

Bay County Community Health Assessment



Our Health Tells a Story

Bay County is a diverse community, rich in vibrant cultures, backgrounds, and experiences. Each of us has a story to tell about our health. It's not just about how we feel but also about where we live, what we have access to, and what choices we make. Our community's health tells a bigger story that includes everyone living here. When we think about health, it's easy to focus on things like exercise, diet, or doctor visits. But the truth is, our health is [influenced](#)^{1st} by many factors such as our physical environment, behaviors, social and economic factors, and health care.

A Community Health Needs Assessment (CHNA) is conducted every 5 years by the Bay County Health Department to learn more about these factors that can affect our well-being. This CHNA dashboard summarizes community insights and population data from our latest CHNA that can be used as a guide to prioritize health concerns, create solutions, and use resources effectively to address issues in the community.



Message from Public Health Officer Joel Strasz

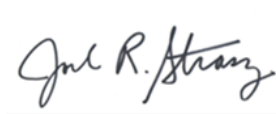
Greetings-

I am pleased to share the results of our most inclusive community health assessment for Bay County, Michigan. Our assessment involved the hard work of the Bay County Health Department staff as well as our valuable partners from McLaren Bay Region and other healthcare, human services and community organizations. Together, we have stridently attempted to reach out to every region of the County and created more opportunities for people to share their voices.

The purpose of the Bay County Community Health Assessment (CHA) is to measure the health status of the community. The CHA is comprised of data collected from various sources, including federal, state and local sources and attempts to go beyond mere indicators of health such as birth, disease and death rates but to include factors that directly influence the health and well-being of our community including educational, economic, housing and human needs statistics. The data collected will be analyzed to identify gaps and needs of the community and used to create a Community Health Improvement Plan.

In this assessment you will note how we carefully collected and studied the data to better understand the root causes of our community's challenges. Data included in this report has the power to affect systems, health outcomes, and the lives of over 100,000 people in Bay County. Together we are committed as partners in the to not only identify the pressing issues related to the health and well-being of our fellow residents, but to find the root causes of what prevents us from being a healthy, thriving community.

Sincerely,

A handwritten signature in black ink, reading "Joel R. Strasz". The signature is written in a cursive style with a large, stylized 'J' and 'S'.

Joel R. Strasz

Public Health Officer

How to Use This Dashboard

How you use this dashboard might depend on why you care about public health. The data provided serves many purposes, with useful information to help you understand the health of our community better.

If you're a **resident**, you may want to learn more about the health of our community to better help your family, neighbors, and friends. Using this data can help you learn about who lives in our community and the overall needs we have.

If you're a **community partner, health professional, or elected official**, you can use this dashboard to inform policy, priorities, supply information for grant applications, or learn more about where to allocate resources.

If you're a **community volunteer**, this dashboard can help you identify the specific needs of the part of the county you support, understand some root causes of those issues, and find other organizations you could partner with.

• Dashboard View and Controls

To ensure you have the full experience of the dashboard, please adjust your view based on your device.

On a phone? Switch to landscape view.

On an iPad? You can either use portrait or landscape view.

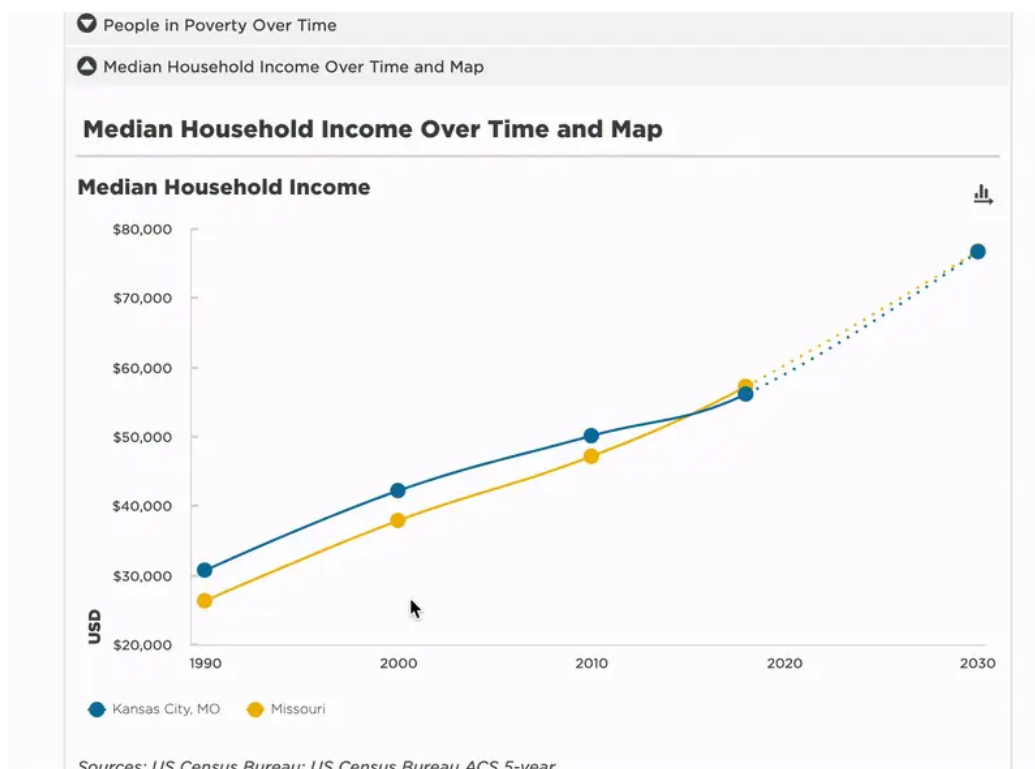
Here are some tips on how you can **view**, **save**, and **share** the provided data:

Dashboard Controls

To get the most use out of this data, here's how you can **see**, **save**, and **share** it:

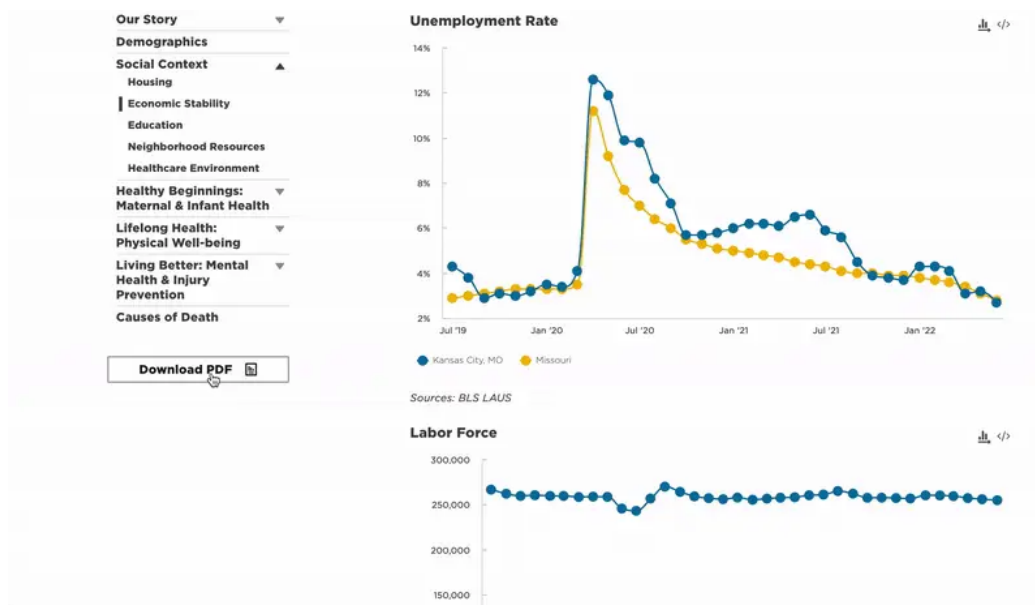
Collections

When more data points are available for a specific topic, you'll see a list of data headings with arrows to the left. **Click on the down arrow** to expand that section and view the data. You can close that section by clicking on the up arrow. A collection may include many presentation types, such as maps, charts, tables, and more.



Saving Data

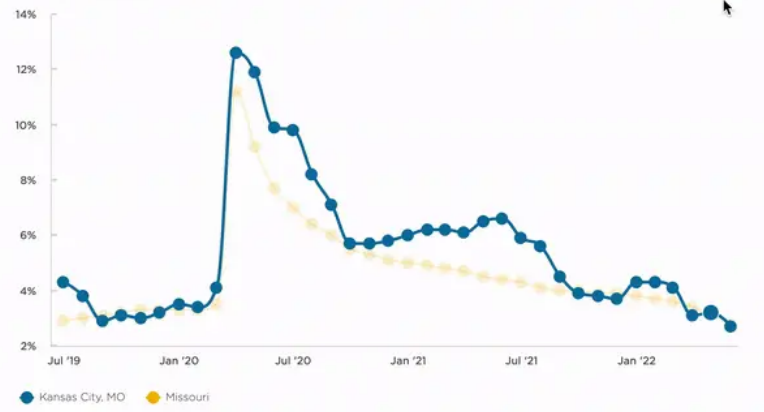
If you want to save the data for yourself, it can be saved as a PDF, CSV (spreadsheet), SVG or PNG (photos), or even GeoJSON (for GIS applications). To see what file types are available, **click on the bar graph icon** on the top right of that data visualization.



Embedding Data on Your Website

If you want to share data from the dashboard on a website, you can **hover over the embed code icon** </> on the top right of that visualization. This will allow the people who visit your webpage to interact with dynamic visualizations rather than a static PNG or PDF.

Unemployment Rate



Sources: BLS LAUS

Labor Force

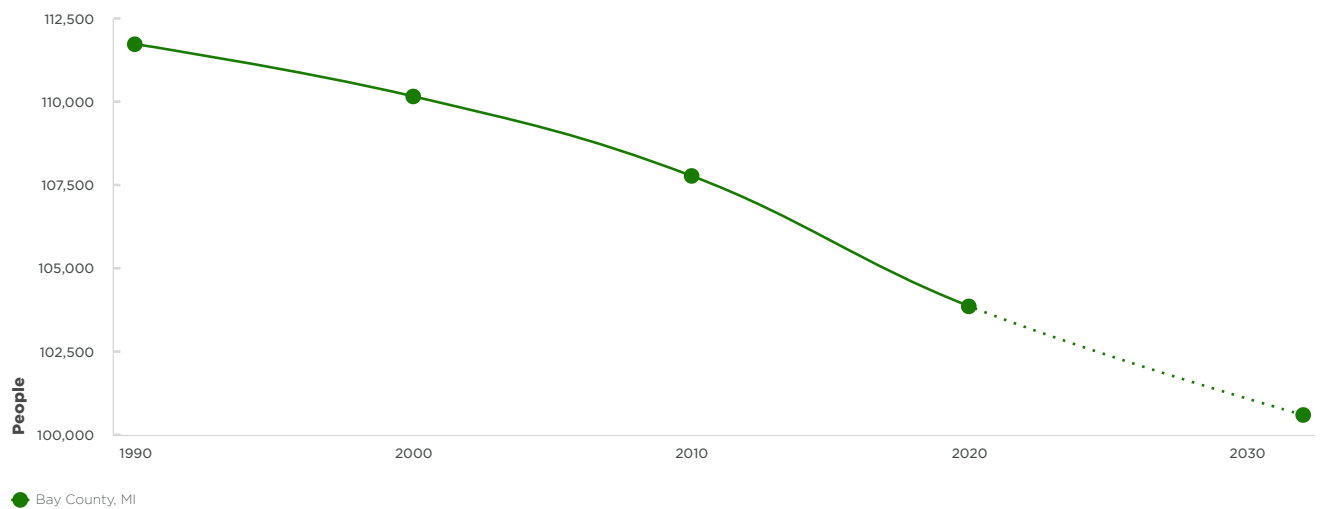
300,000

Who We Are Matters

Every member of our community should have the chance to live a healthy life. Knowing who lives here helps us figure out how to best serve our community and what extra support might be needed. Factors like age, race and ethnicity, sex, languages spoken, immigrant population, veterans, and disabilities are all important to understand the unique needs of our community.

Total Population

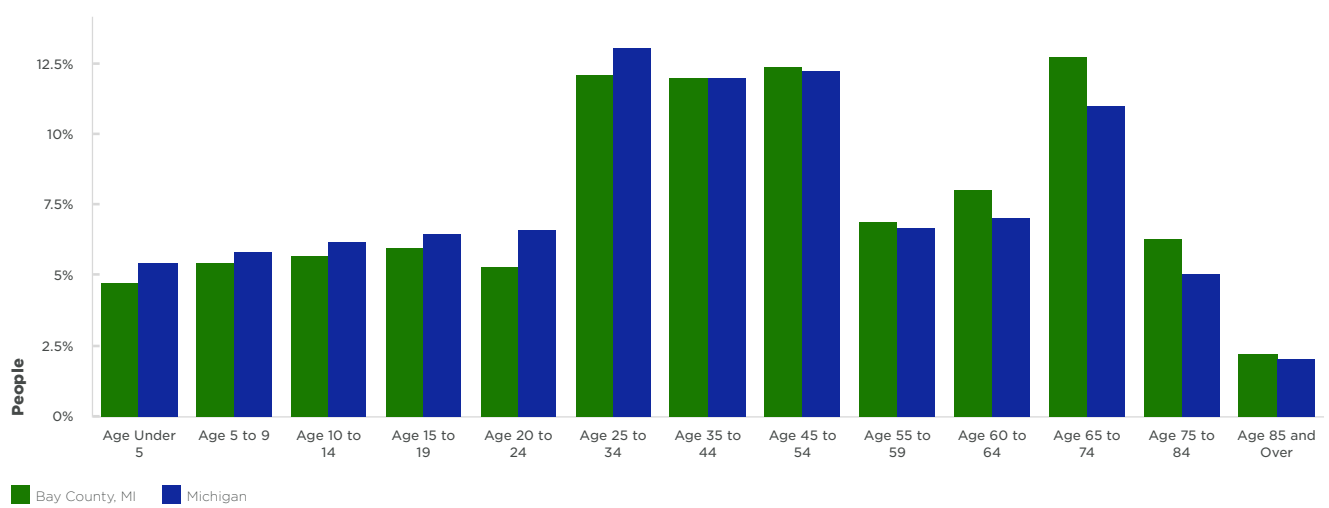
Total Population



Sources: US Census Bureau; US Census Bureau ACS 5-year

Age

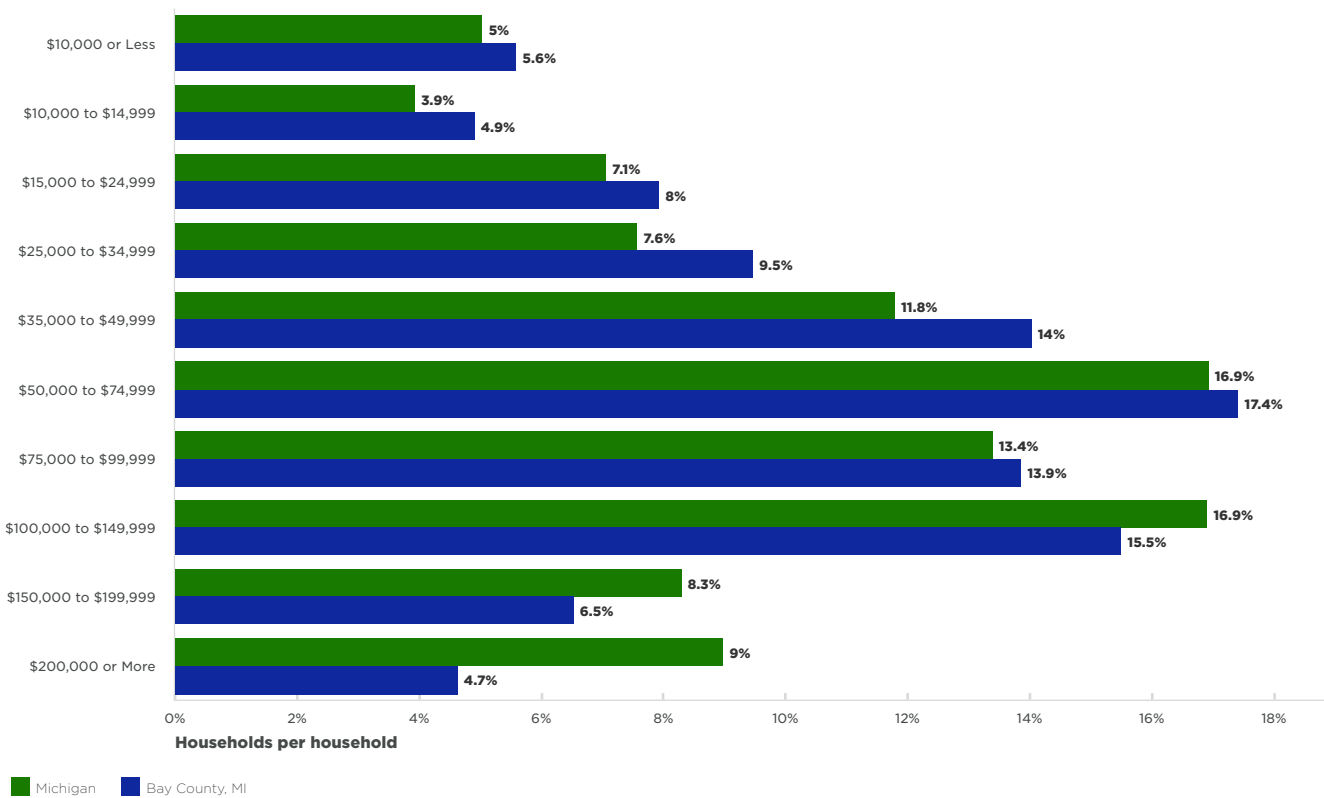
Age Distribution



Sources: US Census Bureau ACS 5-year 2019-2023

Household Income

Household Income for Michigan, Bay County, MI



Sources: US Census Bureau ACS 5-year 2019-2023

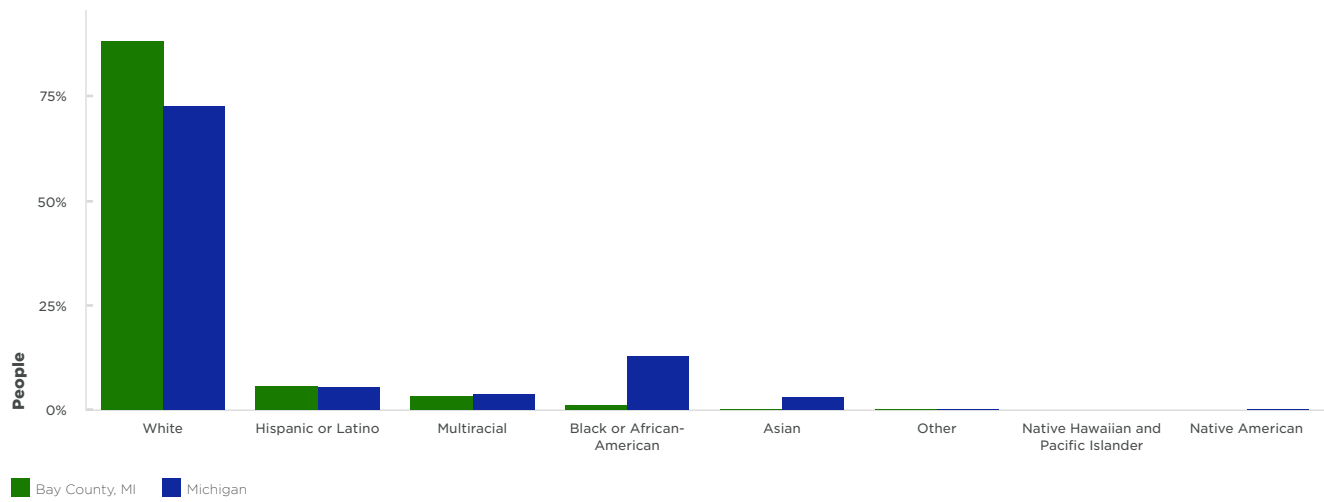
Education

Education Less than 9th Grade per capita	People
Bay County, MI	1.6%
Michigan	1.8%
Midland County, MI	0.8%
Saginaw County, MI	1.5%
Education 9th to 12th Grade, No Diploma per capita	People
Bay County, MI	4.4%
Michigan	3.8%
Midland County, MI	2.7%
Saginaw County, MI	4.7%
Education High School Degree per capita	People
Bay County, MI	24.5%
Michigan	19.5%
Midland County, MI	19.5%
Saginaw County, MI	22.7%
Education Some College No Degree per capita	People
Bay County, MI	18.2%
Michigan	15.4%
Midland County, MI	14.4%
Saginaw County, MI	16.3%
Education Associate Degree per capita	People
Bay County, MI	8.5%
Michigan	6.7%
Midland County, MI	7.9%
Saginaw County, MI	7.9%
Education Bachelor's Degree per capita	People
Bay County, MI	10.6%
Michigan	13.4%
Midland County, MI	15.7%
Saginaw County, MI	10.3%
Education Graduate Degree per capita	People
Bay County, MI	5%
Michigan	8.7%
Midland County, MI	10.2%
Saginaw County, MI	6%

Sources: US Census Bureau ACS 5-year 2019-2023

Race and Ethnicity

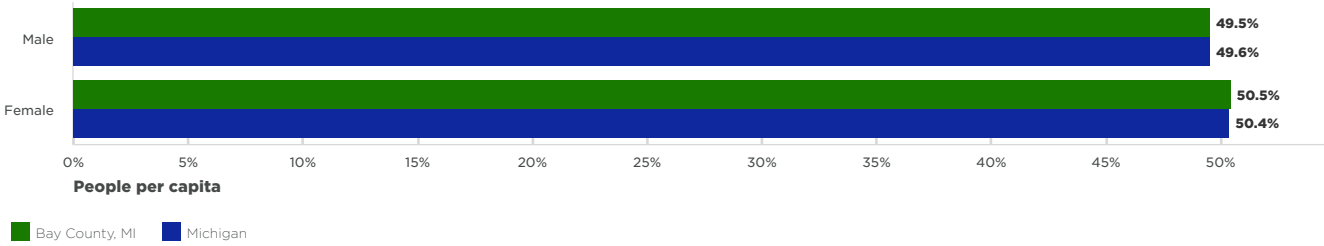
Race & Ethnicity



Sources: US Census Bureau ACS 5-year 2019-2023
Note: Hispanic or Latino includes any race. All other races in this chart are not Hispanic or Latino.

