minnesota including:

- Active citizenry
- Social movements that advocate for policy change, communities advocating for themselves
- Growing awareness and focus on equity
- Growing diversity in leadership positions
- Learning from elders
- Health care systems (Mayo, University of Minnesota)
- Statewide suicide prevention efforts and coordinators
- Mix of public and private colleges
- Libraries
- Free events, community events
- Land stewardship and culture of Indigenous people
- Thriving local businesses and artisans, arts community

State weaknesses or areas for improvement: Some respondents interpreted this question as asking about strengths missing in Minnesota and mentioned the following as weaknesses and barriers to health and well-being. Many of these comments named structural racism and health inequities in Minnesota.

- Person-centered and culturally appropriate health care services and supports for people across the state, including people living in Greater Minnesota, seniors, people with disabilities, people who are undocumented, immigrants, people who speak a primary language other than English, and LGBTQIA+ communities.
- Mental health services, including for youth under 18 years old and people living in Greater Minnesota.
- Transportation for people living in Greater Minnesota, seniors, and people with disabilities.
- Affordable housing, including for people living in Greater Minnesota, people with mental health concerns, and people who use drugs, and senior housing.
- Affordable and accessible child care across the state; support and resources for equitable, quality education from grade school to higher education.
- Access to affordable and nutritious food across the state.
- Care for people impacted by long COVID and protecting high-risk populations.

Recommendations for future health assessment surveys

While the response rate improved in 2023 (538 responses) compared with 2017 survey (77 responses), MDH staff should work with the Healthy Minnesota Partnership to make future surveys more accessible and to increase the response rate, particularly for representation of Minnesota's American Indian, Black, and communities of color. A goal for future assessment surveys would be to ensure demographic categories of respondents reflect the demographics of the state.

Future statewide health assessment surveys should consider the following recommendations:

- Involve other key partners and community members to help design the survey questions, plan for distribution and implementation, and analyze and interpret the results.
- Translate surveys into multiple languages to reach a broader audience.
- Create more accessible survey tools and use other formats to allow for more participation.
- Promote the survey using platforms, social media, and groups outside the Minnesota Department of Health and healthy Minnesota Partnership.
- Create tailored promotional materials and outreach plan with partners representing partners representing communities of color and American Indian communities, LGBTQ+ communities, and people with disabilities.

APPENDIX D. GROUP CONVERSATIONS FINDINGS

Overview

Between 2020 and 2023, the healthy Minnesota Partnership and others provided multiple recommendations for developing the statewide health assessment. One recommendation came from multiple partners: make sure that the assessment includes strengths and assets that support health. Communities reflected that they are tired of being described as a list of deficits. Statewide health improvement plans should amplify strengths as well as address challenges. To address this and include it in the next assessment, Partnership staff facilitated group conversations with committees, advisory boards, leadership teams, and other networks about how being part of a community supports health and well-being. Findings from these conversations were included in the Introduction, and the assessment's people and belonging sections.

Process

Partnership staff worked with the Minnesota Department of Health (MDH) health equity bureau and the steering committee to plan and develop these group conversations. Due to the timeline for developing the assessment, these conversations were designed to engage pre-existing groups that had prescheduled, recuring meetings that Partnership staff could attend. A list of more than 20 groups representing multiple communities was compiled by engaging the Partnership and steering committee for their suggestions as well as recommendations from staff and other partners. In addition to scheduling eight group conversations, recruitment for the group conversations helped to build relationships with several groups who were unavailable for various reasons.

Partnership staff piloted group conversations with health equity network members in the central region in April and completed group conversations in early July 2023. All group conversations were conducted virtually, with the exception of one hybrid meeting. Most groups had eight to 12 participants; the smallest group contained four participants and the largest contained 32.

Partnership staff facilitated group conversations. Staff offered participants multiple ways to respond to questions, including verbally and by typing responses into the meeting chat. Some groups also used Mentimeter, an interactive online facilitation tool. During each group conversation, staff asked participants about the words that come to mind when participants think about health, examples of communities that participants belong to and how those communities support their health and well-being. Staff also asked some groups how geographic communities support health or how the communities to which they belong support children or people as they age. Finally, participants could share other thoughts.

