Children's MINNESOTA

The Kid Experts™

COMMUNITY HEALTH NEEDS ASSESSMENT

December 2022

Detailed findings from primary and secondary data analysis

Prepared by Wilder Research: Rebecca Sales, Carrie Au-Yeung and Stephanie Nelson-Dusek

In partnership with:

Wilder Research

Information. Insight. Impact.

Contents

Contents (continued)

Figures

Figures (continued)

Figures (continued)

Acknowledgements

Many people shared their time and knowledge to help guide this assessment process and to help us develop an understanding of the strengths, assets, concerns, and priorities of children and families living in the Twin Cities metro area. Wilder Research and Children's Minnesota would like to thank the following people for their contributions.

Parents/caregivers and youth

We extend our gratitude to the parents/caregivers and youth who gave their time to participate in focus groups, sharing their experiences and perspectives on the health needs, assets and priorities of their communities.

Community stakeholders

We would like to thank the community partners who took time to speak to the health assets, needs and priorities of the communities they are part of or serve through their individual leadership or organization's services including:

Leondra Mitchell
African American Leadership Forum

Dr. Kate Sadak
Pediatrician
American Academy of Pediatrics – Minnesota Chapter

Pat Pulice
Fraser

Meg Thell
Hennepin County

Laura LaCroix-Dalluhn
Hennepin County Children's Mental Health Collaborative

Will Delaney
Hope Community, Inc.

Irma Márquez Trapero
Latino LEAD

Amber Spaniol, Elizabeth Zeno
Minneapolis Public Schools

Brandon Jones
Minnesota Association of Children's Mental Health Programs

Jinny Palen
Minnesota Association for Community Mental Health Programs

Brittany Wright
Minnesota's Children's Cabinet

Amanda Varley
Minnesota Department of Education

Colleen Wieck
Minnesota Governor's Council on Developmental Disabilities

Antony Stately
Native American Community Clinic

Joan McDonough-Schlecht
Neighborhood House

Stella Whitney-West, Anna Kuehn
Northpoint Health & Wellness

Amy Susman-Stillman
Northside Achievement Zone

Nadia Higgins
PICA Head Start

Nicki Hagsleben, Soua Thao
Queerspace Collective

Cynthia Hassan
Ramsey County

Wendy Goodman
Ramsey County Children's Mental Health Collaborative

Mary Langworthy
St. Paul Public Schools

Suzanne Guertin
Southern Minnesota Regional Legal Services

Anthony Drews
Tiwahe Foundation

Malik Rucker
V3 Sports

Jenny Britton
Washburn Center for Children

Karen Manikowski
Wellshare International

Jacqueline Lloyd Cunningham, Katie Rehani, Luna Allen-Bakerian, Stephanie Thomas
YWCA Minneapolis

Children's Minnesota Community Advisory Committee (CAC)

Fayise Abrahim, Youthprise
Selena Davis, PICA Head Start
Suzanne Guertin,* Southern Minnesota Regional Legal Services
Nadia Higgins,* PICA Head Start
Mary Langworthy,* St. Paul Public Schools
Stella Nyakundi, PICA Head Start
Jihan Rashid, Pillsbury United Communities
Joan McDonough-Schlecht,* Neighborhood House
Sarah Shiele, Minneapolis Health Department
Betsy Sohn, Hope Community, Inc.
Amber Spaniol,* Minneapolis Public Schools
Meg Thell,* Hennepin County

CAC members with an asterisk (*) by their name also participated in an interview about community health assets, needs and priorities.

Children's Minnesota staff

We want to acknowledge the Children's Minnesota staff – especially Megan Peterlinz and Lauren Gilchrist – who worked closely with Wilder Research to design and implement this community health needs assessment. This team shaped the assessment design; provided data, information and insight about Children's Minnesota's patient population and services; and coordinated with providers and community partners.

In addition, we want to acknowledge the contributions of Children's Minnesota providers and staff who volunteered their time to share their perspectives on patient, family and community needs.

Youthprise Staff

We would like to acknowledge the staff from Youthprise who worked with us to conduct focus groups with youth: Nadia Linoo and Essence Blakemore. This team recruited focus group participants, managed logistics, facilitated the group discussions and analyzed and presented results.

Wilder Research staff

The following Wilder Research staff members also contributed to this report:

Anna Alba
Megan Chmielewski
Marilyn Conrad
Phil Cooper
Barite Dawud
Alison Devney
Kristin Dillon
Rachel Fields
Sarah Garcia
Michelle Gerrard
Kyla Goux
Briellen Griffin
Thalia Hall
Maddie Hansen-Connell
Justin Hollis
Monica Idzelis Rothe
Nora Johnson
Christin Lindberg
Allison Liuzzi
Heather Loch
Christina Muñoz-Piñon
Dan Swanson
Austin Thao

Introduction

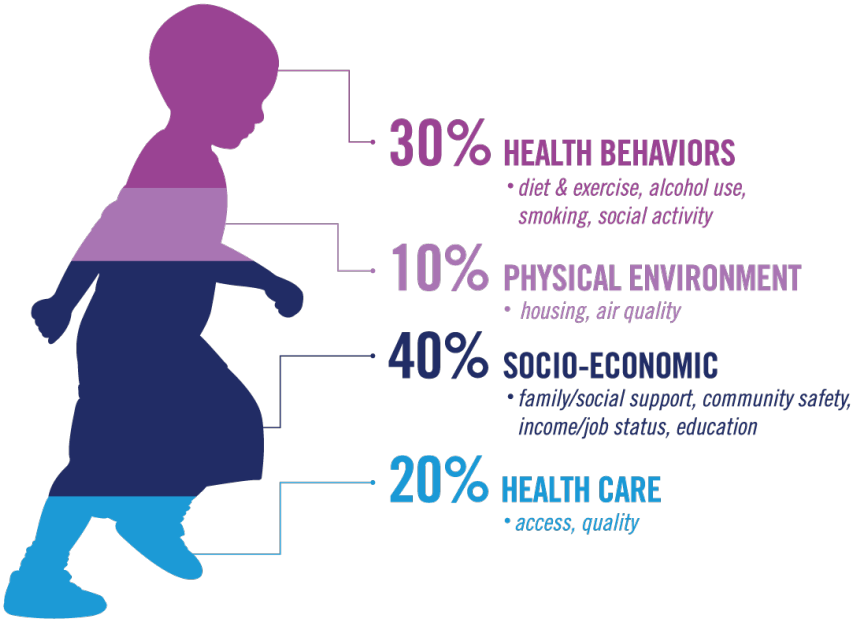
About the assessment

Through the Affordable Care Act, all not-for-profit hospitals are federally required to conduct a community health needs assessment (CHNA) that identifies the health needs and priorities of community residents, as well as the steps that the hospital will take to address these health-related topics. As part of its 2022 CHNA, Children's Minnesota partnered with Wilder Research to conduct the assessment, which included both primary data collection – through a series of focus and discussion groups and individual interviews – as well as a review of existing secondary health-related data. (All data collection methods are described below.)

Throughout the CHNA process, Children's Minnesota and Wilder also met quarterly with a Community Advisory Committee (CAC) in order to get input on research questions, data collection tools and findings. At the beginning of the assessment, CAC members helped form the following guiding evaluation questions:

- What does it look like when children and families are healthy?
- To what extent are children and families experiencing the 2019 priority areas differently, considering local and global events?
- What health issues are newly emerging or are likely to emerge in the next couple of years that will have a negative impact on the health of the community?
- What are the most important issues to address to improve the lives of children and families in the community?
- What resources, strengths and assets exist in the community today that have a positive impact on the health of the community?
- What are the barriers to doing what needs to be done to improve the health of the community?
- What can Children's Minnesota do to advance the health of the community? What can be done within the Children's Minnesota organization, in partnership with other community organizations, or by supporting larger (i.e., state and local) efforts?

Relative influence of factors that contribute to health



Source: University of Wisconsin Population Health Institute. (2022). "County Health Rankings Model." https://www.countyhealthrankings.org/explore-health-rankings/county-health-rankings-model

Since conducting its community health needs assessment (CHNA) in 2016, Children's Minnesota has had an expansive view of what it means to identify and address the needs of the community. Rather than only considering the traditional medical conditions their health system treats (e.g., asthma) and patients' health behaviors, Children's Minnesota prioritizes understanding the needs of the community as they relate to social determinants of health, which shape children's and families' experiences outside of Children's Minnesota's walls.

The purpose of this work is to continually assess the health of children and families who live in the areas that Children's Minnesota serves and, every three years, determine if any health priorities need to be added or revised. Children's Minnesota's work is guided by the following beliefs in order to conduct an assessment that is able to identify the most fundamental health needs of the community and that positions them to partner with the community to address those needs:

- Health is strongly influenced by the conditions in which people are born, live, learn, work, play, worship and age. These conditions, also called social determinants of health, have a greater influence on health than health care services, as indicated in the image above.[1]
- Social determinants of health are shaped by structures, decisions and policies that influence how money, power and resources are distributed.
- Using a racial equity lens in the CHNA process is important, as inequities result when policies and systems that were designed to advantage affluent and often white, residents negatively impact groups of people, often people of color and lower-income residents. Policies that disproportionately impact people of color may not mention race explicitly. Inequities can also result when the full impacts of policies are not considered and if people most

[1] Schroeder, S. (2007). We can do better – Improving the health of the American People. *New England Journal of Medicine*, 357: 1221-1228.

likely to be impacted by a proposed policy have limited influence or are excluded from decisions that impact health and well-being.

Recent context

It is crucial to note that between the 2019 and 2022 CHNA there were several significant events that impacted the way people viewed and engaged with the world around them, both in Minnesota and globally.

- In early 2020, Minnesota (along with the rest of the world) was impacted by the COVID-19 pandemic, which included mandatory shut-downs of businesses and schools, as well as social distancing. Schools were forced to move in-class learning to virtual "distance learning." In addition, unemployment skyrocketed to historically high levels, surpassing the Great Recession. While the rate of COVID-19 infections among children has been lower compared to other age groups, the ways in which COVID disproportionally impacted certain adult populations created community instability that impacted families.[2]
- In May 2020, George Floyd was murdered by a Minneapolis police officer in South Minneapolis. This tragic event had a profound impact on the local community, exacerbating grief, trauma and anxiety resulting from generations of racial injustice. The community-led uprising in response to this tragedy called for an end to systemic racism in policing and other systems, garnering support for important anti-racist work across the country and globally.

In discussions with CHNA contributors focused on the health issues prioritized in this assessment, it is clear that these and other events in many ways exacerbated the challenges facing children and families in the community, underscoring the critical need to pursue systemic change.

About this report

This report describes pertinent demographic and health indicator data from secondary data sources (first half of the report) and summarizes findings from primary data collection activities, both of which were used to identify and prioritize the health topics that community members believe are most critical for Children's Minnesota to address. Subsequent reports will more succinctly describe the 2022 CHNA process and findings (i.e., the official 2022 Children's Minnesota CHNA report), as well as the specific actions Children's Minnesota will take during the next three years to address these priority topics.

The data in this document are intended to provide a point-in-time picture of select metrics related to the demographics and health indicators of the Children's Minnesota community. The data in this summary are not intended to be used in comparison with earlier Children's Minnesota CHNA data summaries, in particular due to the overlapping nature of the American Community Survey estimates used across versions. Additionally, while the data included in this report cover a wide range of topics, they do not provide a comprehensive summary of all demographic information related to the Children's Minnesota community or all factors that could influence the health of community members.

Summary of methods and limitations

Secondary data collection

Wilder Research reviewed and analyzed data from multiple secondary data sources for this report; the most commonly used sources include the American Community Survey, Minnesota Department of Health Public Health Data Access

[2] Minnesota Department of Health. (2022). Health equity and COVID-19. https://www.health.state.mn.us/communities/equity/about/covid19.html

Portal and the U.S. Census Bureau Decennial Census. (A full list of data sources, as well as methods and limitations, can be found in the "Considerations for interpreting secondary data" section.) It is important to note several limitations up front to inform the readers' understanding of the data:

- The majority of data in this report reflect pre-pandemic outcomes and trends.
- Some data represent broader populations than those that are the focus of the CHNA.
- Demographic data, particularly race and ethnicity, are aggregated into groups that do not fully represent the unique identities of Twin Cities' communities.

Primary data collection

Multiple stakeholder groups were asked to consider whether the health topic areas prioritized through the 2019 CHNA process continue to be community needs that should be addressed by Children's Minnesota. All groups, listed below, were also invited to identify additional emerging or unmet health needs within the community.

- **Parent and caregiver focus groups (August-September 2022).** Wilder Research conducted two parent/caregiver virtual focus groups with a total of 15 participants.
- **Youth focus groups (August 2022).** Youthprise, a Minneapolis-based nonprofit youth development organization, conducted two virtual focus groups with a total of 15 participants.
- **Community-based organization interviews (June-August 2022).** Wilder Research conducted 30 semi-structured interviews with representatives of community-based organizations who work closely with children and families.
- **Children's Minnesota staff discussion groups (May 2022).** Twenty-nine (29) staff in roles including social workers, interpreters, service coordinators, family resource managers and family liaisons attended one of two virtual discussion groups (one focused on staff located in St. Paul and one focused on staff located in Minneapolis).
- **Children's Minnesota provider interviews (May-June 2022).** Wilder Research conducted semi-structured interviews with 12 Children's Minnesota health care providers. Participants included physicians, social workers, psychologists and nurse practitioners who worked in multiple Children's Minnesota locations and settings.

It is important to note that without doing exhaustive qualitative data collection across a larger number of respondents, we cannot definitively say the experiences of those participating in data collection activities are representative of their particular community, whether it be a parent, youth, staff, provider, or community organization.

Secondary data review

A review of secondary data sources was used to describe demographic trends and to identify potential changes in health outcomes or emerging health concerns among youth who live in the seven-county Twin Cities metro area. The demographic data used for that purpose were largely from the American Community Survey (ACS), the U.S. Census Bureau, Minnesota Student Survey, Minnesota Department of Health Public Health Data Access Portal and other state and federal sources. Patient data were also used to describe the demographic characteristics of children served and to identify the neighborhoods where the organization serves large numbers of patients.

Demographic characteristics

Children's Minnesota has a broad reach; however, a majority of children served live in the seven-county Twin Cities metro area. For the purposes of this CHNA, Children's Minnesota has adopted the following definition to describe the community it serves: the community served by Children's Minnesota includes the more than 720,000 children (age 0–17) who live in the seven-county Twin Cities metro area: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington counties.

Demographics of children and their families

There are high-level differences between counties. Ramsey and Hennepin counties are home to the largest number of children and most racially and ethnically diverse populations. In Ramsey County, a majority (58%) of children are children of color, compared to 48% in Hennepin County (Figure 1). Throughout the Twin Cities, a relatively small percentage of children (2-9%) were born outside of the United States. However, at least one in 10 children (10-31%) live in a household where the primary language spoken is not English.

1. Demographic characteristics of children (age 0-17), by county (2015-2019)

	Anoka	Carver-Scott[a]	Dakota	Hennepin	Ramsey	Washington
Number of children (age 0-17)	83,984	68,076	103,418	274,667	126,841	62,940
Race						
American Indian	1%	1%	<1%	1%	1%	<1%
Asian (Southeast)[b]	3%	3%	2%	4%	17%	5%
Asian (other)	2%	2%	2%	4%	3%	2%
Black – African American/Other African	8%	4%	6%	16%	15%	6%
Black – Somali	2%	1%	3%	5%	2%	<1%
White, non-Hispanic	71%	78%	68%	52%	42%	75%
Two or more races	7%	4%	9%	8%	10%	7%
Another race	3%	3%	3%	5%	3%	1%
Ethnicity						
Hispanic/Latino	7%	7%	11%	12%	12%	6%
Nativity						
Born outside of the U.S.	3%	2%	3%	5%	9%	2%
Language, 2020-2021[c]						
Percentage of students whose primary household language is other than English	14%	11%	13%	24%	31%	10%

Source. Integrated Public Use Microdata Series (IPUMS) from the U.S. Census Bureau, American Community Survey (2015-2019 five-year estimates).

[a] Carver and Scott counties were combined in order to calculate reliable race/ethnicity and nativity estimates.

[b] The Southeast Asian category includes those who identified their race as Asian and reported belonging to any of the following ancestry groups: Burmese, Cambodian, Filipino, Hmong, Indonesian, Laotian, Malaysian, Taiwanese, Thai, or Vietnamese. The category Asian (other) includes those who identified their race as Asian but did not report belonging to the ancestry groups listed previously.

[c] Only includes children age 5+. According to the Minnesota Department of Education Student Enrollment Data (2020-21), the most common household languages (spoken by at least 2,000 students) include: English, Spanish, Somali, Hmong, Karen, Vietnamese, Oromo and Arabic.

Given that Children's Minnesota serves a high volume of patients under age 6, demographic information for children in this age group are provided separately below. However, data patterns are similar to the age 0-17 group (Figure 2).

2. Demographic characteristics of young children (age 0-5), by county (2015-2019)

	Anoka	Carver-Scott[a]	Dakota	Hennepin	Ramsey	Washington
Number of children (age 0-5)	26,457	20,289	32,779	93,419	45,160	18,419
Race						
American Indian	0%	1%	0%	1%	1%	0%
Asian (Southeast)[b]	3%	3%	2%	4%	17%	5%
Asian (other)	1%	2%	2%	4%	3%	2%
Black – African American/Other African	8%	5%	6%	15%	16%	7%
Black – Somali	2%	2%	3%	5%	3%	0%
White, non-Hispanic	71%	76%	67%	53%	42%	75%
Two or more races	8%	5%	12%	9%	10%	6%
Another race/ethnicity	3%	3%	1%	4%	2%	0%
Ethnicity						
Hispanic/Latino	8%	6%	10%	11%	11%	6%
Nativity						
Born outside of the U.S.	1%	2%	2%	2%	4%	1%
Language, 2020-21						
Percentage of children whose primary household language is other than English[c]	17%	18%	16%	27%	37%	13%

Source. Integrated Public Use Microdata Series (IPUMS) from the U.S. Census Bureau, American Community Survey (2015-2019 five-year estimates).

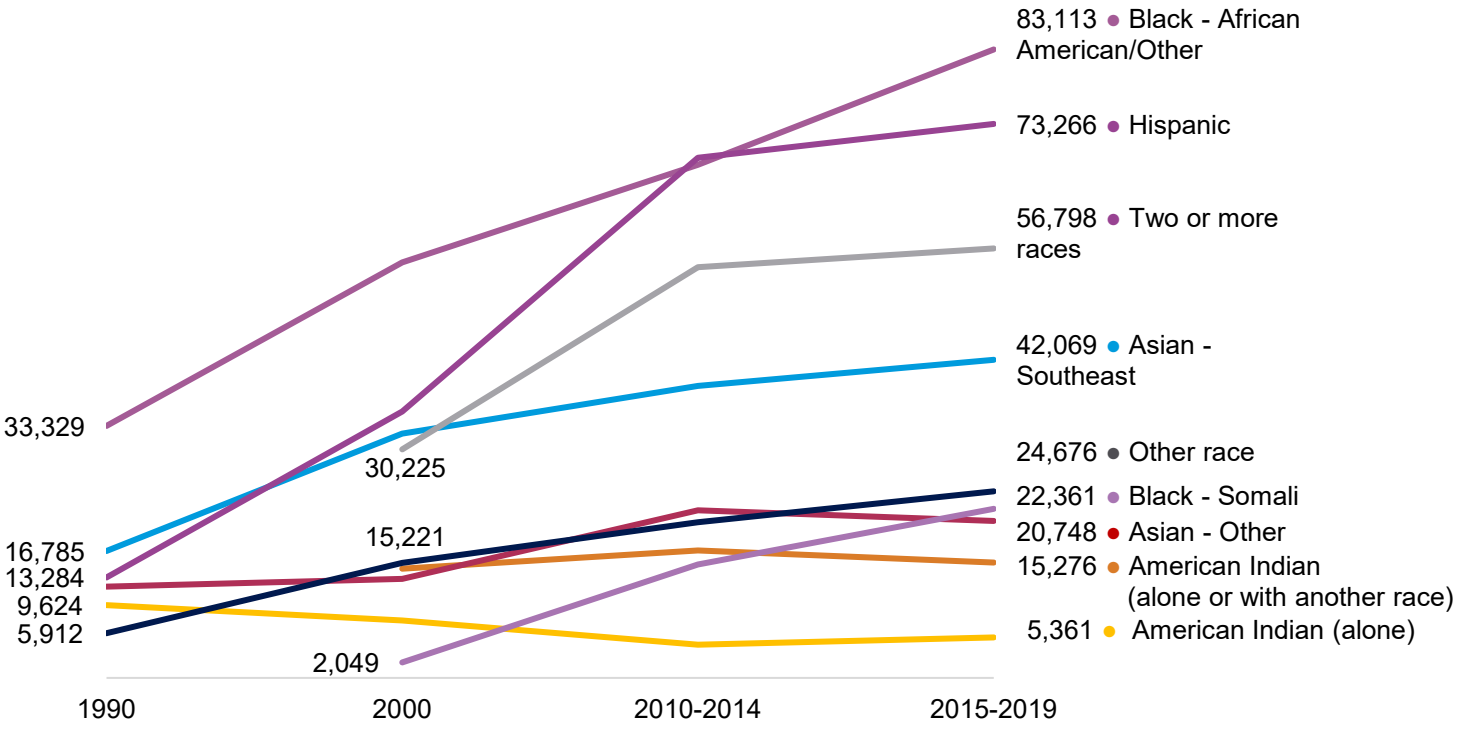
[a] Carver and Scott counties were combined in order to calculate reliable race/ethnicity and nativity estimates.

[b] The Southeast Asian category includes those who identified their race as Asian and reported belonging to any of the following ancestry groups: Burmese, Cambodian, Filipino, Hmong, Indonesian, Laotian, Malaysian, Taiwanese, Thai, or Vietnamese. The category Asian (other) includes those who identified their race as Asian but did not report belonging to the ancestry groups listed previously.

[c] Estimates represent the share of children ages 5 and under where no parent in the home speaks English as their primary language. According to the Minnesota Department of Education Student Enrollment Data (2020-21), the most common household languages for K-12 students (spoken by at least 2,000 students) include: English, Spanish, Somali, Hmong, Karen, Vietnamese, Oromo and Arabic.

The seven-county Twin Cities metro area is growing in population and increasing in racial and ethnic diversity. Since 1990, both the number of children and cultural diversity of children and families have increased in all counties and these trends are expected to continue. Population changes may influence how Children's Minnesota provides services, hires its workforce, or develops partnerships with community organizations in order to provide affordable, high quality, culturally responsive care in an increasingly diverse region. Since 1990, the most notable increases in population have been among children who are Hispanic/Latino, Black and multiracial (Figure 3). The trends listed below may not reflect the population changes in each of the many different cultural groups that fall within each race and ethnicity category.

3. Changes in the number of children (age 0-17) of color over time, Twin Cities metro area



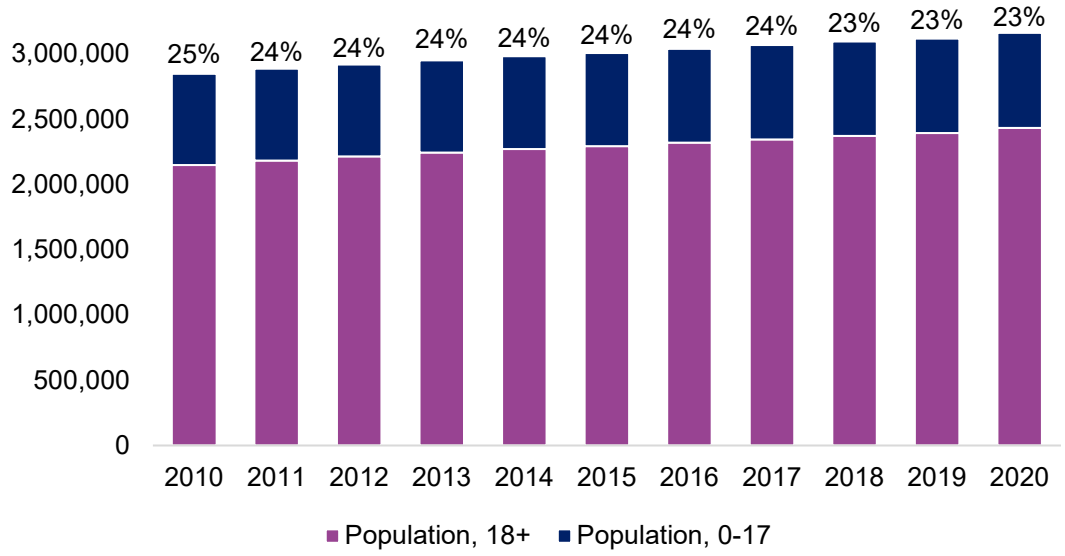
Source. Integrated Public Use Microdata Series (IPUMS) from the U.S. Census Bureau, Decennial Census and American Community Survey.
Note. Black/African American/other includes all Black or African American children who do not identify as Somali. The "two or more races" category was not used by the U.S. Census before 2000. The Southeast Asian category includes those who identified their race as Asian and reported belonging to any of the following ancestry groups: Burmese, Cambodian, Filipino, Hmong, Indonesian, Laotian, Malaysian, Taiwanese, Thai, or Vietnamese. The category Asian (other) includes those who identified their race as Asian but did not report belonging to the ancestry groups listed previously.

Additional analysis (not included in the figure above) of American Indian data from the U.S. Census in 2000 and 2020 showed that while there was a decrease in the number of children who identified as American Indian only during that timeframe, the number of children whose race was identified as American Indian and another race increased from approximately 14,000 to approximately 22,000.

Children as a proportion of the population

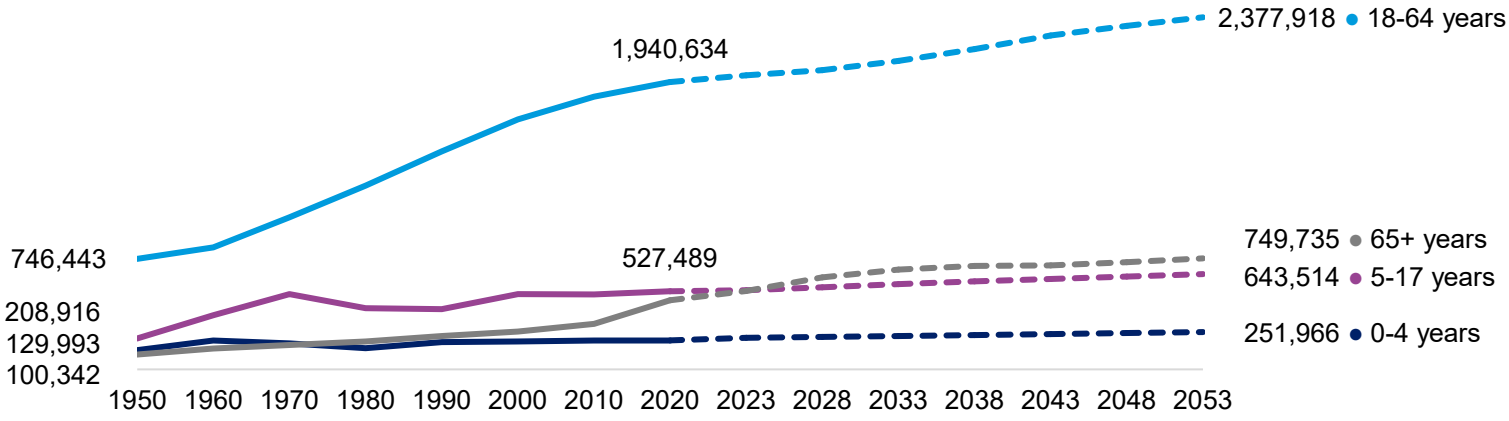
Although the number of children living in the Twin Cities metro area has increased since 1990, children continue to make up nearly one-quarter of the overall population. In 2020, nearly 729,000 children age 0-17 lived in the Twin Cities metro area, compared to nearly 593,000 in 1990 (Figure 4). At the same time, the number of adults age 65 and older has been and will continue to increase dramatically as the baby boomer generation ages. As a result of these demographic shifts, within the next decade the number of adults age 65 and older will be greater than the number of school-age children living in the Twin Cities metro area (Figure 5). This demographic change has the potential to influence how resources and funding are allocated at the state and local level.

4. Children (age 0-17) living in the Twin Cities metro area relative to overall population



Source. U.S. Census Bureau, Decennial Census and Population Estimates and American Community Survey.
Note. The 2020 data are from the Decennial Census and include the full population, whereas the 2011-2019 data are from the American Community Survey and include population estimates. This resulted in an increase in the population size from 2019 to 2020.

5. Projected changes in the population of the Twin Cities metro area, by age group



Source. U.S. Census Bureau, Decennial Census and Population Estimates. Minnesota State Demographic Center.

Immigrant and refugee status

The Twin Cities metro area is also home to a growing number of immigrants and refugees. While Minnesota has proportionally fewer immigrants than the United States as a whole (8%, compared with 14% nationally), the state's foreign-born population is increasing faster than the national average. More than 470,000 residents are foreign born, with 79% of these residents living in the Twin Cities metro area. In 2019, 20% of children in Minnesota were either a child of an immigrant or were themselves born in a different country; in 2000 that was true of just 10% of children. The largest numbers of immigrants and refugees come from the following countries: Mexico, Somalia, India, Laos, Ethiopia, Vietnam, China, Thailand, Korea, Kenya and Liberia.[3]

Languages spoken at home

In the Twin Cities metro area, 20% of school-age children live in a household where a language other than English is spoken as the primary language. These percentages are higher in the region's most diverse school districts. Hennepin County, the largest of the seven counties in the region, has the most children who speak languages other than English in their homes (Figure 6). (Readers should note that the data below differ from the language data in Figure 2 because they are from two different sources.) There are not good measures available that describe the degree to which institutions, schools and other organizations have the linguistic and cultural capacity to meet the needs of all children and families.

6. Students with language other than English as primary language spoken at home, by county

	Enrolled students with language other than English as primary language spoken at home (2020-21)		Number of languages spoken (2020-2021)	Percentage of children (age 5-17) who speak English less than "very well" (2015-2019)
County	#	%	#	%
Anoka	12,215	20%	174	2%
Carver	1,513	9%	62	1%
Dakota	14,257	20%	158	3%
Hennepin	43,708	26%	210	5%
Ramsey	33,524	37%	189	11%
Scott	3,464	14%	97	4%
Washington	4,681	12%	143	2%

Source. Minnesota Department of Education (2020-2021); U.S. Census Bureau American Community Survey (2015-2019 five-year estimates).

Income, wealth and employment

In the Twin Cities metro area, health outcomes for children living in more affluent households are better than those for children in lower income households. Family income and wealth impact child health and well-being in multiple ways, influencing access to resources (e.g., safe housing, nutritious foods, clean water and air) and levels of stress. While Minnesota has historically had a strong economy and one of the lowest poverty rates in the nation, significant income

[3] Integrated Public Use Microdata Series (IPUMS) from the U.S. Census Bureau American Community Survey (2015-2019 five-year estimates). Generated by Minnesota Compass.

disparities exist among racial and ethnic groups. Across the state, poverty rates are higher for households headed by residents of color (double the statewide rate) or a single female (triple the statewide rate).[4]

Beyond income differences, long-term effects of discriminatory policies and practices (e.g., housing policy discrimination, employment discrimination, racial discrimination in the criminal justice system and unequal access to education opportunities) are major drivers of disparities in household wealth. While local data on wealth were not gathered as part of this assessment, these same discriminatory policies have been in place in Minnesota and the Twin Cities metro area, disproportionately impacting people of color.