Sex

Sex



Sources: US Census Bureau ACS 5-year 2019-2023

Foreign Born & Language Spoken

Overall



Immigrant Population

1.2%

of People

Bay County, MI

7%

of People

Michigan

Limited English Proficiency

0.5%

of People ages 5+

Bay County, MI

3.6%

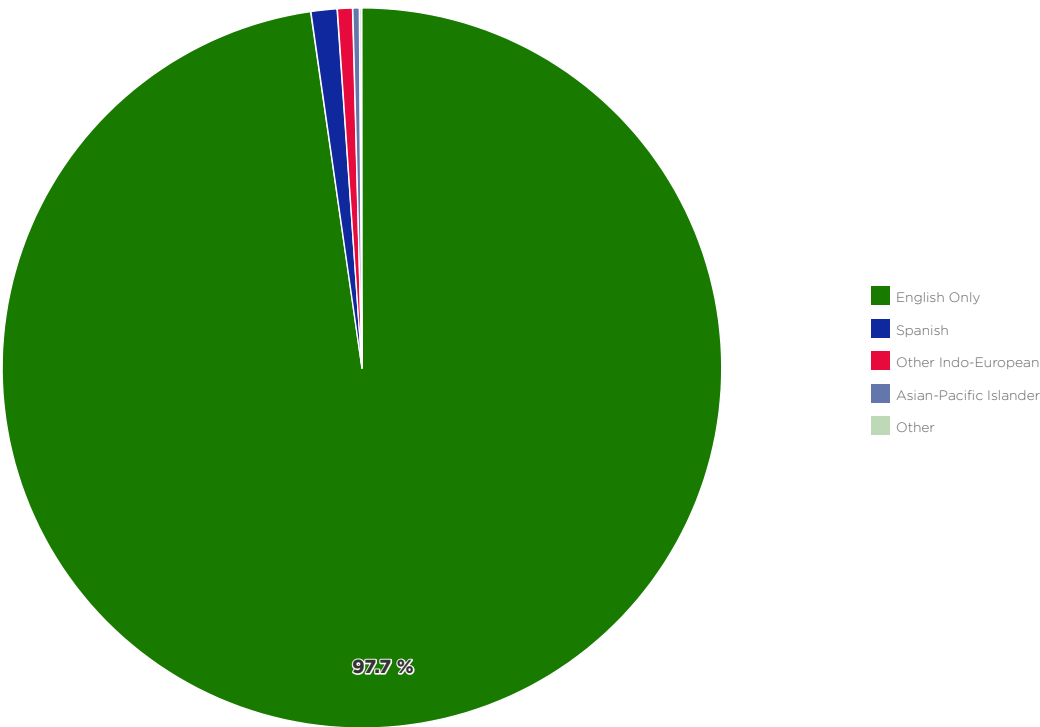
of People ages 5+

Michigan

Sources: US Census Bureau ACS 5-year 2019-2023

Note: Limited English Proficiency is defined as speaking English less than "very well."

Language Spoken at Home Among People Ages 5+

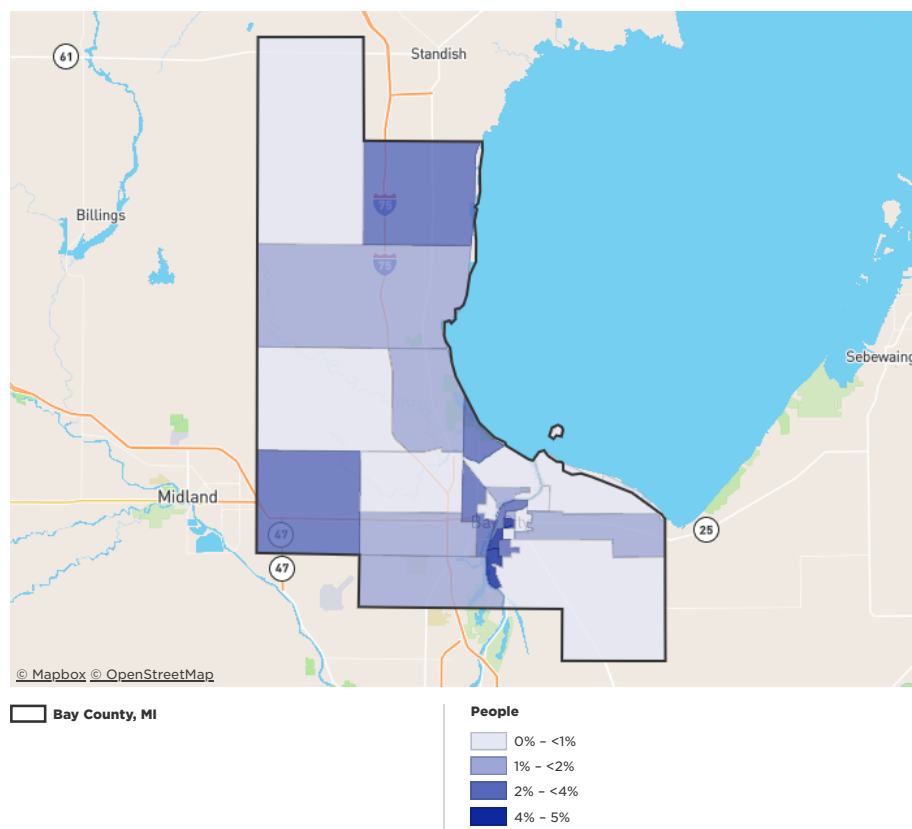


Bay County, MI

Sources: US Census Bureau ACS 5-year 2019-2023

Map: Immigrant Population

Immigrant Population



Veterans



Child Population

20,439

People ages 0 to 17

Bay County, MI

2,154,793

People ages 0 to 17

Michigan

Senior Population

22,007

People ages 65+

Bay County, MI

1,824,907

People ages 65+

Michigan

Sources: US Census Bureau ACS 5-year 2019-2023

Veterans



Veterans

7.9%

of Civilians ages 18+

Bay County, MI

6.1%

of Civilians ages 18+

Michigan

Veterans

6,566

Civilians ages 18+

Bay County, MI

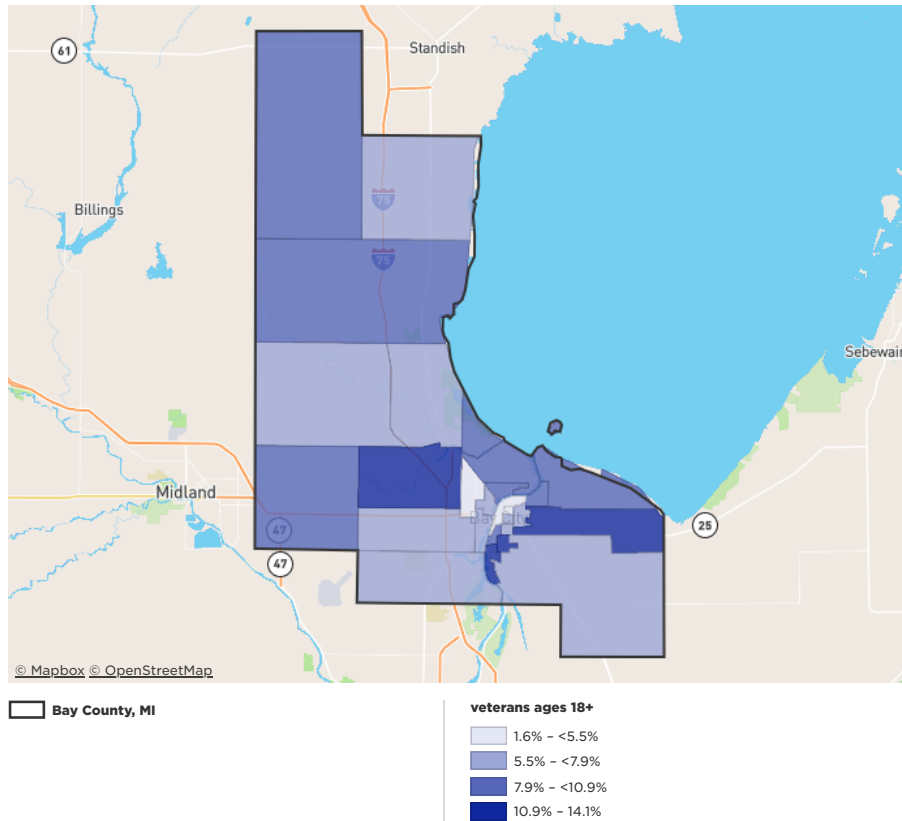
479,115

Civilians ages 18+

Michigan

Sources: US Census Bureau ACS 5-year 2019-2023

Veteran Population



Sources: US Census Bureau ACS 5-year 2019-2023

People with Disabilities



Live with a Disability

16.6%

of People

Bay County, MI

14.2%

of People

Michigan

Live with a Disability

17,019

People

Bay County, MI

1,414,434

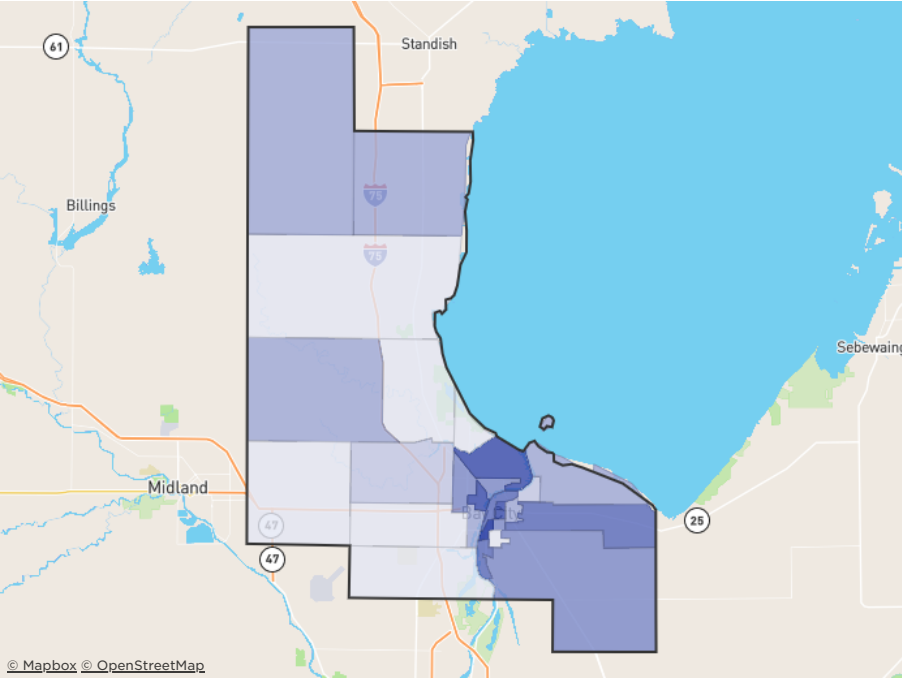
People

Michigan

Sources: US Census Bureau ACS 5-year 2019-2023

Note: Active-duty military and people living in institutional group quarters such as correctional facilities, skilled-nursing facilities, and other long-term care living arrangements are not reflected in this data.

People Living with Disabilities



Bay County, MI

People with a Disability

- 11.5% - <14%
- 14% - <15%
- 15% - <17%
- 17% - <20.1%
- 20.1% - <21.9%
- 21.9% - <32.3%
- 32.3%

Sources: US Census Bureau ACS 5-year 2019-2023

Note: Active-duty military and people living in institutional group quarters such as correctional facilities, skilled-nursing facilities, and other long-term care living arrangements are not reflected in this data.

Healthier Communities Begin with Each and Every One of Us

The Bay County Health Department invites you to learn more about the work we have accomplished thus far and introduce to you our community health planning process that helps us serve Bay County residents.

- **Bay County Health Department:** the convening agency that provides logistical and administrative support to the movement.
- **Synapse Coalition:** a group of non-profit and health care providers that work together to gather information on what the community needs are.
- **Bay County State of the Child:** a group of non-profit and health care providers that work together to gather information on what the community needs are in children.
- **Bay Human Services Collaborative Council (BAY HSCC):** a group of over 30 community-based organizations that work together to support the CHNA and address the top health issues through a Community Health Improvement Plan (CHIP).

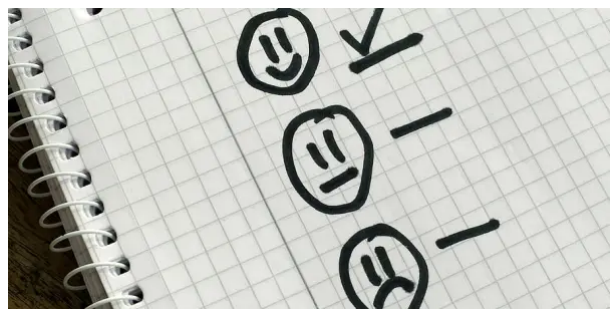
The CHNA consists of data from community surveys, focus groups, key informant interviews, and existing population data. We will explore the four parts of a CHNA in this section of the dashboard.



Focus Groups

Sitting down and listening to community members about their lived experiences can help reveal why and how communities experience different health conditions and outcomes.

[Read More](#)



CHNA Survey

Community surveys provide residents an opportunity to help create a picture of what health strengths, challenges, and issues we are living with at this time.

[Read More](#)



Population Data

Looking at data of entire populations helps identify and compare health trends here in Maricopa County to health trends in Arizona and the U.S.

[Read More](#)

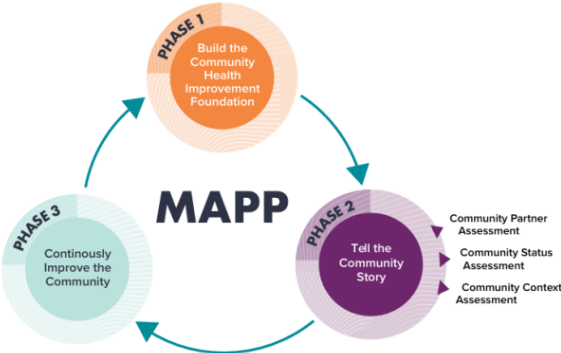


Key Informant Interviews

Interviews with community leaders from various sectors provides context to community strengths and barriers, community resources, and political or social forces that impact how we access healthcare.

Our Guiding Framework

The Bay County Health Department follows a process called [Mobilizing for Action through Planning and Partnerships 2.0^{3rd}](#) (see image below), which provides guidance for local health departments to conduct meaningful CHNAs. This looks like working with community partners to collect and share data, align on resources, and make plans to find and address the top health issues in Bay County together.



Survey Overview

This Community Health Assessment (CHA) is the product of dedicated collaboration, driven by a diverse workgroup established specifically for this vital undertaking. Comprised of passionate individuals representing various sectors of our community – including public health professionals, healthcare providers, local government, community organizations, and engaged residents – this workgroup brought together a wealth of expertise and perspectives. Their commitment ensured a thorough, data-driven, and community-centered approach to identifying our most pressing health needs and opportunities. We extend our sincere gratitude to each member for their invaluable contributions in shaping a healthier future for all.

Together, we analyzed health data, gathered community input, identified key health priorities, and developed actionable recommendations. The members of this workgroup had consistent dedication, and their collaborative spirit were instrumental in shaping this comprehensive assessment, laying a strong foundation for a healthier future for our community.

2024 Community Health Assessment Survey Results

2024 Key Informant Interviews Overview

A cornerstone of this Community Health Assessment was the invaluable insight gathered through Key Informant Interviews. Our dedicated workgroup conducted in-depth conversations with a diverse range of community leaders, service providers, local officials, and residents who possess unique knowledge and experiences related to our community's health. These one-on-one discussions provided rich qualitative data, offering nuanced perspectives on health challenges, barriers to care, community strengths, and potential solutions. By directly engaging those with deep understanding, we were able to paint a more comprehensive and accurate picture of our community's health landscape, ensuring that this assessment truly reflects the lived experiences and critical needs of our population.

Where We Live Matters



Factors Contributing to Health

Our health tells a story [shaped by our surroundings](#)¹⁰. Factors like where we live, our education, how we get around, and our income all influence this story.

[Our environment](#)¹¹ affects our behaviors. While some choices are personal, many are determined by what we have access to. When we have more chances to make healthy choices, we're likely to have better health. Unfortunately, not everyone has the same opportunities. Barriers, like a lack of nearby jobs or grocery stores with fresh food, can keep people stuck in cycles of poverty and poor health.

[Health equity](#)¹² means everyone should have the same access to opportunities for a healthy life. It's up to public health officials, healthcare providers, elected leaders, and community members to help remove the barriers that prevent everyone from having a fair shot at good health.

[According to Healthy People 2030](#)¹³, social determinants of health are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. You can find those conditions (or social determinants of health) in five key areas that we'll explore in this section of the dashboard:

1. [Housing](#)
2. [Economic Conditions](#)
3. [Education](#)
4. [Transportation and Neighborhood](#)
5. [Healthcare](#)



Learn more:

1. "Social Determinants of Health." World Health Organization. <https://www.who.int/teams/social-determinants-of-health>.[🔗]
2. Braveman, Paula, and Laura Gottlieb. "The Social Determinants of Health: It's Time to Consider the Causes of the Causes." *Public Health Reports*, vol. 129, no. 1 suppl2, Jan. 2014, pp. 19–31. SAGE Journals. <https://doi.org/10.1177/003335491412915206>.[🔗]
3. Gómez, Cynthia A., et al. "Addressing Health Equity and Social Determinants of Health Through Healthy People 2030." *Journal of Public Health Management and Practice*, vol. 27, no. Supplement 6, Dec. 2021, pp. 249–57. *journals.lww.com*. <https://doi.org/10.1097/PHH.0000000000001297>.[🔗]
4. Pesheva, Ekaterina. "ZIP Code or Genetic Code?" *Harvard Medical School News & Research*, 14 Jan. 2019. <https://hms.harvard.edu/news/zip-code-or-genetic-code>.[🔗]

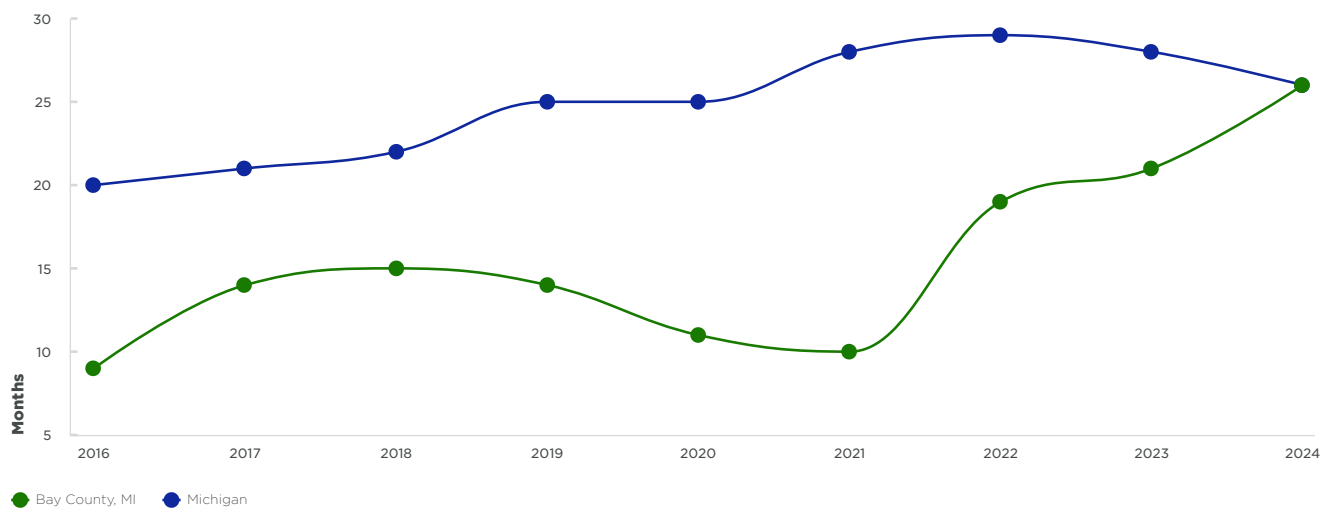
Homes should be affordable and safe.

We spend about two-thirds of our lives inside our homes. The place we call home should be comfortable, safe, and affordable no matter our income. When people with lower incomes pay more than 30% of their income for housing, they don't have much left each month to afford other basic needs. Some families even have to spend more than half of their paycheck just to live in a home. When families have access to **safe, affordable, quality housing**, it has a positive effect on their physical and mental health. All families deserve that kind of home.

Housing insecurity calls for change.

When we look at the number of people experiencing homelessness in our community, and how that number changes over time, we can uncover root causes of homelessness. For example, the economic and health impact of the COVID-19 pandemic left many families struggling to stay in their homes. By recognizing why a family might experience housing insecurity, we can better address their needs and offer solutions to get them back in a safe home as quickly as possible.

Average Months on Waiting List for HUD Assisted Housing Units



Sources: HUD Picture Subsidized HH

High housing costs prevent healthy choices.

Whether renting or owning a home, a family that spends a large portion of their income on housing doesn't have room left in their budget for the other things they need to survive, let alone thrive. If a family can't afford basic groceries, utility bills, clothing, and gas, things like healthy, fresh food or preventive healthcare are likely not within reach. When the burden of housing limits the personal choices we can make, our health suffers.

Cost Burdened Renters



Renters with Excessive Housing Costs

39.6%

Bay County, MI

45.8%

Michigan

All Occupied Housing Units with Excessive Housing Costs

23.4%

Bay County, MI

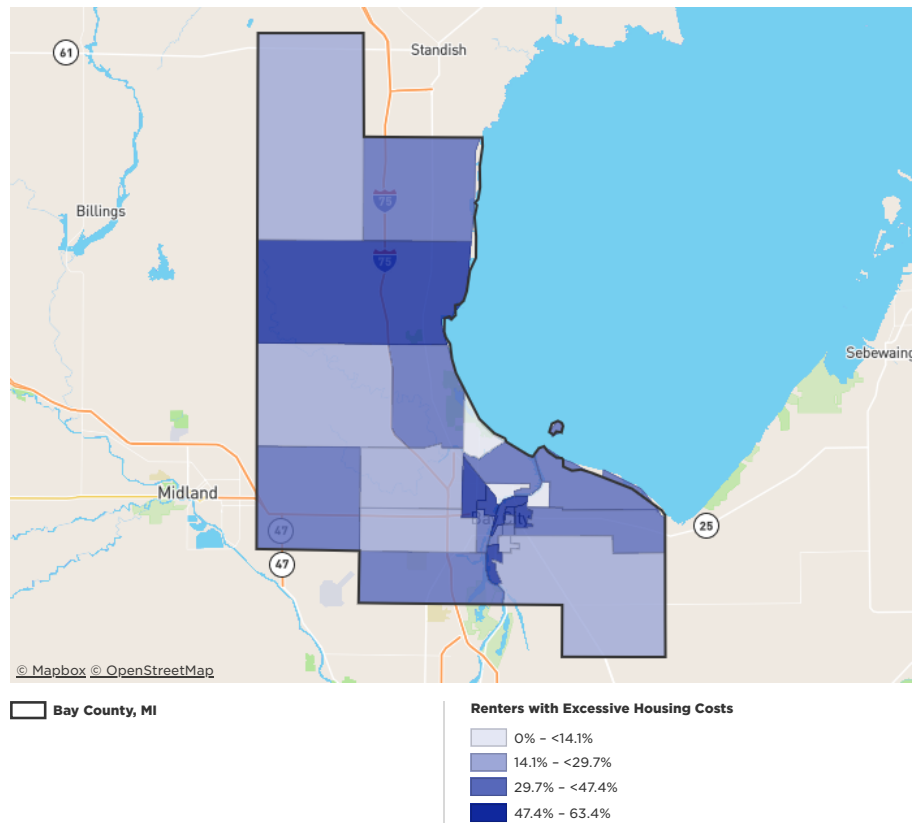
26.3%

Michigan

Sources: US Census Bureau ACS 5-year 2019-2023

Note: Housing costs of 30% or more of household income qualify as "excessive."