Group acknowledgment

Partnership staff would like to extend their appreciation to everyone who participated in these conversations, for sharing their time, insight, and perspectives.

Thank you to the Arrowhead Area Agency on Aging, Black Nurses Rock, Central Health Equity Network, Community Voices Committee from the Minnesota Council for HIV/AIDS Care and Prevention, Horizon Public Health Community Partner Leadership Team, Leaders Serving the Hispanic/Latino Community in Minnesota, Living Naturally Abundant, and Rural Health Advisory Committee.

Preliminary findings

These findings are summarized and organized by question.

When you think about health, what words come to mind?

Of all eight groups, participants shared nearly 200 words related to how they think about health. Some notable words shared include equity; culturally based; language; aging in place; and opportunities. Staff grouped other words into themes, listed below with examples:

Theme	Word examples
Well-being	wellness, happy, enjoyment, joy
Social well-being	community, connections, belonging, togetherness
Wholeness/whole health	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 are some of the communities that you belong to?

Staff asked participants to think about community as a group of people with whom they have a relationship or connection. Staff gave participants instructions that also acknowledged that people belong to multiple communities that may be based on geographical areas where people live, work, worship, or play or that may form around culture; race or ethnicity; faith; hobbies; politics; social groups; or other identities and aspects of life.

Participants shared examples of some of the communities to which they belong. These examples are not exclusive but represent a broad range of communities: social groups, advocacy groups, work, physical activities, faith, family, friends, cultural, education, and neighborhoods.

How does your community support your overall health and well-being?

"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 has a major impact on our health.[441] Partnership staff asked each group to share perspectives on how the communities to which they belong support their health and well-being. During these conversations, many participants shared that being part of a community gives them a sense of belonging and purpose, which can have positive health effects.[442]

Multiple themes emerged from these conversations. Overall, participants from all eight groups shared how the communities to which they belong support their health and well-being through interpersonal relationships, affirmations and support, learning and education, resource sharing, group activities, and assets in their physical environments.

Interpersonal relationships: Participants most frequently shared how the interpersonal relationships with family, friends, coworkers, and other community members support their health and well-being. Some insights include:

- Social connections, friendships, and networks are foundational to health.
- Relationships provide opportunities for listening and sharing with others.
- Relationships help people feel less alone and provide someone to go to when needed or support to face community challenges together.
- From a service perspective, one participant shared that interpersonal relationships build connections within communities and are an important part of sharing information, education, support, and resources with one another.
- Interpersonal relationships help connect people across generations. One participant shared how being part of their community connected them with the elders and the "torch carriers." Another participant shared how trusted adults within the community help watch and guide children when a parent is not available.

Affirmations and support: Participants shared how their communities support their physical, mental, emotional, and spiritual health and well-being by providing affirmations and other support. A few examples of affirmations and support include:

- Talking through issues together and sharing advice.
- Having safe spaces for people to receive support: One participant shared how groups are therapeutic. Another participant shared how a community can be "like medication" when people who are connected by common experiences can share traumas in a safe environment that were not shared outside of the group.
- Receiving encouragement to take care of their mental well-being and physical health.
- Having support from others to accomplish a goal or project.

Learning and education: Participants shared how their communities provide opportunities to learn, receive guidance and advice, and help with solving problems. Participants described how communities support their upbringing and help people learn about their community's history, culture, and values. Communities create opportunities for people to learn from others, both personally and professionally. One participant shared how they spoke about a health topic at their church every month. Another participant shared how they learn to think about new ways to teach their children by engaging with their community.

Resource sharing: Participants also reported that their communities help link people to resources, services, and referrals. They described formal and informal ways of sharing resources, including sharing personal skills and time. A few examples participants shared include shoveling snow, lawn care, and financial support.

Group activities: Participants shared how coming together in person and in virtual spaces supports health and well-being, through a sense of belonging, laughing together, dancing, and celebrating life. Some shared how attending church or faith-based activities supports spiritual well-being. Others shared that group activities encourage healthy lifestyle choices through exercising together, growing vegetables, and sharing cultural recipes and through food that creates comfort and a sense of nostalgia.