Household income and wealth

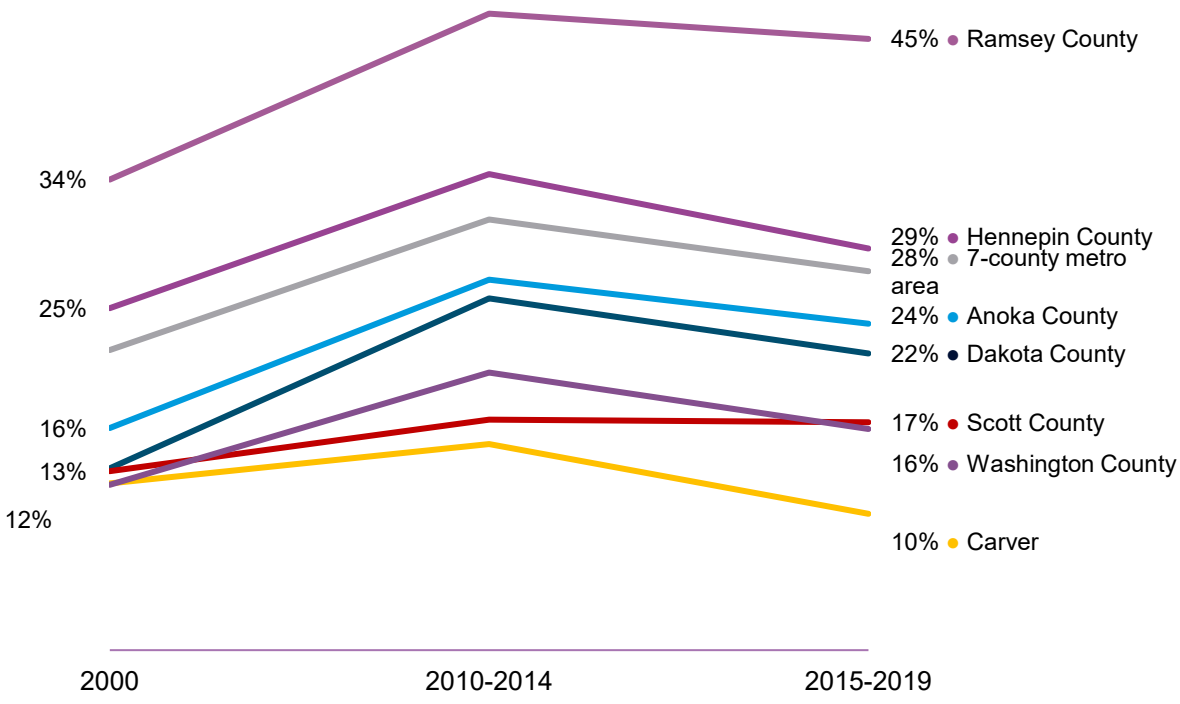
Nearly 200,000 children in the Twin Cities metro area live in households with incomes at or near the poverty level. Children who live in households below the poverty level are eligible to receive certain public assistance benefits.

"Lower-income households" refers to households with an annual income at or below the federal poverty level (FPL). This is the threshold used in eligibility guidelines for some state benefit programs. As of 2020 (for a family of four), 100% FPL was $26,075 per year and 200% FPL was $52,150 per year.

After more notable increases in the percentage of children living in lower-income households between 2000 and 2014, there has been a decrease since then for most counties (Figure 7). Despite these decreases, poverty rates among children are still high in the Twin Cities metro area. Nearly half (45%) of children living in Ramsey County and 29% of children in Hennepin County live in lower-income households. The Ramsey County percentage is more than four times higher than Carver County (the most affluent county in the region) where 10% of children live in lower-income households. There are also concentrated areas of poverty within counties, including the CHNA's focal neighborhoods in Minneapolis and St. Paul (Figure 8).

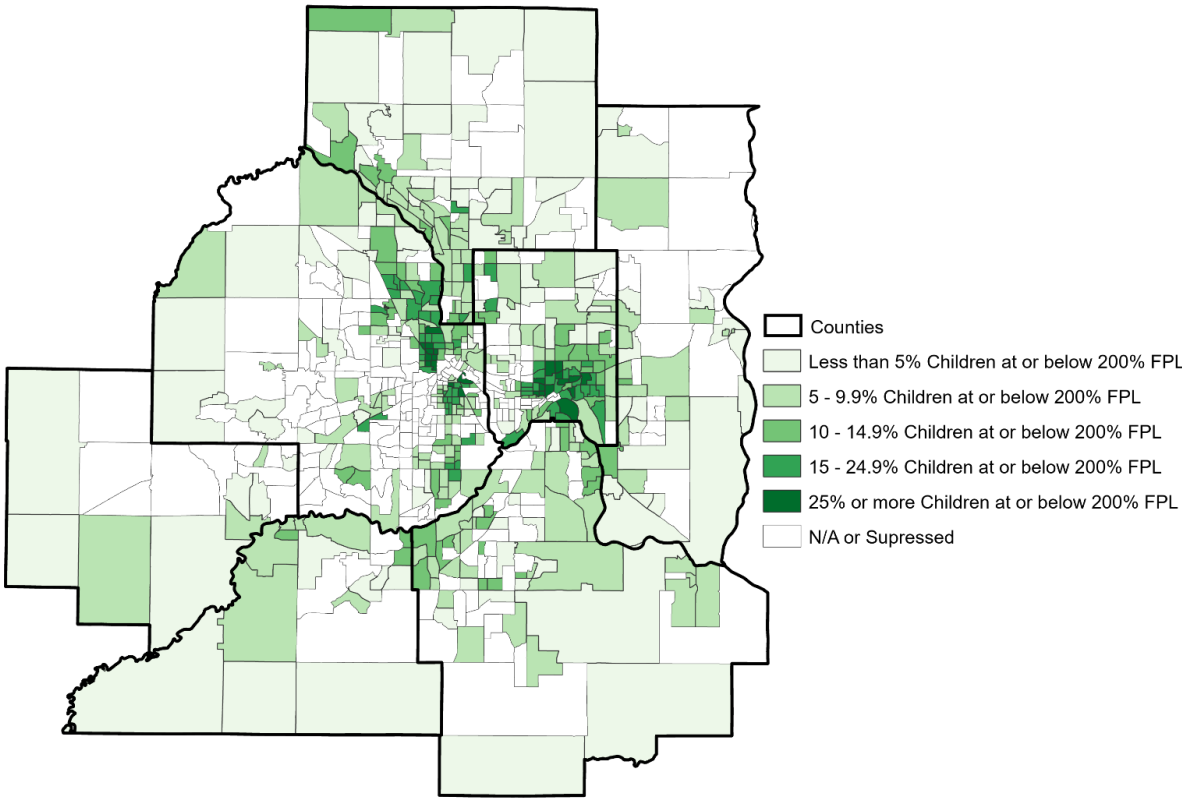
[4] Minnesota Compass. (2019). *Economy overview*. Retrieved from https://www.mncompass.org/economy/overview.

7. Percentage of children (age 0-17) living at or below 200% of the federal poverty level over time, by county



Source. U.S. Census Bureau American Community Survey, including 5-year estimates (2000, 2010-14, 2015-19).
Note. Figure includes households with an annual income at or below 200% of the federal poverty level (200% FPL), which is $52,150 for a family of four in 2020. This is the threshold used in eligibility guidelines for some state benefit programs.

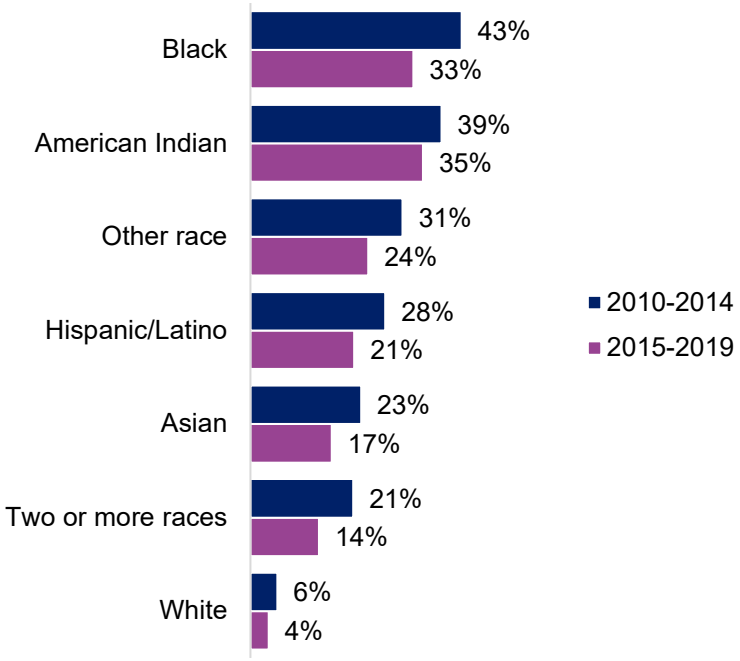
8. Percentage of children (age 0-17) living in lower-income households, by census tract (2015-2019)



Source. U.S. Census Bureau American Community Survey 5-year estimates (2015-19).
Note. "Lower-income households" refers to households with an annual income at or below 200% of the federal poverty level (200% FPL), which was $52,150 for a family of four in 2020.

Racial disparities in income levels are evident; Black and American Indian children more often live in lower-income households and experience poverty, especially when compared to White children. In 2019, 33% of Black children and 35% of American Indian children lived in households with incomes at or below the federal poverty level, whereas only 4% of White children lived in lower-income households (Figure 9). Between 2014 and 2019, there was a significant decrease in the percentage of children living below the federal poverty level for all racial and ethnic groups except American Indian.

9. Percentage of children (age 0-17) in the Twin Cities metro area living at or below 100% of the federal poverty level, by race/ethnicity



Source. U.S. Census Bureau American Community Survey, 5-year estimates (2010-2014, 2015-2019).
Note. For a family of four, 100% FPL in 2020 was $26,075.

The same disparities hold true when looking at data for each of the seven Twin Cities metro area counties (Figure 10). Across all counties with data available, the percentage of American Indian and Black children living in lower-income households is four to thirteen times higher than for White, non-Hispanic children (the racial group with the lowest percentage of children living in lower-income households).

10. Percentage of children (age 0-17) living at or below 100% of the federal poverty level, by race/ethnicity and county (2015-2019)

	Anoka	Carver	Dakota	Hennepin	Ramsey	Scott	Washington
American Indian	**	**	**	35%	60%	**	**
Asian	6%	**	9%	8%	30%	15%	6%
Black	21%	**	22%	35%	41%	31%	17%
Hispanic/Latino	13%	**	22%	22%	27%	17%	11%
White (non-Hispanic)	5%	2%	3%	3%	5%	4%	3%
Another race/ethnicity	14%	**	21%	28%	26%	**	**
Two or more races	15%	**	12%	13%	24%	7%	6%
All children	8%	4%	8%	13%	21%	7%	5%

Source. U.S. Census Bureau, American Community Survey, 5-year estimates (2015-2019).
Note. Data are suppressed (**) in counties where racial/ethnic groups are too small to calculate reliable estimates.

Disaggregating data by cultural community can provide further insight into the economic circumstances impacting the health and well-being of children. The U.S. Census Bureau estimates the number of residents living at or near federal poverty levels for a number of cultural communities in Minnesota, which helps illustrate a few important points:

- Differences in socioeconomic status vary widely across cultural communities. These differences reflect the varied experiences of people who today call Minnesota home, including how groups have been impacted by historical events and many different types of policies, including immigration policy (Figure 11).
- There are wide differences in experiences of cultural groups often reported together within a single race category (e.g., Chinese and Hmong residents grouped together in a single Asian race category).
- Nearly 65,000 White children live below the federal poverty line, more than other cultural groups. However, this comprises only 7% of the White childhood population.

11. Number and percentage of children (age 0-17) living in lower-income households in Minnesota, by cultural group (2015-2019)

Cultural group	Children age 0-17 living below 100% of FPL (% of cultural group)	Children age 0-17 living between 100% and 200% of FPL (% of cultural group)
Somali	**39,630 (57%)**	**10,600 (27%)**
Burmese	5,957 (47%)	1,800 (30%)
Ethiopian	4,800 (34%)	5,600 (39%)
Liberian	2,400 (32%)	1,400 (18%)
Salvadoran	1,400 (30%)	1,500 (33%)
African American	22,200 (28%)	26,100 (33%)
Mexican	25,000 (28%)	29,700 (33%)
Guatemalan	1,300 (26%)	900 (18%)
Hmong	7,200 (24%)	9,300 (31%)
Puerto Rican	1,500 (24%)	1,700 (28%)
Native American[a]	15,600 (24%)	15,200 (24%)
Kenyan	1,300 (21%)	700 (12%)
Lao	900 (19%)	1,500 (30%)
Nigerian	600 (12%)	1,700 (36%)
Filipino	600 (7%)	1,600 (21%)
White	64,400 (7%)	113,700 (13%)
Chinese	600 (6%)	1,300 (11%)
Korean	500 (6%)	600 (7%)
Vietnamese	500 (5%)	2,000 (22%)
Asian Indian	600 (4%)	800 (6%)
All Minnesota children	**167,000 (13%)**	**223,000 (17%)**

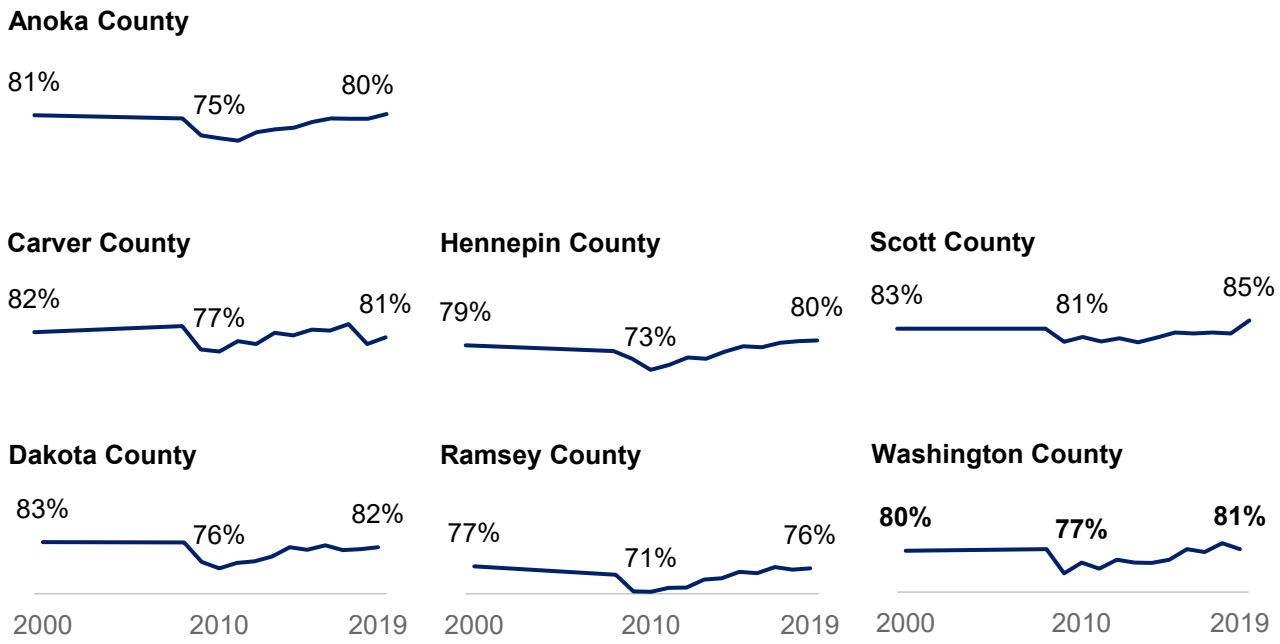
Source. Integrated Public Use Microdata Series (IPUMS) from the U.S. Census Bureau, Decennial Census and American Community Survey (2015-2019). Compiled by Minnesota Compass. https://www.mncompass.org/cultural-communities

[a] The definition of Native American is more expansive than the other tables in this report which may have resulted in a lower poverty rate.

Employment

As of 2019, the majority of Minnesota adults (age 16-64) were employed and employment has remained relatively flat over the past two decades (Figure 12). Two major disruptions to employment trends include the 2008 Great Recession and the current COVID-19 pandemic. During the 2008 recession, the proportion of adults working dropped to their lowest levels since 2000, especially in Hennepin and Ramsey counties (73% and 71%, respectively).

12. Proportion of adults (age 16-64) working, by county



Source. U.S. Census Bureau, Decennial Census and American Community Survey (2000, 2008 to 2019).
Note. People are considered "working" if they are self-employed, working for a family business, or working for others. The percentage of adults working considers all civilian adults (age 16-64), including adults not actively looking for work or who have otherwise left the labor force.

Unemployment and unemployment insurance claims skyrocketed to historically high levels during the Covid-19 pandemic. In April 2020, the number of continuing unemployment insurance claims in Minnesota skyrocketed to 500,246 – a record high. Compared to April of the previous year, this represents a 978% increase in claims filed across the state and a 1,481% increase for the seven-county Twin Cities metro area. Figure 13 illustrates the number of continuing unemployment claims in April for three years, starting with the year prior to the pandemic. Throughout the pandemic, record unemployment and the loss of jobs in certain sectors (e.g., food and beverage servers, retail workers), laid bare economic and racial disparities. While unemployment most directly impacts adults, households in which a parent or caregiver has experienced a loss or reduction in income will certainly have ripple effects on health outcomes for children and youth.

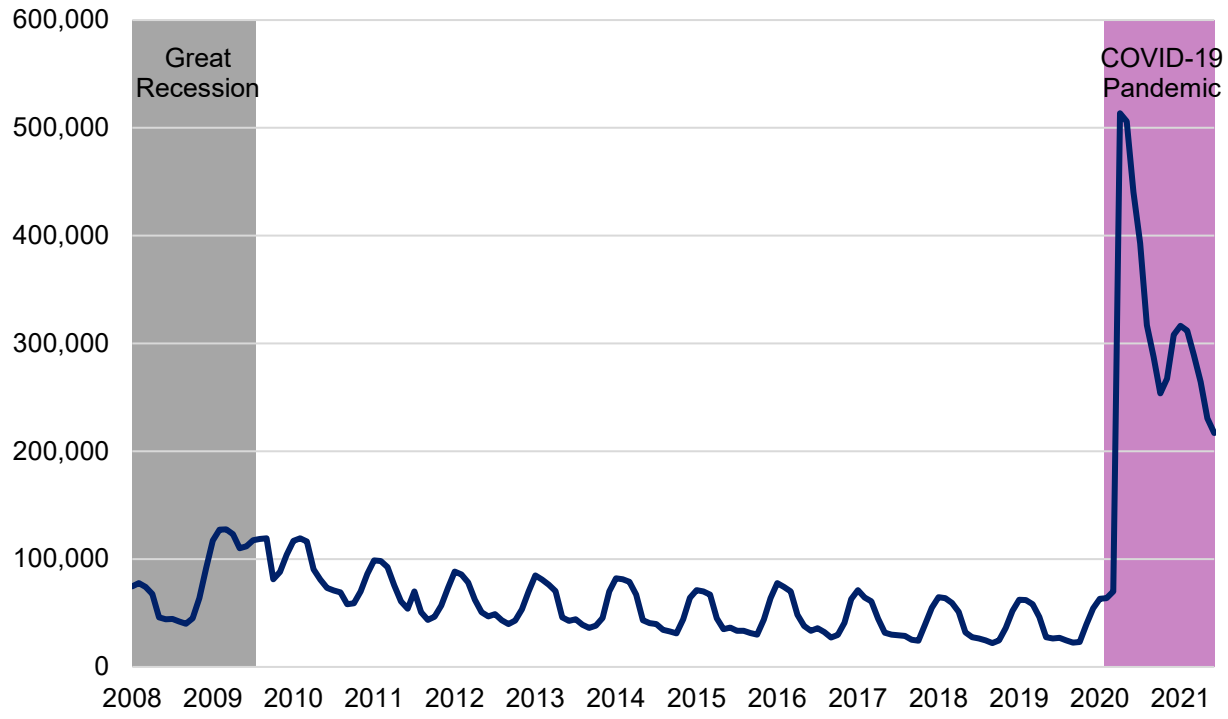
13. Number of continuing unemployment insurance claims filed (2019-2021)

	Pre-pandemic	Pandemic	
# of continuing claims	**April 2019**	**April 2020**	**April 2021**
Minnesota	46,400	500,246	136,544
Seven-county Twin Cities metro area	18,116	286,423	76,298

Source. Minnesota Department of Employment and Economic Development (DEED). Unemployment Insurance Claims Statistics. Retrieved August 2021 from https://mn.gov/deed/data/data-tools/unemployment-insurance-statistics/uimonthly.jsp

For historical context, this spike in claims far surpassed the one seen in 2008 during the Great Recession (Figure 14).

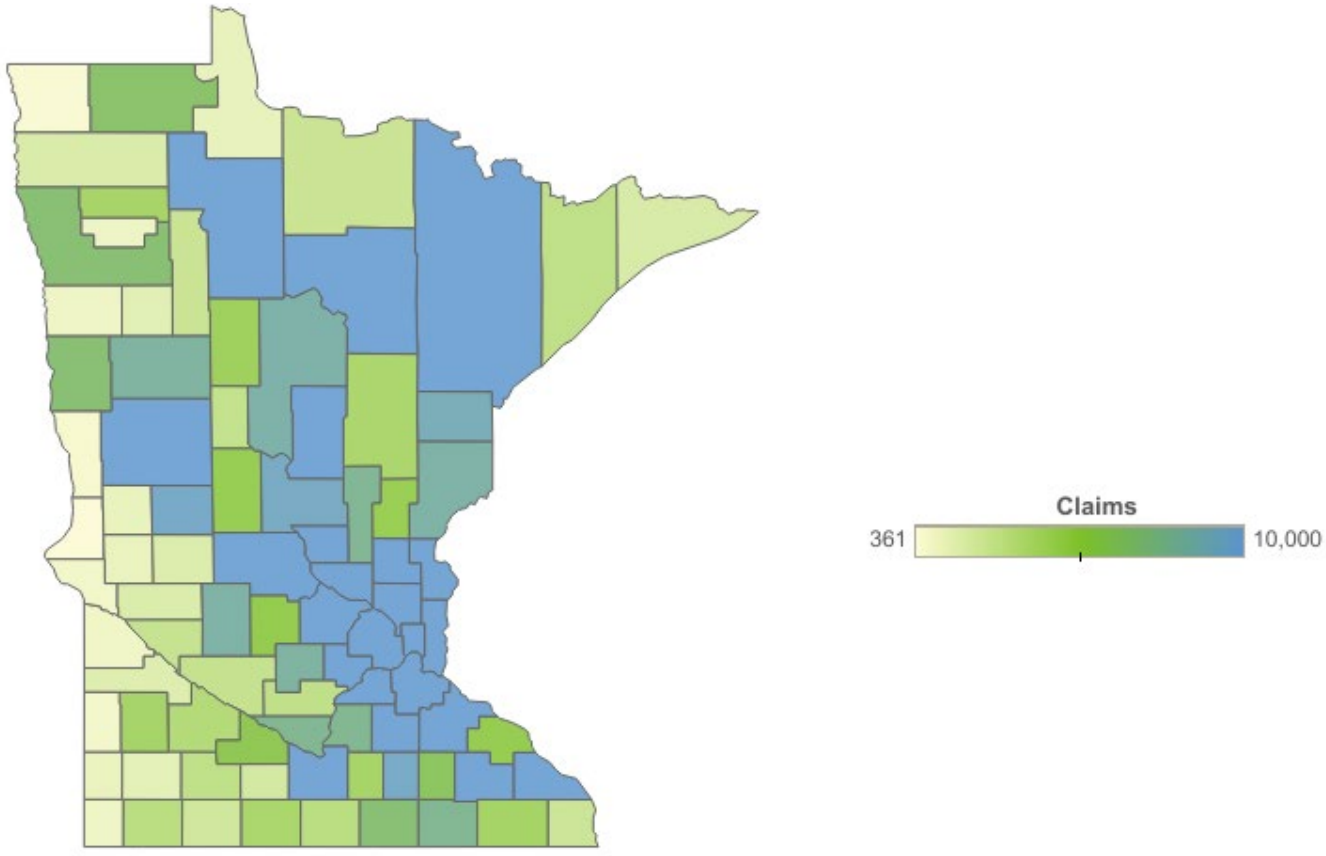
14. Number of continuing unemployment insurance claims filed in Minnesota (2008-2021)



Source. Minnesota Department of Employment and Economic Development (DEED). Unemployment Insurance Claims Statistics. Retrieved August 2021 from https://mn.gov/deed/data/data-tools/unemployment-insurance-statistics/uimonthly.jsp

The seven-county Twin Cities metro area saw more unemployment insurance applications compared to counties in greater Minnesota (Figure 15).

15. Cumulative unemployment insurance applicants, by county (March 16, 2020 to August 19, 2021)



Source. Minnesota Department of Employment and Economic Development (DEED). Unemployment Insurance Claims Statistics. Retrieved August 2021 from https://mn.gov/deed/data/data-tools/unemployment-insurance-statistics/uimonthly.jsp

Housing

Homeownership

Homeownership is a key step, though not a guarantee, to successful wealth accumulation, particularly for lower-income families.[5] However, for many decades, policies restricted people of color from owning homes or choosing the neighborhoods where they would like to live. In Minneapolis and St. Paul, the lasting impacts of discriminatory housing practices can be seen today by comparing "redlined" districts established decades ago to current areas of concentrated poverty (Figure 15). Redlining refers to a set of practices established by the Federal Housing Administration (FHA), other government agencies and private banks to label neighborhoods based on their perceived credit risk. Mortgage loan applications were regularly approved for (predominantly White) people living in suburban areas or other neighborhoods with high credit ratings and denied for residents living in areas identified as "declining" neighborhoods, often areas with many residents of color. As a result of these policies, households of color received just 2% of the FHA loans made between 1934 and 1968.[6] Without homeownership, lower-income residents have very fewer options to increase wealth and financial stability and decrease intergenerational poverty. In addition, the pandemic and extremely tight housing market (i.e., high housing prices) have made it more difficult for Minnesotans to purchase homes.

As a result of historical redlining policies and disparities in income, access to credit and other forms of structural racism, there is a significant homeownership gap today. In the Twin Cities metro area, just over one-quarter of Black householders own their own homes, which is the lowest percentage among all racial and ethnic groups. Homeownership rates are higher among other minority groups, including Hispanic/Latino and American Indian householders (both 43%), householders of two or more races (45%) and Asian householders (58%), but still are much lower than the homeownership rate for White, non-Hispanic householders (76%).[7]

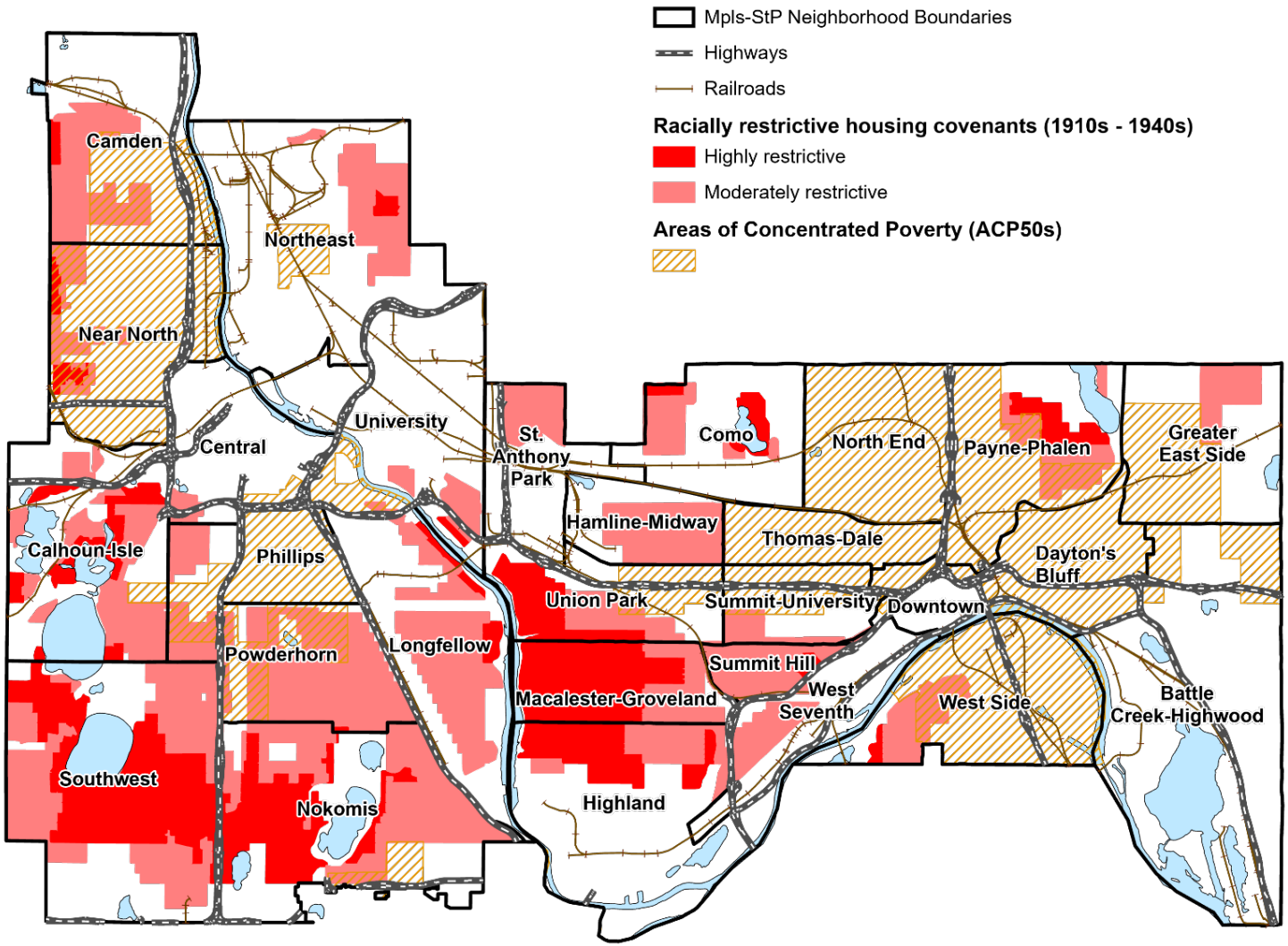
---

5 Boehm, T., & Schlottmann, A. (2004). *Wealth accumulation and homeownership: Evidence for low-income households*. U.S. Department of Housing and Urban Development. https://www.huduser.gov/portal//Publications/pdf/WealthAccumulationAndHomeownership.pdf

6 Asante-Muhammed, D., Collins, C., Hoxie, J., & Nieves, E. (2016). *The ever-growing gap: Without change African-American and Latino families won't match White wealth for centuries*. Corporation for Enterprise Development. http://cfed.org/policy/federal/The_Ever_Growing_Gap-CFED_IPS-Final.pdf

7 Homeownership rates are categorized by the racial/ethnic group of the householder. The data presented are from the U.S. Census Bureau, American Community Survey (2015-2019 five-year estimates) Retrieved from: https://www.mncompass.org/topics/quality-of-life/housing?homeownership-gap#7-5600-g

15. Past housing policies and current areas of concentrated poverty in Minneapolis and St. Paul; Redlining district maps

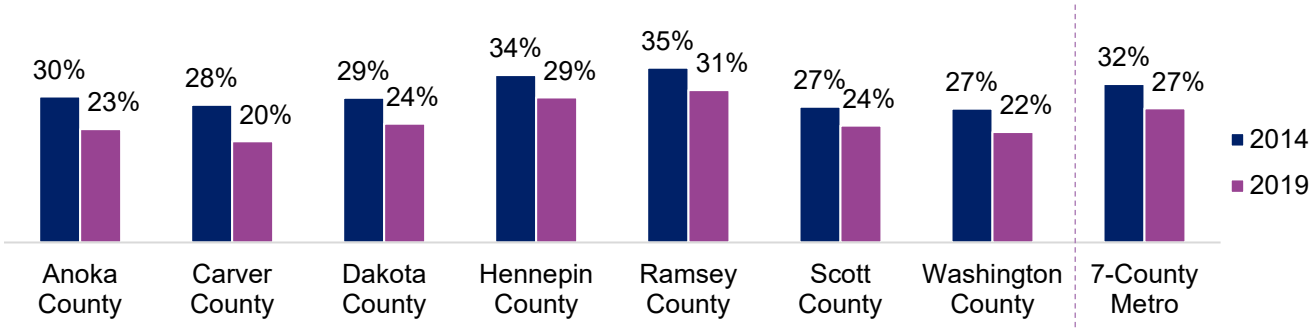


Source. Minnesota Geospatial Information Office. Produced by Wilder Research.