Excessive Housing Costs for Renters



Sources: US Census Bureau ACS 5-year 2019-2023

Note: Housing costs of 30% or more of household income qualify as "excessive."

Cost Burdened Homeowners



Homeowners with Excessive Housing Costs

18.3%

Bay County, MI

19.1%

Michigan

All Occupied Housing Units with Excessive Housing Costs

23.4%

Bay County, MI

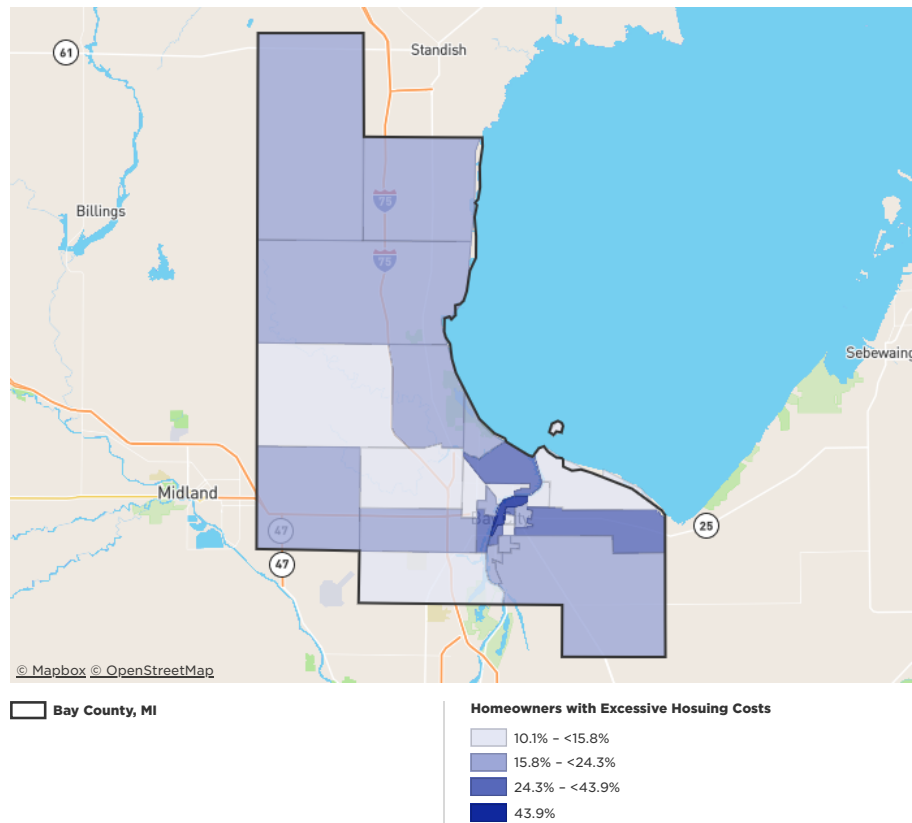
26.3%

Michigan

Sources: US Census Bureau ACS 5-year 2019-2023

Note: Housing costs of 30% or more of household income qualify as "excessive."

Excessive Housing Costs for Owners



Sources: US Census Bureau ACS 5-year 2019-2023

Note: Housing costs of 30% or more of household income qualify as "excessive."

Owning a home opens the door to opportunity.

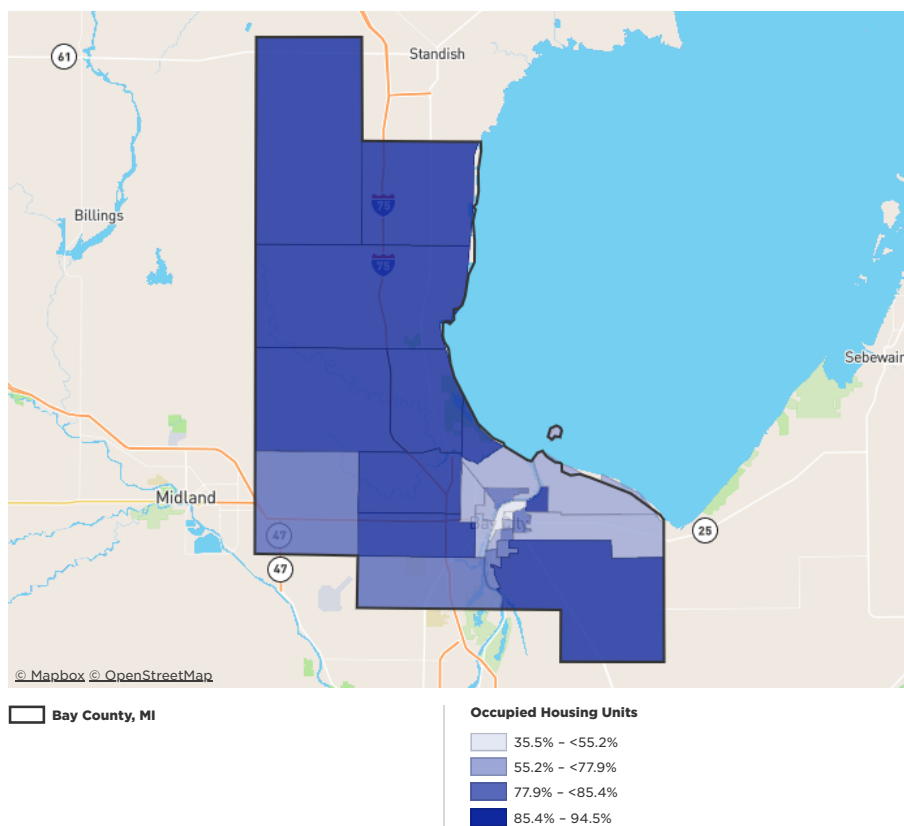
Owning a home leads to more opportunities—owning a safe, affordable home leads to even more opportunities for health and wealth. The ripple effect of homeownership on other areas of life and for children in a home is far-reaching, including financial, social, and physical health benefits. For families who can't afford to own a home due to the cycle of poverty or historical barriers, such as restrictions on housing purchases for certain racial groups, those added health benefits are unattainable.

Homeownership Rate by Race/Ethnicity

Data Sources	Bay County, MI	Michigan
2019-2023 Overall	76.4%	72.9%
2019-2023 Asian	60.5%	62.8%
2019-2023 Black or African American	41.6%	44.2%
2019-2023 Hispanic or Latino	59.8%	60.9%
2019-2023 Multiracial	54.2%	63.5%
2019-2023 Native American	73.4%	65.3%
2019-2023 Native Hawaiian and Pacific Islander	No data	60.2%
2019-2023 Other	56.1%	62.7%
2019-2023 White (Not Hispanic or Latino)	78.3%	79.2%

Sources: US Census Bureau ACS 5-year 2019-2023

Homeownership Rate



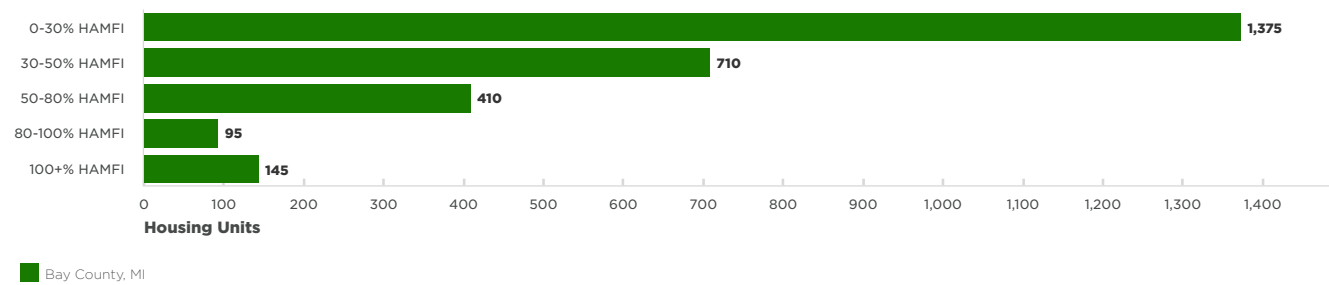
Sources: US Census Bureau ACS 5-year 2019-2023

We all deserve to be safe at home.

Homes that are unsafe put people's health at risk. Safety is more than lack of crime in a neighborhood—it includes the physical structure of the home and whether or not it's safe to be there every day. People with lower incomes and from underserved areas may not have options other than homes with maintenance and safety issues that expose them to health risks. Unsafe homes, such as those with lead paint, may have negative effects on childhood development and can lead to many long-term health issues.

Presence of Severe Housing Problems by Owner vs Renter and Income

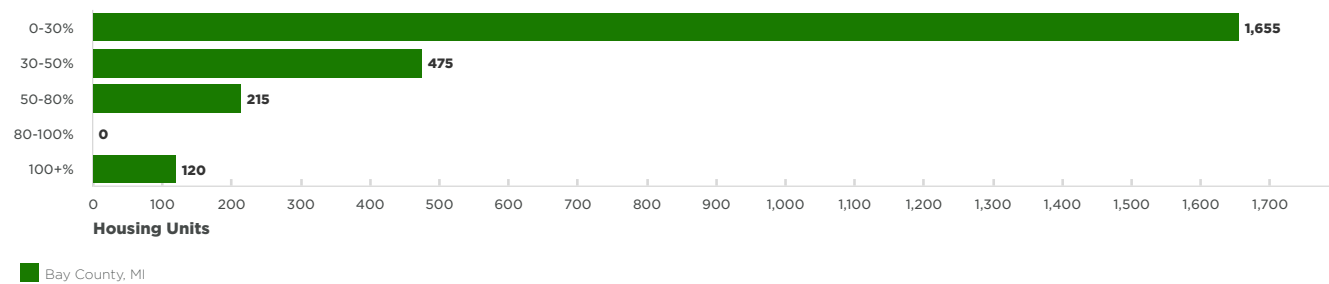
Owner-Occupied Homes with at Least 1 Severe Housing Problem by Owner Income



Sources: HUD CHAS 2017-2021

Severe Housing Problems include 1) lack complete kitchen facilities; 2) lack complete plumbing facilities; 3) household is severely overcrowded; and 4) household is severely cost burdened. HUD Area Median Family Income (HAMFI) is the median family income calculated by HUD for each jurisdiction in order to determine Fair Market Rents (FMRs) and income limits for HUD programs.

Renter-Occupied Homes with at Least 1 Severe Housing Problem by Renter Income

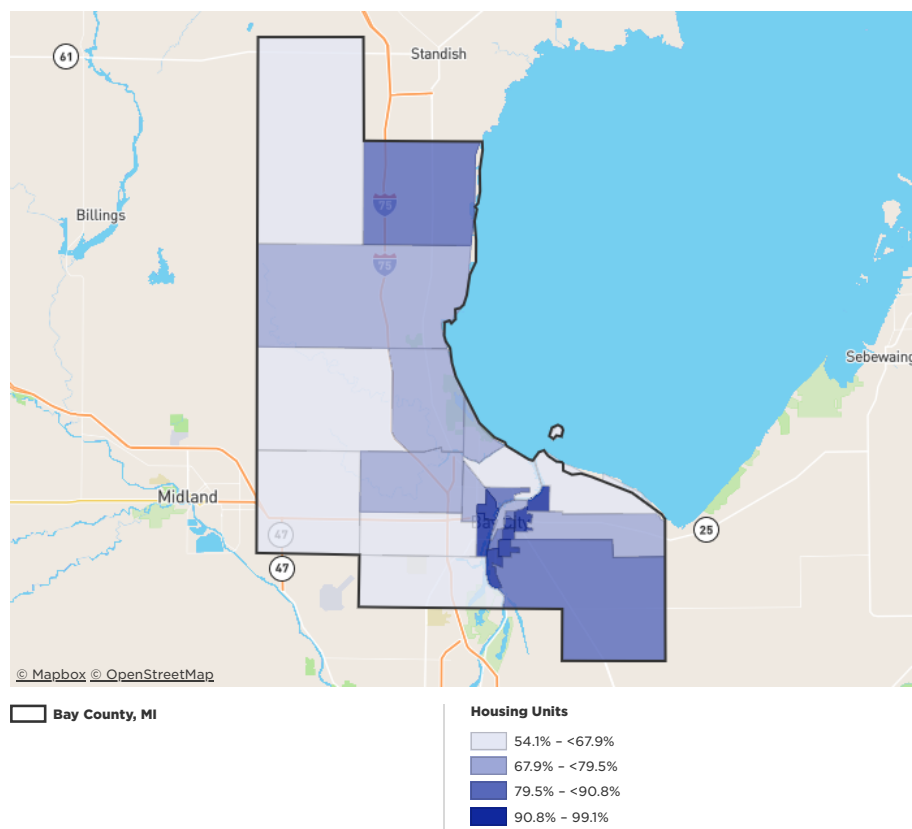


Sources: HUD CHAS 2017-2021

Severe Housing Problems include 1) lack complete kitchen facilities; 2) lack complete plumbing facilities; 3) household is severely overcrowded; and 4) household is severely cost burdened. HUD Area Median Family Income (HAMFI) is the median family income calculated by HUD for each jurisdiction in order to determine Fair Market Rents (FMRs) and income limits for HUD programs.

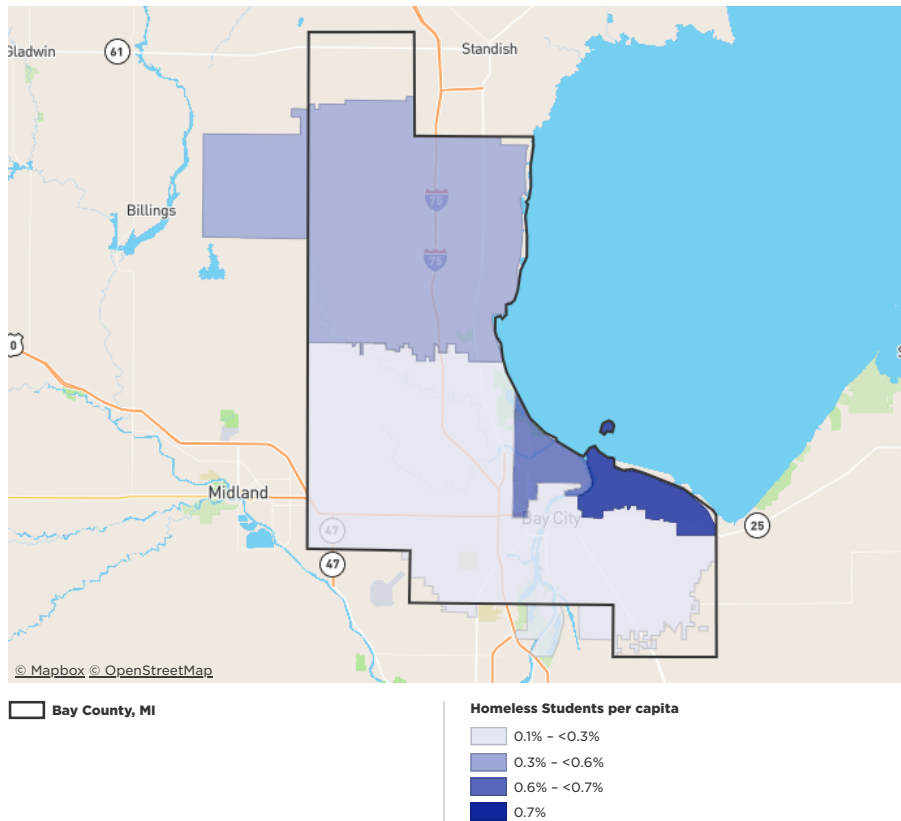
Map: Housing Units with Potential for Lead Paint

Housing Units with Potential for Lead Paint



Sources: US Census Bureau ACS 5-year 2019-2023

Students Experiencing Homelessness



Sources: EDFacts 2021-2022; US Census Bureau ACS 5-year 2019-2023

This data follows the McKinney-Vento definition, where children or youth experiencing homelessness are sharing the housing of other persons due to loss of housing, economic hardship, or a similar reason; are living in motels, hotels, trailer parks, or camping grounds due to the lack of alternative adequate accommodations; are living in emergency or transitional shelters; are abandoned in hospitals; have a primary nighttime residence that is a public or private place not designed for, or originally used as, a regular sleeping accommodation for human beings; or are living in cars, parks, public spaces, abandoned buildings, substandard housing, bus or train stations, or similar settings. Migratory children living in circumstances described above are included.

Learn more:

1. Magbool, Nabihah, et al. *The Impacts of Affordable Housing on Health: A Research Summary*. Center for Housing Policy, Apr. 2015, p. 1-12. , <https://nhc.org/wp-content/uploads/2017/03/The-Impacts-of-Affordable-Housing-on-Health-A-Research-Summary.pdf>. [↗](#)

2. "Housing Instability." *Healthy People 2030*. <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/housing-instability>. [↗](#)

3. *Research series: Outcomes Associated with Homeownership*. Habitat for Humanity, <https://www.habitat.org/our-work/impact/research-series-outcomes-associated-with-homeownership>. [↗](#)

4. Yun, Lawrence, and Nadia Evangelou. *Social Benefits of Homeownership and Stable Housing*. National Association of Realtors Research Division, Dec. 2016, pp. 1-19, <https://www.hocmn.org/wp-content/uploads/2019/09/Social-Benefits-of-Home-Ownership-2.pdf>. [↗](#)

5. Braveman, P., et al. "How Does Housing Affect Health?: An Examinatio of the Many Ways in Which Housing Can Influence Health and Strategies to Improve Health through Emphasis on Healthier Homes." *Housing and Health: An RWJF Collection*, 1 May 2011. <https://www.rwjf.org/en/library/research/2011/05/housing-and-health.html>. [↗](#)

6. Shaw, Mary. "Housing and Public Health." *Annual Review of Public Health*, vol. 25, 2004, pp. 397-418. PubMed, <https://doi.org/10.1146/annurev.publhealth.25.101802.123036>. [↗](#)

Health shouldn't depend on how much money you make.

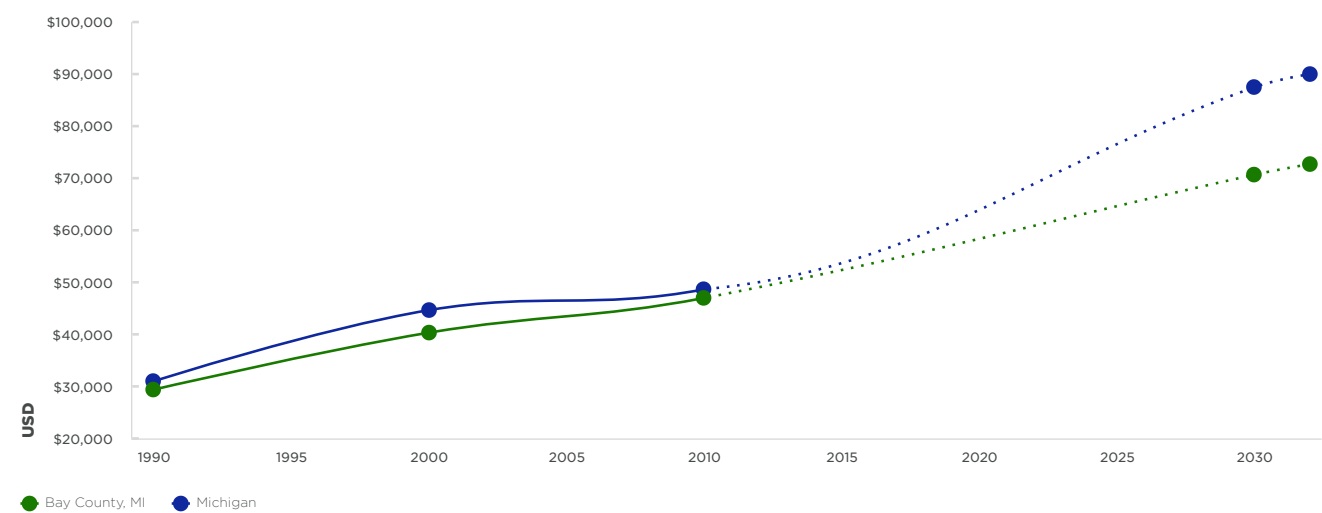
Economic opportunity includes our ability to work in the community where we live, making enough money to buy what we need and some of what we want. This allows us to take care of our families, support other businesses in our neighborhood, and provide for ourselves.

Income affects our quality of life.

Earning a living wage means making enough money to be able to live in our community, including paying for safe shelter, food, and other basic needs. For people who work lower income jobs, this isn't always possible. When the cost to live in our community is high, or the jobs available don't pay enough, families have to choose between needs – paying their rent or buying food, getting medical care or having enough gas to get to work. **No one should have to choose between eating or having safe shelter.** When people can earn a fair wage, it affects their entire wellbeing.