Physical environment (place-based communities): When referring to the physical communities, participants most often describe assets and strengths in their community related to parks, grocery stores, medical clinics, and opportunities for walking or other physical activities.

Culture: Some participants described how their communities connect people to their culture, language, food, and values.

How does your community support children?

Participants in three of eight groups shared how their communities support children. Some comments about how communities help children grow and thrive include:

- 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 children and youth with love, emotional support, and spiritual guidance.
- Providing activities and spaces for kids to be active and play.

How does your community support people as they age?

Participants in three of eight groups shared that their community supports people as they age through interpersonal relationships, sharing resources, and providing emotional support. Several participants shared how their communities value and support intergenerational families and multicultural families. Other comments noted providing:

- Intergenerational activities to support people of all ages, breaking down silos between people of different ages.
- Opportunities for elders to share their wisdom and stories with kids, youth, and adults.
- Mutual or informal support (e.g., shoveling snow) in addition to access to established programs.
- Direct care and caregiving at home, as able.

Thinking about living in Greater Minnesota, what are some of the benefits and strengths of belonging to those communities?

Partnership staff asked three groups representing people living outside of the Twin Cities metro area about the strengths and benefits of living in Greater Minnesota. These conversations highlighted the benefits of physical environment, specifically access to nature and open spaces and having less traffic. Participants also spoke of the interpersonal relationships that come with people having close connections to other people and helping each other during challenges. Despite the benefits of tightknit communities, some participants also acknowledged the difficulty of integrating new residents into a community and that people who are not connected may feel more isolated in rural areas.

Any final comments?

At the end of each conversation, participants were asked if they have any final comments or thoughts. Facilitators observed that many groups used this time to share the barriers and struggles that their communities face. Some of the barriers and challenges shared included:

- Access and availability to mental health services.
- Transportation in rural areas.
- Information and materials that are easy to understand; age-appropriate interventions and activities.
- Appropriate services for communities in need, including rural areas and undocumented communities.
- Scarce financial resources or little funding to do a lot of work; difficulty with reimbursement systems.

Conclusion

Partnership staff included input from group conversations throughout this statewide health assessment.

Group conversations also helped the Partnership build valuable relationships, in addition to gathering input. Partnership staff and members made or strengthened connections to support working to improve health equity and the health and well-being of people across the state. Partnership staff and members also built relationships with several groups who did not participate in a group conversation due to scheduling conflicts and other reasons. Partnership staff and members will continue to build relationships for the statewide health improvement framework and for future assessments.

Lessons learned

Some of the key lessons learned through the group conversations include:

- Consider the timing and resources needed for the engagement process a year before starting the assessment.
- Make sure MDH and/or Partnership funding and organizational policies allow for community engagement, including incentives, food, and other supports. Three groups declined to participate in group conversations due to lack of incentives for participants.
- Leverage healthy Minnesota Partnership member relationships and networks to support community engagement efforts.

APPENDIX E. PUBLIC COMMENT FINDINGS

Purpose

The final community engagement activity for the statewide health assessment was a public comment period. The Minnesota Department of Health (MDH) and the Healthy Minnesota Partnership posted the first draft of the assessment for public comment in October 2023 to allow members of the public to review content and make sure topics and data points were not missing and that narrative framing was correct.

Limitations and lessons learned

Public comment feedback was limited to those who were able to access and engage with the written and verbal participation methods. Engagement numbers show a large number of people were made aware of the public comment period, though fewer people provided written or verbal comments on the draft itself. Small sample sizes (number of participants) for both written and verbal feedback opportunities limit reporting of collected demographics.

Overall, demographics collected for those providing written feedback show respondents were majority white and female. This means that feedback comments do not reflect and are not representative of all people in the state of Minnesota.