Housing stability

When families need to spend a large amount of their income on housing, it can impact their ability to pay for other basic needs. A household is considered housing cost-burdened when 30% or more of its monthly gross income is dedicated to housing expenses, including rent or mortgage payments, taxes and utilities. In all Twin Cities metro area counties, the percentage of cost-burdened households decreased from 2014 to 2019. In 2019, Ramsey County had the largest percentage of cost-burdened households (31%), while Carver County had the fewest cost-burdened households (20%; Figure 16).

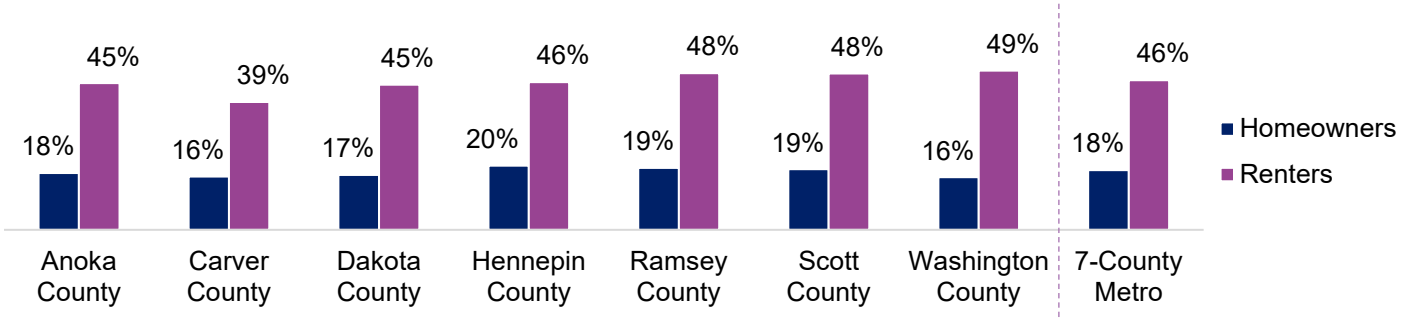
16. Percentage of cost-burdened households over time, by county



Source. U.S. Decennial Census, American Community Survey 5-year estimates (2010-2014, 2015-19).

In 2019, just over 376,000 Twin Cities metro households lived in rental properties, including apartments and rental homes. Of those households renting in the region, 46% were cost-burdened; for homeowners, the percentage was 18% (Figure 17).

17. Percentage of cost-burdened households, homeowners and renters (2015-2019)



Source. U.S. Decennial Census, American Community Survey 5-year estimates (2015-19).

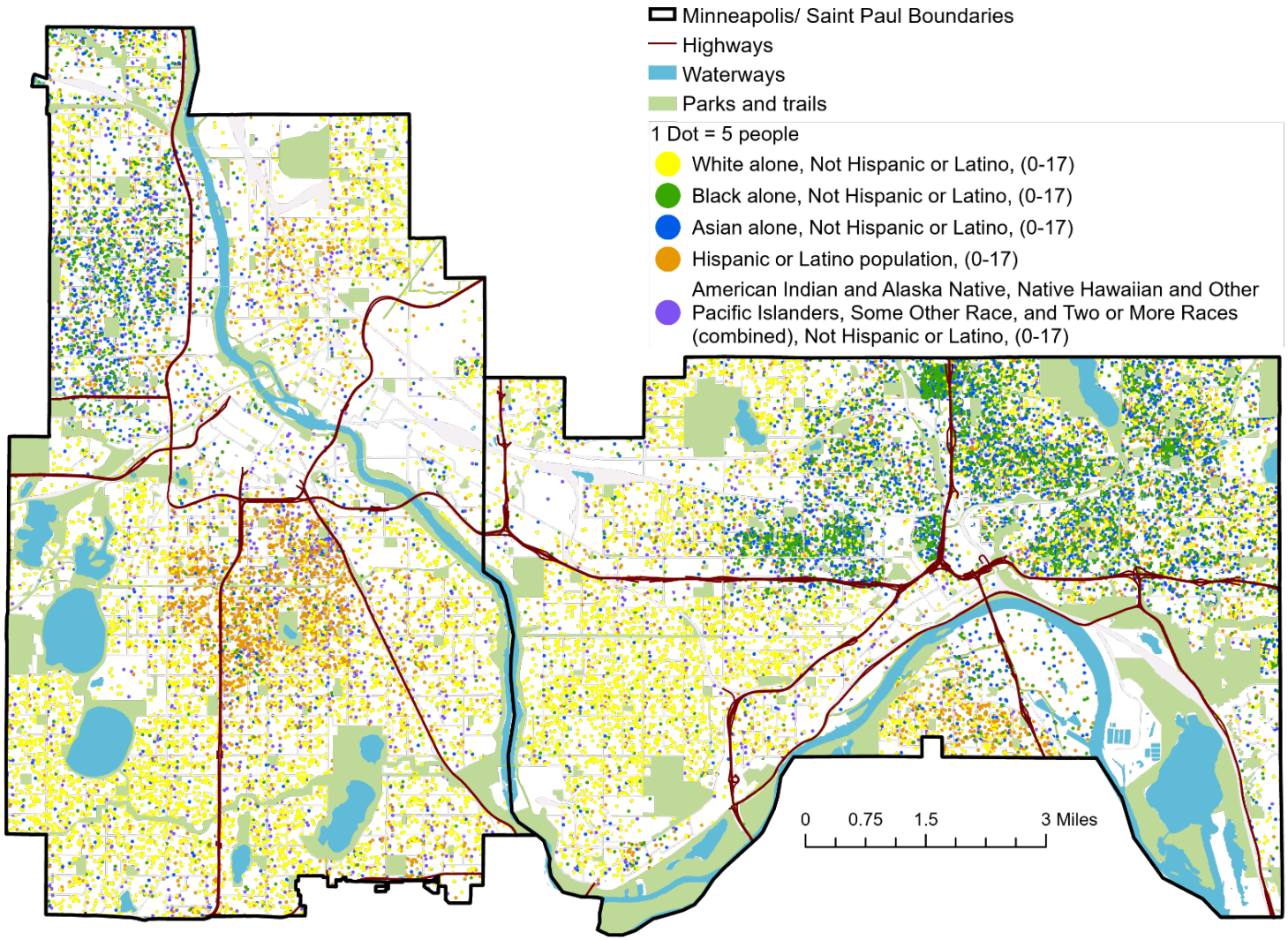
Residential segregation

Mapping of Twin Cities metro area residents by race and ethnicity shows that, although the region is becoming increasingly culturally diverse, few neighborhoods are racially integrated (Figures 18 & 19). A report by the Institute on Metropolitan Opportunity looks in depth at how housing and education policies have reinforced neighborhood segregation.[8] The authors identify a number of key governmental decisions and policy initiatives that have increased or reinforced neighborhood segregation, including policies that have increased affordable housing goals for Minneapolis and St. Paul while at the same time decreasing these goals in more affluent, majority-White suburbs and revisions to the state's school desegregation rules. Another study from University of Minnesota pointed out that racially concentrated areas of affluence, which are census tracts where high proportions of residents are White and wealthy, may lead to lower empathy among White residents, potentially inhibiting policies and other efforts that would aim to reduce citywide or regional racial inequalities.[9]

[8] Institute on Metropolitan Opportunity. (2015). *Why are the Twin Cities so segregated?* University of Minnesota Law School. https://www1.law.umn.edu/uploads/ed/00/ed00c05a000fffeb881655f2e02e9f29/Why-Are-the-Twin-Cities-So-Segregated-2-26-15.pdf

[9] Goetz, E. G., Damiano, A., & Hicks, R. A. (2015). *Racially concentrated areas of affluence: A preliminary investigation*. U.S. Department of Housing and Urban Development. https://www.huduser.gov/portal/periodicals/cityscpe/vol21num1/ch4.pdf

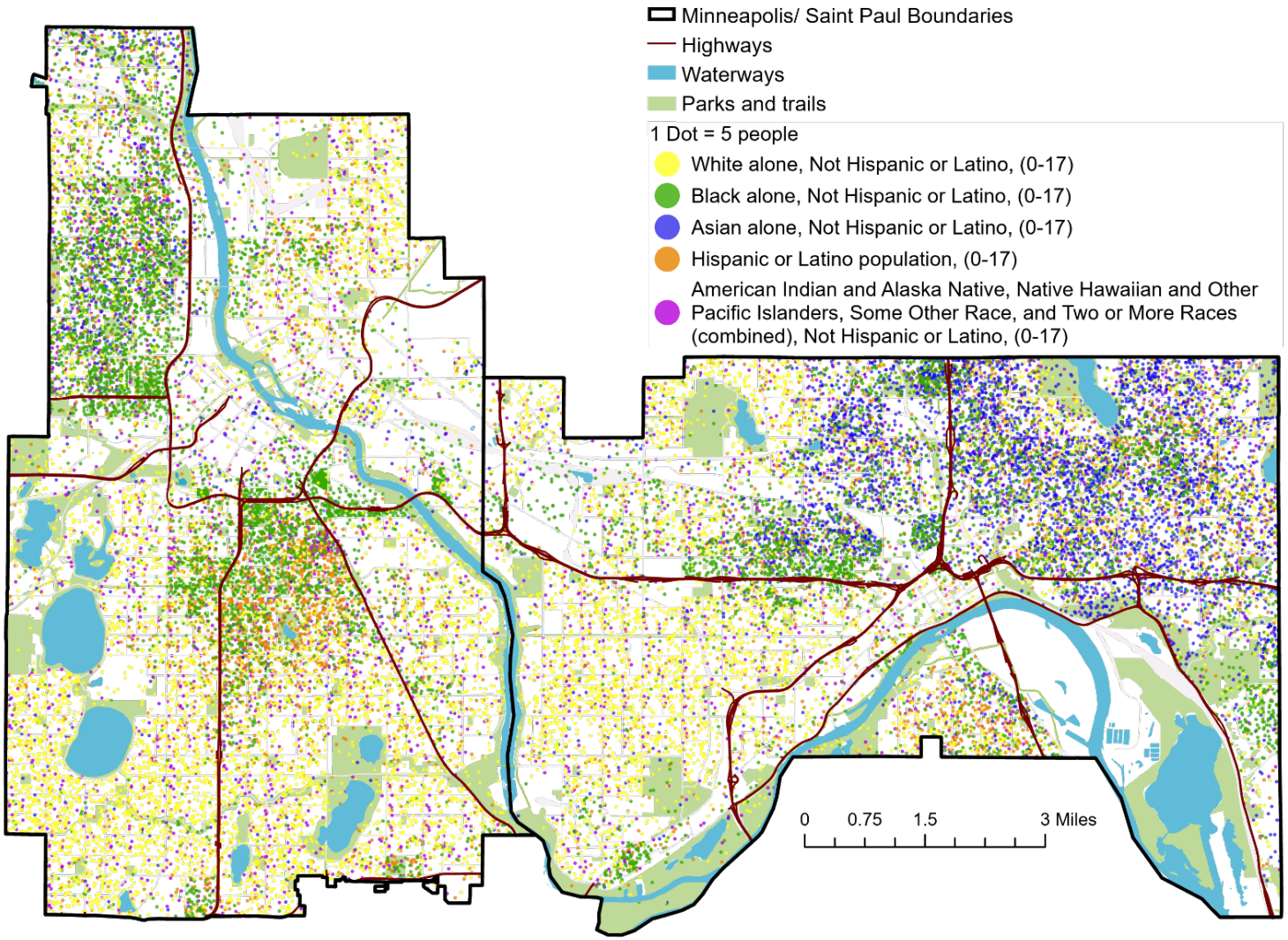
18. Racial dot map of children (age 0-17) living in Minneapolis and St. Paul, 2010



Source. 2010 U.S. Census Bureau, Decennial Census.

Note. American Indian, Another race/ethnicity and Two or more races were combined into a single category due to small sample sizes for each category alone.

19. Racial dot map of children (age 0-17) living in Minneapolis and St. Paul, 2020



Source. 2020 U.S. Census Bureau, Decennial Census.

Note. 2020 decennial census data is the most current data available. American Indian, Another race/ethnicity and Two or more races were combined into a single category due to small sample sizes for each category alone.

Homelessness

In Minnesota, children represent 46% of the overall homeless population. Every three years, Wilder Research conducts a study where volunteers across the state interview as many individuals experiencing homelessness as possible on a single night, including people in shelters, transitional housing and in non-shelter locations such as encampments and drop-in service sites. In 2018, the study found that 3,265 children were homeless with their parents, with an additional 192 living on their own. This count likely underestimates the number of children and youth experiencing homelessness since they are more likely to stay outside the shelter system, making them more difficult to find for the study. Overall, the number of homeless children decreased between 2015 and 2018, with a decrease of 1% for those with their parents and 10% for those on their own (Figure 20).

Children experiencing homelessness or other types of housing instability are at higher risk for developmental and academic delays, behavioral and socioemotional problems and child welfare system involvement, including out of home placement. Language skills, communication skills and mental health issues have been found to be of particular concern among young children experiencing homelessness, with effects above and beyond the effects of poverty.[10]

20. Changes in Minnesota youth experiencing homelessness

	2009 study	2012 study	2015 study	2018 study	% change (2015-2018)
Children (17 and under) with parents	3,251	3,546	3,296	3,265	-1%
Children on their own (17 and under)	227	146	213	192	-10%
Young adults (18-21)	1,041	1,005	779	759	-3%

Source. Wilder Research, 2018 Minnesota Homeless Study Detailed Data. Retrieved from: http://mnhomeless.org/minnesota-homeless-study/detailed-data.php.

[10] Carlson, E., Giovanelli, A., Chase, R., Spaeth, E., & Aviles, S. (2018). *Minnesota early childhood risk, reach, and resilience: Key indicators of early childhood development in Minnesota, county by county*. Wilder Research. https://www.wilder.org/wilder-research/research-library/minnesota-early-childhood-risk-and-reach

Access to resources and supports

There are a number of resources and systems that support the health and well-being of children. Vibrant and healthy neighborhoods have a range of assets to support child health and development, including green spaces and parks where children can play and exercise, places to purchase healthy and affordable food, water and air free of pollution and high-quality schools. These neighborhood assets and other types of resources need to be available, accessible and welcoming to community residents. This section of the report highlights just a few of the many resources children and families access to support health.

Public programs

Many of the children and families eligible for public programs intended to support the health and well-being of children, especially those in lower-income households and neighborhoods, do not receive the resources they need to be healthy (Figure 21). Differences in enrollment by county can be the result of a number of factors, including disparities in who is reached through each county's outreach approach. There are many reasons families may choose not to participate in these programs, but these topics were not explored in this assessment. A full description of each program is located in the shaded box below.

21. Percentage of eligible children enrolled in selected programs that support early childhood health and development (2016)

County	Women, Infant and Children (WIC)[a]	Family Home Visiting Program[b]	Minnesota Family Investment Program (MFIP)[c]	Child Care Assistance Program (CCAP)[d]	Early Childhood Screening[e]	Head Start/Early Head Start[f]
Anoka	52%	11%	51%	14%	34%	32%
Carver	34%	18%	38%	14%	37%	10%
Dakota	45%	15%	36%	14%	48%	12%
Hennepin	56%	14%	61%	18%	29%	22%
Ramsey	68%	11%	57%	13%	23%	18%
Scott	47%	10%	35%	17%	43%	10%
Washington	42%	12%	40%	14%	41%	11%

Source. Carlson, E., Giovanelli, A., Chase, R., Spaeth, E., & Aviles, S. (2018). *Minnesota early childhood risk, reach and resilience: Key indicators of early childhood development in Minnesota, county by county*. Wilder Research. https://www.wilder.org/wilder-research/research-library/minnesota-early-childhood-risk-and-reach.

[a] Includes children under age 6 in households below 185% of the federal poverty line.

[b] Includes families with children under 5 living below 185% of the federal poverty line.

[c] Includes children under 6 in households below 125% of the federal poverty line.

[d] Includes children under 6 in households below 200% of the federal poverty line.

[e] Kindergarteners who received screening by age 3.

[f] Includes children under 6 in households in poverty.

Brief description of public programs and resources available to young children

- **The Child Care Assistance Program (CCAP)** subsidies are available to working parents eligible for MFIP or from lower-income households to help cover the costs of child care. In some counties there are wait lists because there is more demand for CCAP subsidies than funding available.
- **Early Childhood Family Education (ECFE)** is available in school districts across the state and provides parenting education to support children's learning and development. Expecting parents and families with children from birth to kindergarten age are eligible to participate.
- **Early Childhood Screening** is available to all children beginning at age 3 to evaluate their physical, verbal, cognitive and social-emotional development. State law requires screening to be completed within 30 days of enrollment to kindergarten.
- **Early Learning Scholarships** are intended to increase access to high quality early childhood programs for low-income families.
- **The Family Home Visiting Program** works with families with lower incomes (at or below 185% of federal poverty guidelines) who are experiencing other stressful situations, including poverty, past alcohol or drug use, or a history of abuse or neglect. In-home visits are provided by public health nurses or other trained staff and are intended to support healthy parent-child relationships and healthy child development.
- **Head Start and Early Head Start** are available to children with low household incomes, special health needs, or other specific circumstances, such as homelessness. These programs provide young children (6 weeks to 5 years old) with services that support all aspects of child development and health.
- **The Minnesota Family Investment Program (MFIP)** supports low-income families (at or below 125% of the federal poverty level) with children. Parents are supported through cash and food assistance, as well as employment services.
- **School Readiness Programs** are available in all Minnesota school districts to help prepare children for kindergarten. The service is available to all children at a fee-for-service basis, while children who meet specific eligibility criteria can participate free of charge.
- **The Women, Infant and Children (WIC) program** provides pregnant women, as well as new mothers and their children, with nutrition education, breastfeeding support and information, nutritious food and referrals to health and social services. Participation in the WIC program in Minnesota has consistently been high; in 2013 (the most recent data available) Minnesota participation was the 2nd highest in the nation, with 71% of women eligible for WIC enrolled in the program.

Adapted from:

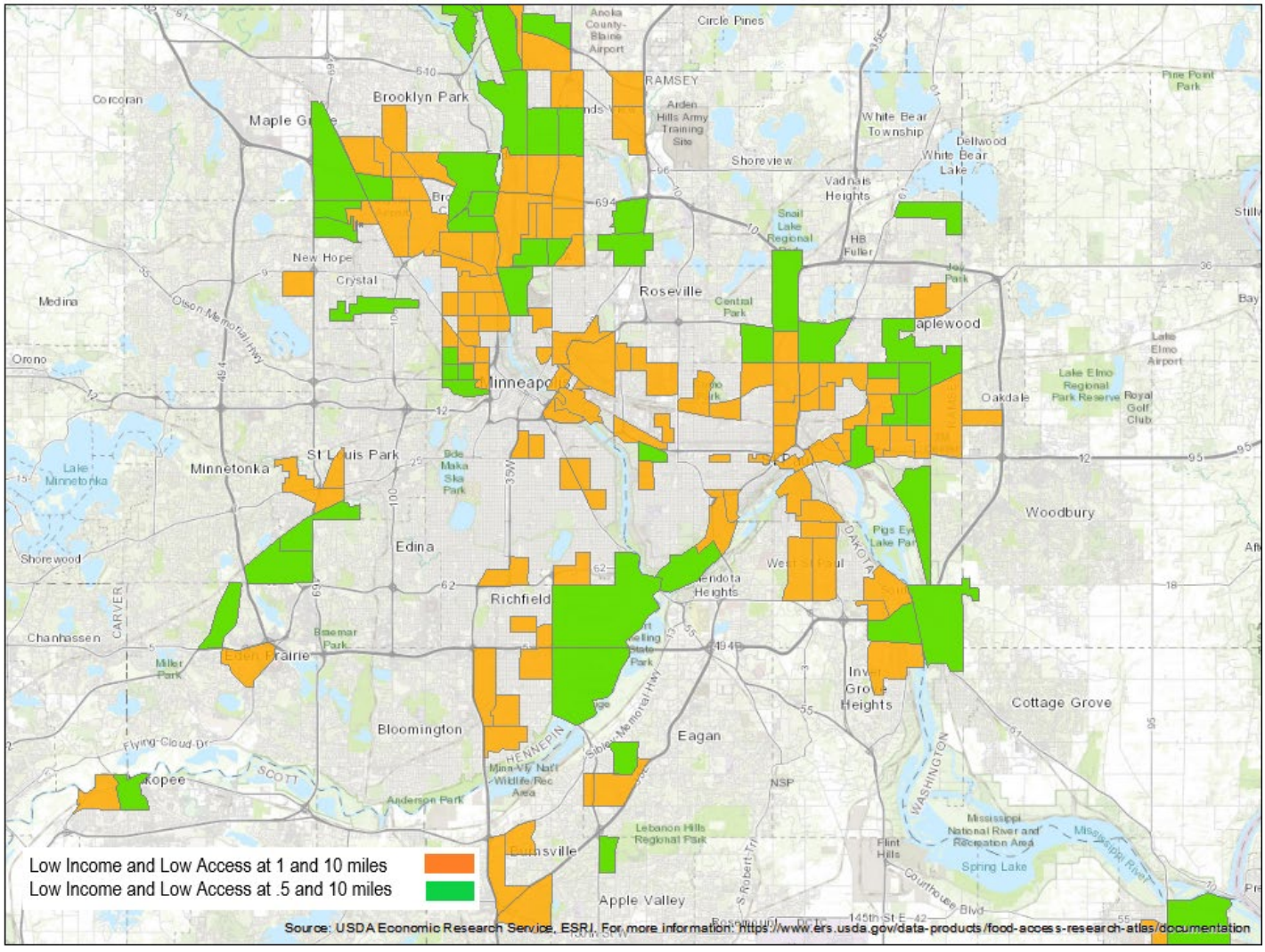
Carlson, E., Giovanelli, A., Chase, R., Spaeth, E., & Aviles, S. (2018). *Minnesota early childhood risk, reach and resilience: Key indicators of early childhood development in Minnesota, county by county*. Wilder Research. https://www.wilder.org/wilder-research/research-library/minnesota-early-childhood-risk-and-reach

Office of the Legislative Auditor. (2018). Early childhood programs: 2018 Evaluation report. https://www.auditor.leg.state.mn.us/ped/pedrep/earlychildhood.pdf

Healthy food

Food deserts are defined by the U.S. Department of Agriculture (USDA) as “low-income census tracts where a significant share of the population is more than 1 mile (urban) or 10 miles (rural) from a supermarket.” This measure only shows areas with low access to supermarkets; the measure assumes that high quality, affordable food is available at all supermarkets and does not capture access to fresh foods available through other types of outlets (e.g., farmers markets or convenience stores that sell high quality fresh produce). Census tracts identified as food deserts using the USDA Food Access Research Atlas are located in Minneapolis and St. Paul; suburban cities including Brooklyn Center, New Hope, South St. Paul and Maplewood; and more rural areas, including areas in Carver and Dakota counties (Figure 22).

22. Twin Cities food access – areas of low income (LI) and low access (LA) (2019)

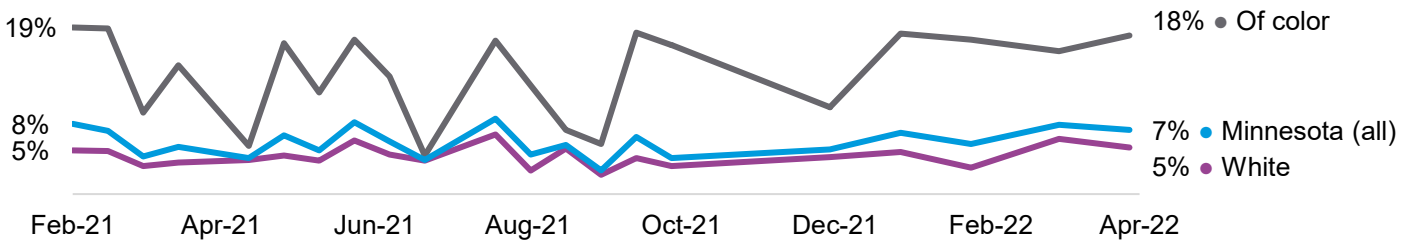


Source. United States Department of Agriculture Economic Research Service, Food Access Research Atlas. www.ers.usda.gov/data-products/food-access-research-atlas.

Food insecurity is of particular concern for young children as it can contribute to a variety of developmental challenges. For infants and toddlers experiencing food insecurity, this may include challenges related to the development of language, motor skills and cognitive functioning.[11] Living in a food desert is just one indicator of food insecurity a family may be experiencing. Families experiencing financial instability are also likely faced with difficult decisions about prioritizing how to meet their family's basic needs such as affording food, housing and transportation. Pre-pandemic, 13% of Hennepin County adults reported that they "sometimes" or "often" worried that food would run out before they had money to buy more.[12] In the CHNA's focal neighborhoods of Phillips/Powderhorn, a higher percentage of adults (24%) reported worrying about being able to afford food. Across Hennepin County, the percentage of adults reporting food insecurity was higher for American Indians (49%), Hispanics (46%) and African Americans (43%), compared to Asians (31%) or White adults (10%) pre-pandemic.

Loss of employment income along with disruptions in supply chains have led to significant challenges around food in many communities during the pandemic. In Minnesota, people of color have been harder hit by food scarcity during the pandemic (18%) as compared to non-Hispanic White people (5%) (Figure 23).

23. Percentage of people in Minnesota experiencing food scarcity



Source. U.S. Census Bureau, Household Pulse Survey.
Note. There is a gap in data between October 12 and November 30, as the Household Pulse Survey transitioned from Phase 3.2 to 3.3.

Health care and insurance

Having health insurance is currently the best way to ensure children have access to the health care services they need to support their growth and development. Services children access through health insurance include well-child check-ups and preventative care, services to address common childhood illnesses, as well as services for more severe conditions when hospitalization is required. Children lacking health coverage are less likely to access the services they need, which can have both short-term impacts, such as school absenteeism, as well as long-term impacts, such as serious illness and disability. [13,14]

---

11 Carlson, E., Giovanelli, A., Chase, R., Spaeth, E., & Aviles, S. (2018). *Minnesota early childhood risk, reach, and resilience: Key indicators of early childhood development in Minnesota, county by county*. Wilder Research. https://www.wilder.org/wilder-research/research-library/minnesota-early-childhood-risk-and-reach

12 Hennepin County Public Health. (2019). *SHAPE 2018 adult data book, survey of the health of all the population and the environment*. shape-databook-2018-v4.pdf (hennepin.us)

13 Artiga, S., & Ubri, P. (2017). *Key issues in children's health coverage* [issue brief]. Kaiser Family Foundation. https://www.kff.org/medicaid/issue-brief/key-issues-in-childrens-health-coverage/

14 Carlson, E., Giovanelli, A., Chase, R., Spaeth, E., & Aviles, S. (2018). *Minnesota early childhood risk, reach, and resilience: Key indicators of early childhood development in Minnesota, county by county*. Wilder Research. https://www.wilder.org/wilder-research/research-library/minnesota-early-childhood-risk-and-reach

The majority of children living in the Twin Cities have health care insurance, but overall disparities in coverage still exist. The percentage of children in Twin Cities metro area counties that lack health care coverage is similar to the state overall (2-3% for both); however, that still means more than 20,000 children in the Twin Cities metro area are without coverage (Figure 24). This relatively low percentage is due in large part to the passage of the Affordable Care Act in 2010. By 2021 Minnesota had reach historically low uninsured rates for the state as a whole (4%). Unfortunately, while rates for White Minnesotans decreased between 2019 and 2021 (3.7% to 2.4%), rates increased for people of color and American Indians (7.6% to 10.2%).[15]

However, just having health care coverage does not take into consideration the quality of the health care plan, children who are covered by high deductible plans, or coverage that includes only the minimum requirements and may have inadequate coverage for their individual health care needs. While health insurance helps many families afford services that support health and well-being, multiple studies, including one conducted by Children's Minnesota on emergency department use, have demonstrated that a number of additional factors also impact access to health care services.

24. Percentage of children (age 6 and under) without health care coverage, by county (2015-2019)

County	% of children
Anoka	2%
Carver	2%
Dakota	2%
Hennepin	3%
Ramsey	2%
Scott	3%
Washington	2%
Minnesota	3%

Source. U.S. Census Bureau, American Community Survey, 2015-2019.

Some residents in Hennepin and Ramsey counties face significant barriers accessing health care. Medically underserved areas (MUAs) are federally designated geographic areas where residents are underserved based on four criteria: ratio of primary care physicians to residents, infant mortality rate, percentage of residents living below the poverty level and the percentage of the population age 65 and over. In the Twin Cities metro area, all medically underserved neighborhoods are located in Hennepin and Ramsey counties: Payne-Phalen, Thomas-Dale, Dayton's Bluff and Summit-Dale neighborhoods in St. Paul and the Phillips, Northeast, Northside and Cedar-Riverside neighborhoods in Minneapolis.[16] Additionally, Northeast and Northside neighborhoods are designated as primary health care professional shortage areas.[17]

The American Indian population in St. Paul is also designated as a medically underserved population (MUP), meaning it is a population with economic, cultural, or linguistic barriers that limit access to primary medical care services.[18] While this designation is one way to identify groups with limited access to health care, additional information from community residents and stakeholders is needed to fully understand what contributes to these difficulties accessing services.

---

15 Minnesota Health Access Survey (2021). https://www.health.state.mn.us/data/economics/hasurvey/index.html

16 Health Resources and Services Administration (HRSA). (n.d.). Quick Maps - Medically Underserved Areas/Populations. https://data.hrsa.gov/maps/quick-maps?config=mapconfig/MUA.json

17 Health Resources and Services Administration (HRSA). (n.d.). Quick Maps - Primary Care Health Professional Shortage Areas. https://data.hrsa.gov/maps/quick-maps?config=mapconfig/HPSAPC.json

18 Health Resources and Services Administration (HRSA). (2019). Medically underserved areas or populations. https://bhw.hrsa.gov/shortage-designation/muap

Children's Minnesota's patient demographics and service data

Children's Minnesota serves children of all ages and from many cultures. While most of the patients served are infants to age 17, Children's Minnesota provides prenatal care and services to some young adults as they complete treatment for specific health issues. English, Spanish and Somali are the most common languages spoken by patients.

In 2021, over 53,000 individual children received emergency department services and over 13,500 were admitted to the hospital. Patient data from the two hospitals combined show that children who receive emergency department services tend to be toddlers and school-age children, while infants are more likely to be admitted to the hospital (Figure 25). A more culturally and socioeconomically diverse patient population received emergency department services than those admitted for inpatient hospital care. Because measures of household income and poverty status are not routinely collected for all patients, this assessment uses enrollment in Medicaid as a proxy measure for lower-income households. More than half of patients who received emergency department (56%) or inpatient (51%) services had Medicaid as their primary source of insurance (Figure 26).

25. Characteristics of patients served in 2021: Hospitals

	Emergency department (N=53,425) [a]		Inpatient hospitalization (N=13,519) [a]	
Demographics	**#**	**%**	**#**	**%**
Age				
<1	9,251	17%	4,755	35%
1-2	7,657	14%	1,368	10%
3-4	9,660	17%	1,424	10%
5-6	6,386	11%	896	7%
7-12	11,752	21%	1,994	15%
13-18	9,606	17%	2,898	21%
19+	1,383	2%	343	3%
Race/ethnicity				
American Indian	513	1%	157	1%
Asian	3,095	6%	726	5%
Black/African American	13,715	26%	2,189	16%
Hispanic/Latino	6,259	12%	862	6%
Native Hawaiian/Pacific Islander	102	<1%	35	<1%
White	19,395	36%	7,219	53%
Other	564	1%	111	1%
More than one race	3,982	7%	1,042	8%
Unknown	1,777	3%	235	2%
Declined	3,702	7%	866	6%

Source. Children's Minnesota (2021).

Note. Due to rounding, totals may not equal 100%. Totals for race/ethnicity exceed 100%, as more than one category may be selected.

[a] Children's Minnesota reports these as the total number of unique patients served. Because of differences in data systems used to gather and

26. Characteristics of patients served in 2021: Hospitals (continued)

Demographics	Emergency department (N=53,425) [a]		Inpatient hospitalization (N=13,519) [a]	
	#	%	#	%
Preferred household language				
English	43,291	81%	12,228	90%
Spanish	4,170	8%	477	4%
Somali	3,338	6%	393	3%
Additional languages [b]	2,728	5%	421	3%
Socioeconomic status				
Proxy: Medicaid as primary insurance	30,322	56%	6,909	51%

Source. Children's Minnesota (2021).