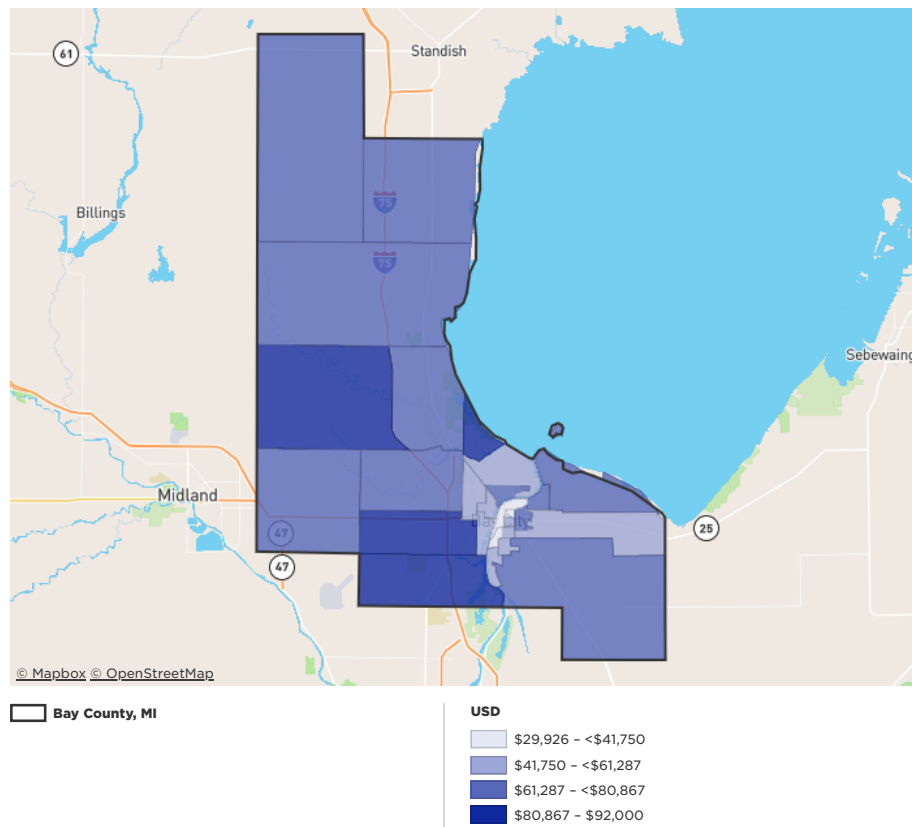
Median Household Income Over Time and Map

Median Household Income



Sources: US Census Bureau; US Census Bureau ACS 5-year

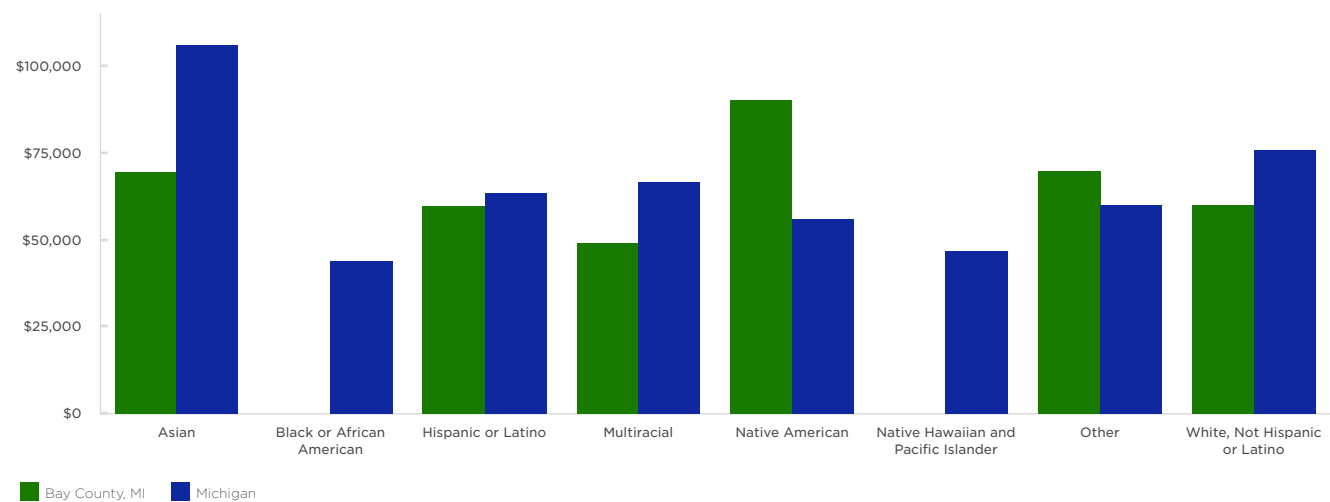
Median Household Income



Sources: US Census Bureau ACS 5-year 2019-2023

Median Household Income by Householder's Race/Ethnicity

Median Income by Householder's Race/Ethnicity

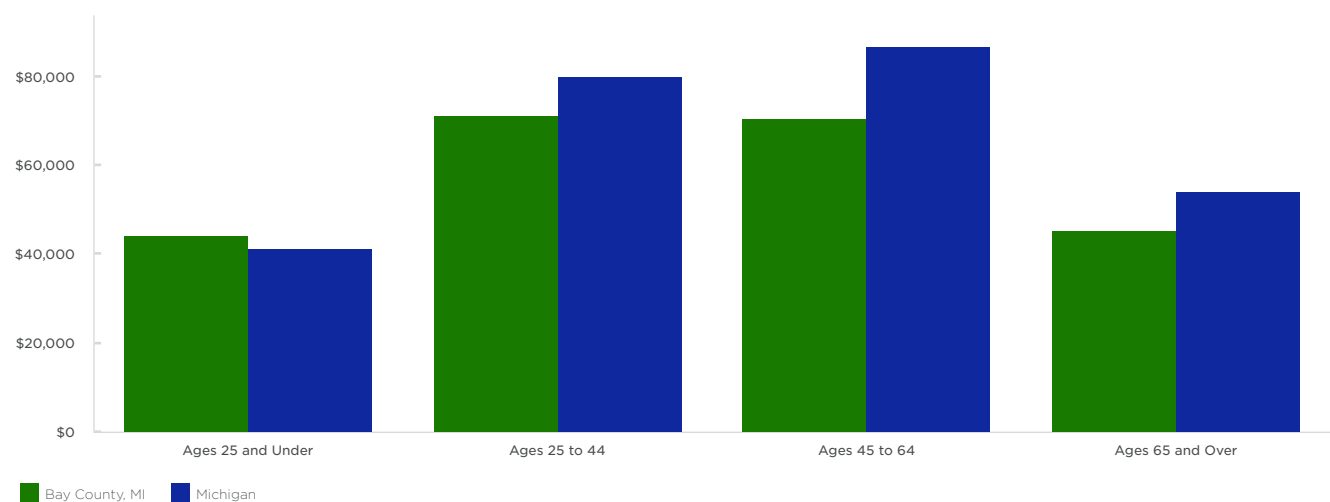


Sources: US Census Bureau ACS 5-year 2019-2023

Note: unless otherwise indicated, data includes both Hispanic or Latino and non-Hispanic or Latino people.

Median Household Income by Householder's Age

Median Household Income by Householder's Age



Sources: US Census Bureau ACS 5-year 2019-2023

Let's break the cycle of poverty.

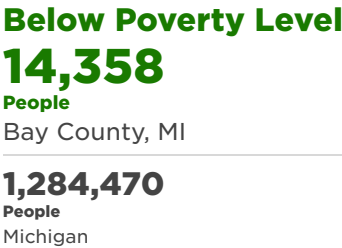
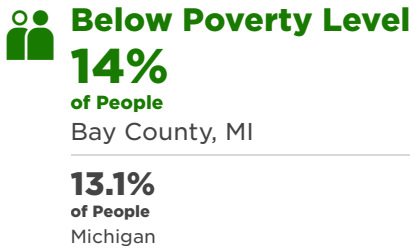
When we talk about the cycle of poverty, we mean people who are struggling to afford the basics of food, safe housing, transportation, childcare, and medical care. This is a difficult cycle to break, as one unexpected cost can send someone back to the starting line.

In addition, generational wealth—having valuable assets such as houses or investments that are passed down in a family—affects health. History shows us that not all people had this opportunity at the same time. For families who didn't have that chance, breaking out of poverty is even more challenging, and it affects more than just finances.

Poor health can also lead to poverty due to expensive medical bills or a health condition that prevents someone from working. **Breaking the cycle of poverty means removing barriers.** It means increased access to nearby jobs with better pay to afford basic needs. If we can make a change, our community will become even healthier, enabling people to make

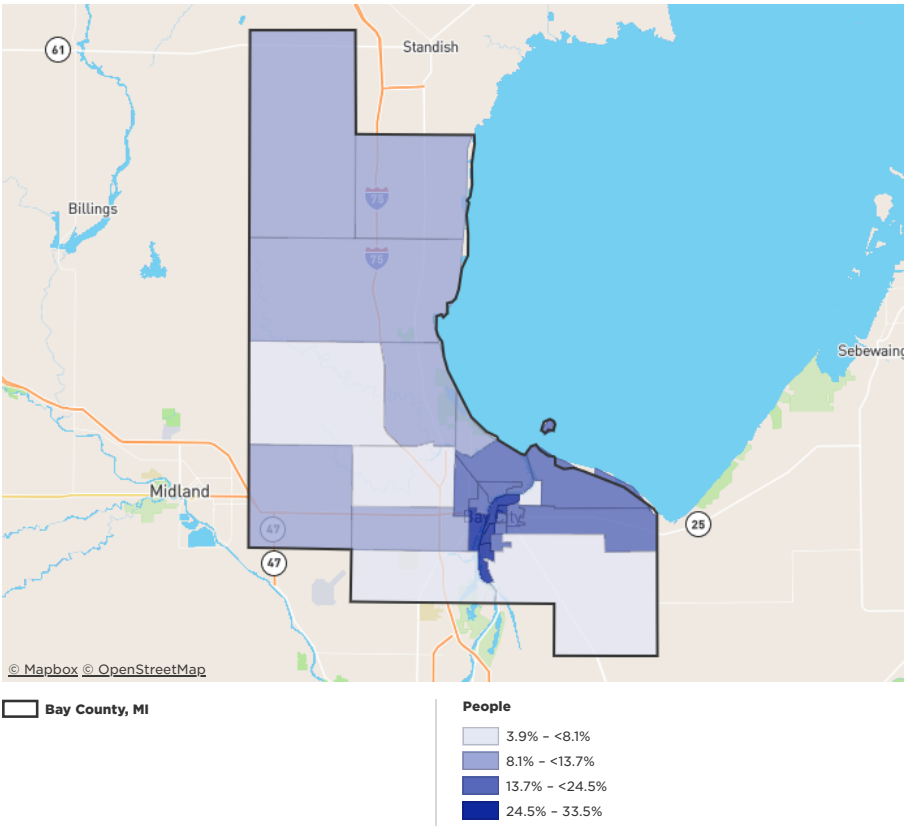
choices that prevent poor health before it happens, rather than responding to costly health emergencies that keep people stuck in the same cycle.

Poverty Overall



Sources: US Census Bureau ACS 5-year 2019-2023

Poverty Rate



Sources: US Census Bureau ACS 5-year 2019-2023

Poverty by Race/Ethnicity

Poverty Rate by Race and Ethnicity

Data Sources	Bay County, MI	Michigan
2019-2023 Asian	15.3%	10.5%
2019-2023 Black or African American	22.7%	26.1%
2019-2023 Hispanic or Latino	19.7%	18.6%
2019-2023 Multiracial	23.2%	16.2%
2019-2023 Native American	13.3%	20.3%
2019-2023 Native Hawaiian and Pacific Islander	0%	29.7%
2019-2023 Other	20.2%	18.8%
2019-2023 White, Not Hispanic or Latino	13.1%	10.2%

Sources: US Census Bureau ACS 5-year 2019-2023

Note: Unless otherwise indicated, data includes both Hispanic or Latino and non-Hispanic or Latino people.

Poverty by Age

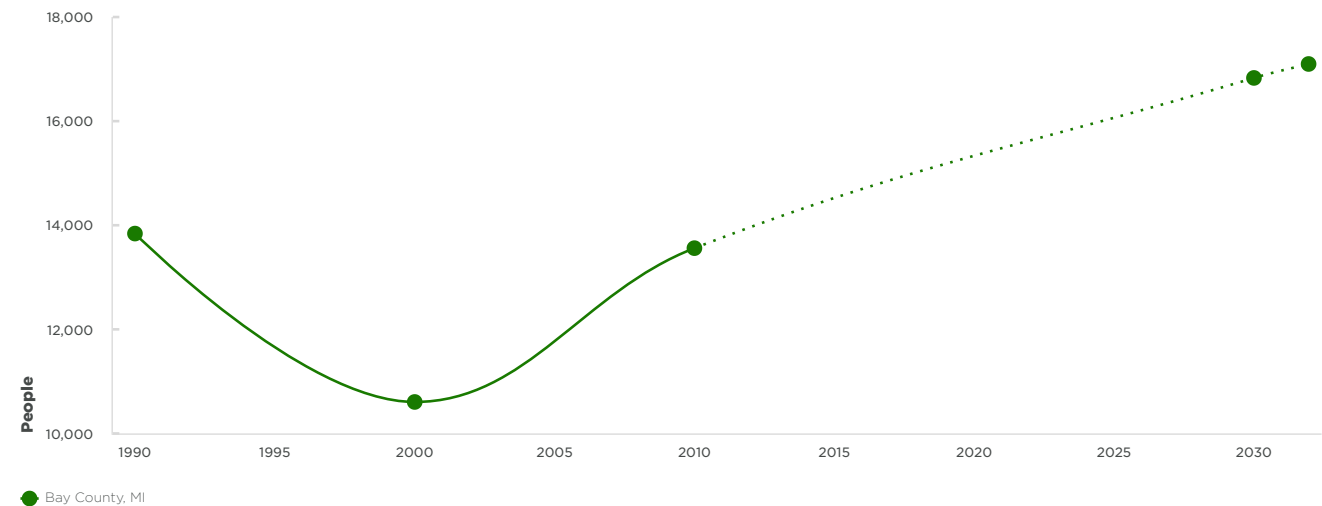
Poverty Rate by Age

Data Sources	Bay County, MI	Michigan
2019-2023 Under Age 5	25.3%	19.3%
2019-2023 Age 5	13.7%	18.3%
2019-2023 Ages 6 to 11	18%	17.8%
2019-2023 Ages 12 to 14	11.7%	16.2%
2019-2023 Age 15	15.6%	16.6%
2019-2023 Ages 16 to 17	19.9%	14.8%
2019-2023 Ages 18 to 24	16.9%	20.2%
2019-2023 Ages 25 to 34	17.6%	12.9%
2019-2023 Ages 35 to 44	10.2%	11.3%
2019-2023 Ages 45 to 54	9.5%	9.7%
2019-2023 Ages 55 to 64	16.1%	11.2%
2019-2023 Ages 65 to 74	9.2%	8.8%
2019-2023 Ages 75 and Over	11.9%	10.1%

Sources: US Census Bureau ACS 5-year 2019-2023

People in Poverty Over Time

People Below Poverty Level



Sources: US Census Bureau; US Census Bureau ACS 5-year

Losing a job means losing so much more.

Not having a job affects many aspects of health and life, from worrying about housing and not being able to buy healthy food, to losing health insurance and the added stress of meeting daily needs that require a paycheck. Unemployment affects both our physical and mental health. When unemployment is high, we know our community is struggling, something needs to change, and increased support is needed.



Employed

56.3%

of Working-age population (age 16+)

Bay County, MI

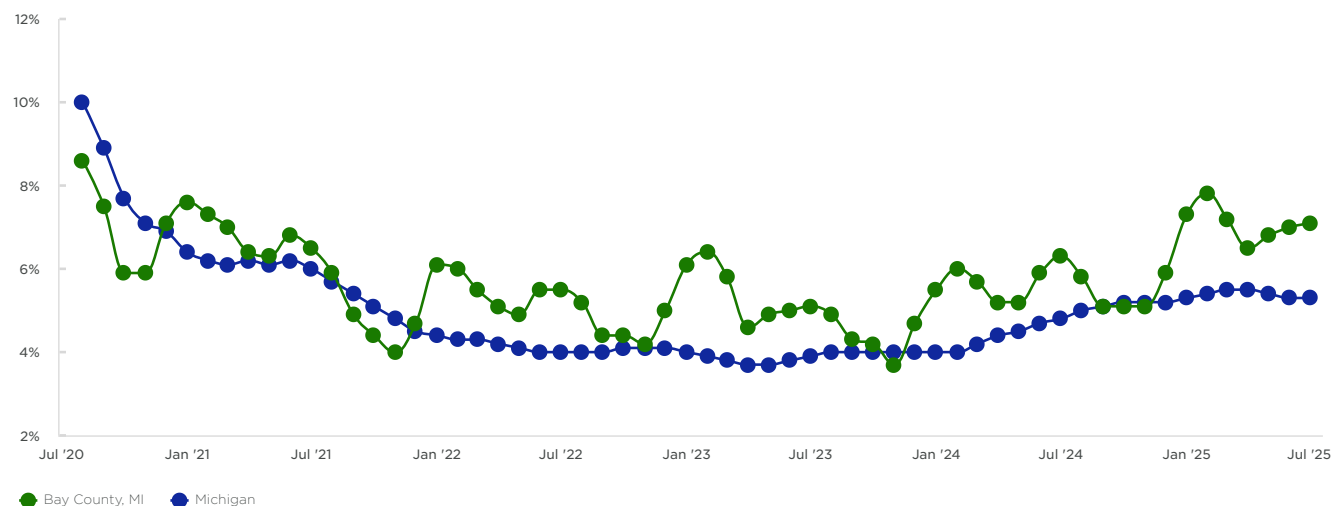
57.8%

of Working-age population (age 16+)

Michigan

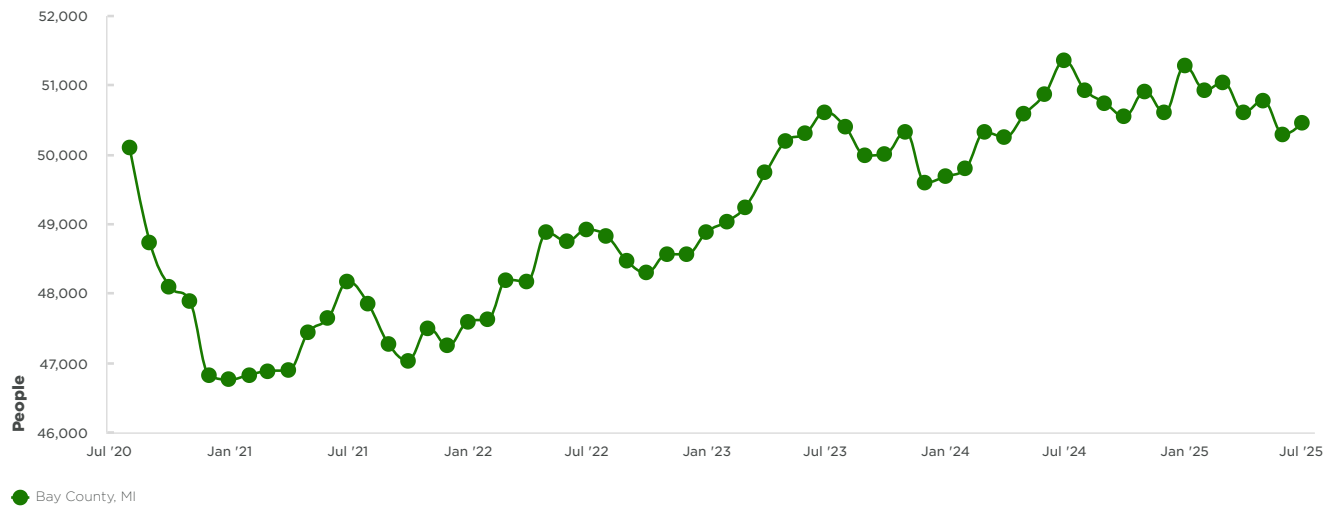
Sources: US Census Bureau ACS 5-year 2019-2023

Unemployment Rate



Sources: BLS LAUS

Labor Force



Sources: BLS LAUS

Learn more:

1. [Guerrero, Rodrigo, et al. "How the Cycle of Poverty and Ill Health Can Be Broken." British Medical Journal, vol. 316, no. 7142, May 1998, p. 1456. PubMed Central, <https://doi.org/10.1136/bmj.316.7142.1456>.](#)

2. ["Poverty and Health." World Bank, 25 Aug. 2014. <https://www.worldbank.org/en/topic/health/brief/poverty-health>.](#)

3. [Mineo, Liz. "Racial Wealth Gap May Be a Key to Other Inequities." Harvard Gazette, 3 June 2021. <https://news.harvard.edu/gazette/story/2021/06/racial-wealth-gap-may-be-a-key-to-other-inequities/>.](#)

4. [Wilson, S. H., and G. M. Walker. "Unemployment and Health: A Review." Public Health, vol. 107, no. 3, May 1993, pp. 153-62. ScienceDirect, \[https://doi.org/10.1016/S0033-3506\\(05\\)80436-6\]\(https://doi.org/10.1016/S0033-3506\(05\)80436-6\).](#)

Education opens doors. Let's unlock them.

Learning leads to opportunities – this has been widely studied over time. The more education a person is able to receive, the better their chances are for success, which includes health. People with more education are said to live longer, have fewer serious illnesses, have better mental health, and less stress and economic struggles.

Give them an early start.

The sooner a child can enroll in school, the better it is for their health. Early childhood programs also help meet challenges of underserved children to help them get ready for school and set them on a path to success from an early age.



Nursery or Preschool-Age Children Enrolled in School

49.4%

Children ages 3 to 4
Bay County, MI

44.2%

Children ages 3 to 4
Michigan

Nursery or Preschool-Age Children Enrolled in School

865

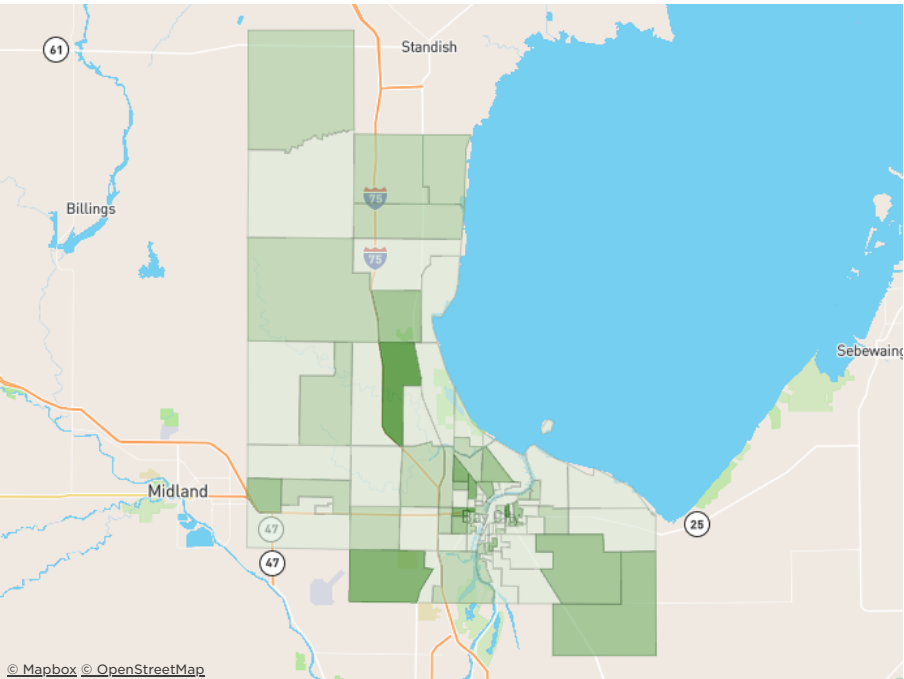
Children ages 3 to 4
Bay County, MI

101,675

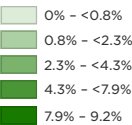
Children ages 3 to 4
Michigan

Sources: US Census Bureau ACS 5-year 2019-2023

Nursery or Preschool-Age Children Enrolled in School



Enrolled in Nursery or Preschool per capita over 3



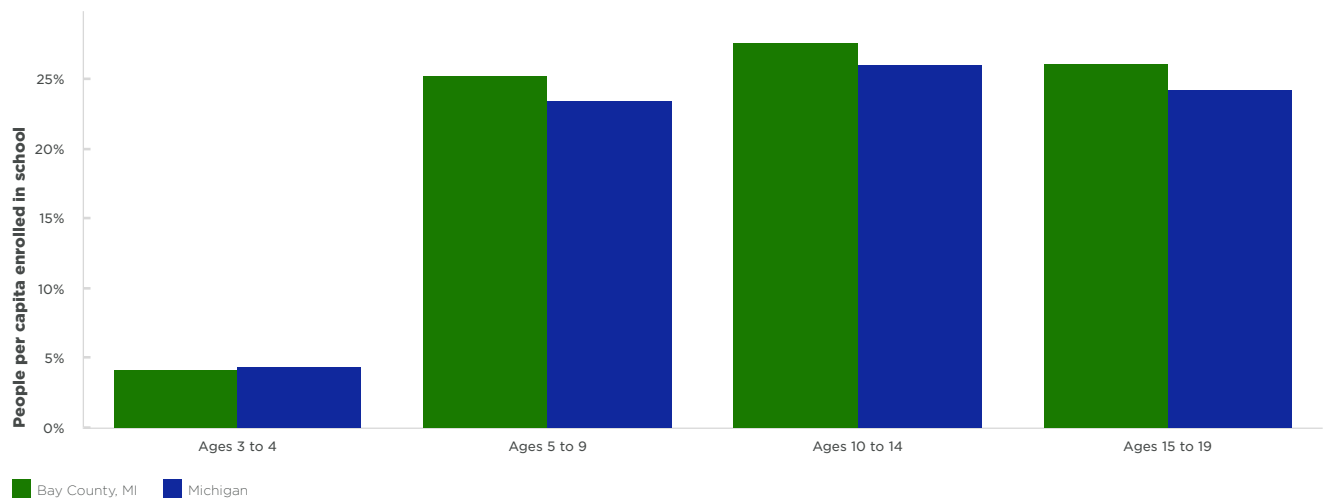
Sources: US Census Bureau ACS 5-year 2019-2023

Make them want to stay.