Future assessment public comment periods should consider the following:

- Ensure public comment period is promoted to diverse audiences and groups across the state of Minnesota. Tailor promotional materials with support from partners representing communities of color and American Indian communities, LGBTQ+ communities, and people with disabilities.
- Use translation services to offer the draft in different languages, and use translation and sign language interpreters or captioning services to support verbal public comment periods.
- Consider the length and format of the draft and how it may limit or encourage review.
- Consider other methods for collecting demographics for all who provide public comment feedback.

Approach and engagement

The public comment period took place in 2023, from October 2 to 23. Partnership staff posted the first draft of the assessment online and promoted it widely through Partnership member organizations and the Healthy Minnesota Partnership email list, the Minnesota State Register, multiple statewide email lists and newsletters, groups identified for the group conversations, other Minnesota government agency contacts involved in data collection, other key partners, and the MDH LinkedIn account. More than 1,000 unique individuals visited the MDH website with the draft during the public comment period. More than 500 unique individuals opened a copy of the first draft.

Interested participants could choose to provide written and verbal comments. Partnership staff collected written comments through an online form and by email.

Written feedback: Partnership staff provided an online feedback form with the draft assessment. It included a short set of Likert scale questions to gauge how well the assessment captured state health and well-being in Minnesota and a set of open response questions for additional comments. 133 unique individuals visited the online form to provide feedback and 39 completed and submitted a form.

Email feedback: Individuals and organizations emailed feedback to Partnership staff during the public comment period as well. Seven people and six organizations provided feedback via email.

Verbal feedback: During the public comment period, Partnership staff offered three, one-hour virtual listening sessions to hear verbal feedback. The listening sessions included 10 minutes of background information and 50 minutes for attendees to share comments. Partnership staff facilitated the 50 minutes with questions that mirrored those in the online comment form. Partnership staff used virtual breakout rooms when 10 or more attendees were present. Thirty-four people registered for the listening sessions and 17 attended.

Organizing and reviewing responses

Partnership staff reviewed approximately 300 comments of feedback. This number is approximate as respondents sometimes submitted comments as a separate sentence or a list of feedback. Lists were not counted for each separate comment, but as one comment together.

Partnership staff reviewed feedback and input via written and verbal comments using a two-phase process. During the first phase of review, Partnership staff read each comment and applied codes for a set of questions to help organize comments. These questions included:

1. What section of the statewide health assessment is the comment related too?
2. What is the comment referring too?
    - Missing data or data error
    - Missing topic/subsection
    - Narrative/framing change to text
    - Design comment (data visual or layout related)
    - Positive comment with no suggestion
    - Negative comment with no suggestion
    - Unsure/other
3. Is this comment referring to or from a specific population or group? (Yes or No)
   Partnership staff asked this question to flag feedback that they might need support for responding from subject matter experts and/or members of a specific population.

During the second phase of review, Partnership staff reviewed the comments and grouped them according to how they could be addressed.

1. Is this comment related to the assessment or the statewide health improvement framework?
2. Does this comment need to be brought to the steering committee for a decision on how to address?
   - Yes
     - **Discussion:** Comments needing discussion; Partnership staff did not have a proposal for incorporating or comment was outside scope of assessment (approximately 30 comments).
     - **Approval:** Comments that fit into buckets of proposed edits for incorporating were brought to steering committee for approval (pending data availability, approximately 25 comments).
   - No
     - **Incorporate edits**: Comments that aligned with work that was already a part of the plan for the final assessment or already aligned with the assessment data criteria and framing considerations (pending data availability, approximately 159 comments).
     - **Share:** Comments that were nonactionable feedback (ex: "This is a comprehensive assessment;" approximately 60 comments).
3. If the comment referred to a specific population or group, what is the group (inside or outside MDH) that might assist?

Written responses

Individuals who filled out the online form to provide written feedback (N=39) provided responses to close-ended questions about the assessment and about themselves. The demographic questions were optional, so N is marked for how many respondents answered.

Responses when N is 10 or less are not reported to adhere with Minnesota Department of Health reporting standards.