Note. Due to rounding, totals may not equal 100%. Totals for race/ethnicity exceed 100%, as more than one category may be selected.

[a] Children's Minnesota reports these as the total number of unique patients served. Because of differences in data systems used to gather and report patient information the N varies somewhat across the demographic categories.

[b] Additional languages identified (spoken by less than 1% of patients) included: Oromo, Karen, Amharic, Arabic, Nepali and Vietnamese.

Children's primary care clinics located on the Minneapolis and St. Paul campuses reach a more culturally diverse patient population than the hospitals or clinics located in other parts of the Twin Cities metro area. At the Minneapolis campus, 41% of children have a preferred household language other than English, while the same is true for 20% of children at the St. Paul clinic (Figure 27). Over two-thirds of the patients seen at the Minneapolis and St. Paul clinics live in lower-income households, as estimated by enrollment in Medicaid (75% and 66%, respectively) (Figure 28). This is a larger percentage of patients than at the other Children's Minnesota affiliated primary care clinics (13-52%) (Figure 29).

27. Characteristics of patients served in Children's Minnesota primary care clinics in 2021, by campus

Demographics	Minneapolis campus[a]		St. Paul campus[a]	
	#	%	#	%
Age	**12,739**	**100%**	**7,870**	**100%**
<1	1,407	11%	853	11%
1-2	1,174	9%	699	9%
3-4	1,690	13%	931	12%
5-6	1,591	12%	919	12%
7-12	3,584	28%	2,096	27%
13-18	2,864	22%	1,956	25%
19+	429	3%	416	5%

Source. Children's Minnesota (2021).

Note. Totals for race/ethnicity and language may exceed 100%, as more than one category may be selected. All race/ethnicity categories include foreign-born children.

[a] Children's Minnesota reports these as the total number of unique patients served. Because of differences in data systems used to gather and report patient information the N varies somewhat across the demographic categories.

28. Characteristics of patients served in Children's Minnesota primary care clinics in 2021, by campus (continued)

	Minneapolis campus[a]		St. Paul campus[a]	
Demographics	**#**	**%**	**#**	**%**
Race/ethnicity	**11,673**	**100%**	**7,204**	**100%**
African	78	1%	32	<1%
African American/Black	4,916	42%	2,419	34%
American Indian/Alaskan Native	89	1%	63	1%
Asian	179	2%	290	4%
Hispanic/Latino	2,839	24%	1,134	16%
Middle Eastern	9	<1%	3	<1%
Native Hawaiian/Pacific Islander	24	<1%	10	<1%
White	1,981	17%	2,115	29%
Other	324	3%	121	2%
More than one race	525	4%	485	7%
Unknown	210	2%	252	3%
Declined	499	4%	280	4%
Preferred household language	**11,673**	**100%**	**7,204**	**100%**
English	6,909	59%	5,740	80%
Spanish	2,319	20%	749	10%
Somali	2,258	19%	505	7%
Additional languages[b]	187	2%	210	3%
Socioeconomic status	**11,787**	**100%**	**7,265**	**100%**
Proxy: Medicaid as primary insurance	8,800	75%	4,779	66%

Source. Children's Minnesota (2021).

Note. Totals for race/ethnicity and language may exceed 100%, as more than one category may be selected. All race/ethnicity categories include foreign-born children.

[a] Children's Minnesota reports these as the total number of unique patients served. Because of differences in data systems used to gather and report patient information the N varies somewhat across the demographic categories

[b] Additional languages identified (spoken by less than 1% of patients) include: Amharic, Arabic, French, Hmong, Karen and Oromo.

29. Characteristics of patients served in 2021: Primary care clinics in suburban Twin Cities metro area locations

	Children's Minnesota		Partners in Peds				
	Hugo Clinic (N=5,174) [a]	West St. Paul Clinic (N=4,332) [a]	Brooklyn Park (N=8,176) [a]	Calhoun (N=5,663) [a]	Maple Grove (N=18,430) [a]	Plymouth (N=8,023) [a]	Rogers (N=9,258) [a]
Age	**# (%)**	**# (%)**	**# (%)**	**# (%)**	**# (%)**	**# (%)**	**# (%)**
<1	398 (8%)	333 (8%)	744 (9%)	3,519 (9%)	1,821 (10%)	3,707 (9%)	832 (9%)
1-2	434 (8%)	378 (9%)	627 (8%)	446 (8%)	1,707 (9%)	586 (7%)	694 (7%)
3-4	637 (12%)	606 (14%)	935 (11%)	701 (12%)	2,555 (14%)	788 (10%)	1,111 (12%)
5-6	648 (13%)	515 (12%)	935 (11%)	739 (13%)	2,337 (13%)	846 (11%)	1,122 (12%)
7-12	1,493 (29%)	1,148 (27%)	2,215 (27%)	1,681 (30%)	5,052 (27%)	2,135 (27%)	2,688 (29%)
13-18	1,168 (23%)	1,003 (23%)	2,000 (24%)	1,148 (20%)	3,737 (20%)	2,182 (27%)	2,151 (23%)
19+	396 (8%)	349 (8%)	720 (9%)	429 (8%)	1,221 (7%)	779 (10%)	660 (7%)
Race/ethnicity							
American Indian	**	**	**	**	61 (<1%)	20 (<1)	**
Asian	128 (3%)	136 (3%)	892 (12%)	170 (3%)	1,176 (7%)	644 (9%)	171 (2%)
Black/African American	100 (2%)	349 (9%)	1,436 (19%)	508 (10%)	1,187 (7%)	411 (5%)	172 (2%)
Hispanic/Latino	45 (1%)	609 (16%)	187 (3%)	49 (1%)	256 (2%)	100 (1%)	69 (1%)
Native Hawaiian/Pacific Islander	**	**	**	**	**	**	**
White	4,005 (88%)	2,027 (52%)	3,868 (52%)	3,801 (74%)	12,386 (74%)	5,603 (75%)	7,219 (86%)
Other	57 (1%)	128 (3%)	213 (3%)	108 (2%)	315 (2%)	159 (2%)	74 (1%)
Declined	101 (2%)	229 (6%)	278 (4%)	120 (2%)	610 (4%)	244 (3%)	313 (4%)
Unknown	71 (2%)	31 (2%)	175 (2%)	150 (3%)	291 (2%)	114 (2%)	194 (2%)
Socioeconomic status							
Proxy: Medicaid as primary insurance	662 (15%)	2,051 (52%)	2,740 (36%)	890 (17%)	2,968 (18%)	1,002 (13%)	1,127 (13%)

Source. Children's Minnesota (2021).

[a] Children's Minnesota reports these as the total number of unique patients served. Because of differences in data systems used to gather and report patient information the N varies somewhat across the demographic categories.

** = Due to small numbers, reliable, unidentifiable numbers could not be provided.

There are specific Minneapolis and St. Paul neighborhoods, particularly lower-income areas of the two cities, that have a high density of children who receive services from Children's Minnesota. Almost 40% of children in the Phillips neighborhood in Minneapolis received some type of care from Children's Minnesota in 2021. In addition, more than one-third of children received services from Children's Minnesota in the Powderhorn and West Side neighborhoods. About a quarter of children in the Thomas-Dale and Dayton's Bluff neighborhoods received services from Children's Minnesota (Figure 30).

30. Percentage of children served by Children's Minnesota, by Minneapolis and St. Paul neighborhoods

Neighborhood (city)	Number of children (age 0-17) living in the neighborhood (2021)	Number served by Children's Minnesota (2021)	Percentage of population (age 0-17) served (2021)	Percentage of population (age 0-17) served (2018)
Phillips (Minneapolis)	6,367	2,467	39%	40%
Powderhorn (Minneapolis)	11,876	3,978	34%	33%
West Side (St. Paul)	4,599	1,460	32%	28%
Thomas-Dale (St. Paul)	5,049	1,203	24%	26%
Dayton's Bluff (St. Paul)	5,640	1,420	25%	22%

Early childhood, key health indicators

Early childhood is a critical period in a child's healthy development, setting the stage for lifelong learning and long-term health and quality of life. Young children (age 0-5) are generally healthy but are at risk for some conditions, including developmental and behavioral disorders, child maltreatment, asthma and other chronic conditions, obesity, dental cavities and unintentional injuries.[19] This summary presents prenatal indicators, as well as some measures of health and access to resources for young children and their families. It should be noted that there is little information available that describes the family and community strengths that support the health and well-being of young children.

Prenatal and birth indicators

Healthy childhood development begins during pregnancy. A total of 37,501 babies were born in the Twin Cities metro area in 2019. Forty-one percent of these births were in Hennepin County (Figure 31). The birth rate in the Twin Cities metro area is fairly close to the statewide average (11.7 births per 1,000 population). Overall birth rates in Minnesota have declined considerably since the 1960s when it peaked at 26.2 births per 1,000 population; this shift is thought to be largely due to economic changes and cultural shifts such as people waiting longer to become pregnant.[20]

As with many other health indicators, it is important to consider the systemic factors that influence prenatal care and birth outcomes, most fundamentally the effects of structural racism and secondary factors like socioeconomic status. For example, structural racism was found to have increased the risk of adverse birth outcomes for U.S.-born Black Minnesotans compared to Whites in 2017, including pre-term birth, low birthweight and small-for-gestational-age birth, all of which shows up in the population health indicator data that follows.[21]

---

19 Office of Disease Prevention and Health Promotion. (n.d.). *Healthy People 2020: Early and middle childhood*. https://www.healthypeople.gov/2020/topics-objectives/topic/early-and-middle-childhood

20 Minnesota State Demographic Center. (2014). *Minnesota births yet to rebound to pre-recession level*. https://mn.gov/admin/assets/mn-births-yet-to-rebound-to-prerecession-level-popnotes-nov2014_tcm36-219637.pdf

21 Chantarat, T., Van Riper, D. C., & Hardeman. R. R. (2022). Multidimensional structural racism predicts birth outcomes for Black and White Minnesotans. *Health Services Research, 57*(3), 448-457.

31. Births, by county (2019)

County	Number of births	Birth rate (births per 1,000 population)
Anoka	4,186	11.7
Carver	1,162	11.1
Dakota	5,180	12.1
Hennepin	15,430	12.2
Ramsey	7,151	13.0
Scott	1,691	11.3
Washington	2,701	10.3
Minnesota	**66,022**	**11.7**

Source. Minnesota Department of Health (MDH), County Health Tables – Natality. (2019).
https://www.health.state.mn.us/data/mchs/genstats/countytables/MNCountyHealthTables2019.pdf

Prenatal care

Women who do not receive adequate prenatal care are less likely to receive important components of preventive care, such as early identification of health conditions that can impact pregnancy and are more likely to experience poor birth outcomes, such as premature birth or low birth weight.

Across the seven-county Twin Cities metro area, as well as statewide, close to 80% of women receive prenatal care. Compared to 2010, some counties have shown a slight decrease in prenatal care during their first trimester (Figure 32). Prenatal care provided by doulas may not be tracked and included in this indicator and may account for at least some of the decreases in percentages.

32. Percentage of women who received prenatal care in the first trimester, by county

County	2010	2014	2019
Anoka	87%	84%	86%
Carver	93%	86%	84%
Dakota	86%	84%	83%
Hennepin	87%	79%	79%
Ramsey	76%	74%	78%
Scott	90%	85%	84%
Washington	91%	88%	86%
Minnesota	**86%**	**82%**	**79%**

Source. Minnesota Department of Health (MDH), County Health Tables – Natality. (2019).
https://www.health.state.mn.us/data/mchs/genstats/countytables/MNCountyHealthTables2019.pdf.

As of 2017, the method used to determine the adequacy of prenatal care significantly changed, resulting in an inability to compare previous year's data with that from 2017 onward.[22] The Adequacy of Prenatal Care (APNCU)

[22] The method changed from the GINDEX to the Kotelchuck's Adequacy of Prenatal Care Utilization (APNCU) in keeping with the standards of national reporting. The APNCU results in a different distribution of the adequacy of prenatal care.

measure defines adequate prenatal care as being initiated during the first four months of pregnancy and 80% or more of expected visits are attended for the remaining months of pregnancy. American Indian mothers have the highest percentage of inadequate prenatal care (29%), followed by Black mothers (18%) (Figure 33). Barriers that reduce accessibility of health care services or services provided by doulas may be contributing factors to these disparities.

33. Inadequate prenatal care among mothers in Minnesota, by race/ethnicity

Race/ethnicity of mother	2019
American Indian	29%
Black	18%
Hispanic/Latino	16%
Asian	12%
White	5%

Source. 2019 Minnesota Health Statistics Annual Summary. https://www.health.state.mn.us/data/mchs/genstats/annsum/AnnSum2019.pdf.
Note. Adequacy is determined using the Adequacy of Prenatal Care Utilization (APNCU) Index and is not comparable to GINDEX Index used in previous years.

Smoking during pregnancy

Smoking while pregnant increases the risk of infant morbidity and mortality.[23] Twin Cities metro area counties have lower proportions of people who smoke while pregnant than the state average (7%; Figure 34). Anoka has the highest percentage of prenatal smoking in the metro at 6%; however, this is still much lower than counties such as Aikin, Beltrami, Cass, Clearwater, Mahnomen, Mille Lacs and Pine that have the highest rates in the state at 24-42%.

34. Percentage of women who smoked during pregnancy, by county

County	2019
Anoka	6%
Carver	2%
Dakota	4%
Hennepin	3%
Ramsey	5%
Scott	4%
Washington	4%
Minnesota	**7%**

Source. Minnesota Department of Health (MDH), County Health Tables – Natality.
https://www.health.state.mn.us/data/mchs/genstats/countytables/MNCountyHealthTables2019.pdf.

Maternal drug and alcohol use during pregnancy can negatively impact the physical, mental, behavioral and academic development of young children. Alcohol is the substance known to have the most negative neurobehavioral

[23] Minnesota Department of Health. (2015). *Infant mortality reduction plan for Minnesota*. https://www.health.state.mn.us/docs/people/womeninfants/infantmort/infantmortality.pdf

effects on a developing fetus.[24] While the majority of women in Minnesota do not drink alcohol while pregnant, 8% of pregnant Minnesotan women reported they drank alcohol in the final 3 months of pregnancy.[25] The percentage of women who drink during the first trimester (before they may even be aware they are pregnant) is likely much higher, as 55% of pregnant Minnesotan women reported they drank alcohol in the three months before pregnancy. Alcohol consumption during pregnancy leads to an estimated 8,500 Minnesota infants born each year with prenatal alcohol exposure and 3,400 babies who will live with a fetal alcohol substance disorder.[26]

The opioid epidemic continues to create concern about Neonatal Abstinence Syndrome (NAS) in Minnesota. In Minnesota, NAS is present in about 10 per 1,000 births.

Adverse birth outcomes

Low birthweight babies weigh less than 2,500 grams (approximately 5 ½ pounds) at birth. These babies are at greater risk for health problems, particularly during their first year of life and are more likely to have developmental complications, which can lead to longer-term difficulties with school performance and other outcomes. Teen mothers, especially those younger than 15 and mothers in poorer health are more likely to give birth to a low birthweight baby, but any premature birth can result in low birth weight.

In 2019, about 4,500 infants were born at low birthweight in Minnesota. Higher proportions of women of color, especially African American women (11%), had low-weight births, compared to White, non-Hispanic women (6%; Figure 35).

35. Low-weight births in Minnesota, by race/ethnicity (2019)

Race/ethnicity of mother	Total births	Percentage of low-weight births (all births)
African American/Black	8,840	11%
Asian/Pacific Islander	5,407	9%
American Indian	1,120	8%
Hispanic/Latino	4,989	7%
White, non-Hispanic	45,404	6%

Source. 2019 Minnesota Health Statistics Annual Summary. https://www.health.state.mn.us/data/mchs/genstats/annsum/AnnSum2019.pdf.There are a number of factors associated with infant mortality (defined as the death of an infant less than one year of age), including low birthweight, preterm birth, lack of adequate prenatal care, mother's substance use and access to care. There has been a steady decrease in the rate of infant deaths over time in Minnesota and across all Twin Cities metro area counties (Figure 36). Ideally, no infant deaths should occur. Healthy People 2020 established a national goal to reduce the number of infant deaths to no more than 6 per 1,000 births; all counties now meet this national benchmark, except for Ramsey County which fell slightly short of this target.

[24] Proof Alliance. (2019). *Impact of alcohol and illicit drugs during pregnancy*. https://www.proofalliance.org/2014/05/impact-of-alcohol-tobacco-and-illicit-drugs-on-women/

[25] PRAMS. Prevalence of Selected Maternal and Child Health Indicators for Minnesota, Pregnancy Risk Assessment Monitoring System (PRAMS), 2012-2015. https://www.cdc.gov/prams/pramstat/pdfs/mch-indicators/Minnesota-508.pdf

[26] Proof Alliance. (2019). *How many people have an FASD?* https://www.proofalliance.org/2014/06/how-many-people-have-an-fasd/

36. Infant deaths, by county

County	Infant mortality rate (deaths per 1,000 births) 2014-2018	Number of infant deaths 2014-2018
Anoka	3.9	82
Carver	4.1	24
Dakota	4.4	114
Hennepin	4.8	394
Ramsey	6.5	252
Scott	3.4	31
Washington	4.5	63
Minnesota	**5.0**	**1,690**

Source. Minnesota Department of Health (MDH), MN Public Health Data Access Portal.
https://data.web.health.state.mn.us/web/mndata/birthoutcomes

Infant mortality rates are higher than the Healthy People Goal of 6.0 for American Indian, Black and Asian infants. Disparities in infant mortality continue for some cultural groups in Minnesota (Figure 37). Disparities in some of the factors that support a healthy pregnancy (e.g., access to adequate prenatal care), as well as social determinants of health (e.g., poverty), likely contribute to racial disparities in infant mortality rates.

37. Infant mortality rates (per 1,000 live births) by race/ethnicity of mother, Minnesota (2014-2018)

Race/ethnicity	Neonatal mortality	Post-neonatal mortality	Total infant mortality
American Indian, non-Hispanic	4.9	5.6	10.5
Asian, non-Hispanic	5.0	1.2	6.3
Black, non-Hispanic	6.2	2.8	9.0
Hispanic/Latino, any race	3.7	1.4	5.2
White, non-Hispanic	2.6	1.2	3.9
Another race/unknown	9.7	**	13.3
Healthy People 2030 Goal	**4.1**	**2.0**	**6.0**

Source. Minnesota Department of Health (MDH), MN Public Health Data Access Portal (2014-18).
Note. Neonatal mortality is the death of a live-born infant within the first 27 days of life. The leading causes of neonatal death are disorders related to premature birth and low birth weight. Postneonatal mortality is the death of a live-born infant from the infant's 28th day of life to one year of age. These deaths reflect events in infancy and are more likely to reflect social or environmental factors.

Early childhood indicators

There are multiple systems and supports in place to help parents and caregivers support the health and well-being of young children (age 0-5). Regular pediatric appointments are recommended for young children to screen for potential health concerns and to receive preventive care, including vaccinations. These early visits with providers are opportunities to screen for developmental concerns and for caregivers to learn information about how to support their child's health and development. There are also a number of public programs in place that help caregivers with lower income levels access resources to support the development of young children. However, there are relatively few sources of information in place that describe the health and wellness of young children, particularly the family strengths and community assets in place that support their health and overall development. This section of the summary includes measures of early childhood health before focusing on various social determinants of health that can influence health and wellness.

Immunizations

The World Health Organization declared "vaccine hesitancy," the delay in acceptance or refusal of vaccines despite availability of vaccination services, as one of the 10 threats to global health in 2019.[27] Wadena and Renville counties in Minnesota have been identified as having higher rates of parents opting for "nonmedical" exemptions for school-required vaccinations. In February 2019, a bill was introduced in Minnesota that would provide funding for outreach to groups with lower vaccination rates to educate them on the benefits of vaccines.[28]

Sixty-nine percent of young children in Minnesota completed the recommended childhood immunization series in 2019 (Figure 38). The Minnesota Department of Health recommends that children receive vaccinations before age 3 to prevent a range of diseases. Although the percentage of young children across the Twin Cities metro area who complete the recommended childhood series has increased since 2016, Minnesota has not met the Healthy People 2020 goals for completing the recommended childhood series (80% of children) by age 3.[29] Additionally, Dakota, Hennepin and Ramsey counties fall below the state percentage of children with a complete childhood series. Immunizations may be missed if children have difficulty accessing health care services or if caregivers refuse vaccinations for their child.

38. Young children (age 24-35 months) with complete childhood series, by county

County	2016	2017	2018	2019
Anoka	58%	58%	70%	73%
Carver	43%	63%	71%	75%
Dakota	62%	60%	65%	68%
Hennepin	53%	53%	64%	68%
Ramsey	54%	55%	64%	63%
Scott	63%	52%	60%	69%
Washington	67%	64%	75%	77%
Minnesota	**60%**	**61%**	**68%**	**69%**

Source. Minnesota Department of Health (MDH), MN Public Health Data Access Portal. https://data.web.health.state.mn.us/immunization_basic.
Note. Childhood Series includes: Diphtheria, tetanus, pertussis (DTaP); Polio; Measles, mumps, rubella (MMR); *Haemophilus influenzae* type b (Hib), Hepatitis B (Hep B), Varicella (chickenpox) and Pneumococcal conjugate vaccine (PCV).

[27] World Health Organization. (2019). *Ten threats to global health in 2019*. https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019

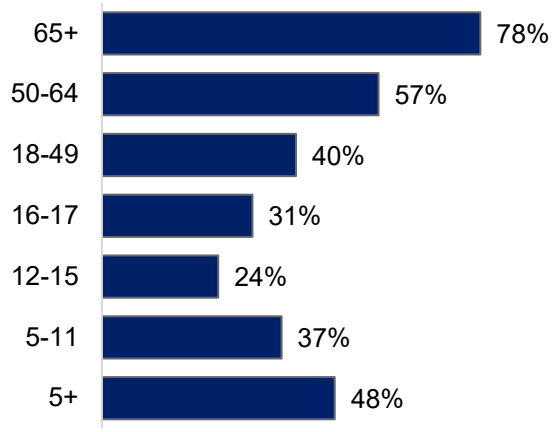
[28] Editorial Board. (2019, February 19). *Minnesota bill would counter dangerous vaccine disinformation* [Editorial]. *Star Tribune*. http://www.startribune.com/minnesota-bill-would-counter-dangerous-vaccine-disinformation/506067652/

[29] Office of Disease Prevention and Health Promotion (2022). https://www.healthypeople.gov/2020/data-search/midcourse-review/lhi.

With lower vaccination rates, there is greater risk for a resurgence of preventable illness. The Minnesota Department of Health reported there were a total of 49 reported measles cases in 2021, which was up from 13 in 2020 (but significantly lower than 1,282 cases in 2019).[30] In 2017, there was a measles outbreak connected with the Somali-American community in Minnesota. Public health officials attributed the outbreak to a steep decrease in vaccination rates within this community due to "anti-vaccine" efforts (92% vaccination rate in 2004 versus 42% in 2014).[31] It is important to note there has also been an emerging trend nationally of affluent, White parents choosing not to vaccinate.[32]

Children age 5 and up became eligible to receive the COVID-19 vaccine on October 29, 2021. As of May 2022, 37% of children age 5 through 11 had received the vaccine (Figure 39).

39. Minnesotans age 5+ who have a completed COVID-19 vaccine series (as of 5/19/22), by age



Source. State of Minnesota, Minnesota Covid-19 Response, Vaccine Data. Retrieved May 19, 2022 from: https://mn.gov/covid19/data/covid-dashboard/index.jsp.

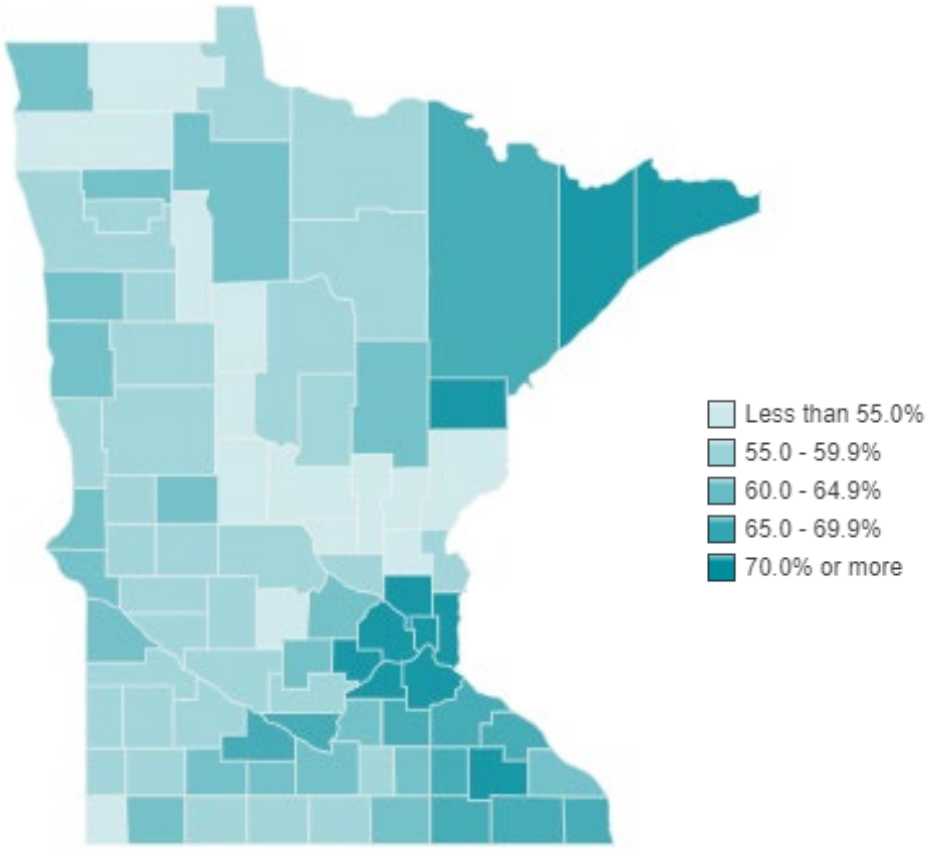
30 Minnesota Department of Health (2022). *Measles cases and outbreaks*. https://www.cdc.gov/measles/cases-outbreaks.html

31 Sum, L. H. (2017, August 21). Despite measles outbreak, anti-vaccine activists in Minnesota refuse to back down. *The Washington Post*. https://www.washingtonpost.com/national/health-science/despite-measles-outbreak-anti-vaccine-activists-in-minnesota-refuse-to-back-down/2017/08/21/886cca3e-820a-11e7-ab27-1a21a8e006ab_story.html?noredirect=on&utm_term=.199ab2ff70ce

32 Bach, B. (2015, November 20). *California vaccination exemptions tend to cluster in White, affluent communities*. Stanford Medicine. https://med.stanford.edu/news/all-news/2015/11/vaccination-exemptions-cluster-in-white-affluent-communities.html

The percentage of people who completed the COVID-19 vaccine series varies by county. In the seven-county Twin Cities metro area, more than 70% of individuals age 5 and above have completed the series. Vaccine completion varies in surrounding counties (Figure 40).

40. People age 5+ who have a completed COVID-19 vaccine series (as of 4/20/22), by county

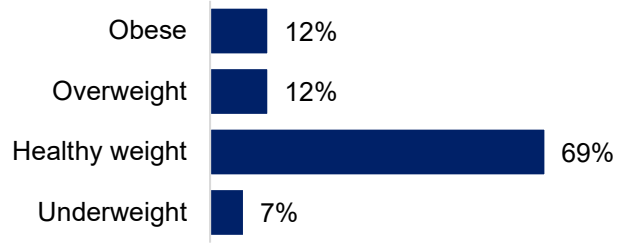


Source. State of Minnesota, Minnesota Covid-19 Response, Vaccine Data. Retrieved May 19, 2022 from: https://mn.gov/covid19/data/covid-dashboard/index.jsp.

Obesity

While there is not a source of data to determine obesity rates for all children in the Twin Cities metro area, the National Survey of Children's Health reported that 12% of Minnesota children (age 10-17) were considered obese; this is significantly lower than the national rate (16%).[33] Another 12% of children (age 10-17) were considered overweight, while 7% were considered underweight (Figure 41).

41. Body weight status of youth age 10-17 in Minnesota (2019-2020 combined)



Source. Child and Adolescent Health Measurement Initiative. 2019-2020 National Survey of Children's Health (NSCH) data query. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). Retrieved March 2022 from https://www.childhealthdata.org/browse/survey.

The federal Healthy People 2020 initiative has specific goals for weight status among children and youth. For children 2 to 5 years old, the Healthy People 2020 goal is to reduce the proportion of children considered obese to 9%. As seen in Figure 42 below, only Carver County (6%) met that goal in 2019. Ramsey and Washington counties had the highest proportion of WIC-enrolled children who are obese (13%), followed by Anoka, Hennepin and Dakota counties (12%). Overall, childhood obesity has remained consistent with no notable upward or downwards trends (Figures 42 and 43). (Obesity information is gathered consistently for children enrolled in the Women, Infant and Child (WIC) program, which helps lower-income children and families have better access to healthy foods and nutrition information.)

42. Obesity among WIC-enrolled children (age 2-5), by county

County	2014	2015	2016	2017	2018	2019
Anoka	11%	10%	11%	10%	11%	12%
Carver	5%	7%	7%	8%	7%	6%
Dakota	12%	12%	12%	12%	11%	12%
Hennepin	12%	12%	13%	13%	13%	12%
Ramsey	14%	12%	13%	14%	13%	13%
Scott	10%	10%	9%	8%	9%	11%
Washington	12%	11%	11%	14%	12%	13%
Minnesota	13%	12%	13%	13%	13%	13%

Source. Minnesota WIC Information System. Weight Status in Minnesota WIC Children Ages 2 to 5 Years by County of Residence during Calendar Years 2012-2019. Minnesota WIC Program. 2019. https://www.health.state.mn.us/docs/people/wic/localagency/reports/wtstatus/annual/childcounty.pdf.

[33] State of Childhood Obesity (October 2021). https://stateofchildhoodobesity.org/children1017/#:~:text=The%20data%2C%20from%20the%20National,10%20to%2017%20had%20obesity

43. Obesity among WIC-enrolled children (age 2-5) in Minnesota over time

Source. Minnesota WIC Information System. (2019). *Minnesota WIC Health Indicators Summary.* Minnesota WIC Program.

Lead exposure

Lead exposure of any type is dangerous for young children and elevated blood lead levels (EBLLs) are linked with learning problems, behavioral problems and death (in cases of very high levels). Younger children are at greater risk of these health problems because their brains are still developing and their bodies can absorb lead more easily. In Minnesota, Child and Teen Checkup providers are required to screen blood lead levels in children at 12 and 24 months of age.[34] According to the Minnesota Department of Health (MDH) "lead testing is not universal in Minnesota" and children with risk factors (such as older housing or poverty status) are targeted for testing. 2017 MDH data show that 81% of children in Minnesota had received blood lead testing by 3 years of age. The rate of children being tested has increased dramatically over the past two decades. In the Twin Cities metro area, it rose from 42% in 2000 to 87% in 2017.[35]

Each year, nearly 700 Minnesota children have EBLLs. Children who live in homes built before 1978 are most at risk due to the likelihood these homes have lead-based paint.[36] Compared to other areas of the state, the Minneapolis/St. Paul area has the highest percentage of young children with elevated blood lead levels, although it has been trending downward over time (Figure 44).

44. Percentage of children (age 6 and under) with elevated blood lead levels (EBLLs), by region

Year	Minnesota	Minneapolis/ St. Paul	Metro excluding Minneapolis/ St. Paul	Greater Minnesota
2011	1.0%	2.8%	0.5%	0.6%
2012	1.2%	3.3%	0.5%	0.8%
2013	1.0%	2.4%	0.5%	0.7%
2014	0.8%	1.9%	0.4%	0.7%
2015	0.9%	2.0%	0.4%	0.9%
2016	1.0%	2.4%	0.5%	0.8%
2017	0.8%	1.9%	0.4%	0.8%
2018	0.8%	1.7%	0.4%	0.8%
2019	0.7%	1.4%	0.3%	0.8%

Source. Minnesota Department of Health (MDH), MN Public Health Data Access Portal. (2011-19).
https://data.web.health.state.mn.us/web/mndata/lead_annual_level#byregion

Note. The definition of an elevated blood lead level recently changed from 10 to 5 mcg/dL (micrograms of lead per deciliter of blood). The reference level was lowered in 2011 to identify children with levels much higher than most children.