Every child deserves a safe school with great teachers, enough resources, and parents with the time and resources to be involved. [When we keep kids in school through graduation²²](#), we give them the tools and support to lead healthier, better lives. Kids with lower reading skills are [more likely to drop out²³](#), and low-income families often don't have access to the best schools, which affects how kids do. By supporting our K-12 schools, we can help improve life for kids in our community.

Enrollment

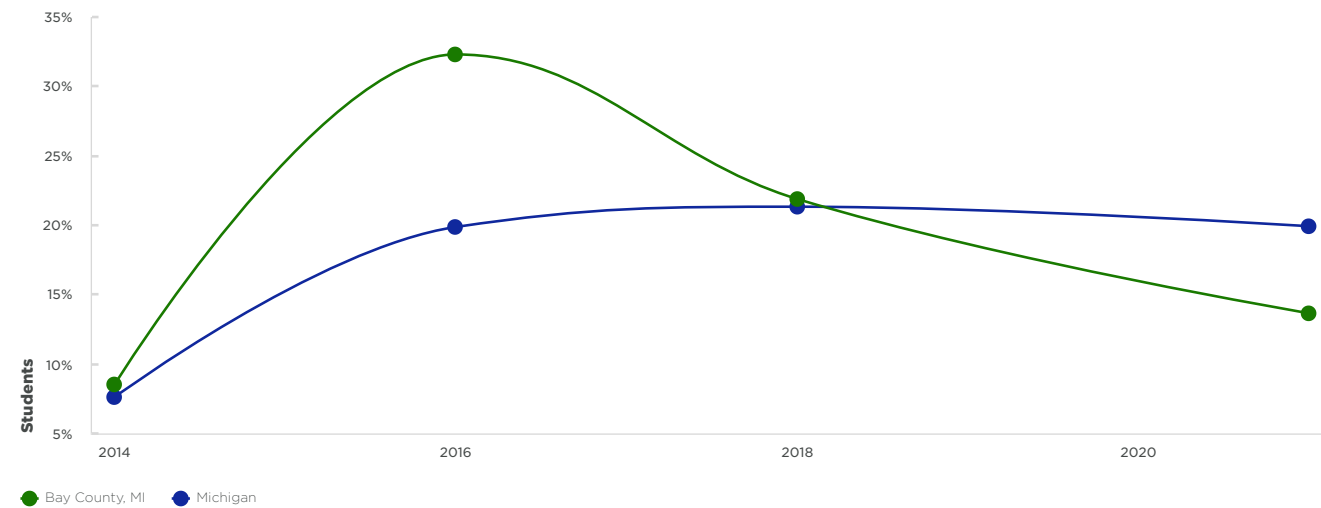
Children and Adolescents Enrolled in School by Age



Sources: US Census Bureau ACS 5-year 2019-2023

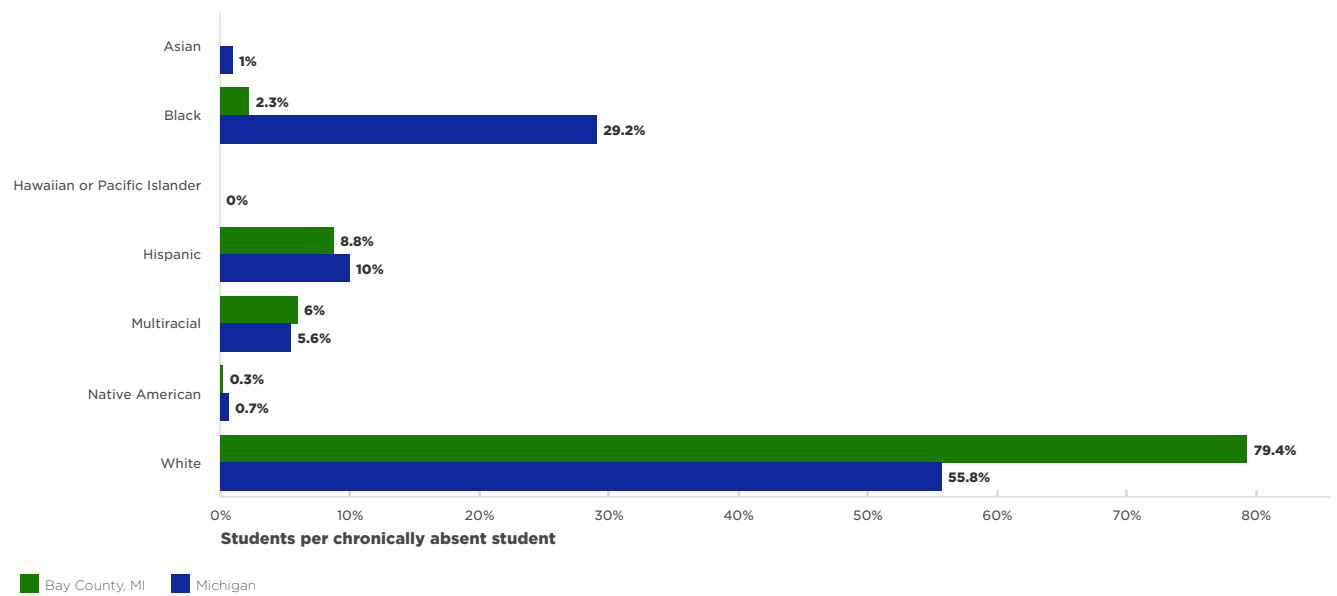
Chronically Absent Students

Chronically Absent Students



Sources: CRDC

Chronically Absent Students by Race/Ethnicity



Sources: CRDC 2020-2021

Reading Proficiency



Students Proficient in Reading

44.4%

Students
Bay County, MI

No data

Students
Michigan

Students Proficient in Reading - High School

No data

High school students
Bay County, MI

No data

High school students
Michigan

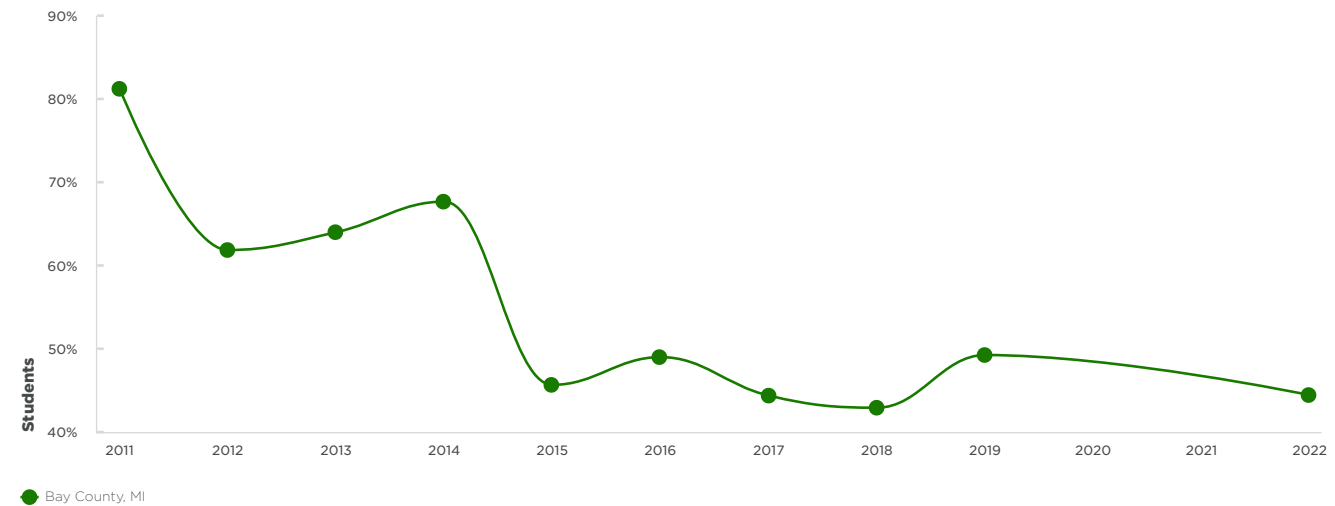
Sources: *EDFacts 2021-2022*

Student Reading Proficiency by Sex

Geography	2021-2022	2021-2022
	Female	Male
Bay County, MI	44.5%	37.7%
Michigan	No data	No data

Sources: *EDFacts 2021-2022*

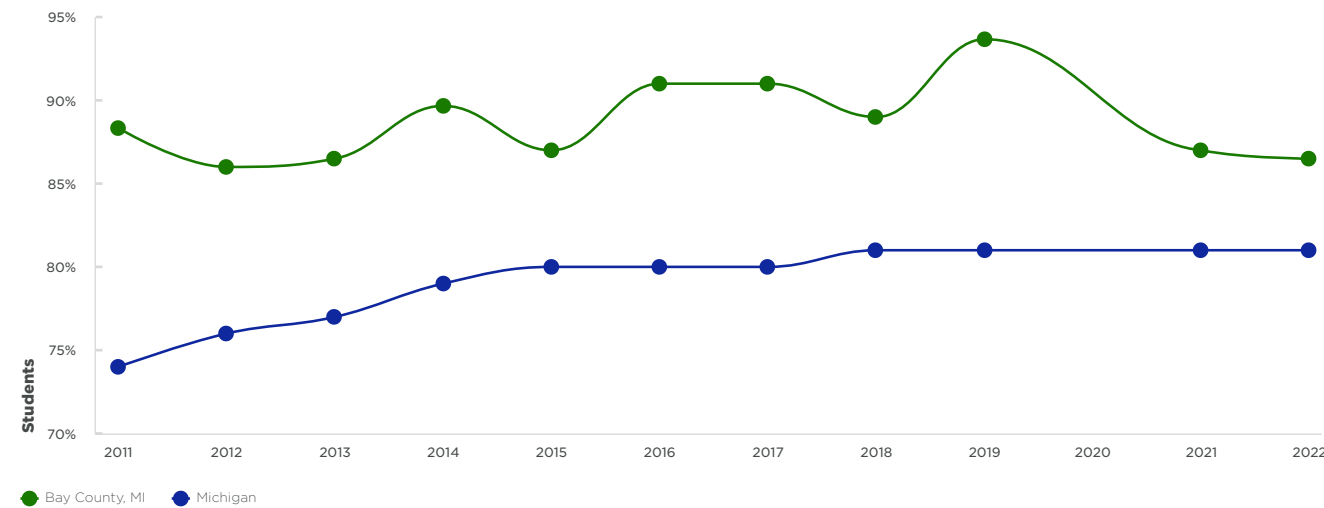
Reading Proficiency Among All Students



Sources: *EDFacts*

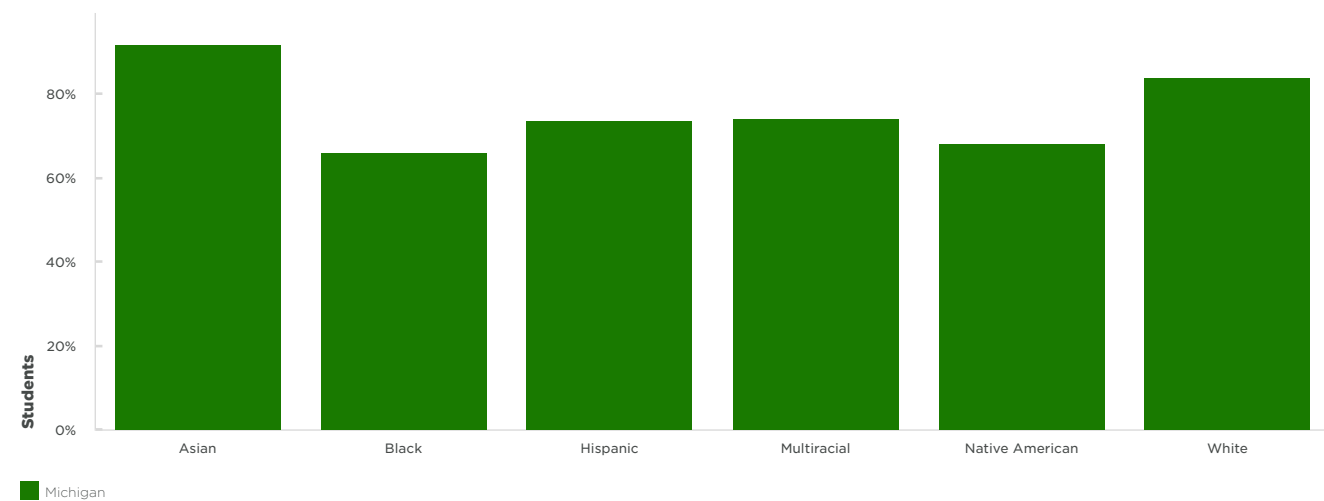
High School Graduation Rate

High School Graduation Rate



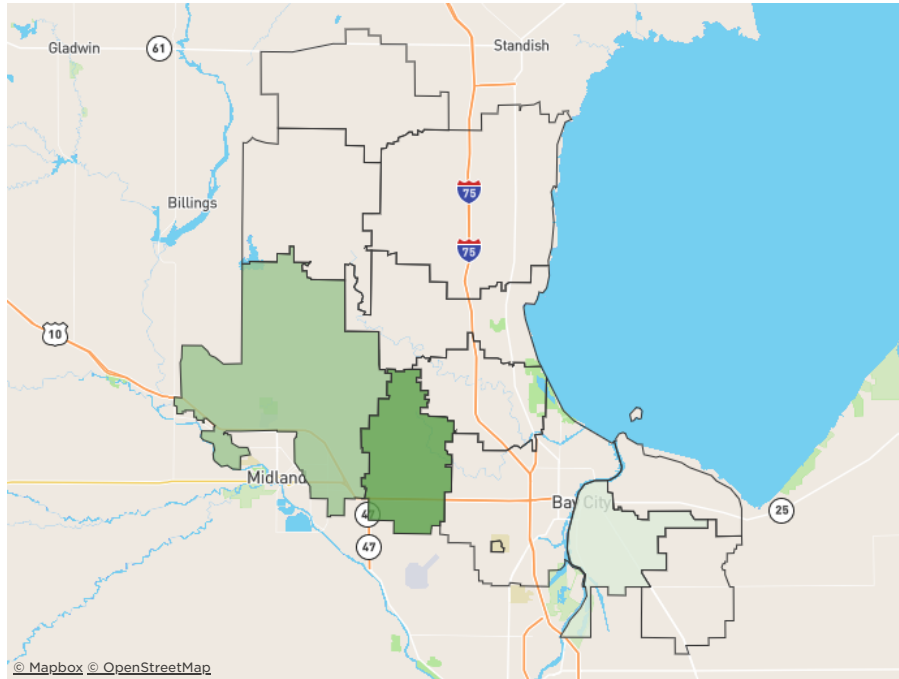
Sources: *EDFacts*

High School Graduation Rate by Race/Ethnicity

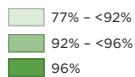


Sources: *EDFacts 2021-2022*

High School Graduation Rate



High School Graduation Rate



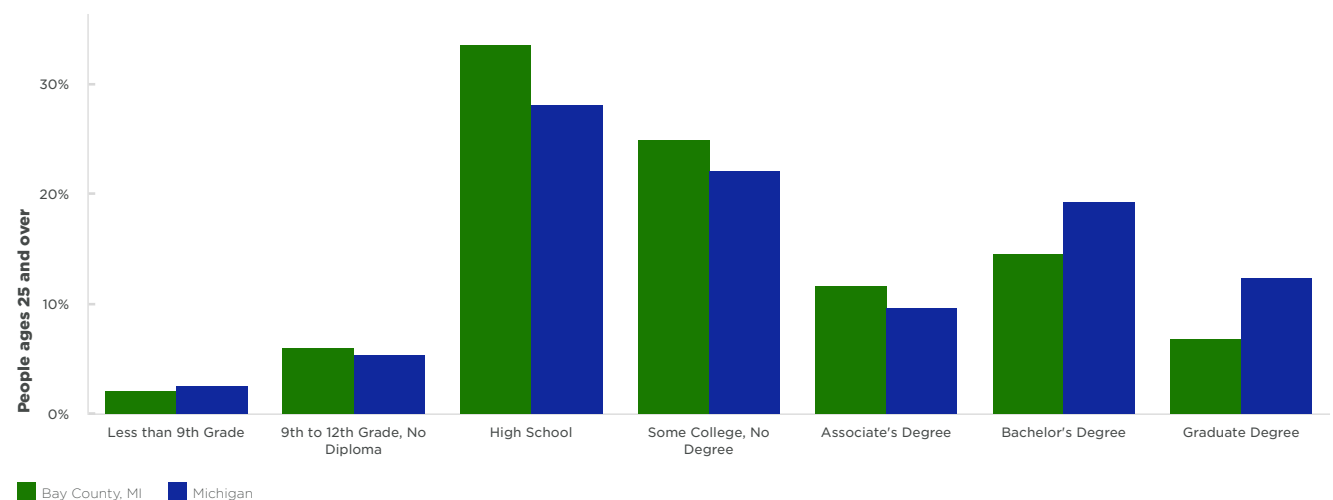
Sources: EDFacts 2021-2022

Help students reach their education goals.

The amount of education we get plays a big role in our future career and income. For each year of high school a student finishes, [their lifetime earnings go up by 15%](#)²². With more education, we can earn enough to live comfortably, have health insurance, and afford more than just the basics—a quality of life everyone deserves.

[But not everyone has the same chance](#)²⁴ to achieve their education goals. Even with the desire to keep learning, the cost of college, lack of support, and not being ready due to poor-quality schools can hold students back. When more people complete high school and beyond, [our whole community benefits](#)²⁵ and becomes healthier.

Highest Level of Education Completed



Sources: US Census Bureau ACS 5-year 2019-2023

Bachelor's Degree or Higher by Race/Ethnicity

Data Sources	Bay County, MI	Michigan
2019-2023 Total	21.4%	31.8%
2019-2023 Asian	77.5%	64.6%
2019-2023 Black or African American	13.7%	18.9%
2019-2023 Hispanic or Latino	12.4%	23.4%
2019-2023 Multiracial	15.2%	29.6%
2019-2023 Native American	0%	13.6%
2019-2023 Native Hawaiian and Pacific Islander	80%	33.2%
2019-2023 Other	18.9%	22.1%
2019-2023 White (Not Hispanic or Latino)	21.7%	33.1%

Sources: US Census Bureau ACS 5-year 2019-2023

Note: unless otherwise indicated, data for each group includes both Hispanic or Latino people and non-Hispanic or Latino people.

Learn more:

- ¹ [Zajacova, Anna, and Elizabeth M. Lawrence. "The Relationship between Education and Health: Reducing Disparities through a Contextual Approach." *Annual Review of Public Health*, vol. 39, Apr. 2018, pp. 273-89. PubMed Central, <https://doi.org/10.1146/annurev-publhealth-031816-044628>. !\[\]\(448bd415caa8b52d2aeb4d58499267b2_img.jpg\)](https://doi.org/10.1146/annurev-publhealth-031816-044628)
- ² [Hummer, Robert A., and Elaine M. Hernandez. "The Effect of Educational Attainment on Adult Mortality in the United States." *Population Bulletin*, vol. 68, no. 1, June 2013, pp. 1-16. !\[\]\(23be4c52910c50d5908bb101588c4f4e_img.jpg\)](https://pubmed.ncbi.nlm.nih.gov/23711111/)
- ³ [Picker, Les. *The Effects of Education on Health*. 3. National Bureau of Economic Research, Mar. 2007. <https://www.nber.org/digest/mar07/effects-education-health>. !\[\]\(5dc449795a3a9c8d29c257423584cf78_img.jpg\)](https://www.nber.org/digest/mar07/effects-education-health)
- ⁴ [Kosik, R., et al. "The Association between Childhood Educational Attainment and Adult Mental Health and Status: A Thirty-Year Longitudinal Follow up Study." *The European Journal of Psychiatry*, vol. 32, no. 2, Apr. 2018, pp. 53-62. ScienceDirect, <https://doi.org/10.1016/j.ejpsy.2018.01.001>. !\[\]\(4b7fb8a3e9c3712ee79f95e386b5ecd4_img.jpg\)](https://doi.org/10.1016/j.ejpsy.2018.01.001)
- ⁵ [Zimmerman, E. and S. H. Woolf. 2014. *Understanding the Relationship Between Education and Health*. NAM Perspectives. Discussion Paper, National Academy of Medicine, Washington, DC. <https://doi.org/10.31478/201406a> !\[\]\(348b5f08c0a9aee916460ca5f8ad2999_img.jpg\)](https://doi.org/10.31478/201406a)
- ⁶ ["Early Childhood: High Return on Investment." Center for High Impact Philanthropy - University of Pennsylvania. <https://www.impact.upenn.edu/early-childhood-toolkit/why-invest/what-is-the-return-on-investment/>. !\[\]\(5b1a514e7f27fbd3f661e6a3500c4f68_img.jpg\)](https://www.impact.upenn.edu/early-childhood-toolkit/why-invest/what-is-the-return-on-investment/)
- ⁷ [Yoshikawa, Hirokazu, et al. *Investing in Our Future: The Evidence Base on Preschool Education*. Foundation for Child Development, Oct. 2013, pp. 1-24. \[https://www.srcd.org/sites/default/files/file-attachments/mb_2013_10_16_investing_in_children.pdf\]\(https://www.srcd.org/sites/default/files/file-attachments/mb_2013_10_16_investing_in_children.pdf\). !\[\]\(2baf952763ad8c6fd37e6395b59f0aca_img.jpg\)](https://www.srcd.org/sites/default/files/file-attachments/mb_2013_10_16_investing_in_children.pdf)
- ⁸ [Oreopoulos, Philip. "Do Dropouts Drop out Too Soon? Wealth, Health and Happiness from Compulsory Schooling." *Journal of Public Economics*, vol. 91, Dec. 2007, pp. 2213-29. DOI.org \(Crossref\), <https://doi.org/10.1016/j.jpubeco.2007.02.002>. !\[\]\(9359d9eaad7bd12a2f12145434d4cd6e_img.jpg\)](https://doi.org/10.1016/j.jpubeco.2007.02.002)

Neighborhood and Built Environment

Our neighborhoods should help, not harm. Just like neighbors support each other, our neighborhoods should be places where we feel connected—physically, emotionally, and even digitally. Being able to get around easily, breathe clean air, enjoy time with others, and stay connected through the internet all help improve our quality of life.