Demographics of online form responses

Table 16: What is your affiliation? (N=37)

Response	Frequency	Count
Healthy Minnesota Partnership Member	NR	NR
Local Public Health	NR	NR
Tribal Public Health	NR	NR
Health care	NR	NR
State employee	32.4%	12
Community based organization	NR	NR
Community member	24.3%	NR
Other	NR	NR

Table 17: How did you hear about the draft statewide health assessment public comment period? (N=37)

Response	Frequency	Count
Healthy Minnesota Partnership email	32.4%	12
Other newsletter or listserv email	27%	10
Meeting announcement	NR	NR
MDH website	NR	NR
State Register posting	NR	NR
Other	24.3%	NR
I don't remember	NR	NR

Table 18: What county do you live in? (N=34)

Response	Frequency	Count
Anoka	NR	NR
Blue Earth	NR	NR
Dakota	NR	NR
Hennepin	23.5%	NR
Ramsey	NR	NR
Other Responses	41.2%	14

Table 19: Are you Hispanic, Latino, or Spanish? N=36

Response	Frequency	Count
Yes	NR	NR
No	88.9%	32
Unknown	NR	NR
No response/declined	NR	NR

Table 20: How do you describe yourself? (N=36)

Response	Frequency	Count
American Indian or Alaska Native	NR	NR
Asian	NR	NR
Black or African or African American	NR	NR
Native Hawaiian or Other Pacific Islander	NR	NR
White	86.1%	31
Race not listed above	NR	NR

Table 21: Select your age range (N=36)

Response	Frequency	Count
Younger than 18 years	NR	NR
18-24 years	NR	NR
25-44 years	50.0%	18
45-64 years	27.8%	10
65 years and older	NR	NR
No response/declined	NR	NR

Table 22: How do you describe your gender today? (N=36)

Response	Frequency	Count
Male	NR	NR
Female	86.1%	31
Transgender man	NR	NR
Transgender woman	NR	NR
Genderqueer/Gender non-conforming	NR	NR
Non-binary	NR	NR
Two-spirit (Indigenous Specific Gender)	NR	NR
Gender not listed above	NR	NR
No response/declined	NR	NR

Close-ended question responses

Table 23: Select which sections you reviewed and are providing feedback on (N=39)

Response	Frequency	Count
All/The entire draft	71.8%	28
Introduction	NR	NR
People	NR	NR
Opportunity	NR	NR
Nature	32.4%	12
Belonging	NR	NR
Appendix	24.3%	NR

Table 24: Please share how strongly you agree or disagree that this draft of the statewide health assessment describes the current state of health and well-being across Minnesota (N=38)

Response	Frequency	Count
Strongly agree	NR	NR
Agree	60.5%	23
Neither agree or disagree	NR	NR
Disagree	NR	NR
Strongly disagree	NR	NR

Table 25: Is there anything you hoped to see in the Minnesota Statewide Health Assessment that you did not see? (N=37)

Response	Frequency	Count
Yes	81.1%	30
No	NR	NR

Table 26: How much do you agree or disagree with each of the following statements about the draft assessment? (N=32)

Statement	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
The assessment inspired me to want to do something to improve the health of people in the state.	31.3%	37.5%	28.1%	NR	NR
The assessment clearly includes some strengths and assets that support health and well-being.	34.4%	46.9%	NR	NR	NR
The assessment helped me understand how structural racism prevents people from reaching their full health potential.	31.3%	40.6%	21.9%	NR	NR
The assessment helped me understand how systems impact the health of individuals and communities.	40.6%	40.6%	NR	NR	NR

Findings from public comment

The following tables summarize the comment types and how feedback was incorporated from public comment. Feedback will be shared with Minnesota Department of Health staff and departments as is relevant to their work.

Types of feedback received: As noted above, during the first phase Partnership staff organized comments by type of feedback (Phase 1, Question 2). The following table gives the approximate number of comments per feedback type (columns) and is organized by question asked on the online form and during the listening sessions (rows). These numbers are approximate based on format and length of feedback.