[34] Minnesota Department of Health. (2022). Blood Lead Level Guidelines. https://www.health.state.mn.us/communities/environment/lead/prof/guidelines.html

[35] Minnesota Department of Health. (2017). *Children tested in Minnesota.* https://data.web.health.state.mn.us/lead_testing

[36] Minnesota Department of Health. (n.d.). *Childhood lead exposure.* https://data.web.health.state.mn.us/web/mndata/lead

Child welfare system

There is a growing understanding that negative experiences in childhood have implications for both child and adult health outcomes. Adverse childhood experiences, or ACEs, refer to a set of issues including abuse, neglect, caregiver mental illness, caregiver incarceration and divorce that studies have shown to have long-term negative impacts on health.[37] While there are not sources of data available that describe the number of young children currently impacted by these events in most areas, child maltreatment and foster care records are available for this young age group. (See the "School-age youth key health indicators" section for additional information on ACEs in older children, including disparities.)

Child maltreatment can include physical, emotional and sexual abuse, as well as neglect by a parent or caregiver. Children under age 5 are more likely to experience neglect than older children and are at greatest risk for injury and death from abuse. Maltreatment reports by county include both family investigations and assessments,[38] as well as facility investigations. The rate of maltreatment reports involving young children in 2016 was highest in Hennepin (44 per 1,000 children) and Ramsey (30 per 1,000 children) counties (Figure 45). Rates have increased across metro-area counties and statewide. This increase likely reflects both an actual change in rates of maltreatment (e.g., drug-related maltreatment reports have increased since 2013, especially in the number of reports related to chronic parental drug use in the seven-county Twin Cities metro area) and changes in required reporting (e.g., a 2015 law requires local agencies to follow revised screening and reporting guidelines).[39]

45. Rate of young children (age 0-5) with filed maltreatment report during the past year (per 1,000 children), by county

County	2013	2016
Anoka	14	22
Carver	18	24
Dakota	15	21
Hennepin	28	44
Ramsey	17	30
Scott	19	23
Washington	13	23
Minnesota	**25**	**39**

Source. Carlson, E., Giovanelli, A., Chase, R., Spaeth, E., & Aviles, S. (2018). *Minnesota early childhood risk, reach and resilience: Key indicators of early childhood development in Minnesota, county by county*. Wilder Research. https://www.wilder.org/wilder-research/research-library/minnesota-early-childhood-risk-and-reach.

[37] For more information about ACEs and their impacts in Minnesota, see the Minnesota Department of Health website: http://www.health.state.mn.us/divs/cfh/program/ace/

[38] A family assessment is completed when social services staff accept a report about a child's safety, but there are not threats of immediate and serious harm. A family investigation is completed by social services when a child is in immediate or severe danger or when a family refuses to work with social services staff to ensure a child is safe.

[39] Minnesota Department of Human Services. (2018). *Minnesota's child maltreatment report, 2017*. https://www.leg.state.mn.us/docs/2018/mandated/181110.pdf

Where there are significant concerns about the child's safety or the ability of the family to meet the child's needs, children may be temporarily placed in foster care. The removal of a child from their caregiver and home, as well as the instability of placements after a child enters the child welfare system, can be very stressful for children, lead to gaps in care and exacerbate existing health and mental health conditions. In the Twin Cities metro area, the rate of foster care placement for young children was higher in both Hennepin and Ramsey counties (11.0 per 1,000) than other counties, although lower than all of Minnesota (12.5 per 1,000; Figure 46). Overall, rates for foster care placements have increased since 2013 (with the exception of Carver County). The reasons for this increase in Minnesota foster care placements are in part due to increased parental substance use, leading to more children in need of foster care.[40] Additionally, the median length of time children are staying in out-of-home care has increased. This is largely because the cases for children who are removed due to parental substance use typically take longer to reach permanency as parents work through recovery issues.[41]

46. Rate of young children (age 6 and under) in foster care placements (per 1,000 children), by county

County	2013	2016
Anoka	5.7	6.0
Carver	3.8	3.5
Dakota	2.6	4.1
Hennepin	7.5	11.0
Ramsey	8.8	11.0
Scott	1.4	3.4
Washington	2.1	3.9
Minnesota	**8.3**	**12.5**

Source. Carlson, E., Giovanelli, A., Chase, R., Spaeth, E., & Aviles, S. (2018). *Minnesota early childhood risk, reach and resilience: Key indicators of early childhood development in Minnesota, county by county*. Wilder Research. https://www.wilder.org/wilder-research/research-library/minnesota-early-childhood-risk-and-reach.

Early childhood education

Access to high quality early education is critical to the academic success of students. A recent study reviewing decades of research on early childhood education found that, compared to children who did not access those programs, children who participated in early childhood education had fewer special education placements, decreased grade retention and improved high school graduation rates.[42] In Minnesota, Early Head Start, Head Start, Early Childhood Family Education, Child Care Assistance Program, Early Learning Scholarships, Child Care Assistance Program Voluntary Pre-K and School Readiness are some of the public programs available to help young children access high-quality early learning programs and develop skills to be successful in school.

[40] Minnesota Department of Human Services. (2018). *Minnesota's out-of-home care and permanency report, 2017*. https://www.leg.state.mn.us/docs/2018/mandated/181111.pdf

[41] Minnesota Department of Human Services. (2018). *Minnesota's out-of-home care and permanency report, 2017*. https://www.leg.state.mn.us/docs/2018/mandated/181111.pdf

[42] McCoy, D. C., Yoshikawa, H., Ziol-Guest, K. M., Duncan, G. J., Schindler, H. S. Magnuson, K., Yang, R., Koepp, A., & Shonkoff, J. P. (2017). Impacts of early childhood education on medium- and long-term educational outcomes. *Educational Researcher*, *46* (8), 474-487.

School-age youth, key health indicators

This section describes the health needs and priorities for school-age children and adolescents, age 6 to 18, living in the seven-county Twin Cities metro area. The information cited includes the most recent data available, broken out in as much detail as possible (e.g., most local geography available, most detailed race/ethnicity categories). Health disparities observable through these available data sources are noted throughout.

Education

There is a strong association between education and health. Adults with higher levels of education tend to have lower rates of most acute and chronic illnesses and have higher levels of functioning as they age. There are multiple factors that contribute to this relationship: people with higher levels of education are more likely to have higher-paying jobs; less likely to live in poverty; and less likely to smoke, drink heavily, or be overweight or obese (all factors that contribute to chronic disease). The COVID-19 pandemic has had a drastic impact on educational systems and related outcomes for children and youth. As stated in the introduction, most of the data in this report represent a pre-pandemic landscape; however, it is important to note that major shifts in academic practice will influence educational outcomes for years to come.

Because of the pandemic, most Minnesota schools (including all St. Paul and Minneapolis public schools) closed in mid-March 2020 and pivoted to distance learning. Many remained in distance learning through the middle of the next academic year (20-21), meaning that children and youth had to navigate their education virtually for about nine months, possibly without consistent adult support (e.g., parents and caregivers having to work) or resources (e.g., high-speed Internet). In addition, the Minnesota Department of Education used a federal waiver to cancel the Minnesota Comprehensive Assessments (MCA) in the 20-21 academic year, so typical student data, such as reading and math scores, are unavailable for that year of the pandemic. While COVID-19 undoubtedly exacerbated existing health disparities, the lack of available current data makes it challenging to assess the full impact of the pandemic on school-age youth.

High school graduation

Academic data have consistently shown an achievement gap between White students and students of color, which has persisted over time. Graduating from high school is an important step that supports overall health and wellness into adulthood. However, there are notable disparities in on-time graduation, particularly in Minneapolis Public Schools (MPS) and St. Paul Public Schools (SPPS), the districts where Children's Minnesota's two hospital campuses are located. Graduation rates for MPS (74%) and SPPS (76%) students are lower than the statewide average overall (83%; Figure 47) and there are large differences in graduation rates by race. While graduation rates have improved over time for all racial groups (from 2012 to 2020; Figure 48), there are deeply rooted, historical inequities in the education system that will require large systems changes to fix. Additionally, the recent pandemic has exacerbated these inequities.

47. Graduation rates by race/ethnicity, statewide and selected districts (2021)

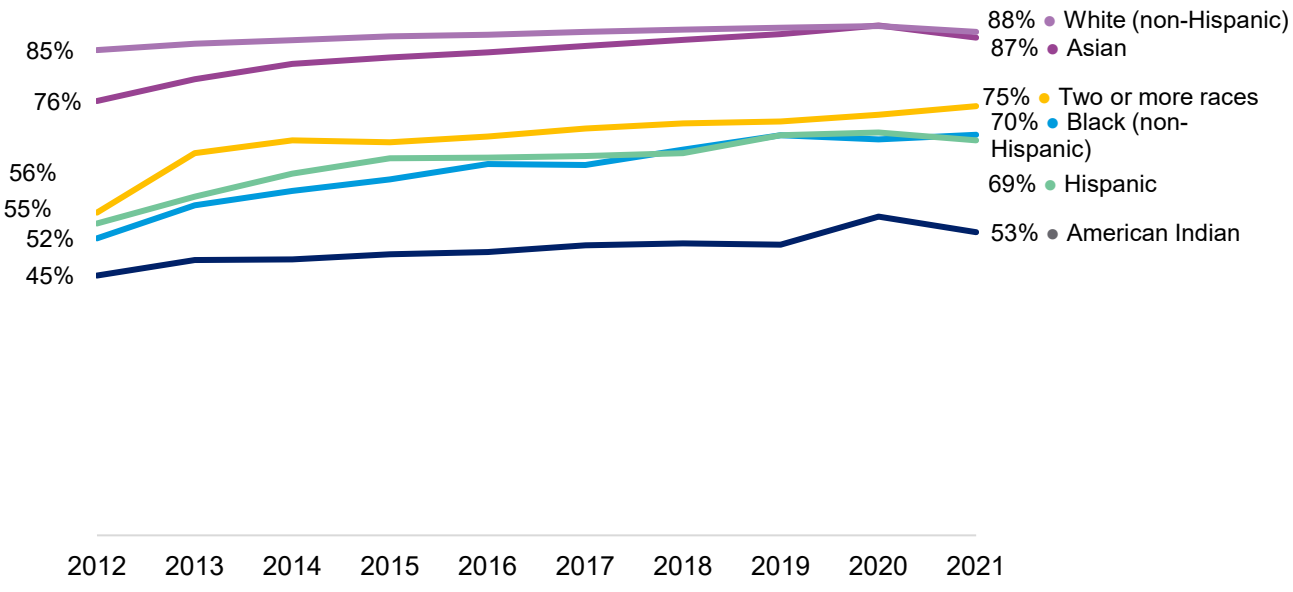
Race/Ethnicity	Minnesota	Minneapolis Public Schools	St. Paul Public Schools
American Indian/Alaskan Native	53%	47%	44%
Asian	87%	86%	82%
Black, not of Hispanic origin	70%	68%	65%
Hispanic	69%	60%	65%
Two or more races[a]	75%	62%	75%
White, not of Hispanic origin	88%	89%	87%
All students	**83%**	**74%**	**76%**

Source. Minnesota Department of Education. Retrieved from the Minnesota Department of Education data center: https://public.education.mn.gov/MDEAnalytics/Data.jsp.

Note. This high-level reporting cannot capture successful efforts of schools within each county to reduce this educational disparity.

[a] Does not include Native Hawaiian or Pacific Islander

48. Statewide trends in graduation, by race/ethnicity



Source. Minnesota Department of Education. Retrieved from the Minnesota Department of Education data center: https://public.education.mn.gov/MDEAnalytics/Data.jsp.

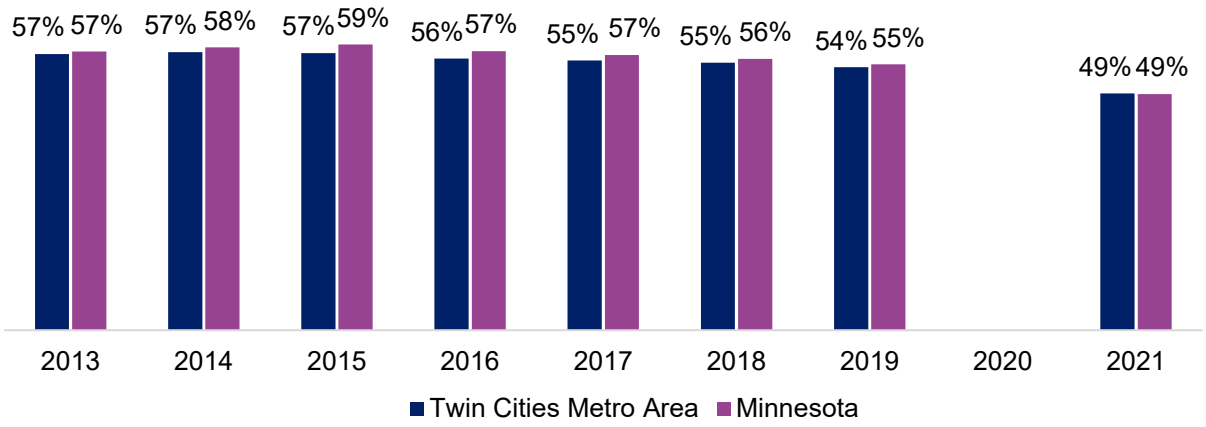
There are a number of factors, both within and extending beyond schools, that contribute to racial disparities in academic achievement. A report prepared by the Minnesota Education Equity Partnership calls out the need to address broader issues of "segregation and integration, intersections of race and economic class and White dominance in K-12 and teacher education" to understand and change the opportunity gaps that impact students and families.[43]

While the COVID-19 pandemic affected many aspects of education, high school graduation rates by race and ethnicity in 2021 are similar to graduation rates in 2020 (Figure 49).

Test scores

While standardized testing has its limitations, test scores can be predictive of future outcomes, such as college attendance, adult earnings and health.[44,45] According to the most recent data available, there was a decrease in student test scores between 2019 and 2021, suggesting that the pandemic affected student learning and achievement. (Minnesota did not administer standardized tests during the 2020 school year.) Specifically, the percentage of 3rd and 8th grade students meeting reading and math standards, respectively, fell both in the Twin Cities and in the state overall (Figures 49 and 50).

49. Percentage of 3rd grade students achieving reading standards



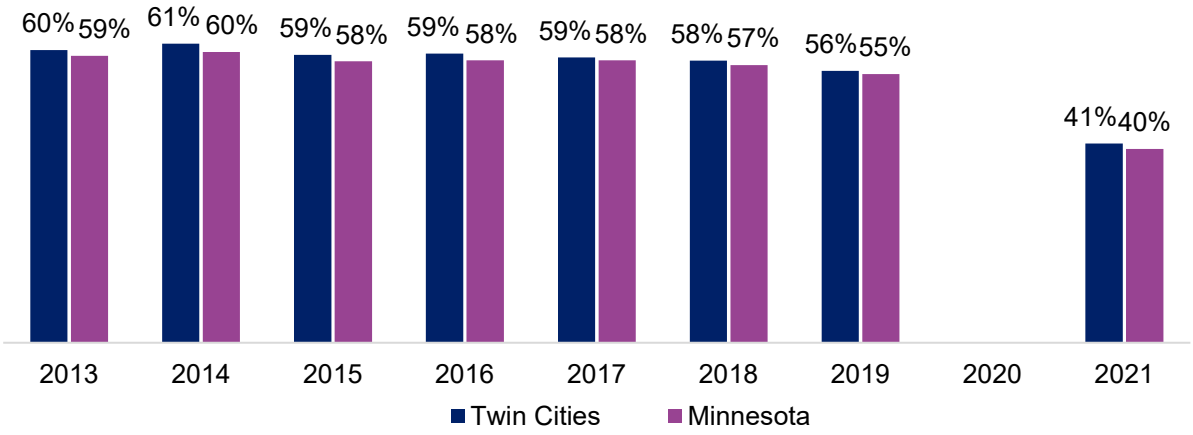
Source. Minnesota Department of Education, Minnesota Comprehensive Assessment. https://education.mn.gov/MDE/Data/.
Note. MCA tests were not administered in 2020.

[43] Hamilton, J. L., Spies, P., Godinez, J., & Mariani, C. (2016). *State of students of color and American Indian students report*. http://mneep.org/wp-content/uploads/2016/04/SOSOCAI-Report-2016.pdf

[44] Chetty, R., Friedman, J. N., & Rockoff, J. E. (2014). Measuring the impacts of teachers II: Teacher value-added and student outcomes in adulthood. *American economic review*, *104*(9), 2633-79.

[45] Goldhaber, D., & Özek, U. (2019). How much should we rely on student test achievement as a measure of success?. *Educational Researcher*, *48*(7), 479-483.

50. Percentage of 8th grade students achieving math standards

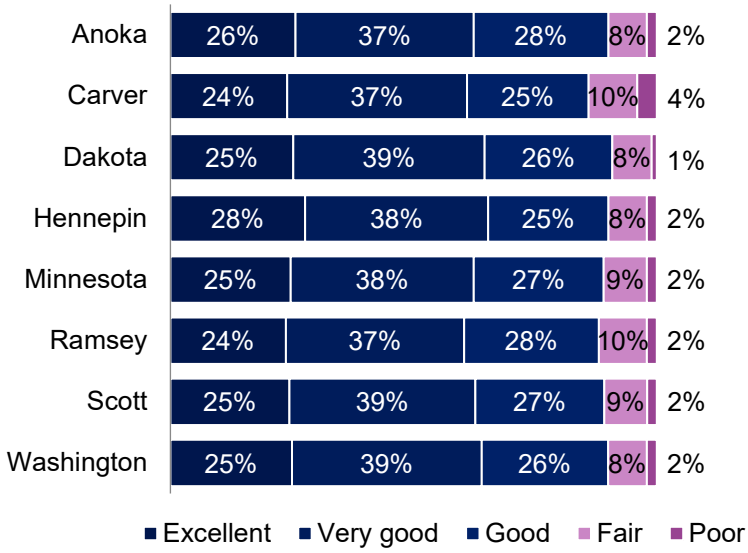


Source. Minnesota Department of Education, Minnesota Comprehensive Assessment. https://education.mn.gov/MDE/Data/.
Note. MCA tests were not administered in 2020.

Overall health and well-being

Over 60% of ninth grade students in each of the Twin Cities metro counties rate their overall health as "very good" or "excellent" (Figure 51). Overall health ratings are similar across the seven-county Twin Cities metro area (61%-66% across counties said "very good" or "excellent") and are comparable to the statewide average (63%). Self-reported health status is considered a good indicator of actual overall health and well-being.

51. Self-reported overall health of ninth graders, by county (2019)

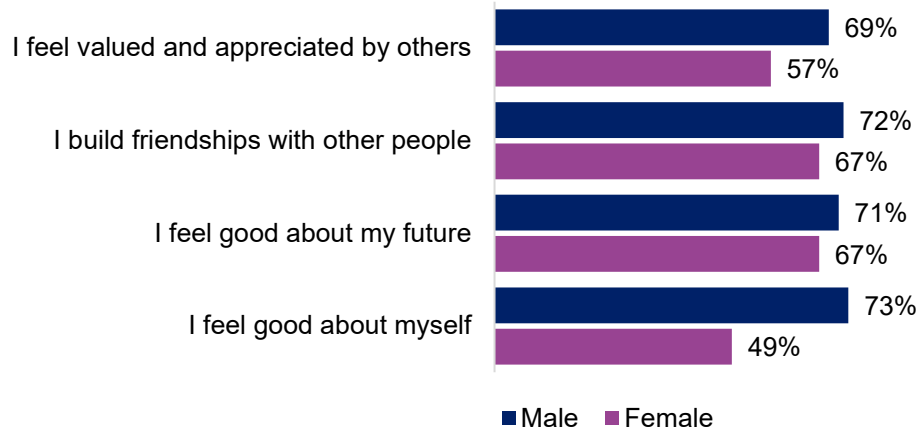


Source. Minnesota Student Survey, 2019. http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=242.
Note. Totals may not equal 100 due to rounding.

Statewide, the majority of ninth grade students report feeling positive about their well-being, yet gender disparities exist. A notable difference in self-confidence between males and females has remained the same since 2016; 73% of ninth grade male students reported they "often" or "almost always" felt good about themselves, compared with 49% of female students (Figure 52). This is consistent with studies that look at changes in self-esteem across the lifespan. On average, self-esteem is relatively high in childhood and drops during adolescence (particularly for girls) before rising again in adulthood.[46] Differences in body satisfaction are one of the main factors that contribute to gender differences in self-esteem in adolescence.[47]

52. Measures of well-being among ninth graders in Minnesota, by gender (2019)

Percentage of students who "often" or "almost always" agree with each item:



Source. Minnesota Student Survey, 2019. http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=242.
Note. The following question is used for each of the items listed in the figure: "In general, how does each of the following statements describe you?"

[46] Robins, R. W., & Trzesniewski, K. H. (2005). Self-esteem development across the lifespan. *Current Directions in Psychological Science, 14*(3): 158-162.

[47] Gentile, B., Grabe, S., Dolan-Pascoe, B., Twenge, J. M., Wells, B. E., & Maitino, A. (2009). Gender differences in domain-specific self-esteem: A meta-analysis. *Review of General Psychology, 13*(1): 34-45.

A majority of ninth grade students feel they can talk to a parent about their problems. Across the state, most students (83%) feel they can talk to a parent or guardian at least "some of the time" about problems they are having.[48] In Minnesota, female students (78%) were less likely than male students (84%) to report being comfortable talking to their parent or guardian.

Less than half of ninth grade students feel they have other caring adults in their lives. Positive connections to non-family adults are important to the health and well-being of youth. Close to half (35%-51% across counties) of ninth grade students felt that a teacher or other school staff cared about them "very much" or "quite a bit" (Figure 53). Fewer students (34%-44% across counties) felt that other adults in their community cared about them "very much" or "quite a bit."

53. Percentage of ninth grade students who feel non-family adults in their lives care about them "very much" or "quite a bit," by county (2019)

County	Teachers/other adults at school	Adults in your community
Anoka	35%	34%
Carver	51%	36%
Dakota	43%	37%
Hennepin	49%	44%
Ramsey	40%	36%
Scott	41%	38%
Washington	43%	40%
Minnesota	**42%**	**38%**

Source. Minnesota Student Survey, 2019. http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=242.

[48] Minnesota Department of Education. (2019). *2019 Minnesota Student Survey reports, 2013-2019* [data tables]. http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=242

Adverse childhood experiences (ACEs) among school-aged children

In 2013, some ACEs questions were added to the Minnesota Student Survey. This section draws from statewide analyses of MSS data completed by the Minnesota Department of Health and SUMN (Substance Use in Minnesota)[49] to describe how often youth experience ACEs, how ACEs impact youth well-being and how family and community strengths can reduce the negative impacts of ACEs. Their analyses included Minnesota students in grades 8, 9 and 11 who completed the Minnesota Student Survey in 2019.

Description and prevalence

The eight ACEs items included in the MSS are: incarceration of parent/caregiver; living with someone who drinks too much alcohol; living with someone who is depressed or has mental health issues; living with someone who uses illegal drugs or abuses prescription drugs; verbal abuse; physical abuse; household domestic abuse; and sexual abuse.

- **While a majority of Minnesota children (52%) have not experienced any of these ACEs, a substantial portion have experienced at least one ACE (48%).** About 23% experienced one ACE, 11% experienced two ACEs, 6% experienced three ACEs and 7% experienced four or more ACEs.
- **Twenty-six percent of students live with someone who was depressed or has mental health issues.** Mental health issues is the most commonly reported ACE.
- **Sixteen percent of students experienced a parent or caregiver being incarcerated at some point in their life.** Parental incarceration was the second most commonly reported ACE.
- **Other common ACEs include verbal abuse (15%), alcohol abuse (11%) and physical abuse (13%).** Fewer children experienced witnessing domestic abuse (8%), sexual abuse (6%), or living with someone who abuses drugs (5%).
- **Students with multiple ACEs are more likely to report using substances.** Students reporting 4+ ACEs are 5.2 times more likely to report e-cigarette use, 8.9 times more likely to report marijuana use and 12.6 times more likely to report prescription drug misuse.
- **Students with multiple ACEs are more likely to report poor mental health and suicidal behavior.** Students with 4+ ACEs are 3.4 times more likely to report feeling down, depressed, or hopeless in the past two weeks (49% compared to 14%). Additionally, 46% of students with 4+ ACEs reported suicidal ideation (compared to 4% with zero ACEs) and 20% reported suicide attempts (compared to 1% with zero ACEs).

[49] SUMN (Substance Use in Minnesota) provides data on over 100 indicators related to alcohol, tobacco, and other drug use (www.sumn.org). It is a project of the Minnesota State Epidemiological Outcomes Workgroup, a collaborative effort across multiple state agencies and EpiMachine, LLC, and includes representatives from state agencies, coalitions, and other local organizations. Data in this summary were retrieved from https://www.pcamn.org/wp-content/uploads/2020/07/MINNESOTA-ACEs-Fact-Sheet-2020.pdf

Impacts on health and well-being

Initial research on the impact of ACEs found that there is a relationship between the number of ACEs experienced in childhood and increased risk of several poor outcomes in adulthood, including: alcoholism, drug use, mental health issues (e.g., depression), chronic diseases (e.g., heart disease, liver disease), higher risk sexual activity, poor academic/ work performance and lower quality of life.[50] The same patterns can be found in Minnesota: adults who experienced multiple ACEs in childhood are more likely to report their own health as "fair" or "poor," to use tobacco products and overuse alcohol and to be diagnosed with depression or anxiety.[51] The study also found that adults who experienced five or more ACEs were more likely to be unemployed and feel financial stress.

While the initial study focused on ACEs' impact on health outcomes in adulthood, ACEs have more immediate impact on youth health and well-being. When ACEs occur, particularly if they occur repeatedly or over long periods of time, children experience toxic stress which can impact brain development, influencing behavior, learning, relationships, memory and overall health. In Minnesota, for example, youth who have more ACEs are more likely to report mental health concerns and use alcohol, marijuana and prescription drugs.[52]

ACEs are an important, but not exhaustive, list of factors that can lead to poor health outcomes. For example, chronic poverty and its impacts on housing, food security and access to resources can lead to chronic stress and poor health. Children and families who come to the United States as immigrants and refugees experience stress as they learn about living in a new culture and interacting with new systems. This is in addition to the chronic stress that some families experienced in their home country. Structural racism, experiences of direct racism or discrimination and historical trauma are also experiences that impact people of color and American Indians, but these topics are not asked about in surveys that are used to describe ACEs and their impacts.

Factors that reduce ACE impacts

Although ACEs can have profound short- and long-term impacts on health and well-being, community and familial strengths and assets can offset the negative impacts of ACEs. Nurturing relationships, connections with supportive and caring adults, ensuring basic needs are met and nurturing the social emotional development of children are all examples of protective factors that can reduce the negative impacts of ACEs. SUMN's analyses of MSS data showed that strong families and communities minimize the impacts of ACEs in Minnesota:

- Among students with two or more ACEs, students with greater educational engagement are less likely to report suicidal ideation in the past year (27% versus 38% for students with lower educational engagement).
- Students with two or more ACEs who feel teachers or other adults in the community care about them are 14 to 16 percentage points less likely to report suicidal ideation in the past year than students who do not feel they have that support.

In an ideal world, no child would experience abuse, neglect and other traumatizing events. While working to prevent ACEs from occurring, it is important to help teachers, health care providers and others who work closely with children increase their understanding of ACEs and how these events can impact development and child behavior (a trauma-informed approach), as well as to support efforts that foster community and family strengths and assets.

---

50 Violence Prevention. (2019). Centers for Disease Control and Prevention (CDC). For more information, see: https://www.cdc.gov/violenceprevention/acestudy/about.html

51 Minnesota Department of Health. (2013). *Adverse childhood experiences in Minnesota*. https://www.health.state.mn.us/docs/communities/ace/acereport.pdf

52 SUMN: Analysis of 2016 MSS data

Physical health

School-age children are generally healthy. Therefore, this section of the summary focuses primarily on conditions that can be managed or prevented by changes in behavior or environment; however, the last section also discusses reasons for premature death.

Asthma

Asthma is one of the leading causes of absenteeism from school. A number of factors can trigger an asthma episode, including air pollution, exposure to allergens, exercise, tobacco smoke and chemical irritants. Across the seven counties in the Twin Cities metro area, 12%-18% of ninth grade students have been told they have asthma.[53] American Indian and African American middle and high school students are more likely to have been diagnosed with asthma and rates of optimal asthma control are significantly lower for Asian, Black, American Indian and Latinx children (compared to rates for all children); and for children whose preferred language is Hmong, Karen, or Spanish (compared to the state average).[54, 55] The rate of asthma-related hospitalizations is higher in Minneapolis and St. Paul than in other parts of the metro region, particularly in the downtown areas of each city and nearby neighborhoods (Near North and Phillips neighborhoods in Minneapolis, Summit-University neighborhood in St. Paul, Camden in Minneapolis, Payne/Phalen in St. Paul and Summit-University-Frogtown in St. Paul).[56] Emergency department (ED) visits due to asthma are also higher for children in the Twin Cities metro area compared to children in greater Minnesota; however, ED visits appear to have declined between 2015 and 2019 (Figure 54).

54. Asthma emergency department visits among children (age 0-17), rate per 100,000, by region

	2015	2016	2017	2018	2019
Seven-county Twin Cities metro area children	78	74	69	63	58
Greater MN children	44	38	37	36	31

Source. Minnesota Hospital Association, 2019. https://data.web.health.state.mn.us/web/mndata/asthma_ed#byregion.

Exposure to Environmental Tobacco Smoke (ETS)

Environmental tobacco smoke (ETS) is a mix of chemicals in the air that results from burning tobacco (cigarettes, cigars, pipes) and from exhaled smoke. ETS or second-hand smoke causes cancer and no level of exposure is considered safe. ETS is particularly harmful to children. In the 2017 Minnesota Youth Tobacco Survey, almost half (47%) of nonsmoking Minnesotan youth in grades 6-12 were exposed to ETS in any of the surveyed settings (home, car, at school, at work, or in a public place) in the previous week. Public places (33%) were the most common settings for exposure to secondhand smoke, followed by in the car (17%), in the home (16%), at school (15%)

53 Minnesota Department of Education. (2019). *Minnesota Student Survey reports, 2019* [data tables]. http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=242

54 Minnesota Department of Health. (n.d.). *Asthma quick facts.* https://www.health.state.mn.us/diseases/asthma/data/quickfacts.html

55 MN Community Measurement. (2021). *Minnesota health care disparities by race, Hispanic ethnicity, language and country of origin.* https://mncmsecure.org/website/Reports/Community%20Reports/Disparities%20by%20RELC/2020%20Disparities%20by%20RELC%20Chartbook%20-%20FINAL.pdf

56 Minnesota Department of Health. (n.d.). *Asthma hospitalizations (2015-2019)* [Interactive map]. MN Public Health Data Access: https://apps.health.state.mn.us/mndata/webmap/asthma.html

and at work (4%).[57] Though legislation restricting smoking in workplaces and indoor public spaces has contributed to decreased rates of ETS, these regulations do not extend to private homes, public outdoor spaces, or cars.

Diabetes and contributing factors

In the seven-county Twin Cities metro area, approximately 1% of ninth grade students have been told they have diabetes; the Minnesota Student Survey asks students about diabetes, generally and does not differentiate between Type I and Type II.[58] This may be an underestimate of the prevalence of the disease. A much larger percentage of students have an increased risk of developing diabetes because of their weight or health behaviors. One-quarter of Minnesota ninth grade students are overweight or obese, with Ramsey County having the largest percentage of youth who are obese (12%; Figure 55). The percentage of students who are overweight or obese changed little from 2016, staying the same or changing by a few percentage points, depending on the county.