Internet access is a need, not a want.

In today’s world, so much of life is lived online – school assignments, remote work, job applications, appointment scheduling, bill paying, and social connection all need reliable internet access. When a community can be online, those basic, daily needs are possible, along with opening a world of opportunity for learning, exploring, and connecting beyond the borders of a neighborhood.



People in Households with a Computer and Internet Subscription

91.9%

of People
Bay County, MI

92%

of People
Michigan

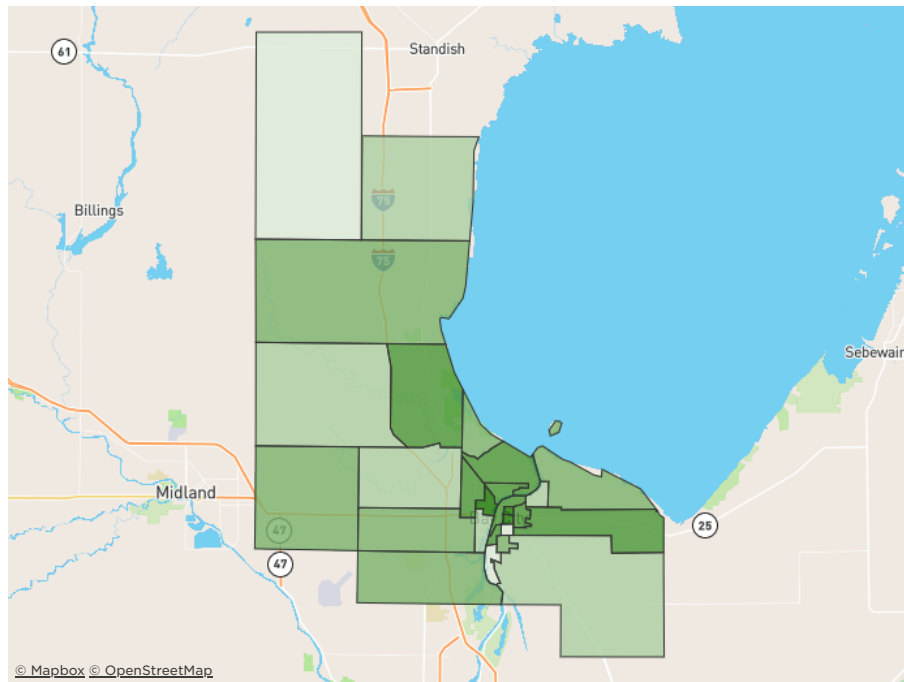
Sources: US Census Bureau ACS 5-year 2019-2023

Students with Access to a Computer and Internet by Grade Level

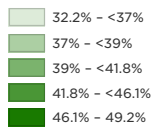
Geography	2019-2023 Pre-K to 4th Grade	2019-2023 5th to 8th Grade	2019-2023 9th to 12th Grade	2019-2023 Undergraduate or Higher
Bay County, MI	98.4%	98.5%	99.6%	96.5%
Michigan	95.8%	96%	96.1%	93.8%

Sources: US Census Bureau ACS 5-year 2019-2023

People in Households with a Computer and Internet Subscription



Households with a Computer Device per capita



Sources: US Census Bureau ACS 5-year 2019-2023

Drive time is lost time.

When we can travel freely to work, the doctor's office, healthy grocery stores, and parks, we're more likely to go. If those services and goods are inside our neighborhood, that's even better. When a task is challenging due to lack of a vehicle or long rides on public transportation, the effect on our health adds up. Without long commutes, we have more time to focus on living a healthy and fulfilled life.

Access to a Vehicle

 **Lack Access to a Vehicle**
6.4%
of Occupied Housing Units
Bay County, MI

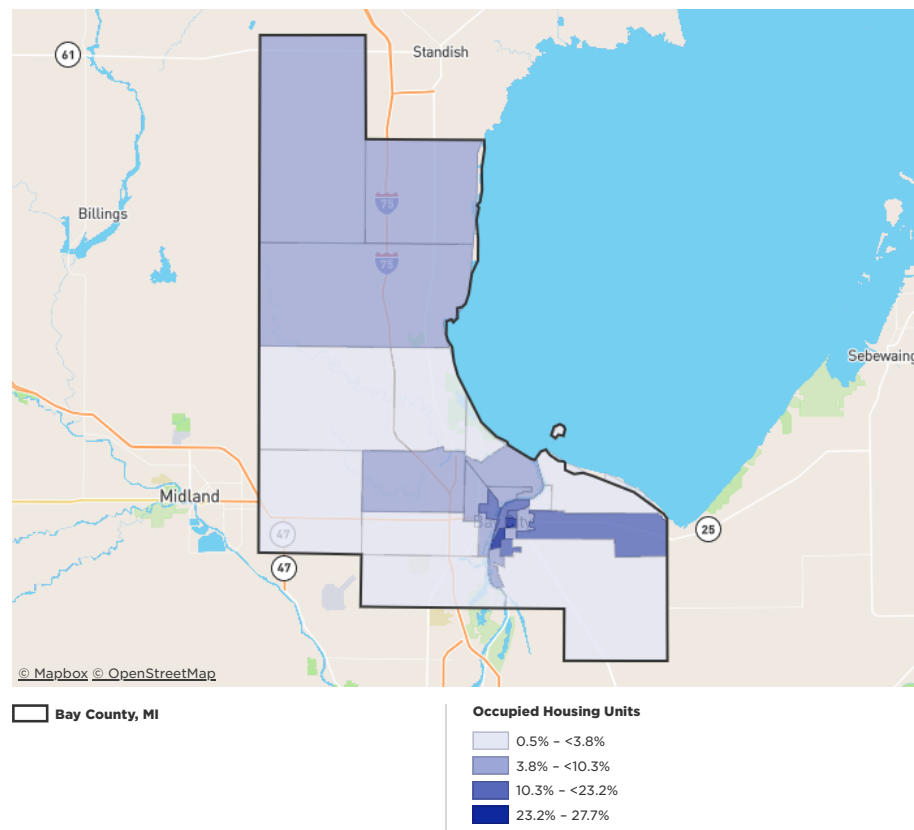
7.1%
of Occupied Housing Units
Michigan

Lack Access to a Vehicle
2,876
Occupied housing units
Bay County, MI

286,327
Occupied housing units
Michigan

Sources: US Census Bureau ACS 5-year 2019-2023

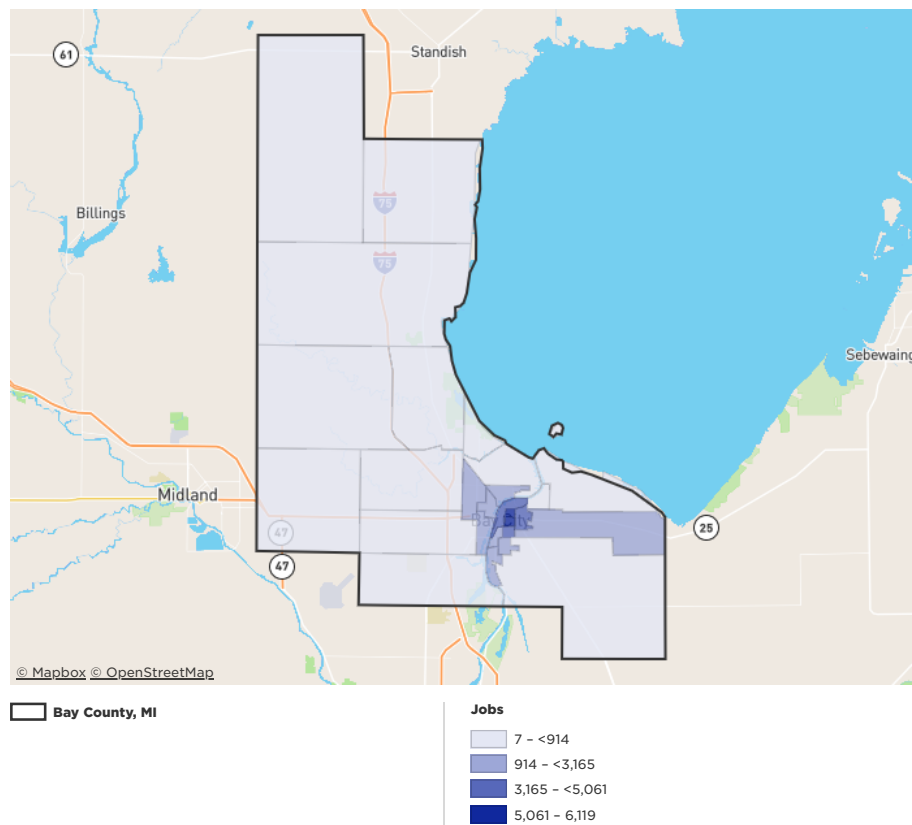
Lack of Vehicle Access



Sources: US Census Bureau ACS 5-year 2019-2023

Map: Average Jobs within 30-Minute Transit Trip

Average Number of Jobs within a 30 Minute Public Transit



Sources: Access Across America Transit 2022

We should be able to breathe easy.

It's likely no surprise that the air we breathe affects our health. That air is affected by where we live and if things that cause poor air quality are nearby, such as heavy traffic, fires, and more.



Diesel Particulate Matter Level in Air

0.09

Micrograms per cubic meter

Bay County, MI

0.12

Micrograms per cubic meter

Michigan

Respiratory Hazard Environmental Justice Index

1.1

Bay County, MI

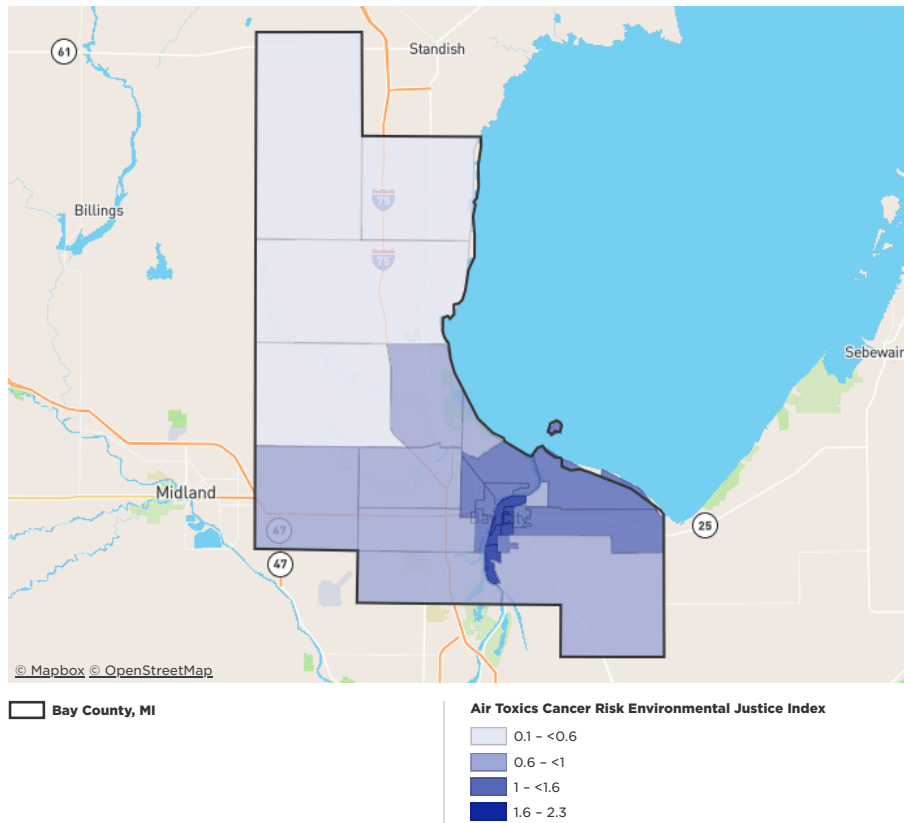
2.5

Michigan

Sources: EPA EJSCREEN 2023, 2024

Respiratory Hazard Environmental Justice Index: the ratio of air toxic exposure concentration to health-based reference concentration weighted by the proportion of the population identified as low-income or belonging to an ethnic/racial minority group. As the value increases, the environmental justice in that area worsens.

Air Toxics Cancer Risk Environmental Justice Index



Sources: EPA EJSCREEN 2023

Air Toxics Cancer Risk Environmental Justice Index: the estimate of individual lifetime cancer risk from inhalation of air toxics multiplied by the proportion of the population identified as low-income or belonging to an ethnic/racial minority group. Lower values indicate lower relative individual lifetime cancer risk from inhalation of air toxics, while higher values indicate greater relative individual lifetime cancer risk from inhalation of air toxics.

Playing outside is good for you.

From childhood to adulthood, being active and outdoors is good for your health. Playing, walking, running, or cycling at parks and green spaces are free ways to help prevent illness. Our neighborhoods should allow residents to engage in outdoor activity for improved physical, mental, and social wellbeing. Access to nature also has potential to improve health outcomes for people in lower income areas, giving them the same chance to be healthy as people who live in other areas.



Walkability Index

7.8

on a scale of 1 to 20

Bay County, MI

7.9

on a scale of 1 to 20

Michigan

Area Dedicated to Parks

1.7%

Bay County, MI

3.8%

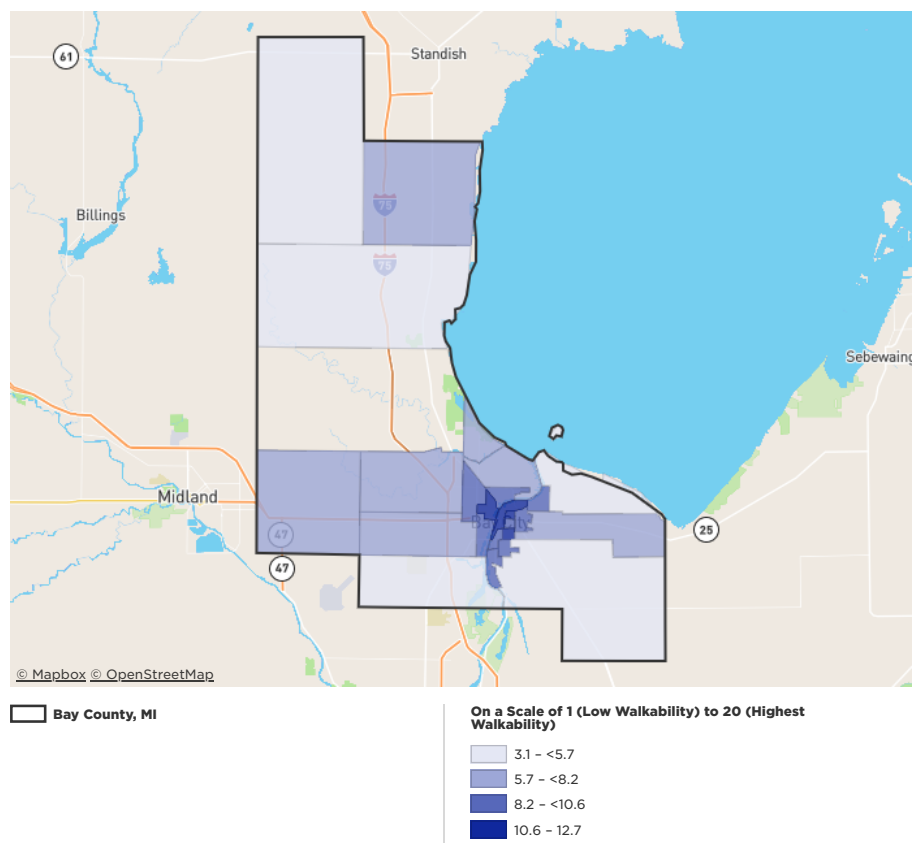
Michigan

Sources: EPA 2021; openICPSR NaND 2018

Note: Walkability improves as scores approach 20.

Map: Walkability

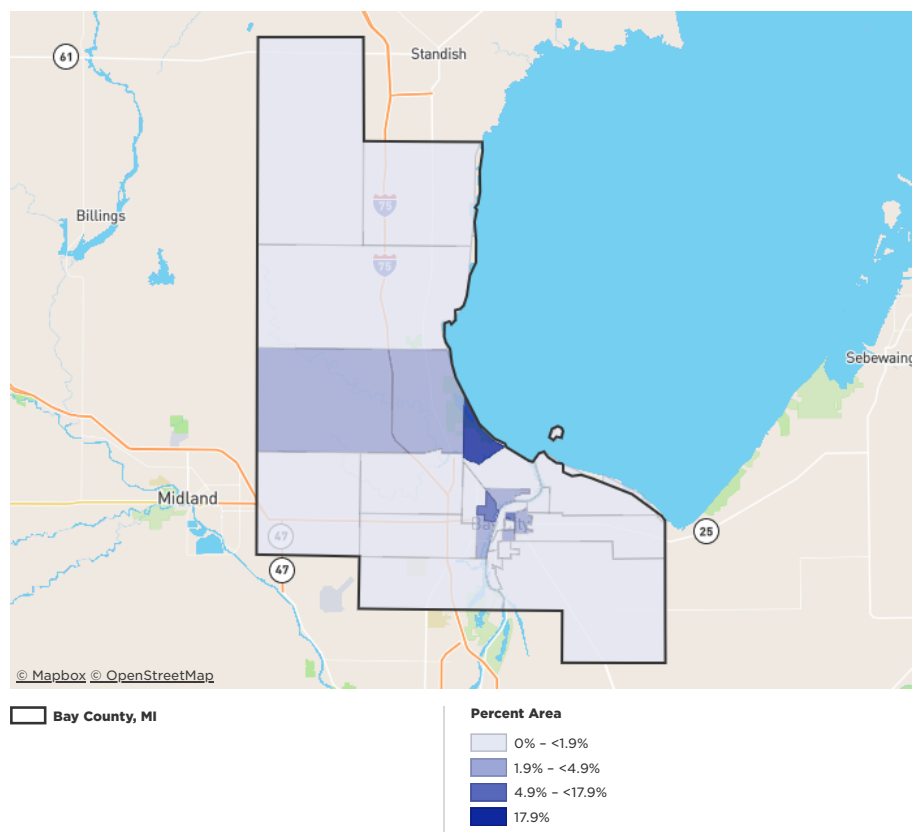
Walkability Index



Sources: EPA 2021

Map: Percent Park Area

Area Dedicated to Parks



Sources: openICPSR NaNDA 2018

Learn more:

1. [Hutch, Daniel J., et al. "Potential Strategies to Eliminate Built Environment Disparities for Disadvantaged and Vulnerable Communities." *American Journal of Public Health*, vol. 101, no. 4, Apr. 2011, pp. 587-95. *ajph.aphapublications.org* \(Atypon\), <https://doi.org/10.2105/AJPH.2009.173872>. !\[\]\(6841ca9b0e023296428e7c9e683b9367_img.jpg\)](https://doi.org/10.2105/AJPH.2009.173872)
2. [Satariano, William A., et al. "Mobility and Aging: New Directions for Public Health Action." *American Journal of Public Health*, vol. 102, no. 8, Aug. 2012, pp. 1508-15. *ajph.aphapublications.org* \(Atypon\), <https://doi.org/10.2105/AJPH.2011.300631>. !\[\]\(e258e347e7683f87061f627f84598eb5_img.jpg\)](https://doi.org/10.2105/AJPH.2011.300631)
3. [EPA, Air Now. Particle Pollution and Your Health, Mar. 2018, <https://www.airnow.gov/sites/default/files/2018-03/pm-color.pdf>. !\[\]\(1233990ad3f0b7475c568d7bf16af31f_img.jpg\)](https://www.airnow.gov/sites/default/files/2018-03/pm-color.pdf)
4. [Barrett, Meredith A., et al. "Parks and Health: Aligning Incentives to Create Innovations in Chronic Disease Prevention." *Preventing Chronic Disease*, vol. 11, 2014, \[www.cdc.gov\]\(http://www.cdc.gov\), <https://doi.org/10.5888/pcd11.130407>. !\[\]\(18570b67a4686b081406cd3de636c1c3_img.jpg\)](https://doi.org/10.5888/pcd11.130407)
5. [Mitchell, Richard, and Frank Popham. "Effect of Exposure to Natural Environment on Health Inequalities: An Observational Population Study." *Lancet*, vol. 372, no. 9650, Nov. 2008, pp. 1655-60. *PubMed*, \[https://doi.org/10.1016/S0140-6736\\(08\\)61689-X\]\(https://doi.org/10.1016/S0140-6736\(08\)61689-X\). !\[\]\(411af059a517db12f1097bc63c4fbe36_img.jpg\)](https://doi.org/10.1016/S0140-6736(08)61689-X)

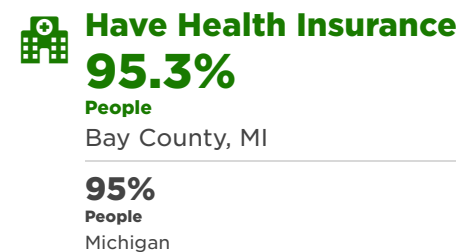
Healthcare shouldn't be a luxury.

Getting the high-quality medical care we need helps us stay healthy and live longer. It also lowers the amount of lost days of productivity, learning, and earning an income. **When we focus on prevention**—getting proactive healthcare before we're in an emergency situation—**our community is even healthier.**

Not everyone can get insurance.