Table 27: Types of feedback received during public comment period, 2023

Question	Missing data or data error	Missing topic/ subtopic	Narrative framing/ change to text	Design comment	Positive or neutral comment	Negative comment
What stood out to respondents?	2	13	11	6	34	1
What did respondents hope to see?	18	20	7	7	4	1
Any other comments or feedback?	9	6	10	2	8	3

Steering committee meetings: After organizing the comments of feedback into the buckets by type of feedback, they were reviewed during the second phase of review for how they should be addressed (Phase 2, Question 2). The categories discussion and approval were brought to two meetings (to accommodate schedules) for steering committee members to review. Healthy Minnesota Partnership members were also invited to these meetings, if interested.

Partnership staff grouped "discussion" comments into the following buckets:

Feedback "buckets"	Summary of feedback from public comment	How it was addressed in final assessment and rationale
Disaggregation	Request for data to be disaggregated (by race/ethnicity, SOGI, etc.) throughout assessment.	The assessment is not intended to be a data book. Data collection for this assessment relied on data stewards to elevate disaggregations most relevant for this assessment. Given the scope and size of the assessment in its current format, the Steering committee and Partnership staff agreed this assessment could not meet every request for disaggregation. Data availability was also a limitation in meeting this request. Partnership staff attempted to meet this request by linking data dashboards where additional data is available, specifically disaggregations and local-level data.
Health care system	Requests for additional data and narrative on the health care system to be added. Examples include staffing shortages, health care corporatization, physician-to-patient ratios, provider diversity, etc.	The Steering committee and Partnership staff agreed some of these metrics were out of scope for the assessment and conflicted with the assessment's message of health being beyond healthcare. Additional data was added to the health care system sub-section about critical access hospitals, supply of health care professionals, provider burnout, provider diversity, and dental professional shortages, mental health professional shortages, and data about rural health care access for primary care or a dentist.
Health behavior/ outcomes	Requests for data related to nutrition, obesity, chronic disease, and domestic violence.	The Steering committee and Partnership staff agreed to incorporate additional data regarding these topics as available. Partnership staff worked with subject-matter-experts and data stewards to identify and review additional data points for the following sub-sections: Food, Living with chronic conditions, Physical and sexual violence, and a leading causes of death table.
Local data	Requests for county-level data.	The assessment is not intended to be a data book. Given the scope and size of the assessment in its current format, the Steering committee and Partnership staff agreed this assessment could not meet requests for local data for every data point. Partnership staff attempted to meet this request by linking data dashboards where additional data is available, specifically disaggregations and local-level data. Additionally, the assessment alignment appendix (Appendix F.) provides background and resources on local assessments and locally identified health priorities.

Partnership staff grouped "approval" comments into the following buckets:

Feedback "buckets"	Summary of feedback from public comment	How it was addressed in final assessment and rationale
Rural	Requests for more rural data and narrative throughout the assessment.	Partnership staff proposed and the Steering committee approved the following approach: add additional rural data as available and confer with MDH rural communications staff on terminology. Partnership staff added additional rural data and narrative to the following sub-sections: Income, Transportation, Employment, Health care system, and Isolation. A glossary of identity terms was also added to the introduction of this assessment to define rural and Greater Minnesota for further clarity.
Addiction	Request for more data and narrative about addiction, specifically the opioid crisis.	Partnership staff proposed and the Steering committee approved the following approach: add additional data as available and narrative to describe the impact of the opioid crisis. Partnership staff met with subject-matter-experts to bolster the data and narrative in the Substance use section.
Cannabis	Request for more data and narrative about Cannabis, specifically usage and impacts of policies.	Given the new legislation data is currently limited on cannabis usage. Partnership staff proposed and the Steering committee approved the following approach: add additional data as available and narrative and mark this with a footnote to update when more data becomes available (prior to development and release of next assessment). Partnership staff added currently available data regarding youth usage and medical registry numbers. A note was added that more data will be added as it becomes available.
Longitudinal data	Requests for more data trends over time.	The assessment attempts to provide an overview of the state of health in Minnesota at a snapshot in time. Data collection for this assessment relied on data stewards to elevate timespan comparisons most relevant for this assessment. Finally, COVID-19 limits that ability for longitudinal data (timespan data comparisons). Data Partnership staff proposed and the Steering committee approved the following approach: include a text describing the limitation of COVID-19 on providing longitudinal data, outside of what is already included.