55. Weight status of ninth graders, by county (2019)

County	Normal or underweight	Overweight	Obese
Anoka	74%	15%	11%
Carver	78%	13%	9%
Dakota	76%	15%	9%
Hennepin	79%	12%	9%
Ramsey	73%	14%	12%
Scott	79%	14%	7%
Washington	79%	13%	8%
Minnesota	**75%**	**14%**	**11%**

Source. Minnesota Student Survey, 2019. http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=242.
Note. Weight status was based on body mass index (BMI) calculated using students' self-reported height and weight.

Similar to 2013 and 2016 survey results, relatively few ninth grade students meet recommended guidelines for physical activity and healthy eating. The Centers for Disease Control and Prevention (CDC) *Physical Activity Guidelines for Americans* recommends that children age 6 to 17 should be physically active for at least 60 minutes each day. Only 17% of ninth grade students in the state meet these physical activity requirements. In its food pyramid, the U.S. Department of Agriculture (USDA) recommends that school-age children consume at least two servings of fruit and three servings of vegetables a day. Approximately one-third of ninth graders across Twin Cities metro area counties are meeting fruit serving recommendations and even fewer are meeting vegetable serving recommendations (7%-14% across counties; Figure 56). A number of factors contribute to how easily students can be physically active and follow a healthy diet, including the availability and affordability of resources that support health, the safety of their outdoor play spaces and comfort or experience with exercise and meal preparation.

[57] Minnesota Department of Health. (n.d.). *Youth secondhand smoke exposure*. https://data.web.health.state.mn.us/ets_youth

[58] Minnesota Department of Education. (2019). *Minnesota Student Survey reports, 2019* [data tables]. http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=242

56. Percentage of ninth grade students who meet recommended physical activity and healthy eating guidelines, by county (2019)

County	60 minutes of physical activity daily	2 or more servings of fruit daily	3 or more servings of vegetables daily
Anoka	18%	36%	14%
Carver	21%	36%	13%
Dakota	18%	31%	9%
Hennepin	16%	34%	10%
Ramsey	13%	27%	9%
Scott	16%	28%	7%
Washington	16%	32%	9%
Minnesota	**17%**	**29%**	**8%**

Source. Minnesota Student Survey, 2019. http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=242.

Premature death

Causes of premature death vary based on the ages of children and youth; suicide becomes a top-three cause of death starting between 12 and 17 years. In 2019, among younger children (age 0-5) the leading cause of death was perinatal conditions, followed by congenital anomalies and unintentional injury (Figure 57). Suicide is a top-three cause of premature death for youth between 12 and 24 years.

57. Top 10 leading causes of death in the seven-county Twin Cities metro area, by age (2019)

	Number of child deaths				
Cause of death	**Age 0-5**	**Age 6-11**	**Age 12-17**	**Age 18-24**	**Total (ages combined)**
Unintentional injury	22	4	9	93	128
Perinatal conditions	86	0	0	0	86
Congenital anomalies	53	5	3	2	63
Suicide	0	0	16	34	50
Homicide	3	2	5	20	30
Cancer	4	5	3	8	20
Heart disease	6	3	0	9	18
Chronic lower respiratory disease	0	1	0	4	5
Septicemia	3	0	0	0	3
Pneumonia and influenza	1	1	0	1	3

Source. Minnesota Department of Health. (2019). https://mhsq.web.health.state.mn.us/frontPage.jsp.
Note. "Other" deaths: Age 0-5 = 3 | Age 6-11 = 4 | Age 12-17 = 10 | Age 18-24 = 27.

Mental health

At least 21% of ninth grade students reported having a long-term mental health, behavioral, or emotional problem in all Twin Cities metro counties. The percentage of students reporting a mental health problem across the state has increased since 2016 from 17% to 23% (Figure 58). Among ninth grade students in Minnesota, females are more likely than males to report having any long-term mental health, behavioral, or emotional problems (30% compared to 16%, respectively).[59] Results from the College Student Health Survey conducted by the University of Minnesota showed 42% of students reported having a mental health diagnosis in their lifetime in 2018, compared to 25% of students in 2007.[60] This observed increase may not be a change in actual prevalence; reduced stigma around mental illness may make youth more willing to discuss problems they are experiencing and seek treatment.

58. Percentage of ninth graders reporting long-term mental health, behavioral, or emotional problems, by county

County	2010	2013	2016	2019
Anoka	12%	12%	16%	22%
Carver	9%	10%	18%	25%
Dakota	11%	13%	18%	23%
Hennepin	10%	13%	17%	23%
Ramsey	12%	13%	17%	21%
Scott	12%	11%	20%	23%
Washington	10%	13%	19%	22%
Minnesota	**11%**	**13%**	**17%**	**23%**

Source. Minnesota Student Survey, 2010, 2013, 2016, 2019. http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=242.

Over the past two decades (1999 to 2017), suicide deaths have increased nationally and in Minnesota. Suicide rates are increasing across demographic groups and Minnesota's youth (age 15-24) suicide rate is higher than the youth suicide rate nationally (14.7 per 100,000 compared to 12.8 per 100,000). [61]

White, non-Hispanic, males accounted for two-thirds (67%) of all suicides among Minnesota youth (and 81% of all *male* suicides among Minnesota youth). Between 2015 and 2016, Minnesota males (age 15-24) were over four times more likely to die by suicide compared to females in this same age group.

Suicide rates have increased for all races, with the highest increase (61%) in the American Indian community (57 suicides in 2008-2012 and 98 suicides in 2013-2017 across Minnesota).[62] Statewide, there has been an increase in non-fatal self-inflicted injury (SII) for all age groups (from 6,552 cases in 2012 to 9,581 cases in 2017). In 2017, over half of all SII were among youth and young adults (10-24 years) and females had higher numbers of SII compared to males across all age groups. The most common mechanisms of non-fatal SII were poisoning and cutting/piercing.[63]

---

59 Minnesota Department of Education (2019). *2019 Minnesota Student Survey statewide tables, 2013-2019*. http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=11

60 University of Minnesota. (2018). *2018 College student health survey report: Health and health-related behaviors: University of Minnesota-Twin Cities students*. https://boynton.umn.edu/sites/boynton.umn.edu/files/2018-11/CSHS-2018-UMN-Twin-Cities.pdf

61 Minnesota Department of Health. (2019). *Alcohol and suicide: White male youth in Minnesota*. https://www.health.state.mn.us/communities/suicide/documents/alcoholsuicidewmy.pdf

62 Minnesota Department of Health. (2018). *Suicide in Minnesota, 1999-2017 Data Brief*. https://www.health.state.mn.us/communities/suicide/documents/2017suicidedatabrief.pdf

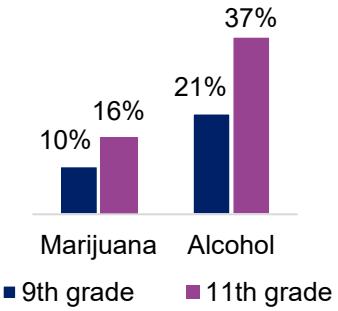
63 Coutinho, S., Heinen, M., Carter, T., & Roesler, J. (2018). *Non-fatal self-inflicted injury fact sheet*. Minnesota Department of Health. https://www.health.state.mn.us/communities/suicide/documents/2017nonfatalselfinflictedinjury.pdf

Youth health behavior indicators

Substance abuse

Alcohol, marijuana, or prescription drugs were used by less than one-quarter of ninth grade students. In 2019, ninth grade students were less likely to have used alcohol (21%) or marijuana (10%) compared to 11th graders (37% and 16% respectively; Figure 59). In contrast, there was little difference in the percentage of ninth and 11th grade students who reported misusing a prescription drug in the past 30 days (4% for both grades).[64]

59. Percentage of ninth and eleventh grade Minnesota students that used alcohol or marijuana during the past year (2019)



Source. Minnesota Student Survey, 2019. https://public.education.mn.gov/MDEAnalytics/DataTopic.jsp?TOPICID=11.
Note. Students were instructed to not include use of medical marijuana prescribed to them by a doctor.

The percentage of students who reported having alcoholic beverages at least once in the past year has declined greatly over time. In 1992, nearly two-thirds (64%) of ninth grade students in Minnesota reported using alcohol in the past year, compared to 21% in 2019.[65, 66]

[64] The MSS asks students how often, in the past 30 days, they have used prescription drugs that were not prescribed to them. This item on prescription drug misuse was first added to the survey in 2013. There is not a question comparable to the alcohol and marijuana survey items that asks about any misuse during the past year.

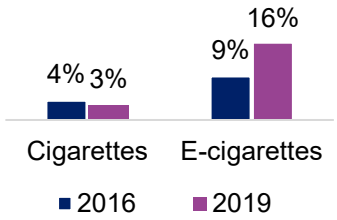
[65] Minnesota Departments of Education, Health, Human Services, & Public Safety. (2013). http://www.health.state.mn.us/divs/chs/mss/trendreports/msstrendreport2013.pdf

[66] Minnesota Department of Education. (2019). *Minnesota Student Survey reports, 2019.* http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=242

Cigarette and E-cigarette use

While use of conventional cigarettes continues to decrease among Minnesota youth, there was a 75% increase in reported use of e-cigarettes between 2016 and 2019 (Figure 60). The most common reasons youth gave for using e-cigarettes included: a friend or family member used them (11%); e-cigarettes come in flavors such as mint, candy, fruit, or chocolate (10%); they were curious about e-cigarettes (8%); and e-cigarettes are less harmful than other forms of tobacco (6%).[67]

60. Percentage of Minnesota ninth graders reporting cigarette or e-cigarette use in the past 30 days



Source. Minnesota Student Survey, 2019. https://www.health.state.mn.us/communities/tobacco/data/docs/2019_mss_tobacco.pdf.

Most e-cigarette products contain nicotine, which contributes to deficits in cognitive development in youth and is highly addictive.[68] However, even more concerning in recent years are the severe lung injuries and even deaths, being attributed to e-cigarette use.[69] Unfortunately, many youth seem to be unaware of the risks of e-cigarettes, with 71% of ninth graders saying there was either no, slight, or a moderate risk to using e-cigarettes.[70]

Analysis from the Minnesota Youth Tobacco Survey finds that youth with asthma are more likely to use conventional tobacco products or e-cigarettes when compared to youth without asthma. This finding is concerning as youth with asthma who use tobacco are less likely to have their asthma symptoms controlled and may require subsequent medical interventions.[71]

---

67 Minnesota Department of Health. (2017). *Minnesota Youth Tobacco Survey Frequencies 2017*. https://www.health.state.mn.us/data/mchs/surveys/tobacco/2017_myts_freqs.xlsx

68 U.S. Department of Health and Human Services. (2019). *Know the risks: E-cigarettes and young people.* https://e-cigarettes.surgeongeneral.gov/knowtherisks.html

69 Siegel, D. A., Jatlaoui, T. C., Koumans, E. H., Kiernan, E. A., Layer, M., Cates, J. E., Kimball, A., Weissman, D. N., Petersen, E. E., Reagan-Steiner, S., Godfred-Cato, S., Moulia, D., Moritz, E. Lehnert, J. D., Mitchko, J., London, J., Zaki, S. R., King, B. A., Jones, C. M. . . . Koppaka, R. (2019). Update: Interim guidance for health care providers evaluating and caring for patients with suspected e-cigarette, or vaping, product use associated lung injury – United States, October 2019. *CDC Morbidity and Mortality Weekly Report*. https://www.cdc.gov/mmwr/volumes/68/wr/mm6841e3.htm

70 Minnesota Department of Health. (2019). *2019 Minnesota Student Survey: E-cigarette and cigarette findings.* https://www.health.state.mn.us/communities/tobacco/data/docs/2019_mss_tobacco.pdf

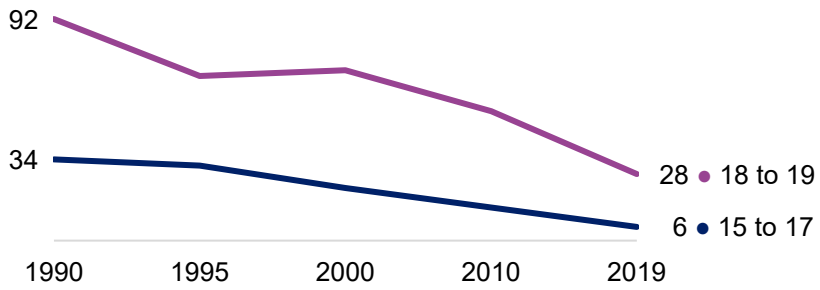
71 Minnesota Department of Health. (2019). *Tobacco use and asthma.* https://www.health.state.mn.us/communities/tobacco/data/docs/0201_tobacco_asthma.pdf

Sexual activity

Teen pregnancy

In Minnesota, the teen pregnancy rate has steadily decreased since 1990 (Figure 61). In 2019, there were 612 births to teenagers age 15-17 and three times as many births (n=1,932) to teenagers age 18-19. The same trend in decreased teen births has occurred nationally, likely due to teenagers waiting longer before becoming sexually active and the increased use of more effective contraceptive methods.[72] In Minnesota, birth rates have decreased among adolescents in all racial groups. Although pregnancy and birth rates are highest among adolescents of color in Minnesota, the largest number of adolescent births is among White youth.

61. Changes in teen pregnancy rate per 1,000 females in Minnesota, by age



Source. Farris, J., & Sullivan, O. (2021*). 2021 Adolescent Sexual Health Report*. University of Minnesota Healthy Youth Development – Prevention Research Center. https://prc.umn.edu/trainings/minnesota-adolescent-sexual-health-report.
Note. The teen pregnancy rate is the number of pregnancies to a specific age group per 1,000 female population of the specific age group.

[72] Farris, J., & Sullivan, O. (2021). *2021 Adolescent Sexual Health Report*. University of Minnesota Healthy Youth Development – Prevention Research Center. https://prc.umn.edu/trainings/minnesota-adolescent-sexual-health-report

Among teenagers age 15-19, pregnancy rates in Ramsey and Hennepin counties are higher than the statewide average (Figure 62).

62. Teen pregnancy rates, per 1,000, by age and county (2019)

County	15-17 years	18-19 years	15-19 years
Anoka	4.6	30.6	13.2
Carver	**	**	7.1
Dakota	4.7	29.4	13.0
Hennepin	7.6	30.0	16.6
Ramsey	10.1	34.3	20.8
Scott	**	18.1	7.2
Washington	**	17.9	8.1
Minnesota	**5.7**	**27.6**	**14.4**

Source. Minnesota Department of Health (MDH), County Health Tables – Natality. (2019). https://www.health.state.mn.us/data/mchs/genstats/countytables/MNCountyHealthTables2019.pdf.

Note. The teen pregnancy rate is the number of pregnancies to a specific age group per 1,000 female population of the specific age group. Data are suppressed (**) in counties where racial/ethnic groups are too small to calculate reliable estimates.

Sexually transmitted infections

Though adolescents (age 15-19) account for only 7% of the population in Minnesota, they accounted for 25% of chlamydia and 16% of gonorrhea cases in 2020.[72] High rates of STIs among this age group are likely the result of limited access to prevention services and lack of comfort seeking services, including concerns about confidentiality.

The chlamydia incidence rate for adolescents (age 15-19) increased from 2008 to 2020 (from 1,164 to 1,503 adolescents infected per 100,000 population). While there was a steep drop in chlamydia rates from 2019 to 2020 (1,696 to 1,503), it is possible that less routine screening during the pandemic may account for this decrease.

Gonorrhea incidence rates have fluctuated over the same time period, but were the highest rates in over 10 years in 2020 (452 adolescents infected per 100,000 population).[73]

[73] Farris, J., & Sullivan, O. (2021). *2021 Adolescent Sexual Health Report*. University of Minnesota Healthy Youth Development – Prevention Research Center. https://prc.umn.edu/trainings/minnesota-adolescent-sexual-health-report

LGBTQ youth

On most mental, physical and sexual health measures, adolescents who identify as LGBTQ have worse outcomes than their heterosexual peers. In 2019, 10% of Minnesota ninth graders identified their sexuality as something other than heterosexual (bisexual: 5%, questioning or unsure: 2%, pansexual 2%, gay or lesbian: 1%; Figure 63). Mental health issues impact a majority of this population, with 60% of ninth graders who identified as gay, lesbian, or bi-sexual reporting having long-term mental, behavioral, or emotional health problems. Additionally, 8% of Minnesota ninth graders reported being bullied because they are gay, lesbian, or bisexual or because someone thought they were.[74] Higher rates of abuse and harassment at home, at school and in the community contribute to these mental health disparities. One indicator of the increased harassment and rejection LGBTQ youth face is the sizeable percentage (22%) of homeless young adults (age 18-24) who identify as LGBTQ.[75] Physical health is also a concern for LGBTQ youth, with 17% being obese and less than one-third getting the recommended amount of weekly physical activity.[76]

63. Sexual orientation of Minnesota ninth grade students (2019)

Sexual orientation	%
Heterosexual	77%
Bisexual	5%
Questioning/not sure	2%
Pansexual	2%
Gay or Lesbian	1%
I don't identify myself in any of those ways	9%
I don't understand the question	2%

Source. Minnesota Student Survey. 2019. http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=242.

74 Minnesota Department of Education. (2019). *Minnesota Student Survey reports, 2019* [data tables]. http://w20.education.state.mn.us/MDEAnalytics/DataTopic.jsp?TOPICID=242

75 Nelson-Dusek, S., Pittman, B., Decker Gerrard, M., Shelton, E., Owen, G., & Sales, R. (2019). *Characteristics and trends among Minnesota's homeless population: Initial findings from face-to-face interviews conducted in 2018.* https://www.wilder.org/sites/default/files/imports/2018_HomelessStudy_CharacteristicsFactSheet_5-19.pdf

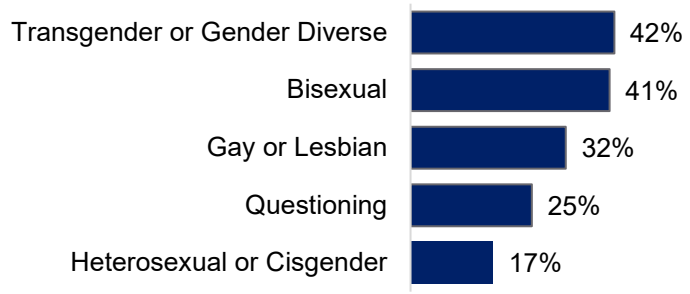
76 Minnesota Department of Health. (2017). *2017 Minnesota statewide health assessment*. https://www.health.state.mn.us/communities/practice/healthymnpartnership/docs/2017MNStatewideHealthAssessment.pdf

Minnesota transgender youth experience marked health disparities, yet access health care less than cisgender youth. According to the 2019 Minnesota Student Survey (MSS), 1.4% of students (in 9th and 11th grade) identified themselves as transgender, gender queer, or genderfluid; an additional 1.6% of ninth graders and 1.2% of eleventh graders were unsure about their gender identity.[77]

An earlier study using 2016 MSS data found that significantly more transgender and gender nonconforming (TGNC) students reported "poor," "fair," or "good" general health (62%) than their cisgender peers (33%).[78] (The response options of poor, fair and good were compared against two other options of "very good" and "excellent.") In this same study, TGNC students also reported lower rates of preventive health check-ups than cisgender youth, suggesting TGNC youth face barriers to accessing the health care system.

For TGNC youth, schools can be places of harassment and victimization. TGNC youth are seven times more likely to report bullying about their gender and five times more likely to attempt suicide than their cisgender peers.[79] Four in ten transgender or gender diverse (42%) and bisexual (41%) students had experienced sexual harassment in the past 30 days (Figure 64).

64. Percentage of Minnesota students reporting sexual harassment in the past 30 days, by sexual orientation and gender identity (2016)



Source. Farris, J., Austin, J, & Brown, C. (2018). *2018 Adolescent sexual health report*. University of Minnesota Department of Pediatrics. https://prc.umn.edu/trainings/minnesota-adolescent-sexual-health-report.

Practices that support and affirm TGNC youth include using gender-neutral language, asking youth their pronouns, providing staff training on TGNC youth and rethinking and redesigning gender binary spaces (like bathrooms).

---

77 Farris, J., Kusinitz, Z., & Oliphant, J. (2020). I. University of Minnesota Healthy Youth Development - Prevention Research Center.

78 Rider, G., McMorris, B., Gower, A., Coleman, E., & Eisenberg, M. (2018). Health and care utilization of transgender and gender nonconforming youth: A population-based study. *Pediatrics, 141*, 3. https://pediatrics.aappublications.org/content/pediatrics/early/2018/02/01/peds.2017-1683.full.pdf

79 University of Minnesota Department of Pediatrics. (2017). *What are we learning about Minnesota high school students who identify as transgender or gender non-conforming (TGNC)?* https://www.cehd.umn.edu/tuckercenter/library/docs/dls/dls-2017-fall/Learn-MN-TGNC-high-school-students.pdf

Communities at highest risk of COVID-19

The COVID-19 pandemic has had large health, economic and social impacts on Minnesota communities in ways that can negatively affect child development, school performance and general well-being.[80] Socially vulnerable populations—those that are especially at risk during public health emergencies because of factors like socioeconomic status, household characteristics, racial and ethnic minority status, or housing type and transportation—are at increased risk of COVID-19 cases and mortality.[81,82,83] Identifying socially vulnerable populations can lead to interventions to reduce infection rates and the associated impacts of COVID-19 in communities at higher risk, including children and families.

The Social Vulnerability Index (SVI)[84] measures neighborhood-level relative social vulnerability using a ranking system from the Census variables on social factors like socioeconomic status, household composition and disability, minority status and language and housing type and transportation. Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability). Figure 65 depicts county-level information regarding neighborhood social vulnerability to better inform Children's Minnesota about regions at higher risk of COVID-19. Counties with higher vulnerability rankings (e.g., Anoka, Dakota, Hennepin and Ramsey) also have higher COVID cases and COVID mortality rates as compared to counties with lower vulnerability rankings (e.g., Carver, Scott and Washington).

80 Nichols, A., Mitchell, J., & Lindner, S. (2013*). Consequences of long-term unemployment. Washington, DC: The Urban Institute*.

81 Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry. At a Glance: CDC/STSDR Social Vulnerability Index. https://www.atsdr.cdc.gov/placeandhealth/svi/at-a-glance_svi.html. Accessed November 22, 2022.

82 Karaye, I. M., & Horney, J. A. (2020). The impact of social vulnerability on COVID-19 in the US: An analysis of spatially varying relationships. *American Journal of Preventive Medicine, 59*(3), 317-325.

83 Nayak, A., Islam, S. J., Mehta, A., Ko, Y. A., Patel, S. A., Goyal, A., ... & Quyyumi, A. A. (2020*). Impact of social vulnerability on COVID-19 incidence and outcomes in the United States*. MedRxiv.

84 Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry/Geospatial Research, Analysis, and Services Program. CDC/ATSDR Social Vulnerability Index 2018 Database State. https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html. Accessed on April 4, 2022.

65. Social vulnerability (2018) and COVID-19 cases and deaths (2020), by county

County	SES[a]	Household composition & disability[b]	Minority status & language[c]	Housing type & transportation[d]	Overall summary ranking[e]	COVID cases[f]	COVID deaths[g]
Anoka	0.12	0.20	0.88	0.27	0.33	12.09	112.32
Carver	0.00	0.05	0.52	0.06	0.01	5.98	12.35
Dakota	0.09	0.30	0.90	0.20	0.27	8.94	58.65
Hennepin	0.38	0.02	0.97	0.85	0.57	19.38	350.42
Ramsey	0.79	0.45	0.99	0.97	0.92	15.08	125.58
Scott	0.06	0.07	0.91	0.15	0.15	8.90	9.32
Washington	0.02	0.17	0.78	0.10	0.09	6.17	75.55

Source. a-e Social Vulnerability Index (SVI), 2018 dataset.
https://www.atsdr.cdc.gov/placeandhealth/svi/documentation/SVI_documentation_2018.html.
Minnesota Department of Health. Retrieved from Minnesota Compass https://www.mncompass.org/covid-19?key-measures.

[a] Socioeconomic status includes percentage below poverty and unemployed, household income, percentage with no high school diploma.

[b] Household composition & disability includes percentage age 65+, age 17 or younger, percentage with a disability, percentage single-parent households.

[c] Minority status & language includes percentage minority and age 5+ who speak English "less than well."

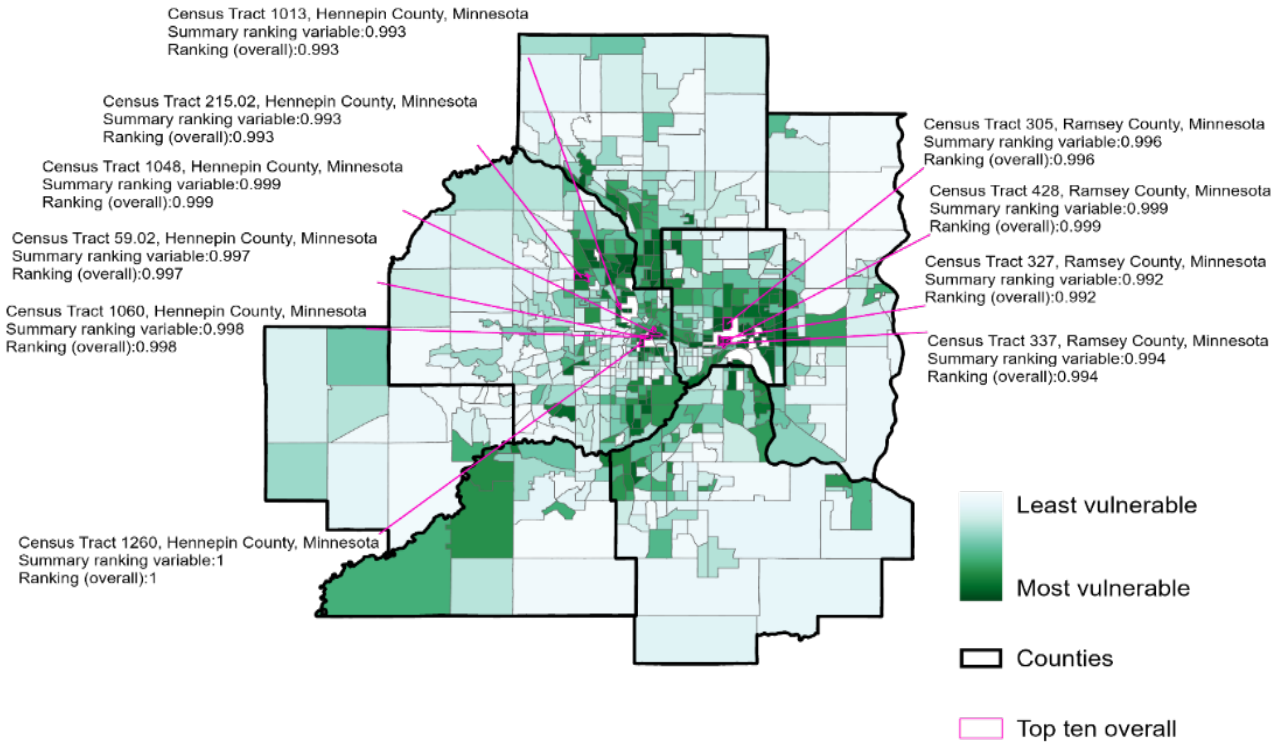
[d] Housing type & transportation includes percentage of multi-unit structures and mobile homes, crowding, percentage with no vehicle, percentage living in group quarters.

[e] Overall tract rankings were calculated by summing the sums for each theme, ordering the counties and then calculating overall percentile rankings. Please note; taking the sum of the sums for each theme is the same as summing individual variable rankings.

[f] Average of new COVID-19 cases from May 1–May 26, 2020 per 10,000 residents (in the past 14 days).

[g] Average COVID-19 deaths per one million residents. Figure 66 shows vulnerability by census tract in the Twin Cities metro area.

66. Social vulnerability by census tract, Twin Cities metro area (2018)



Source. Social Vulnerability Index (SVI), 2018 dataset.
https://www.atsdr.cdc.gov/placeandhealth/svi/documentation/SVI_documentation_2018.html.
Note. Overall tract rankings were calculated by summing the sums for each theme, ordering the counties and then calculating overall percentile rankings.

Considerations for interpreting secondary data

As stated in the introduction, many data sources were used to write this report. These include: the American Community Survey (ACS), Centers for Disease Control and Prevention Social Vulnerability index, Centers for Disease Control and Prevention WISQARS Fatal Injury and Nonfatal Injury, Minnesota Compass, Minnesota Department of Education, Minnesota Department of Employment and Economic Development, Minnesota Department of Health Public Health Data Access Portal, Minnesota Student Survey, Minnesota Geospatial Information Office, Minnesota State Demographic Center, Minnesota WIC Information System, National Survey of Children's Health, IPUMS, University of Minnesota Adolescent Sexual Health Report, the U.S. Census Bureau Decennial Census, U.S. Census Bureau Household Pulse Survey, The United States Department of Agriculture Economic Research Services and Wilder Research.

Each of these sources has its own set of caveats and limitations; primary limitations to consider include:

- **The majority of data in this report reflect pre-pandemic outcomes and trends.** The COVID-19 pandemic, which has had a drastic impact on health outcomes across the globe, occurred after the most recent CHNA was conducted in 2019; however, most of the data reported here reflect a time prior to the pandemic. Children's Minnesota and Wilder staff decided early in the project to examine whatever data were available, in order to meet analysis and reporting timelines. Wilder included more current data where possible, particularly from the Minnesota Department of Health, Minnesota Employment and Economic Development and the Minnesota Department of Education.
- **Some data reflect broader populations than the community definition Children's Minnesota used for this assessment.** Data from the seven-county Twin Cities metro area are reported where possible; however, some datasets are not granular enough to report metro-level characteristics or outcomes. In those cases, Wilder opted to present the broader data (e.g., statewide) even though it does not exactly match the scope of Children's Minnesota's work. Also, this data summary includes data for both children and adult age groups, as adult health outcomes have an impact on the well-being of children and youth.
- **Demographic data, particularly race and ethnicity, are aggregated into groups that do not fully represent the unique identities of Twin Cities' communities.** We recognize that there are many different cultural communities that fall within each race/ethnicity category, as well as diversity in experience and perspective within each cultural community. Most secondary data sources report estimates based on responses provided by a sample of community residents. Often, potential disparities are reported using very broad cultural or socioeconomic categories, which does not capture the diversity of opinions and experiences of residents. The data provided in this summary are a starting point to better understand factors that contribute to health and well-being in the Twin Cities metro area. However, there are limitations in the data available. The race and ethnicity categories used in this report are intended to be more detailed and reflective of the backgrounds of residents who live in the Twin Cities metro area, but are imperfect. Further, reported differences between populations reflect the varied experiences of residents, including the many ways that immigration, housing, education, employment and other policies have impacted specific racial and ethnic groups.

The following section highlights some limitations of specific data sources that were used in this report.

American Community Survey data

The demographic data presented in this summary are largely from the American Community Survey (ACS). This survey is administered by the U.S. Census Bureau to a sample of residents and weighted in order to calculate estimates for the population. Throughout this summary, the most detailed data available are presented. However, there are limitations in the degree to which race and ethnicity data can be disaggregated while still providing reliable

estimates at a more local (county or neighborhood) level or in counties where relatively few people of the same racial or ethnic community live. Therefore, in some tables, estimates are suppressed because there are not enough residents of a racial or ethnic community to calculate a reliable estimate. Most ACS data reported in this summary cite a date range (e.g., 2015-19) rather than a single year; the U.S. Census Bureau uses averaged data from a 5-year period to calculate the most reliable estimates possible.

Minnesota Student Survey data

The Minnesota Student Survey (MSS) is cited frequently in this summary, as it includes questions that consider child health and well-being holistically. The MSS is administered every three years to students in selected grades throughout the state; individual survey items and grade levels of students asked to participate have changed over time. This summary includes data from MSS results from 2013, 2016 and 2019 (the most recent survey results available). Some survey instrument questions changed between 2013, 2016 and 2019. While most questions stayed the same, other questions were updated with changes to the question or response options. Results from the ninth grade survey are presented because all MSS items are asked of these young adolescents and the response rate for students at this grade level is higher than for older students. Although these surveys are given repeatedly over time, student populations may change between administrations of the survey. Caution must be used when making comparisons over time. Two limitations when interpreting information from this data source include:

- In 2019, the Minnesota Department of Education provided schools and parents copies of the MSS in Spanish, Somali and Hmong for consent purposes, but the survey was only administered to students in English. Schools and districts with students who were not proficient in English were asked to provide accommodations for students to take the survey. In schools that could not develop translations or provide interpreters, the survey results may not adequately reflect the opinions and experiences of students who receive English Learner (EL) services.
- In 2019, over 81% of Minnesota's school districts participated. Chanhassen Public Schools (Eastern Carver County Public Schools) decided to opt out of the MSS in 2019. Data from this county is included in the summary, but should be interpreted with caution as they exclude the opinions and experiences of large numbers of students. Additionally, only a small sample of Minneapolis Public Schools (a district where nearly two-thirds of students are youth of color) participated. Because these students and potentially some English Learner students were not included, the MSS does not report response rates by race and ethnicity at the county level.