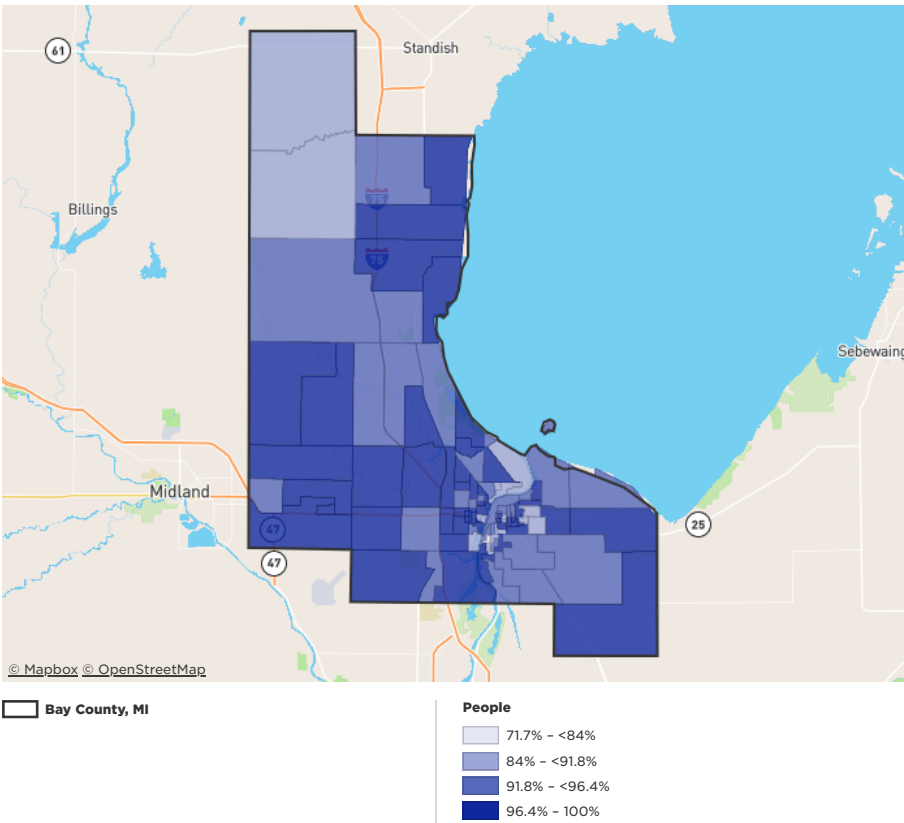
People who have insurance are more likely to get the healthcare services and medication they need when they need it. However, insurance can be complex, tied to employment, and is sometimes not financially doable. Residents who don't have insurance for any number of reasons may not be able to live healthy lives.

People Covered by Insurance



Sources: US Census Bureau ACS 5-year 2019-2023

Health Insurance Coverage



Sources: US Census Bureau ACS 5-year 2019-2023

People Covered by Insurance by Race/Ethnicity

Insurance Status by Race/Ethnicity

Data Sources	Bay County, MI	Michigan
2019-2023 Insured Asian People	100%	95.3%
2019-2023 Insured Black People	96.7%	94%
2019-2023 Insured Hispanic or Latino People	97.1%	89.1%
2019-2023 Insured Multiracial People	95.2%	93.4%
2019-2023 Insured Native American People	97%	88%
2019-2023 Insured Native Hawaiian and Pacific Islander People	100%	81.8%
2019-2023 Insured Other People	98.7%	86.8%
2019-2023 Insured White (Not Hispanic or Latino) People	95.1%	95.6%

Sources: US Census Bureau ACS 5-year 2019-2023

Note: Unless otherwise indicated, data for each group includes both Hispanic or Latino people and non-Hispanic or Latino people.

People Covered by Insurance by Age

Health Insurance Status by Age

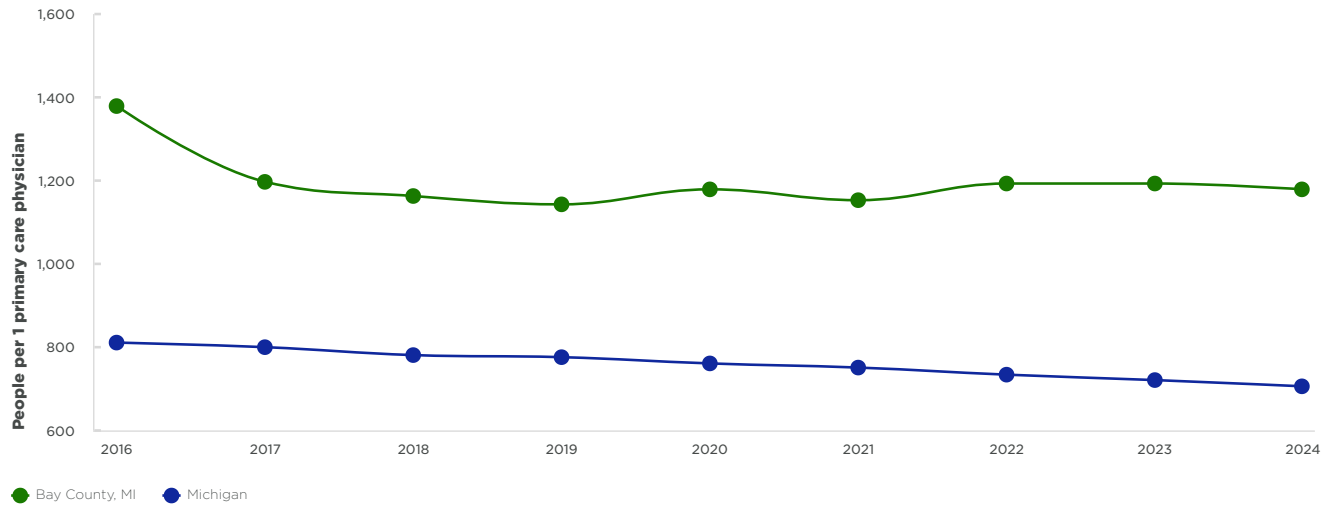
Geography	2019-2023 Insured People Under Age 6	2019-2023 Insured People Ages 6 to 18	2019-2023 Insured People Ages 19 to 64	2019-2023 Insured People Ages 65+
Bay County, MI	98.6%	97.3%	92.8%	99.9%
Michigan	97.2%	97%	92.8%	99.6%

Sources: US Census Bureau ACS 5-year 2019-2023

Primary care is the first line of defense.

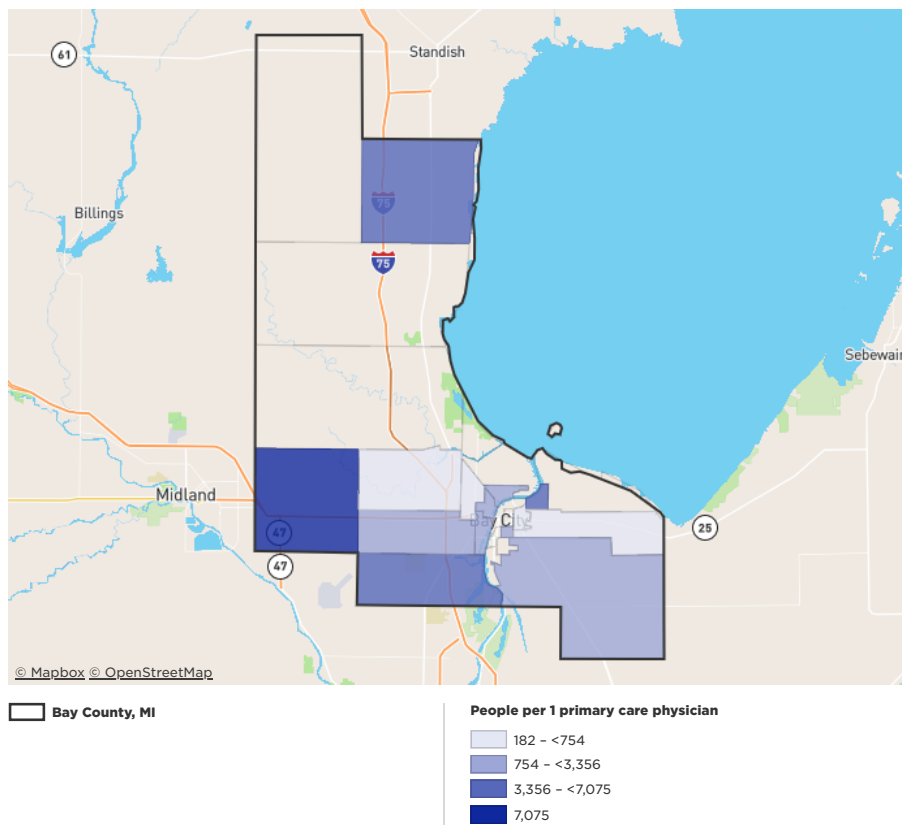
A primary care provider is a doctor or practitioner who can look at your health as a whole, managing your care and sometimes even preventing the need for medical specialists. Having a primary care provider leads to positive health outcomes because it often includes more proactive health care visits, such as annual check-ups. Creating more opportunities for relationships with primary care providers helps us focus on prevention, rather than costly treatment.

Primary Care Physician Ratio



Sources: NPPES NPI

Primary Care Physician Ratio



Sources: NPPES NPI 2024

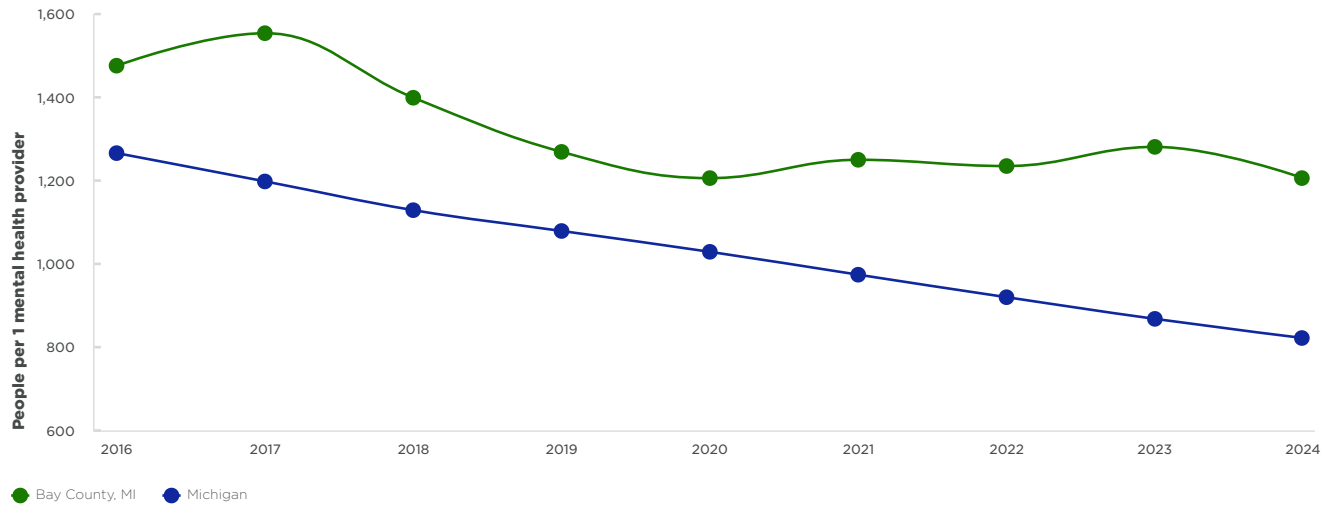
Areas with no data have 0 primary care physicians.

Mental health should be equal to physical health.

Mental healthcare should be easier to find in our community, as mental and physical health go hand-in-hand. We can't focus on one without the other. While healthcare access in general can be a challenge, mental healthcare is especially difficult because of a lack of services or social stigmas that still exist. We don't think twice about seeking medical care for a broken arm or other physical need, yet many people delay getting help for their mental health because of outdated ideas about why it happens, what it means, and who struggles with it. 1 in 5 adults in the U.S. live with mental illness. In addition to those with diagnosed conditions, many people can benefit from mental health services at some point in life.

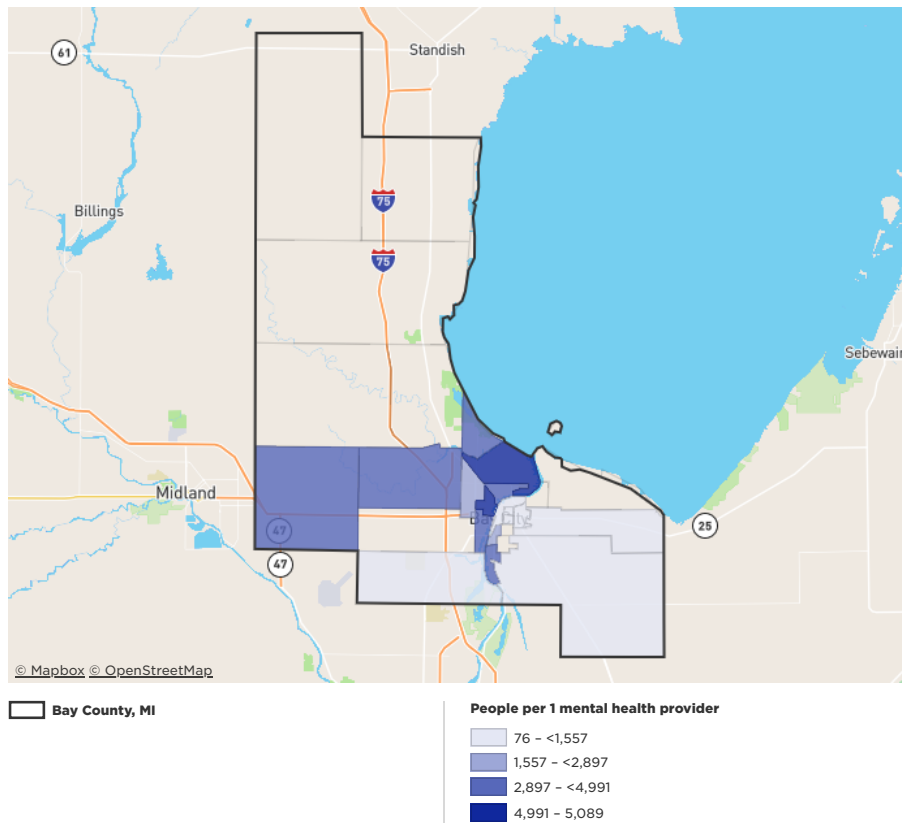
The more we talk about mental health, share resources, and remove barriers for people to access mental health providers, the healthier our community will be.

Mental Health Provider Ratio



Sources: NPPES NPI

Mental Health Provider Ratio



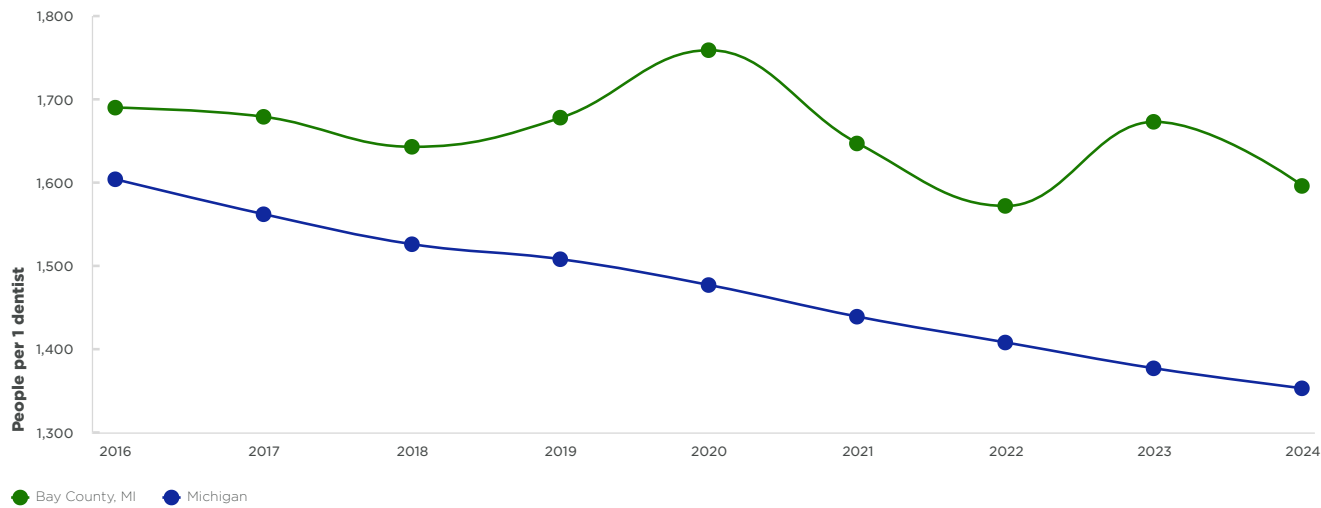
Sources: NPPES NPI 2024

Areas with no data have 0 mental health providers.

Dental health highlights the root of the problem.

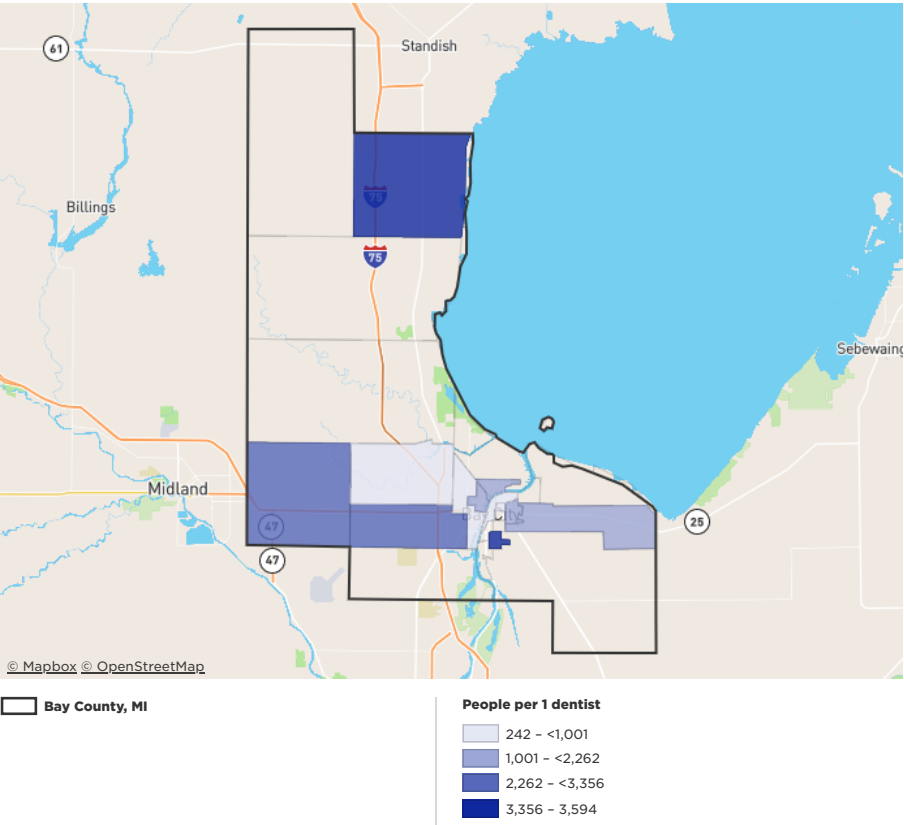
Dental health doesn't just tell us about proper brushing of teeth and gums. Poor dental health can point to social inequalities, as underserved populations are more likely to have greater dental needs. Poor dental health is also linked with other diseases, such as diabetes and obesity, because they share risk factors such as smoking or sugary diets. Increasing dental care services in our community is another way to improve health.

Dentist Ratio



Sources: NPPES NPI

Dentist Ratio



Sources: NPPES NPI 2024

Areas with no data have 0 dentists.

Learn more:

1. Institute of Medicine (US) Committee on the Consequences of Uninsurance. "3. Effects of Health Insurance on Health." *Care Without Coverage: Too Little, Too Late*. National Academies Press (US). 2002. <https://www.ncbi.nlm.nih.gov/books/NBK220636/>
2. "Access to Primary Care." *Healthy People 2030*. <https://odphp.health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/access-primary-care>
3. Coombs, Nicholas C., et al. "Barriers to Healthcare Access among U.S. Adults with Mental Health Challenges: A Population-Based Study." *SSM - Population Health*, vol. 15, June 2021, p. 100847. *PubMed Central*, <https://doi.org/10.1016/j.ssmph.2021.100847>
4. Knaak, Stephanie, et al. "Mental Illness-Related Stigma in Healthcare." *Healthcare Management Forum*, vol. 30, no. 2, Mar. 2017, pp. 111-16. *PubMed Central*, <https://doi.org/10.1177/0840470416679413>
5. "Mental Illness." *National Institute of Mental Health (NIMH)*. <https://www.nimh.nih.gov/health/statistics/mental-illness>

Causes of Death

How We Respond Matters

Understanding the main causes of death in our community helps us see what's needed to keep everyone safe and healthy. By focusing on prevention, we can reduce causes of death. This means identifying risks, encouraging healthy choices, and creating programs that support everyone's well-being. Prevention isn't just about telling people to make good choices; it's about making those choices easier by creating a supportive environment. When we identify the biggest health problems, we can work together to develop programs and resources that prevent these issues and save lives.

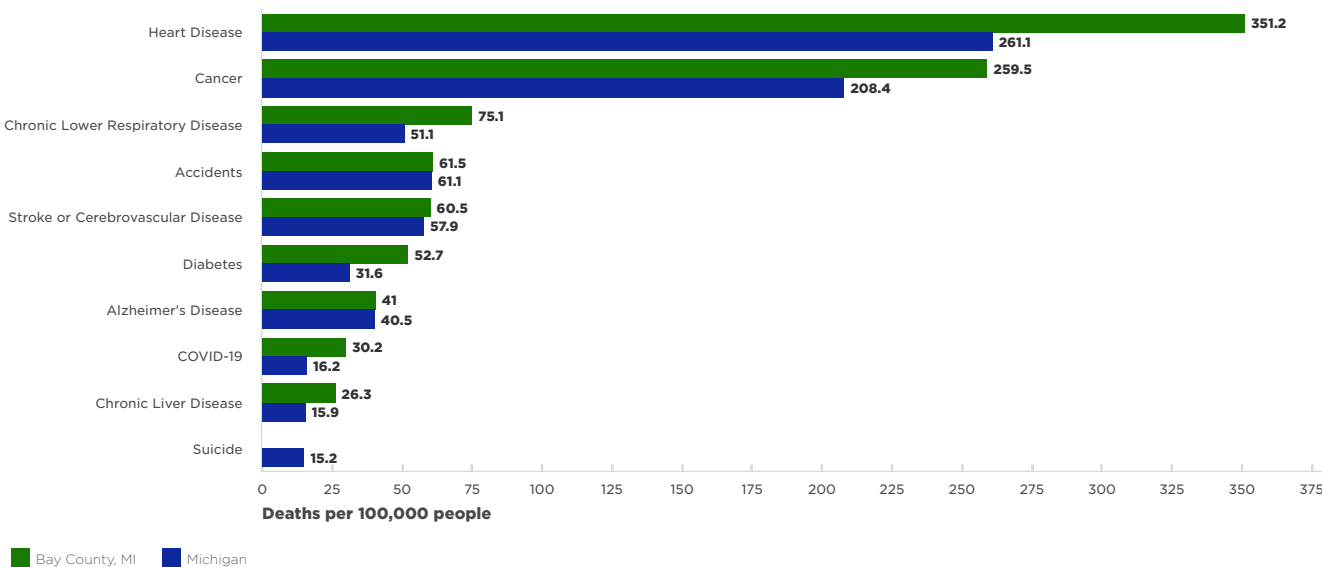
Please note:

Not all data displayed within this section align with developed CHNA data reports. Variations can occur due to differences in data sources, processing methods, or frequency of updates.