APPENDIX F. ASSESSMENT ALIGNMENT

Purpose

In planning for this assessment, the Healthy Minnesota Partnership and Minnesota Department of Health (MDH) leadership identified a goal for the next statewide health assessment of aligning local community health assessments and the statewide health assessment.

As a result, Partnership staff reviewed two kinds of local assessments for topic alignment with the statewide assessment: community health assessments and community health needs assessments.[ss]

In addition, Partnership staff convened for this assessment a subcommittee of local public health, health plan, and health care professionals to discuss what alignment could look like between state and local assessments.

Methods

Community health assessments

The MDH public health practice center maintains a list of community health priorities, reported by Minnesota's 51 community health boards during their own community health assessment and improvement planning processes. MDH last collected these self-reported priorities in 2020, reflecting the community health board's most recent community health assessment and community health improvement plan at the time. Partnership staff used this information to construct the first table in this appendix.

Community health needs assessments

In fall 2022, MDH staff reviewed a sample of 26 community health needs assessments from a variety of nonprofit hospitals in Minnesota. This review looked at a variety of information presented in these community health needs assessments, including their key health priorities. These identified priorities were then used to construct the second table in this appendix.

Assessment alignment subcommittee

In spring 2023, a group of local assessment professionals met three times to discuss alignment between local and the state health assessment. This group included local public health staff, and hospital or health plan staff familiar with or responsible for conducting their health assessments. Partnership staff recruited participants from the Healthy Minnesota Partnership.

During these meetings, members discussed approaches and content for their local assessment work and the benefits and drawbacks of aligning local assessments with the statewide health assessment.

ss All Minnesota community health boards are required to participate in assessment and planning to determine local public health priorities and focus local resources on the greatest community and organizational needs. A community health assessment (sometimes called a CHA), also known as community health needs assessment (sometimes called a CHNA), refers to a state, tribal, local, or territorial health assessment that identifies key health needs and issues through systematic, comprehensive data collection and analysis.

Health priorities across local health assessments

The following tables show the priority areas identified most often by local community health assessments and community health needs assessments. Partnership staff compared statewide health assessment topics with local priorities across the state and focused on conditions or systems-level indicators over individual indicators like health behaviors and health outcomes.

Table 28: Community health assessments and community health improvement plans reviewed (reported in 2020)

Key priority area	Number of community health boards	Example indicators (local-level data source[tt])
Mental health	42	Adult mental health services (Minnesota Department of Human Services Adult Mental Health Dashboard) Adult poor mental health (PLACES, Centers for Disease Control and Prevention Map) Youth with mental health, behavioral, or emotional problems (Minnesota Department of Education Student Survey Tables)
Economic stability	27	Cost of living (Minnesota Department of Employment and Economic Development Cost of Living in Minnesota Dashboard) Households paying 30% or more of income for Housing (Minnesota Compass – Cost-burdened households dashboard) Income (U.S. Census Bureau Census Reporter) Income inequality (U.S. Census Bureau Income Inequality Index)
Substance use (general)	26	Substance use in Minnesota (Substance use in Minnesota Reports) Drug overdose (MDH Substance Use and Overdose County Profiles)
Neighborhood and built environment	23	Youth who feel safe in their neighborhood (Minnesota Department of Education Student Survey Tables) Park access (National Environmental Public Health Tracking Network, Centers for Disease Control and Prevention)
Obesity	20	Adult obesity (PLACES, Centers for Disease Control and Prevention Map) Youth overweight and obese (Minnesota Department of Education Student Survey Tables) Children in WIC who are overweight or obese (Minnesota WIC Health Indicators)
Access to health care services	18	Health insurance coverage (U.S. Census Bureau, Small Area Health Insurance Estimates) Healthcare Workforce (Health Resources and Services Administration (HRSA)) Rural Health Atlas (Center for Rural Policy and Development) *Provider: Patient ratios*
Physical activity	16	Adult physical inactivity (PLACES, Centers for Disease Control and Prevention Map) Youth physical activity (Minnesota Department of Education Student Survey Tables)

tt A list of these indicators (and others) is available online: County-Level Health Indicators (www.health.mn.gov/communities/practice/assessplan/lph/countyindicators.html)

Table 29: Community health needs assessments reviewed (spanning years 2020-2024)

Note: This list is not representative of all priority issues identified by all community health needs assessments across the state. This is a list of priority areas identified most often in samples reviewed.