Social Vulnerability Index

The social vulnerability data in this summary are from the Centers for Disease Control's Social Vulnerability Index (SVI). The SVI measures neighborhood-level relative social vulnerability using 15 census variables to help local officials identify communities that may need support before, during, or after disasters. The SVI indicates the relative vulnerability of every county or census tract using a ranking system from the 15 variables on social factors like socioeconomic status, household composition and disability, minority status and language and housing type and transportation. Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability). There are four distinct themes: socioeconomic status, household composition and disability, minority status and language, housing type and transportation and an overall ranking which combines the four distinct themes.

- Socioeconomic status includes the percentage below poverty and unemployed, household income and percentage with no high school diploma.
- Household composition & disability includes the percentage age 65+, age 17 or younger, percentage with a disability, percentage of single-parent households.
- Minority status & language includes the percentage of minority and age 5+ who speak English "less than well."
- Housing type & transportation includes the percentage of multi-unit structures and mobile homes, crowding, percentage with no vehicle and percentage living in group quarters.
- Overall tract rankings were calculated by summing the sums for each theme, ordering the counties and then calculating overall percentile rankings. Please note; taking the sum of the sums for each theme is the same as summing individual variable rankings.

Primary data collection

As part of the 2022 CHNA process, multiple partner groups were asked to consider whether the health topic areas prioritized through the 2019 CHNA continue to be community needs that should be addressed by Children's Minnesota. All groups were invited to identify additional emerging or unmet health needs within the community. The following sections provide a summary of each data collection activity, including focus groups with Children's Minnesota staff, parents and caregivers and youth, as well as individual phone interviews with Children's Minnesota health care providers and staff from community-based organizations. A total of 106 people participated in this phase of the work.

- 35 staff from community-based organizations (33%)
- 29 staff from Children's Minnesota (27%)
- 15 parents or caregivers (14%)
- 15 youth, age 14-18 (14%)
- 12 health care providers from Children's Minnesota (11%)

Figure 67 illustrates the race and gender identity of participants by group. (Providers were grouped with Children's Minnesota staff and parents, caregivers and youth were grouped together.)

67. Race and gender of respondents

	Children's Minnesota staff and providers (N=41)		Community-based organization staff (N=35)		Parents, caregivers and youth (N=30)	
Race	#	%	#	%	#	%
White	29	71%	20	57%	7	23%
Black	5	12%	7	20%	15	50%
Hispanic	4	10%	2	6%	2	7%
Asian	2	5%	2	6%	1	3%
Native American	0	0%	2	6%	2	7%
Multiracial	1	2%	0	0%	2	7%
Unknown	0	0%	2	6%	1	3%
Gender						
Female	35	85%	28	80%	18	60%
Male	5	12%	5	14%	12	40%
Non-binary	1	2%	0	0%	0	0%
Unknown	0	0%	2	6%	0	0%

Community-based organizations

Over the summer of 2022, Wilder Research conducted in-depth phone interviews with 35 staff from 30 community-based partner organizations (CBOs); multiple people could participate in an interview at once. For the interviews, Children's Minnesota staff identified organizations that have critical perspectives on children's health and are able to speak to the needs of children from specific geographic and/or cultural communities. Interview respondents represented a range of organizations, including nonprofit and advocacy groups (e.g., autism, education, mental health, queer health, health for people of color), foundations, school districts, tribes, counties and the state. When asked to describe who their organization serves:

- Half (N=15) described serving a specific city or county and the other half described working across the broader seven-county Twin Cities metro area (N=15).
- More than half described serving whole families (N=19), compared to children and youth (birth to young adulthood; N=16).
- Over one-third (N=11) described their organization as serving communities of color or non-English speaking populations.
- Six of the organizations talked about serving communities based on health needs, such as mental health challenges and developmental disabilities.

Existing health priorities

In each interview, Wilder staff described Children's Minnesota's five 2019 health priority areas – mental health and developmental well-being, access to resources, economic opportunity and income, structural racism and health disparities. Respondents were then asked, "To what extent should each area *remain* a priority area that Children's Minnesota addresses directly?" For most areas, respondents felt each area should either be "essential" or a "high" priority. **Mental health and developmental well-being** and **structural racism** were the top priority areas for community-based organization staff (Figure 68).

68. Community-based organization staff ratings of 2019 CHNA priority areas (N=35)

	Mental health/ developmental well-being	Structural racism	Health disparities	Access to resources	Economic opportunity and income
Essential	27	26	22	19	12
High	7	3	8	10	9
Moderate	0	3	2	3	9
Somewhat	0	0	0	1	1
Low	0	0	0	0	1
Not a Priority	0	0	0	0	0
Missing	1	3	3	2	3

The following section outlines the ways in which community stakeholders perceived these issues to be present in their community and implications for their presence. Bulleted items in each area reflect the main themes identified during the community-based organization interviews.

Mental health and developmental well-being

- When asked what services have a *positive* impact on the health of children and families, the most common answer respondents gave was community-based mental health and clinical services.
- COVID-19 and other local and global events have deepened and intensified mental health issues across Twin Cities' communities. Respondents talked about families losing the capacity to cope with challenges.
- There are not enough mental health services (e.g., psychologists, therapists) available for children and their families; this is *especially* true for families of color and families who speak languages other than English. There is an urgent need for more culturally responsive services and providers.
- Specific mental and behavioral health concerns include trauma, anxiety, grief, isolation, depression and suicide. Respondents also talked about "younger and younger" children experiencing these mental and behavioral health issues, including suicide.
- Respondents talked exclusively about "mental health" and particularly the impacts of the past two years on everyone's mental health, rather than talking about "developmental well-being."

Structural racism

- Community-based organizations consistently pointed to structural racism as the way in which policies and practices were designed to intentionally deny certain communities access to opportunities and resources that support advancement and success. Structural racism shapes the environment in which people live and devalues specific communities.
- As with mental health and developmental well-being, respondents discussed that there are not enough providers of color or bi-lingual providers who represent the communities they serve, which contributes to implicit bias.
- Political polarization and increases in hate speech were also mentioned by respondents as deeply impacting and further traumatizing communities of color.

Health disparities

- Most respondents rated health disparities as an essential priority; however, they also talked about health disparities as existing because of structural racism; the two issues are intertwined.

Access to resources

- Many respondents, when describing their image of "healthy families," described having access to basic resources like housing, food, health care services and educational opportunities.
- Community organizations said that children and families in poverty have the greatest need for services and supports; however, they have the most difficulty accessing these resources.

Economic opportunity and income

- Income and employment were seen as important health issues; however, community organizations most often focused on how the lack of income and employment opportunities in their communities contributes to poverty. Some spoke specifically to deep poverty that is present in Indigenous communities and in African American communities that contributes to cycles of intergenerational poverty.
- Respondents felt that a lack of income and employment exacerbates issues around access to resources such as health care and healthy food.

Emerging health issues identified

After community-based organization staff shared their perspectives on the importance of existing health priorities, they were asked what health topics or emerging issues they felt Children's Minnesota should be aware of or consider as a priority in 2022 and why. The main topics identified include culturally responsive services and community safety. The following outlines the ways in which community organizations perceived these issues to be present in their community and implications for their existence.

Culturally responsive services

- Many respondents listed cultural resources and supports as having a "positive impact on the health of children and families." This included resources for LGBTQ+ community members, Black or African American, Latino and Asian communities as well as other communities of color, Women and immigrant communities. One-third of respondents described the importance of initiatives that are community-led.
- Intertwined with mental health and developmental well-being (as well as many of the other 2019 health priorities) is the fact that there are not enough culturally responsive services and resources for supporting community health.
- Respondents pointed to the following as being important components of culturally responsive services and resources: staff who are representative of the community served, overall cultural competency and sensitivity of staff, staff who speak the same languages as the community they serve and ensuring access to services that align with cultural practices. Respondents noted that the lack of these culturally responsive services and resources are barriers to community health.

Community safety

- Along with mental health, respondents most commonly identified community violence as an area that negatively impacts the health of children and families.
- Multiple respondents talked about increases in gun violence and the trauma that communities have experienced in the aftermath of increases in gun violence (locally and nationally).

Ways in Which Children's Minnesota is Best Positioned to Address Health Issues

Respondents were asked what they thought Children's Minnesota is best positioned to do to help address the issues affecting the health of children and families in the community in the near future (i.e., the next three years).

Community-based organization respondents identified several approaches. First, more than half of respondents suggested **providing or referring to direct resources to increase mental health and developmental well-being**. Participants suggested that this could be done through collaboration with other organizations and/or by providing culturally appropriate and trauma-informed services at Children's Minnesota. Roughly half of respondents also suggested that Children's Minnesota could do **more to connect families to services and resources more broadly.** Finally, more than one-third of participants suggested that Children's Minnesota **could increase its direct involvement with community-based organizations in order to tackle future community issues together**.

The range of respondent suggestions included:

- Setting both internal/external goals and short/long term goals for communicating and connecting to both families/children and community-based organizations
- Advocating for systems change, anti-racism and local policies
- Eliminating barriers to access to services, including barriers around language, cost, insurance and immigration status
- Providing free mobile clinics
- Providing education opportunities for families on health and well-being
- Helping families navigate the health care system
- Supporting multi-system communication in order to provide wider whole family and culturally specific support
- Partnering and collaborating with community-based organizations

Children's Minnesota staff

Earlier this year, Wilder facilitated discussion groups with staff from Children's Minnesota's Minneapolis and St. Paul campuses. Staff were asked about their perceptions of families' needs related to Children's Minnesota's 2019 priority areas, as well as what other needs are prominent among the children and families they work with. Staff who participated in these discussions included family liaisons, social workers, health care providers, health equity leadership, family resource managers and coordinators, music therapists, psychologists, interpreters, patient experience coaches, human resources staff, child life supervisors and legal services staff. Twenty-nine staff participated in one of two discussions (May 5 and May 6). The majority of the participants identified as White and female and worked at the Minneapolis Children's Minnesota campus.

Existing health priorities

As with the community-based organization interviews, Wilder asked Children's Minnesota staff, "To what extent should each area *remain* a priority area that Children's Minnesota addresses directly?" Most respondents felt that each area should either be "essential" or a "high" priority. **Structural racism and mental health and developmental well-being** were the top priority areas for Children's Minnesota staff (Figure 69).

69. Children's Minnesota staff ratings of 2019 CHNA priority areas (N=29)

	Structural racism	Mental health/ developmental well-being	Health disparities	Access to resources	Economic opportunity and income
Essential	21	20	18	15	5
High	2	4	5	6	12
Moderate	1	0	1	2	6
Somewhat	0	0	0	0	0
Low	0	0	0	1	0
Not a Priority	0	0	1	0	0
Missing	5	5	4	5	6

Structural racism

- The highest number of staff rated structural racism as an essential priority.
- Bias and racism can be found throughout the health care system, including providers treating Black or African American, American Indian, Latino or Asian patients differently, as well as not having providers that represent the patients being served (i.e., racially, ethnically, culturally, linguistically).

Mental health and developmental well-being

- Mental health impacts every other area of health.
- When asked about resources where communities need additional support, the most common response was mental health care – the number of providers, the types of treatment and overall infrastructure.
- Multiple factors had a negative impact on children and families' health in the past two years, including the pandemic, educational systems (e.g., MPS district redesign, distance learning, overwhelmed teachers), a rise in bullying and hate speech (especially amplified by social media).

Health disparities

- More than other groups, Children's Minnesota staff talked about disparities beyond race and ethnicity, especially for LGBTQ+ youth, immigrants and refugees (e.g., several people mentioned the war in Ukraine).

Access to resources

- Having a "healthy family" means having access to resources, including stable housing, food, transportation, education and health care (including a good primary care provider).
- Our complex and siloed health care systems have a negative impact on families' abilities to access health care. In addition, many families are mistrustful of providers and health care systems because of the complexity.
- A lack of transportation, unreliable transportation and parking fees are also barriers to accessing services and, ultimately, have a negative impact on health.
- COVID-19 worsened the ability of families to access health care resources (e.g., baby formula shortage, restrictions on visitors at clinics and hospitals, room shortages, long wait times).

Economic opportunity and income

- Staff discussed the importance of income and employment in meeting basic needs, especially child care and medical costs.

Emerging health issues identified

Listed below are the emerging health issues and concerns identified during the staff discussion groups.

Culturally responsive services

- There are not enough culturally responsive resources at Children's Minnesota. This includes staff representation of different cultures and experiences, as well as gaps in services (e.g., alternative medicine).
- More culturally responsive health care is needed for transgender patients, as well as for specific services related to women's health.
- Some staff also discussed the need for more language interpreters and spiritual services.

Safe and supportive environments

- Several staff talked about the importance of safe and supportive environments, both at home and in the community (e.g., outdoor play spaces, safe schools, clean air/environment).

Ways in Which Children's Minnesota is Best Positioned to Address Health Issues

Children's Minnesota staff participants were asked what Children's Minnesota is best positioned to do to address the issues impacting the health of children and families in the next three years.

The most commonly suggested strategy for Children's Minnesota to address issues impacting health was to utilize **telehealth and mobile clinics** to address lack of access to health care. The second most common strategy participants suggested was **increasing partnerships and collaboration** with other community organization and schools. Other strategies included:

- Provide transportation assistance (e.g., parking vouchers, gas assistance)
- Provide food vouchers for cafeteria
- Determine whether to pursue a focus on mental health
- Conduct outreach in diverse communities
- Provide reconstructive surgery for female genital cutting
- Provide non-health care resources such as food or clothes
- Facilitate mandatory staff meetings that promote culturally competent care
- Focus on diversity, equity and inclusion and hire more staff with similar backgrounds/experiences as patients
- Participate in political advocacy
- Make sure hospital administration staff are physically present more often

Parents and caregivers

Children's Minnesota staff worked with two community partners (Ramsey County Children's Mental Health Collaborative and Hennepin County Children's Mental Health Collaborative) and the Children's Minnesota Families as Partners program to invite parents and caregivers to participate in two focus groups. Respondents were asked to discuss what health means to them, as well as what factors negatively and positively impact their community and family's health. Information from parent/caregiver focus groups is used as a supplement to the other primary data collection and secondary data review. Wilder Research moderated the two focus groups – one on August 9th with parents and caregivers recruited by Ramsey and Hennepin County and one on August 30th with parents and caregivers recruited through the Families as Partners program. Each participant received a $35 gift card as a thank you for their time.

Fifteen parents or caregivers attended the focus groups; the majority were women (80%) and identified as White (33%) or Black (27%; Figure 70). The following section outlines the main themes identified during the parent/caregiver focus groups.

70. Race and gender of parent/caregiver participants (N=15)

	#	%
Race		
White	5	33%
Black	4	27%
Hispanic	2	13%
Asian	1	7%
Native American	1	7%
Multiracial	1	7%
Gender		
Female	12	80%
Male	3	20%
Non-binary	0	0%
Unknown	0	0%

Existing health priorities

Because of the nature of focus groups, which allow for more open discussion, respondents were not individually asked to rate the 2019 CHNA priority areas (as they were in the community-based organization interviews). That being said, parents and caregivers coalesced around certain priority areas. **Access to resources**, **mental health and developmental well-being** and **economic opportunity and income** were particularly top-of-mind.

Access to resources

- When parents and caregivers were asked to describe what it looks like when their family is "healthy," one of the most common themes across groups was having access to recreational activities, especially nature (e.g., parks, lakes, trails), sports, museums and supportive social groups.
- Parents also talked about how difficult it is for them to access certain resources (particularly related to mental health). Access to resources includes multiple factors – respondents do not always know where to go for help, eligibility criteria are confusing and resources are limited, especially culturally responsive supports or supports for people who speak languages other than English.
- Many respondents also discussed the need for additional resources that would support them as caregivers of children, including more maternity and paternity leave, respite care, specific needs support groups (e.g., Down Syndrome or other groups for children with special health needs) and mental health care.

Mental health and developmental well-being

- Parents and caregivers talked about mental health as being part of the "whole person" and equally as important as physical health. Many parents and caregivers discussed the mental health resources they receive (e.g., through the Ramsey County Children's Mental Health Collaborative) as being the most important.
- As mentioned among other respondent groups, parents and caregivers talked about the deeply felt need for more mental health services, such as family counseling and counseling for youth in school.

Economic opportunity and income

- When asked which of the 2019 CHNA priority areas pose the biggest challenges for them and their communities, many respondents said "economic opportunity and income," since having income is crucial to supporting other aspects of health.
- Several families said they struggle to meet basic needs – housing, food and transportation – and that the cost of living is only getting higher.

Structural racism and health disparities

- Parents and caregivers often talked about structural racism and health disparities together.
- Several parents said that structural racism and health disparities were the biggest challenge for them and their community.
- A few parents and caregivers talked about experiences at Children's Minnesota (and other health care systems) where providers assumed certain things about their situation based on their race (parents/caregivers of color) or gender identity (LGBTQ parents/caregivers).

Emerging health issues identified

One of the parent/caregiver focus groups spoke about increased violence in the community and the need for more work around community safety.

Ways in Which Children's Minnesota is Best Positioned to Address Health Issues

Parent and caregiver participants were asked what Children's Minnesota is best positioned to do to address the issues impacting the health of children and families in the next three years. Caregivers suggested that Children's Minnesota could **provide more mental health resources and supports, advocate for universal basic income, implement mobile clinics, collaborate with other organizations to provide resources for families (e.g., car seats, books, food), provide financial assistance to patients and give health care professionals time to connect to the community.**

Youth, age 14-18

A select group of youth participated in two focus groups in August 2022. These focus groups were conducted by staff at Youthprise, a Minneapolis-based nonprofit youth development organization. Participants for one focus group were recruited by Children's Minnesota from the membership of its Youth Advisory Council. Participants for the second focus group were recruited by Youthprise from among eligible members of their Youth Engagement Network. All participants lived in the seven-county Twin Cities metro area and were between age 14 and 18.[85] Respondents were asked to provide their perspectives on the strengths of their communities, how they define health, challenges to having good health and how Children's Minnesota can play a role in improving community health.

A total of 15 youth participated in the focus groups. The majority were male (60%) and identified as Black (73%; Figure 71). The following section was produced by Youthprise and outlines the main themes and relevant quotes shared during the youth focus groups.

71. Demographics of youth participants (N=15)

Gender	#	%
Female	6	40%
Male	9	60%
Race		
Asian	0	0%
Black	11	73%
Native American	1	7%
White	2	13%
Multiracial	1	7%
Hispanic	0	0%
Unknown	11	0%

[85] Because of the age of participants, Institutional Review Board (IRB) approval was obtained for consent procedures and focus group protocols from the Wilder Research IRB. Informed consent was obtained from all participants, as well as from the parents/guardians of all participants younger than age 18.

Themes

Access to resources, especially financial resources

Participants stated people shouldn't be disconnected from basic human needs due to lack of financial resources. Finances are connected to access and overall health. People have to have their needs met before thinking about healthy lifestyles. Participants also shared what resources helped them and which they would still like to have.

Quotes

> *Access to resources is what I'd rank as number one. With access to the right resources, other problems could be sorted or kept in check.*
>
> *Maybe more places to connect like make a space/place that sounds like a lot of fun, that might be nice. A way to be more knowledgeable about what is happening around. I have a friend that goes to an art area with a t-shirt press place and VR space.*
>
> *Having more options of places to go and things to do. My one friend who lives nearby and I would go around our neighborhood on bike rides and it got repetitive.*
>
> *I wish public transportation was free, so people can get to where they have to go without having to pay every time. It would be helping the public be more self-sufficient, getting to their jobs, appointments, etc.*
>
> *One place I like to go and it is easier to go now [is] go to my friends' houses and go play basketball, but it's harder to do when you do not drive or have access to transportation.*
>
> *Kind of going off of what [redacted] said—homeless students took a huge hit during COVID and more so than others as they had nowhere to go or have resources they need such as not having a computer or access to distance learning and missed out on a whole year.*
>
> *Financial opportunity and income, I say is the biggest barrier that because it plays into all the other topics. You need funds! There aren't too many charities for therapy.*
>
> *Like I said before there's intersection because if you have a mental health issue you need to be treated, right? Well, you need a stable financial account to be able to take care of things.*
>
> *We live right by [redacted] near the [uprisings] from George Floyd and we saw people getting pushed out and not get stable housing and not being able to access resources and needs. Like what does it really mean to have safer streets when you move them or shove them into another corner?*
>
> *That could look like no school, a tent, some cobbled together structure to keep you safe and the health care system is strange and deranged compared to Canada and universal health care. You can get sick but if you can't afford stuff you cannot pay to get better or your family might suffer if you get sick and have to pay.*
>
> *Not having enough money, or financial capability. It [financial opportunity] is the most challenging to me. It can affect everyone in the family from the father to the last child.*

Racism and racial disparities

Communities of color face disparities when it comes to being healthy, whether it be from lack of resources (health coverage, healthy food, gym memberships, mental health providers), or from facing discrimination in spaces where fitness and health are the center, such as with sports.

Quotes

> *I like this topic because I have been experiencing this since elementary school. The racism I have experienced during sports makes it so hard for me to continue the sport. Being on an all-girl Black basketball team and experiencing racism from other players and parents on opposite teams have made it hard. I learned these spaces aren't safe at a really young age.*
>
> *I felt left out and I just had to accept it. It really did affect my mental health but I just learned to deal with it.*
>
> *Discrimination of any kind.*
>
> *Thinking of racism, I am privileged enough to have a house and it's just really sad and I wish people could all be equal and have what they need that they do not get.*
>
> *Women's Rights and Black Rights. I don't know, I feel like we are going backwards."*
>
> *I want to jump off what [redacted] said. I completely agree. The whole Roe v. Wade thing really sets the tone for how the government and higher ups see not even just Black women, but any woman of color. Any woman with the slightest pigment. It's really actually sad. I feel Black women are especially dismissed when it comes to medical things or when then go to the hospital. It's either a one and done, or a 'you don't have that.' 'You'll be fine.' Or a 'all you need to do is this.' When there's been stories and lots of cases where Black women was like, 'This is what the doctor told me, I did it and it 'f-----' me up even worse. Excuse my language.*

COVID-19 and its impacts

The pandemic, lockdown and COVID-19 itself had a number of impacts on the community and how health was experienced and defined.

Quotes

> *I feel with COVID and health issues it has created mental health issues. I went in to get a primary doctor and she bombarded me with mental health and how me losing weight was tied to my mental health. It's weird. Before they would say I needed to gain weight.*
>
> *Obviously COVID even though it's a generic answer. Obviously, it wasn't great – always staring at a computer, not having interactions and as a family not connected and going out..*
>
> *Of course, COVID. We used to have block party things and then they stopped having them but we were not connected. We were all isolated during COVID and it was exhausting, the pressure of having to be online and not feeling fulfilled.*
>
> *Kind of going off of what [redacted] said – homeless [students] took a huge hit during COVID and more so than others as they had nowhere to go or have resources they need such as not having a computer or access to distance learning and missed out on a whole year.*

Mental Health

Mental health can be a barrier to youth and families' health and wellness. and it impacts nearly everything. Participants found it to be a challenge to focus on other areas of life when their mental health was not up to par. They also noted how mental health has shifted during the pandemic both for themselves and the community.

Quotes

> *I feel like mental health can consume all. Meaning your physical health, your emotional health, everything. I know this from personal experience…I feel you can't be healthy in life in all aspects if you aren't working on your mental health. I suggest that above all.*
>
> *I feel with COVID and health issues it has created mental health issues. I went in to get a primary doctor and she bombarded me with mental health and how me losing weight was tied to my mental health. It's weird. Before they would say I need to gain weight.*
>
> *It's about the people around us. If you get positive vibes, you will give positive vibes. If you give negative vibes, you will give out negative vibes.*
>
> *Mental health is part of the conducts that directs even physical activities that helps you live healthily.*
>
> *Having a lot of different places you [could] run into people and are connected to friends. It makes me happy and improves my mental health to be more connected to people since my friends are not nearby.*

Children's Minnesota providers

A select group of Children's Minnesota health care providers were interviewed in summer 2022. Providers included physicians, social workers, psychologists and nurse practitioners who worked in multiple Children's Minnesota locations (Minneapolis and St. Paul) and settings (emergency departments, inpatient setting, primary care and specialty clinic care). Respondents were asked to provide their perspectives on the importance of continuing 2019 community health priorities, perceptions of emerging health issues and barriers families experience to health and wellness.

A total of 12 providers were interviewed. The majority were women (83%) and identified as White (67%) or Hispanic (17%). Most (70%) were physicians and the greatest percentage (33%) practiced in inpatient hospital settings, with the majority of practice settings located in Minneapolis (58%; Figure 72). The following section outlines the main themes identified during the provider interviews.

72. Demographics and characteristics of practice for provider participants (N=12)

Gender (N=12)	#	%
Female	10	83%
Male	1	8%
Gender non-binary	1	8%
Race and ethnicity (N=12)		
Asian	1	8%
Hispanic	2	17%
White	8	67%
Multiracial	1	8%
Role (N=10)		
Nurse Practitioner	1	10%
Physician	7	70%
Psychologist	1	10%
Social Worker	1	10%
Primary practice setting (N=12)		
Emergency department	2	17%
Inpatient hospital	4	33%
Primary care	2	17%
Specialty clinic care	3	25%
Other	1	8%
Location of primary practice setting (N=12)		
Minneapolis	7	58%
St. Paul (proper, not including West St. Paul)	2	17%
Multiple locations	3	25%

Existing health priorities

As with the community-based organization interviews and staff discussions, Wilder asked Children's Minnesota providers, "To what extent should each area *remain* a priority area that Children's Minnesota addresses directly?" Again, most respondents felt that each area should either be "essential" or a "high" priority. **Mental health and developmental well-being, health disparities and access to resources** were the top priority areas for Children's Minnesota providers (Figure 73).

73. Children's Minnesota provider ratings of 2019 CHNA priority areas (N=12)

	Structural racism	Mental health/ developmental well-being	Health disparities	Access to resources	Economic opportunity and income
Essential	8	11	11	11	5
High	3	1	0	1	4
Moderate	0	0	0	0	2
Somewhat	0	0	0	0	1
Low	1	0	1	0	0
Not a Priority	0	0	0	0	0
Missing	0	0	0	0	0

Mental health and developmental well-being

- Providers spoke firmly about the importance of mental health and developmental well-being as a priority area of concern. "Mental and behavioral health is the biggest issue for children. Stressors in the community and within families have manifested as problems for children [in] their mental and behavioral health," noted one participant.
- A theme that emerged was the extent to which mental health struggles among children are both more widespread and more severe than before. "Everybody is struggling. There are not enough resources. Suicidality has increased … [and] I see [this] at Children's," noted one provider. Another participant commented, "The thing that seems categorically worse is the volume of actively suicidal children who have overdosed, we're stabilizing, or they've done self-harm. We are seeing higher numbers of more aggressive self-injury. This is getting worse."
- Providers noted that mental health concerns among children have been exacerbated by recent local and global events. "[These events are] negatively impacting kids. Maybe it's just the pandemic, but it feels worse than it did 10 years ago as a pediatrician. I think Children's is making good decisions, but [I'm] more discouraged than I was pre-pandemic. Delayed social skills for the littles, learning loss for older kids, everyone so stressed. The mental health tie-in. The stressors are overwhelming compared to the coping mechanisms." Another participant noted, "Children are fearful and anxious about all of these issues. Their fear manifests itself as emotional and behavioral health complications."

Health disparities

- Provider respondents discussed health disparities primarily by race/ethnicity and income. One pointed out the extent to which the COVID-19 pandemic underscored health disparities by socioeconomic status (SES).
- Providers emphasized that health disparities by race/ethnicity are caused by systemic racism: “Racism in general is having a huge impact on patients and families. Racist structures and societal pressures [are] the largest driver[s] of adverse health outcomes and disparities. The largest groups of patients Children’s is currently not adequately serving is based on racial identity. That is the biggest gap.”

Access to resources

- Providers primarily framed access to resources in the context of health care resources, commonly reporting challenges among Children’s Minnesota families in accessing needed heath care services due to the complexity of the health care system.
- Providers observed that the health care system can be especially difficult for families to access and understand if households are low income, low literacy, and/or don’t speak English.
- Provider participants also noted that clinical providers have reduced capacity to help patients with navigating the health system and this reduction exacerbates the challenges of accessing needed services:
- Providers noted a number of practical barriers to accessing health care as well, including long wait times for care, lack of transportation, insufficient access to interpreters, insufficient access to health insurance and prescription drug coverage, the cost of care, lack of form literacy and lack of flexible care times.

Structural racism

- Providers identified racism firmly as being an ongoing priority area because it drives negative health outcomes and disparities.
- Providers underscored insufficient representation of people of color among providers and staff at Children's Minnesota, pointing out that representation matters for families and patients.
- Providers pointed out the disproportionate impact of recent local and global events on people of color. One respondent noted, "The murder of George Floyd, social injustice, abortion rights, anti-trans legislation … COVID, have all adversely affected [multiple] populations at much higher rates, with worsening disparities."
- Providers noted that racism adds another level of difficulty when patients and families are trying to navigate a health system that is already complex.

Economic opportunity and income

- Providers noted the critical role economic opportunity and income play in determining health.
- A provider pointed out the extent to which lack of economic resources shows up in the social determinants of health: "housing instability, transportation difficulties, food insecurity, unreliable electricity, [unstable] access to health insurance."
- Heath care costs arose as an issue that affects most families, even if their income is steadier: "[F]amilies that have more stable incomes worry about medical bills. Finances end up driving a lot of the care decisions."

Emerging health issues identified

Multiple respondents identified **mental health and developmental wellbeing as an emerging priority.** While mental health and well-being are a priority at Children's Minnesota, respondents are concerned about the increase in mental health issues, specifically as it related to the pandemic and racial injustice, although one provider explained that it is difficult to "tease out" the impact of the pandemic on mental health. Some providers identified mental health and developmental well-being, in general, as an emerging area of concern, while others pointed out more specific issues like the rise in transphobia and homophobia along with concerns about gender health. The need for chemical dependency support for caregivers arose as a concern, as did the issue of stress related to financial insecurity and the problem of having low emotional reserves to handle everyday stressors. Related to health care, providers cited problems with continuity of care, access to services and provider burnout.

Ways in Which Children's Minnesota is Best Positioned to Address Health Issues

Respondents were asked what they thought Children's Minnesota is best positioned to do to help address the issues affecting the health of children and families in the community in the near future (i.e., the next three years).