Key priority area	Number of community health boards	Example indicators (local-level data source[uu])
Mental health	26	Adult mental health services (Minnesota Department of Human Services Adult Mental Health Dashboard) Adult poor mental health (PLACES, Centers for Disease Control and Prevention Map) Youth with mental health, behavioral, or emotional problems (Minnesota Department of Education Student Survey Tables)
Substance use (general)	16	Substance use in Minnesota (Substance use in Minnesota Reports) Drug overdose (MDH Substance Use and Overdose County Profiles)
Obesity	14	Adult obesity (PLACES, Centers for Disease Control and Prevention) Youth overweight and obese (Minnesota Department of Education Student Survey Tables) Children in WIC who are overweight or obese (Minnesota WIC Health Indicators)
Access to specialty services	14	Inadequate prenatal care (Minnesota County Health Tables, Minnesota Department of Health) Adult dental care (PLACES, Centers for Disease Control and Prevention) *Access and availability of allergy/immunology, cardiology, dermatology, ear/nose/throat (ENT), infectious disease, neurology, obstetrics and gynecology (OB/GYN), oncology, optometry/ophthalmology, orthopedics services and more.*
Physical activity and nutrition	11	Adult physical inactivity (PLACES, Centers for Disease Control and Prevention) Youth physical activity (Minnesota Department of Education Student Survey Tables) Supplemental Nutrition Assistance Program (Minnesota Department of Human Services) Youth fruit consumption (Minnesota Department of Education Student Survey Tables) Youth vegetable consumption (Minnesota Department of Education Student Survey Tables)
Food security and access	10	*Proximity to grocery store(s)* *Proximity to food deserts* *Community gardens*
Social connectedness	8	Social vulnerability index (Centers for Disease Control and Prevention and Agency for Toxic Substances and Disease Registry) *Social isolation* *Loneliness*

uu A list of these indicators (and others) is available online: County-Level Health Indicators (www.health.mn.gov/communities/practice/assessplan/lph/countyindicators.html)

Takeaways and next steps

As Partnership staff reviewed local assessments and the assessment alignment subcommittee met, a number of themes emerged:

Does alignment refer to process or content?

Approaches to local health assessments differ from the process Partnership staff used to develop the statewide health assessment. From subcommittee discussions and review of the local assessments above, local assessments rely on more primary data collection methods (e.g., surveys, focus groups, etc.) to assess the health in their areas. This statewide health assessment strived to increase community engagement activities but relied on existing data to summarize health conditions across the state.

For content, subcommittee members shared examples of how their local assessments aligned with past statewide assessments by focusing on conditions for health and using the same sections (people, opportunity, nature, and belonging) to organize information.

For process, subcommittee members wanted to know how community engagement happens across the state and who might be missed. Appendix B. Community engagement inventory has more information on a community engagement inventory completed for this assessment.

How can local staff have greater support in identifying county or local data for their assessments?

Subcommittee members discussed the need and desire for more local data within the statewide health assessment. However, the statewide health assessment is not intended to be a data book and the data (focused on conditions for health and systems-level data) may not be available at the local level.

MDH maintains a list of county-level health indicators online (www.health.mn.gov/communities/practice/assessplan/lph/countyindicators.html) and can offer technical assistance to local public health departments and community health boards to identify county or local data for their assessments. Additionally in this assessment, Partnership staff have identified existing data dashboards where readers can further explore disaggregated data.

How can local staff have greater support to focus assessment processes on social determinants of health rather than individual health outcomes?

As seen in the table above, local assessments often identify individual health outcomes and behaviors as priority areas (the nonhighlighted rows and example indicators) across the state. These priority areas reflect the needs of local communities, and the statewide health assessment could be a tool for identifying the upstream contributing factors to these issues.

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