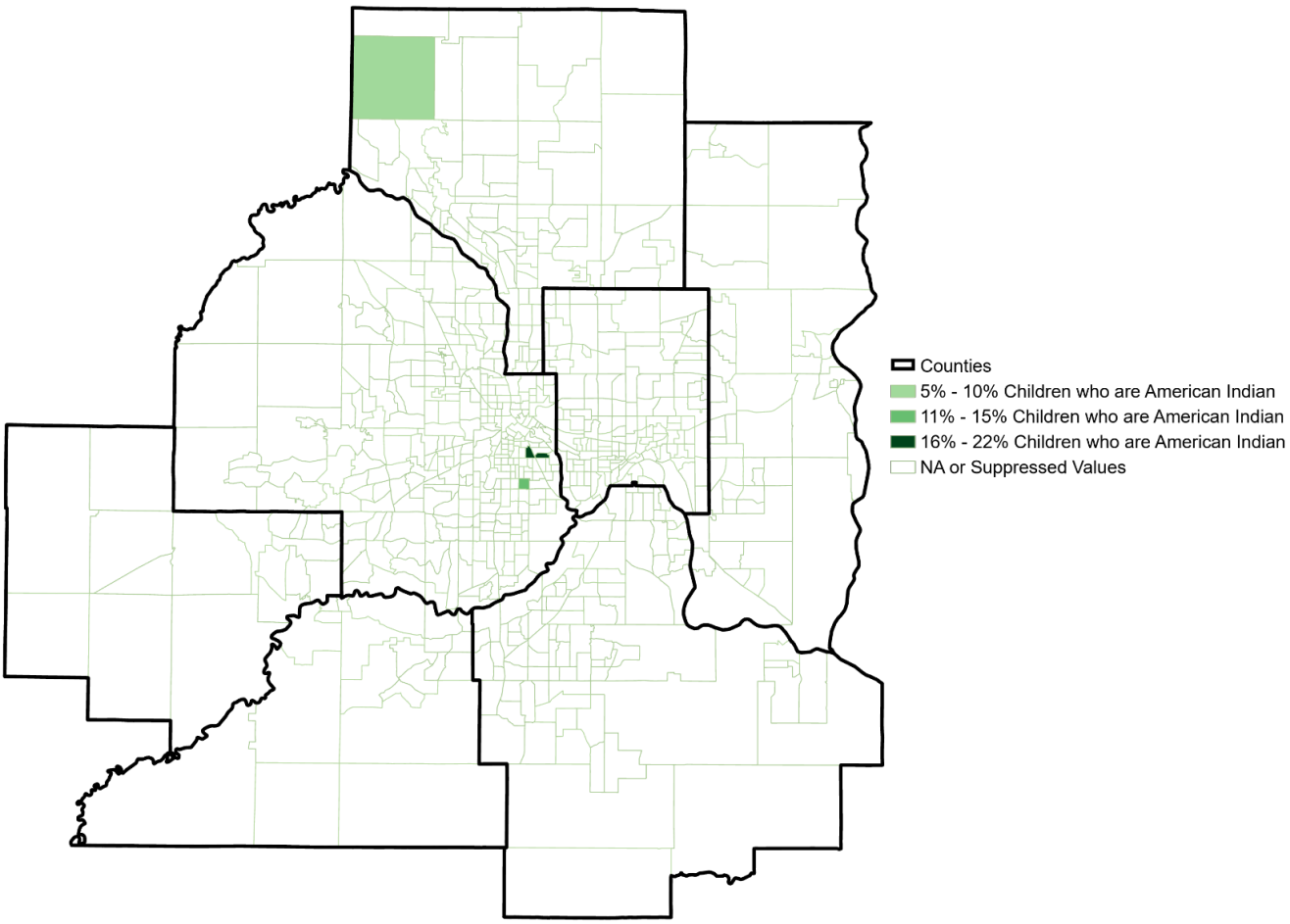
Providers most often said that Children's Minnesota is best positioned to address these issues by developing more partnerships with community resources. Respondents suggested, variously, that Children's Minnesota should expand its Community Connect services to all Children's Minnesota locations, promote the work of community-based organizations, expand its cultural and language liaisons to all Children's Minnesota locations and establish a time where community organizations that are helping families all come to a Children's Minnesota location together to make it easier for families to access services.

Providers also frequently stated that Children's Minnesota is best positioned to address gaps in mental health care services. They suggested that Children's Minnesota could do this by, for example, incorporating chemical dependency treatment for families, increasing available crisis psychiatry services, ensuring there is outpatient follow-up after inpatient services and advocating at the state level for resource allocation for mental health management through coalition efforts.

Respondents suggested a number of other ways that Children's Minnesota could help address the issues affecting the health of children and families in the near future, although these suggestions didn't fall into cohesive categories. Respondents suggested that Children's Minnesota could: institute universal screening for social determinants of health, focus on holistic care, reduce health disparities, implement mobile clinics, provide more care coordination, address systemic racism in a systematic way, provide health and health care education, provide housing support, hire more language ambassadors (or patient family health advocates for language barriers), continue advocating for Medicaid expansion and advocate against gun violence and anti-trans legislation.

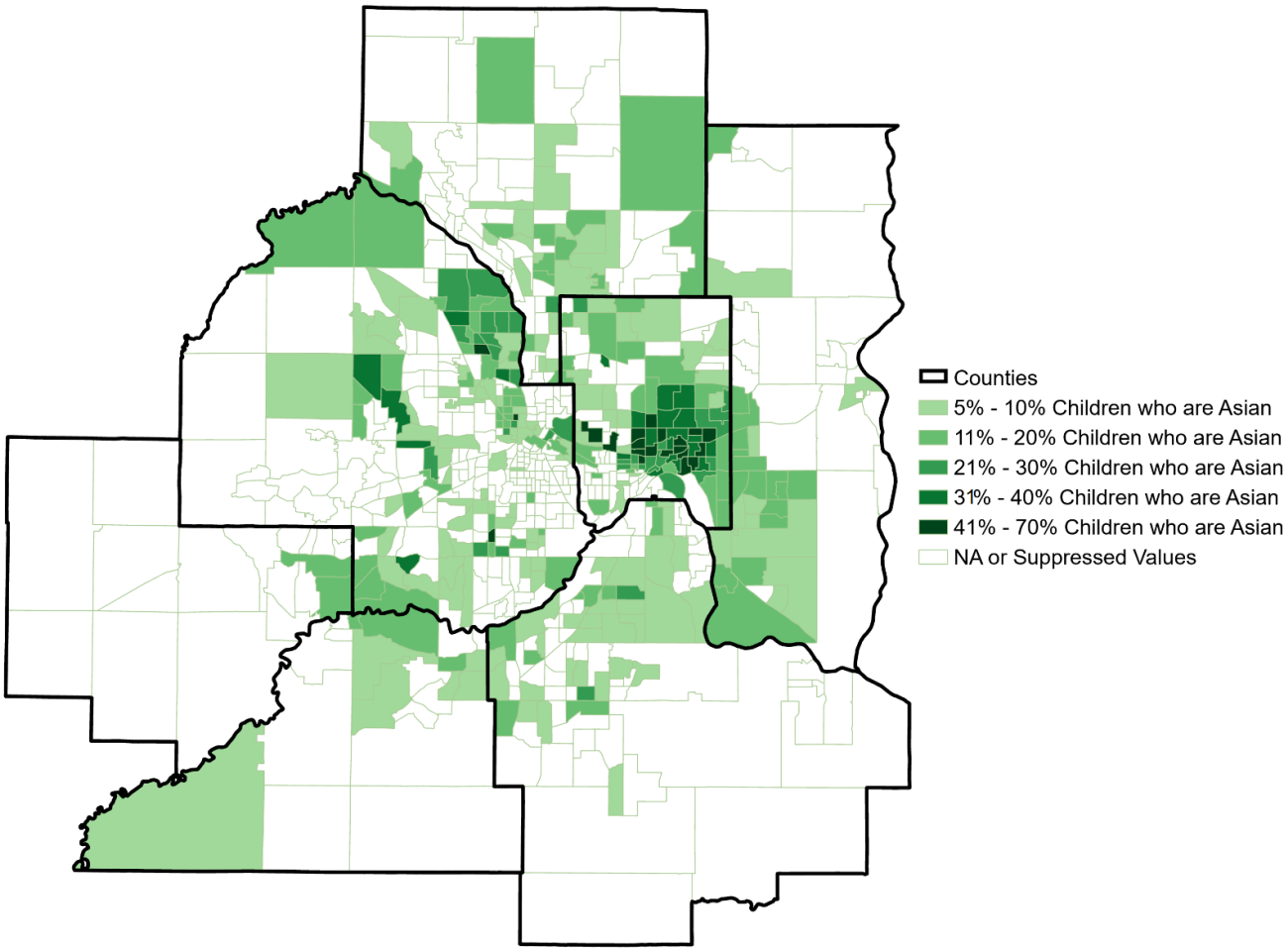
A. Mapping of children in the Twin Cities metro area, by race and census tract

A1. Percentage of children who are American Indian, by census tract (2015-2019)



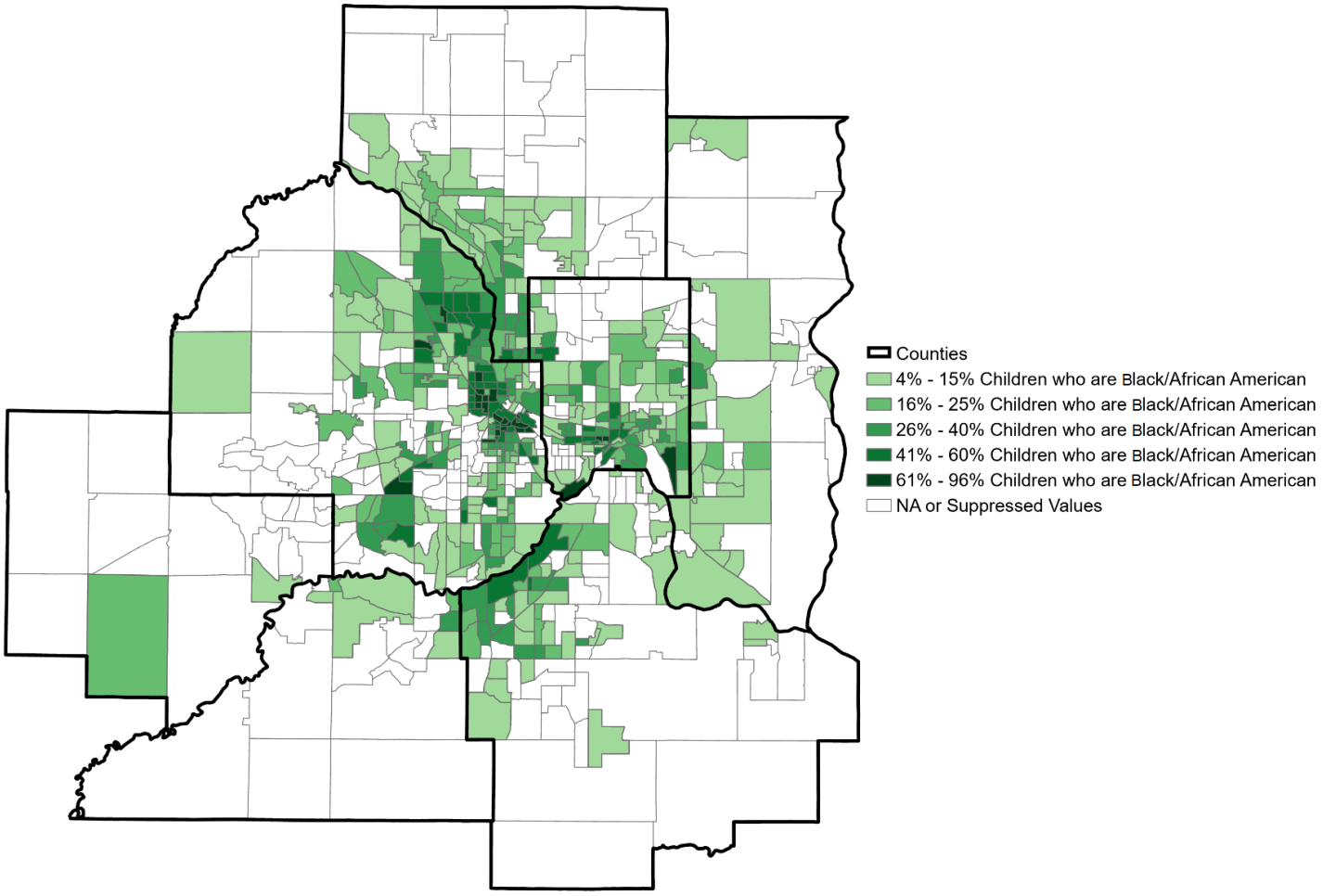
Source. American Community Survey 5-year estimates (2015-19).

A2. Percentage of children who are Asian, by census tract (2015-2019)



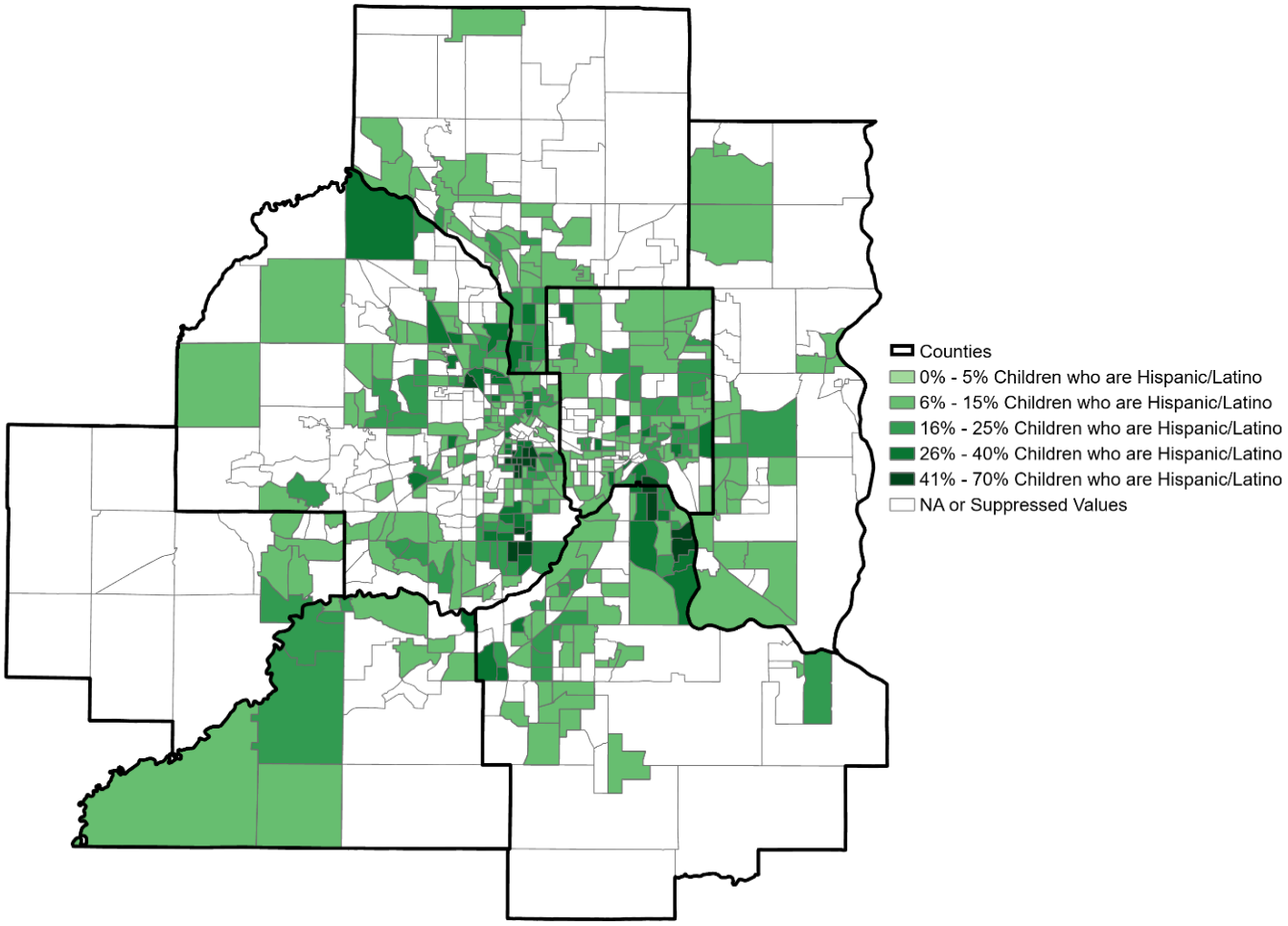
Source. American Community Survey 5-year estimates (2015-19).

A3. Percentage of children who are Black/African American, by census tract (2015-2019)



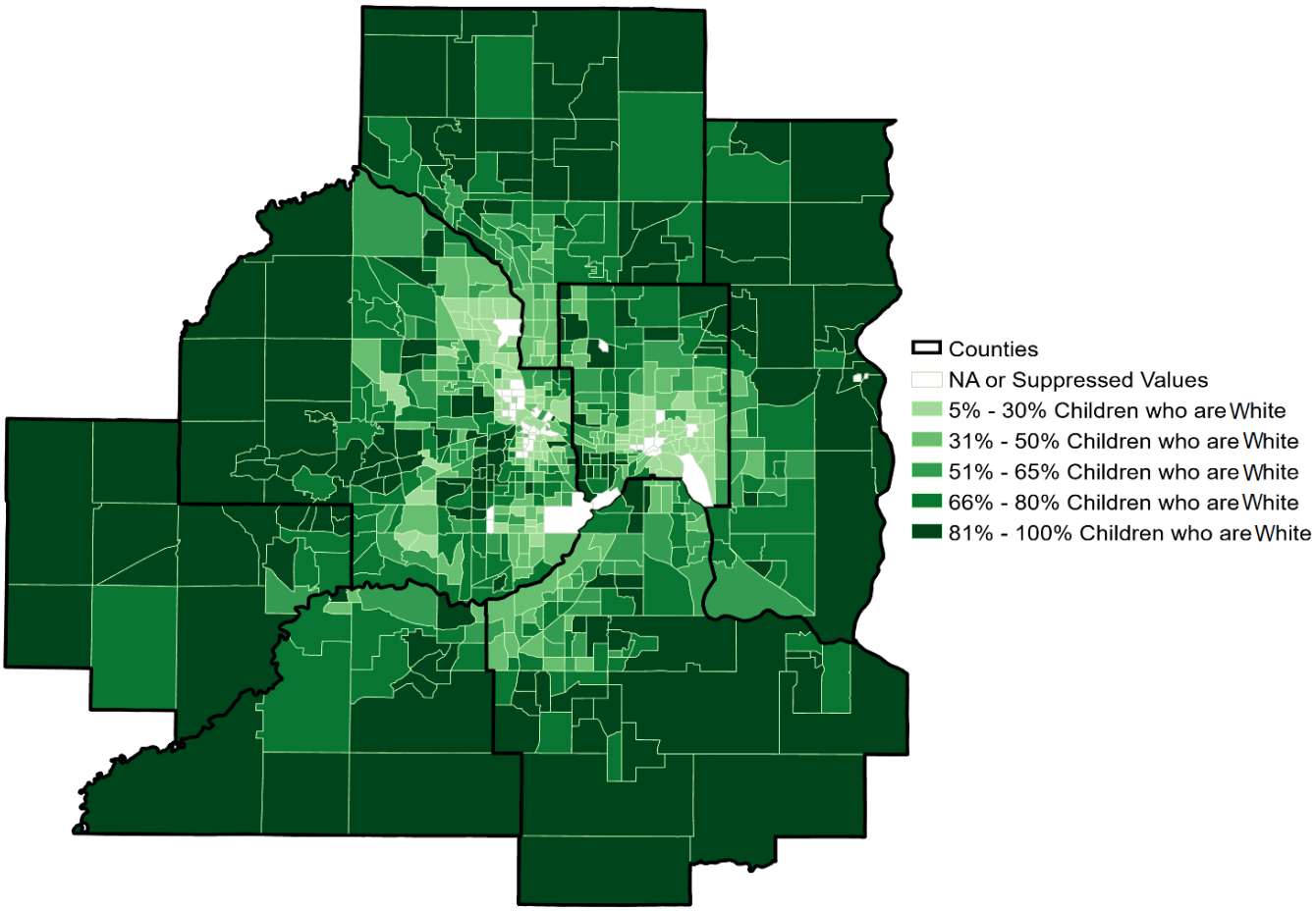
Source. American Community Survey 5-year estimates (2015-19).

A4. Percentage of children who are Hispanic/Latino, by census tract (2015-2019)



Source. American Community Survey 5-year estimates (2015-19).

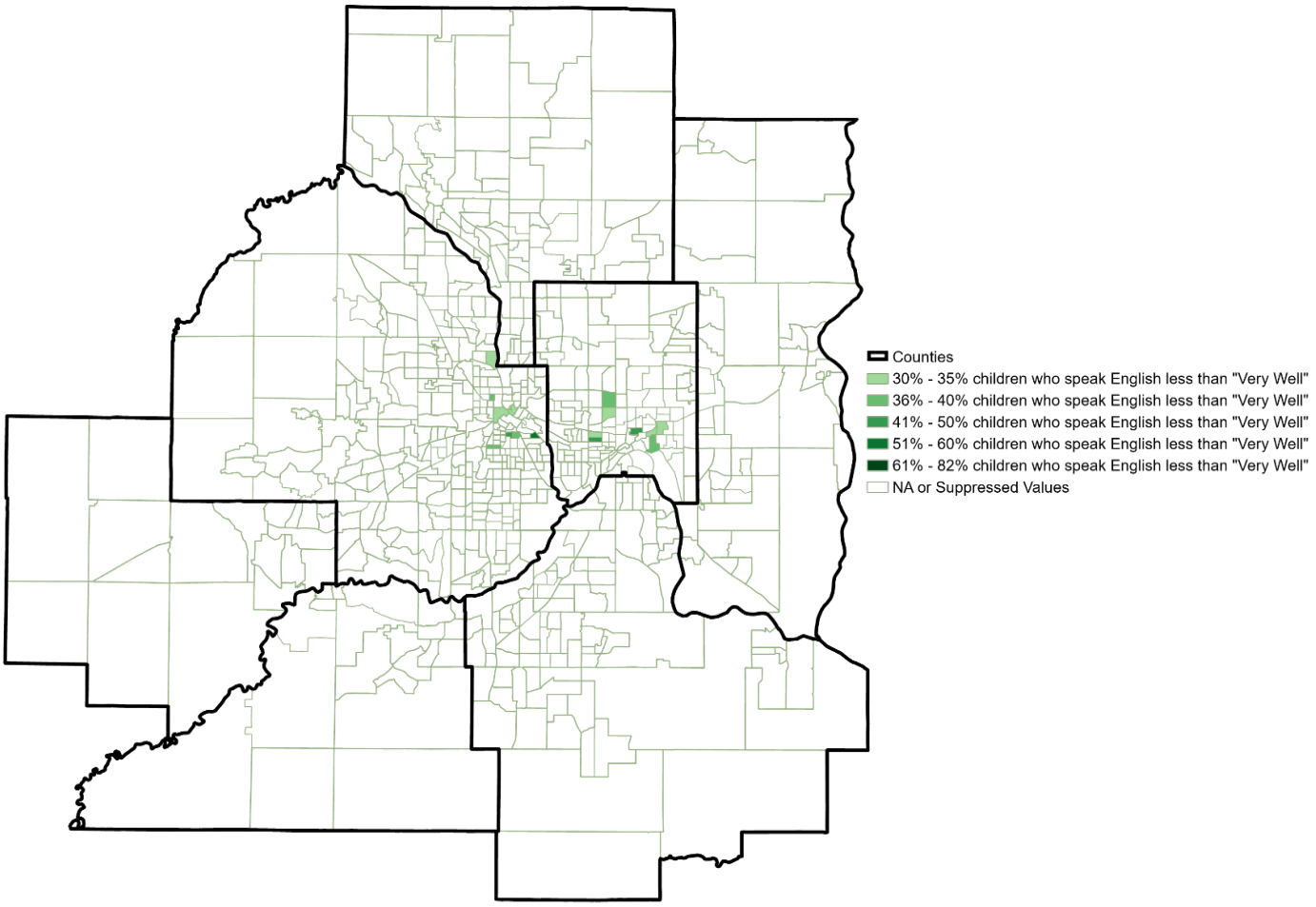
A5. Percentage of children who are White, by census tract (2015-2019)



Source. American Community Survey 5-year estimates (2015-19).

B. Mapping of children in the Twin Cities metro area, by language skill and census tract

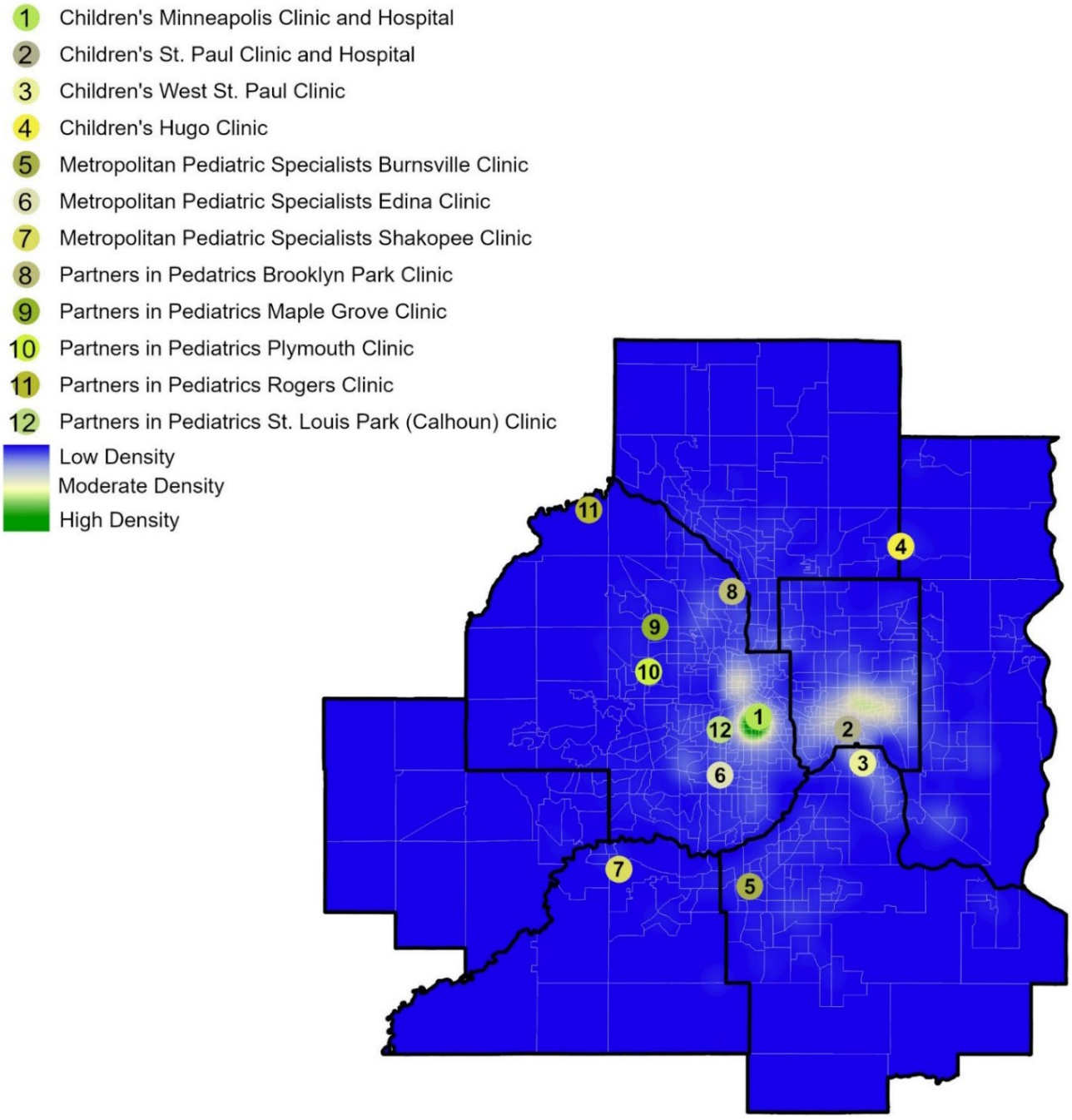
B1. Percentage of children who speak English less than “very well,” by census tract (2015-2019)



Source. American Community Survey 5-year estimates (2015-19).

C. Mapping of Children's Minnesota patient visits

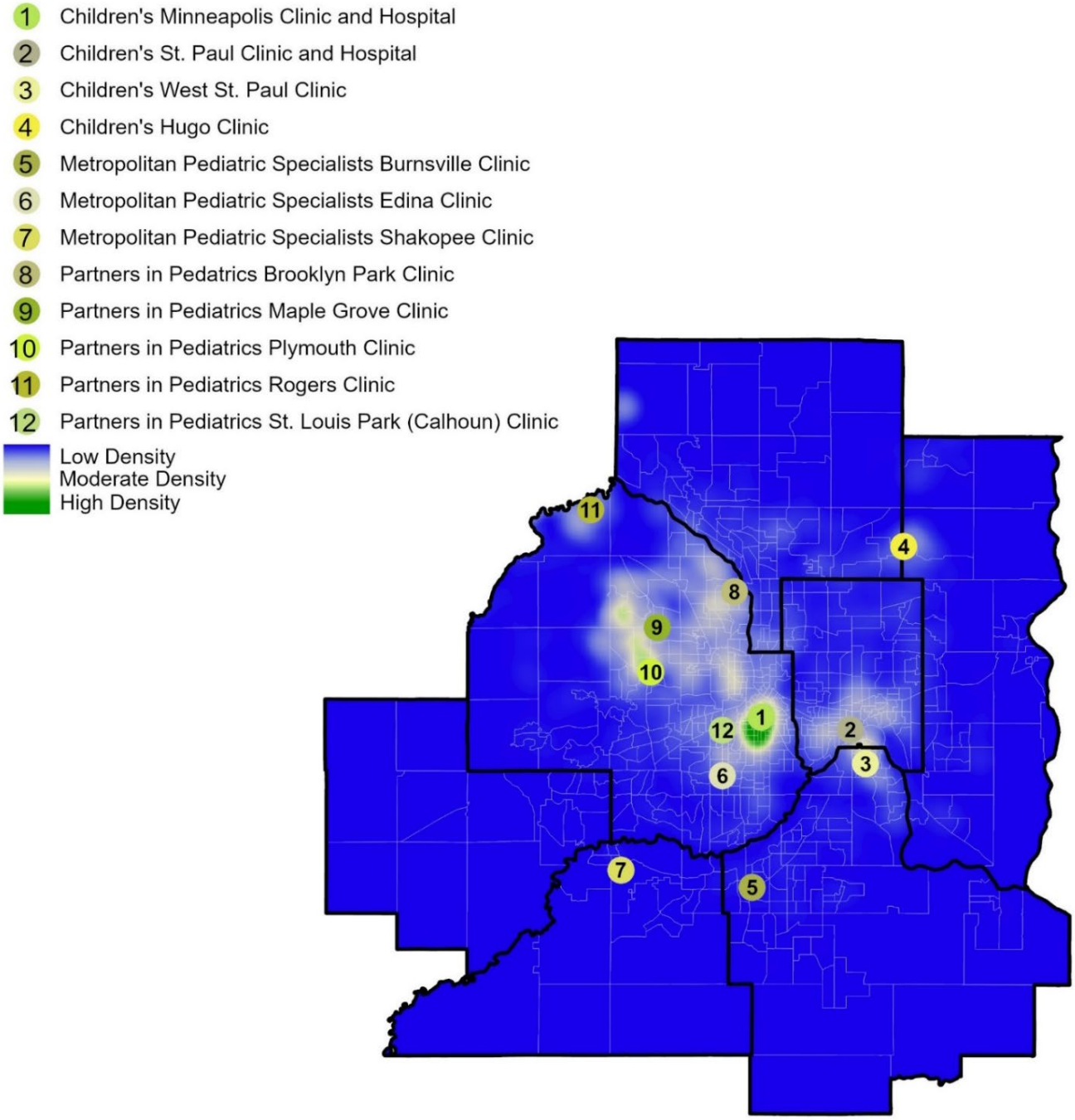
C1. Areas where children are served by Children's Minnesota emergency departments: Patient density (2021)



Source. Children's Minnesota. Mapping and analysis by Wilder Research using 2010 census tracts.

Note. The most recent residence was selected for each child who had at least one visit at a Children's Minnesota emergency department between January 1, 2021 and December 31, 2021. 53,399 unique patients are represented in this map. Emergency departments are located at the Minneapolis and St. Paul hospital campuses (1 and 2 on the map).

C2. Areas where children are served by Children's Minnesota primary care clinics: Patient density (2021)



Source. Children's Minnesota. Mapping and analysis by Wilder Research using 2010 census tracts.

Note. The most recent residence was selected for each child who had at least one visit at a Children's Minnesota primary care clinic between January 1, 2021 and December 31, 2021. 62,281 unique patients are represented in this map. Children's Minnesota primary care clinics are located across the Twin Cities metro and include clinics located at the Minneapolis and St. Paul hospital campuses (1 and 2 on the map). Patients who were seen only at one or more of the Metropolitan Pediatric Specialists clinics (located in Burnsville, Edina and Shakopee) are not included in this map.

Children's®
MINNESOTA

The Kid Experts™

M0972 12/22