How long do we live?

Ultimately, the job of public health is to **improve how long our residents live, and the quality of life our residents experience** throughout their lives. One key measure of the health of our community is life expectancy, which tells us how long a typical resident is expected to live when they are born. Communities that have more opportunities for health will generally have a longer life expectancy.

Leading Causes of Death



Sources: CDC WONDER Cause of Death 2023 Crude

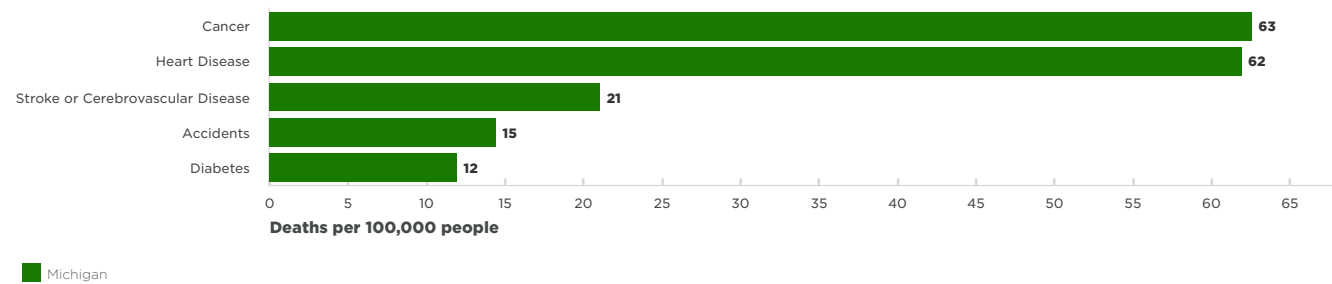
This data is sorted from highest to lowest based on national top causes of death.

Leading Causes of Death by Race & Ethnicity

Note: Leading causes of death by race and ethnicity utilizes data over a five year period to improve data availability and reliability.

Asian

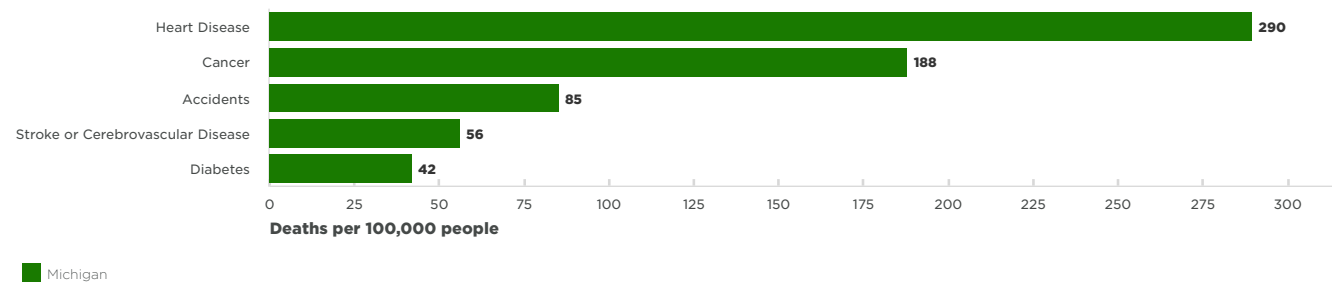
Leading Causes of Death Among Asians



Sources: CDC WONDER Cause of Death 2019-2023 Crude
This data is sorted from highest to lowest based on national top causes of death for Asians.

Black or African American

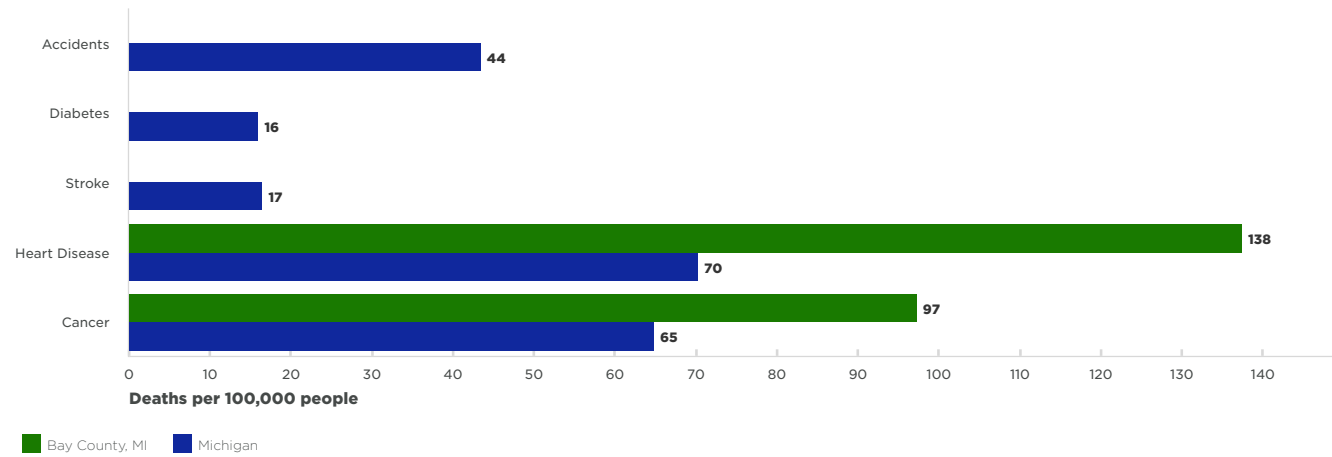
Causes of Death Among Black/African Americans



Sources: CDC WONDER Cause of Death 2019-2023 Crude
This data is sorted from highest to lowest based on national top causes of death for Black/African Americans.

Hispanic or Latino

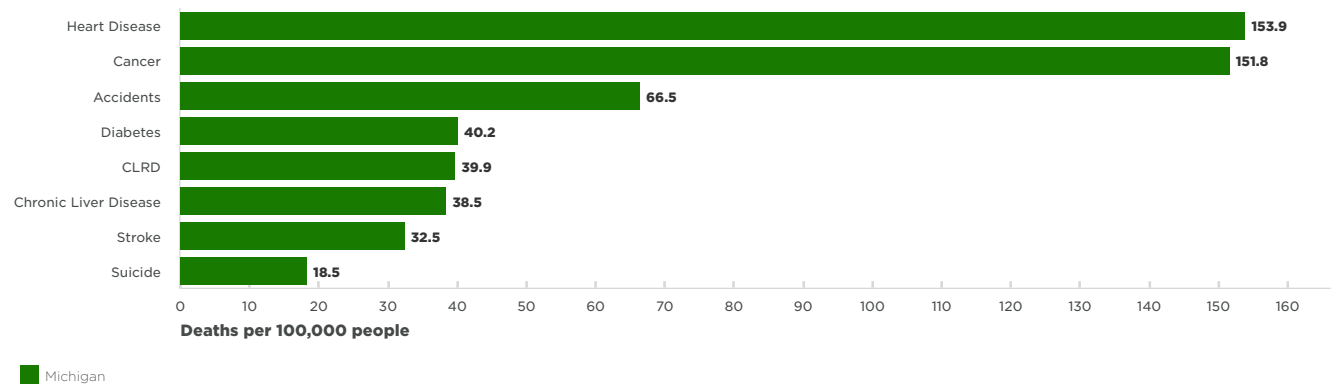
Leading Causes of Death Among Hispanic/Latinos



Sources: CDC WONDER Cause of Death 2019-2023 Crude
This data is sorted from highest to lowest based on national top causes of death for Hispanics or Latinos.

Native American

Leading Causes of Death Among Native Americans

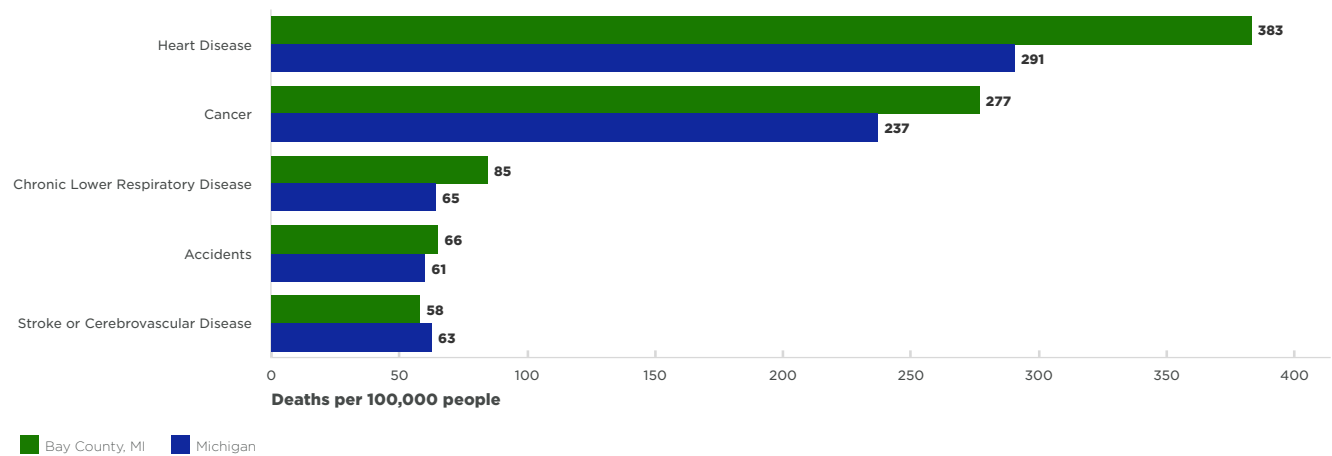


Sources: CDC WONDER Cause of Death 2019-2023 Crude

This data is sorted from highest to lowest based on national top causes of death for Native Americans.

White

Leading Causes of Death Among Non-Hispanic Whites



Sources: CDC WONDER Cause of Death 2019-2023 Crude

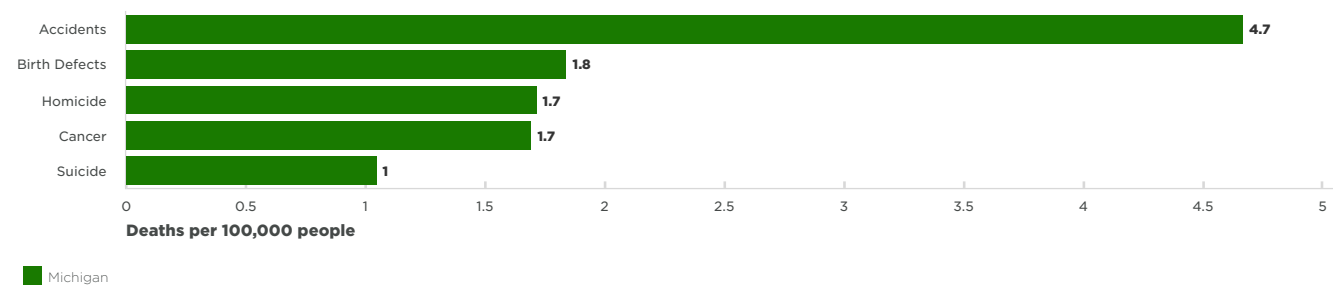
This data is sorted from highest to lowest based on national top causes of death for whites.

Leading Causes of Death by Age

Note: Leading causes of death by age utilizes data over a five year period to improve data availability and reliability. At present, COVID death data is not available for all three years. As a result, COVID death rates by age are located in a separate, single-year bar chart.

Age 1-14

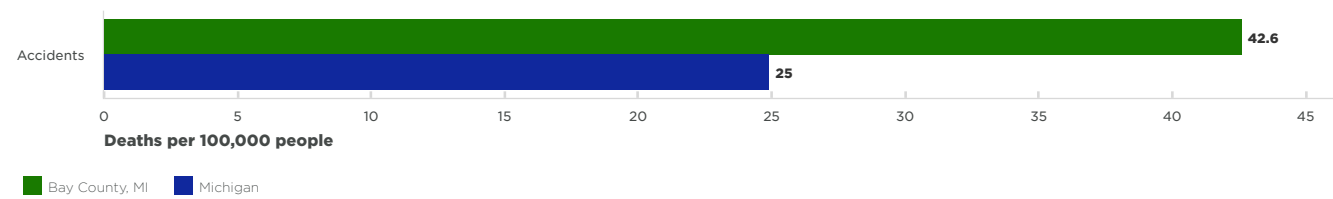
Leading Causes of Death Age 1-14



Sources: CDC WONDER Cause of Death 2019-2023 Crude
This data is sorted from highest to lowest based on national top causes of death for ages 1-14.

Age 15-24

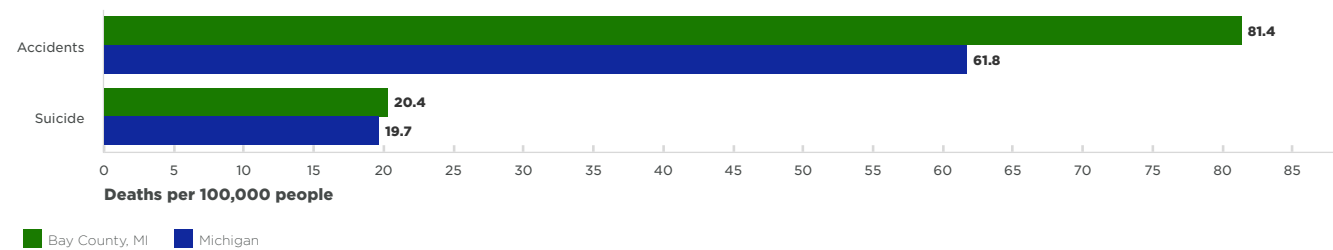
Leading Causes of Death Age 15-24



Sources: CDC WONDER Cause of Death 2019-2023 Crude
This data is sorted from highest to lowest based on national top causes of death for ages 15-24.

Age 25-34

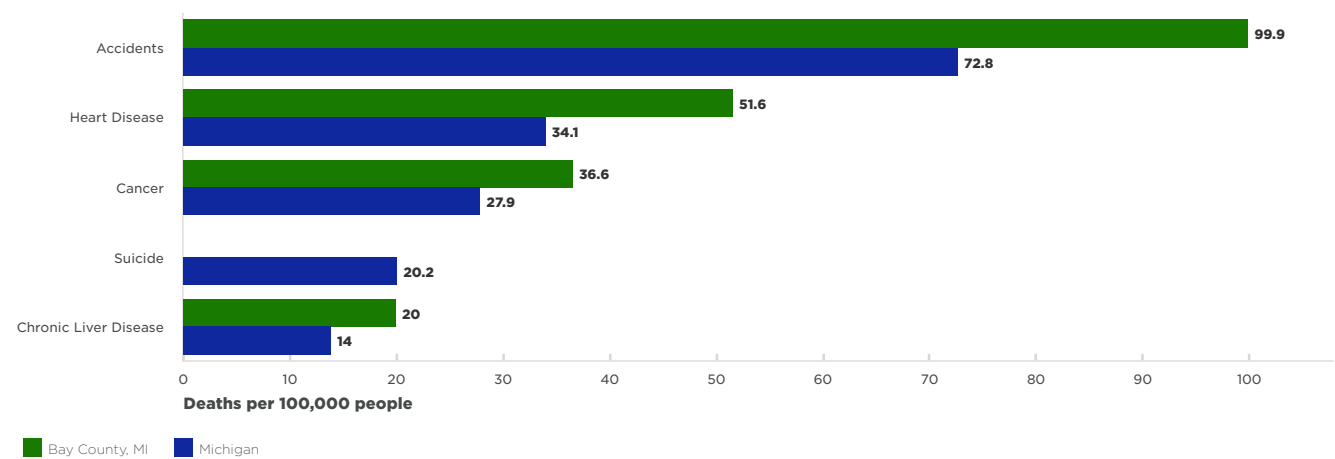
Leading Causes of Death Age 25-34



Sources: CDC WONDER Cause of Death 2019-2023 Crude
This data is sorted from highest to lowest based on national top causes of death for ages 25-34.

Age 35-44

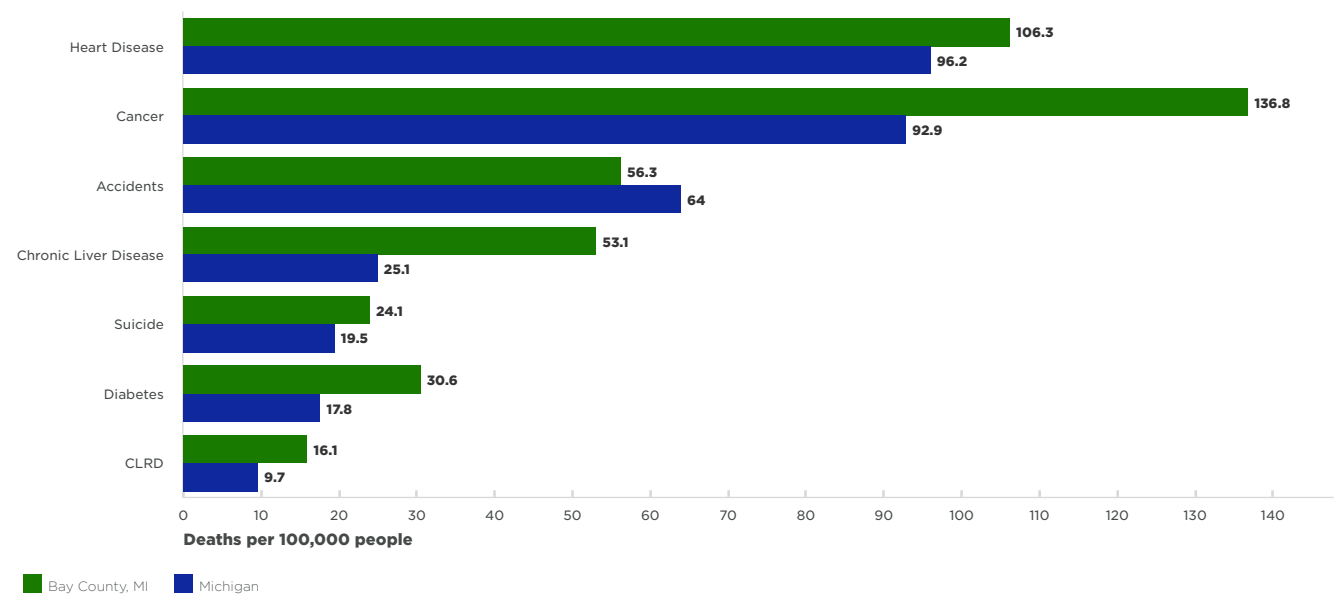
Leading Causes of Death Age 35-44



Sources: CDC WONDER Cause of Death 2019-2023 Crude
This data is sorted from highest to lowest based on national top causes of death for ages 35-44.

Age 45-54

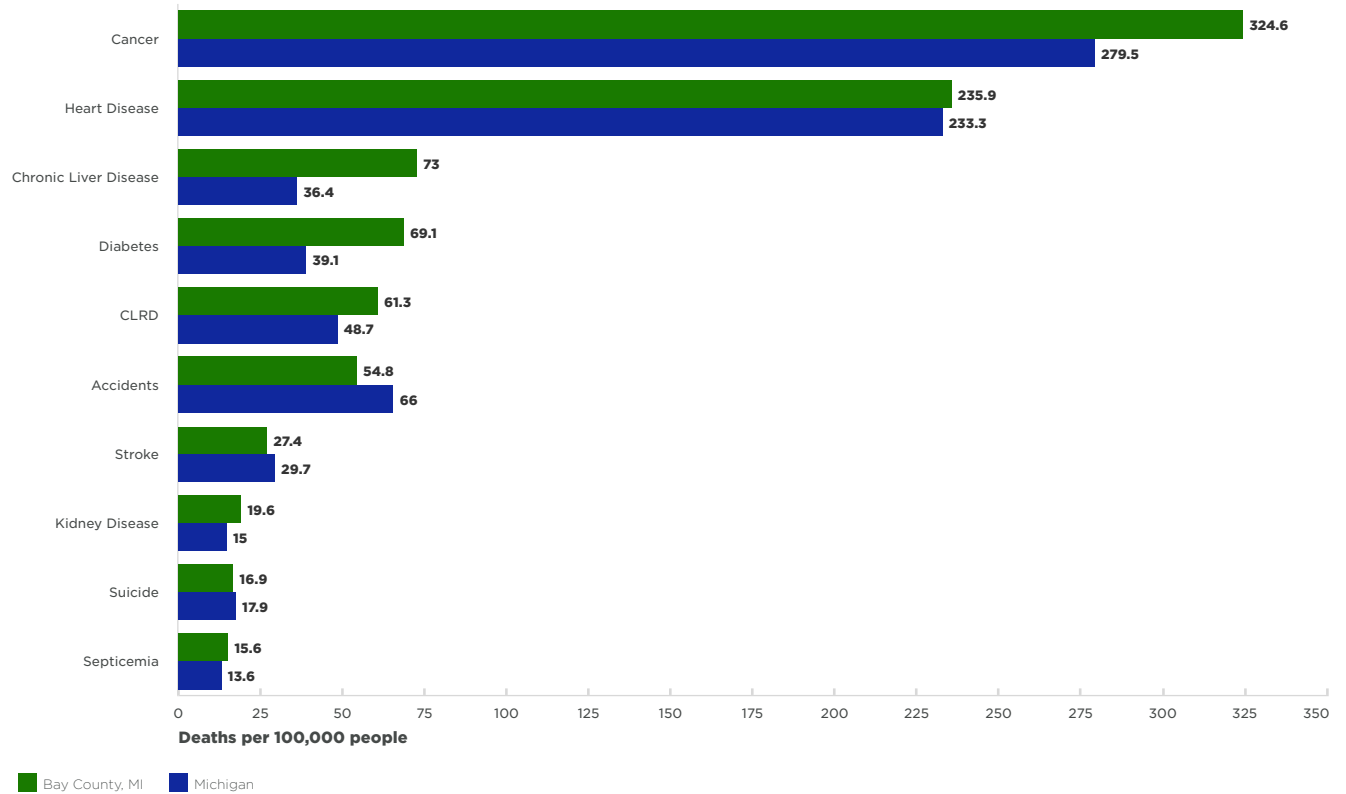
Leading Causes of Death Age 45-54



Sources: CDC WONDER Cause of Death 2019-2023 Crude
This data is sorted from highest to lowest based on national top causes of death for ages 45-54.

Age 55-64

Leading Causes of Death Age 55-64

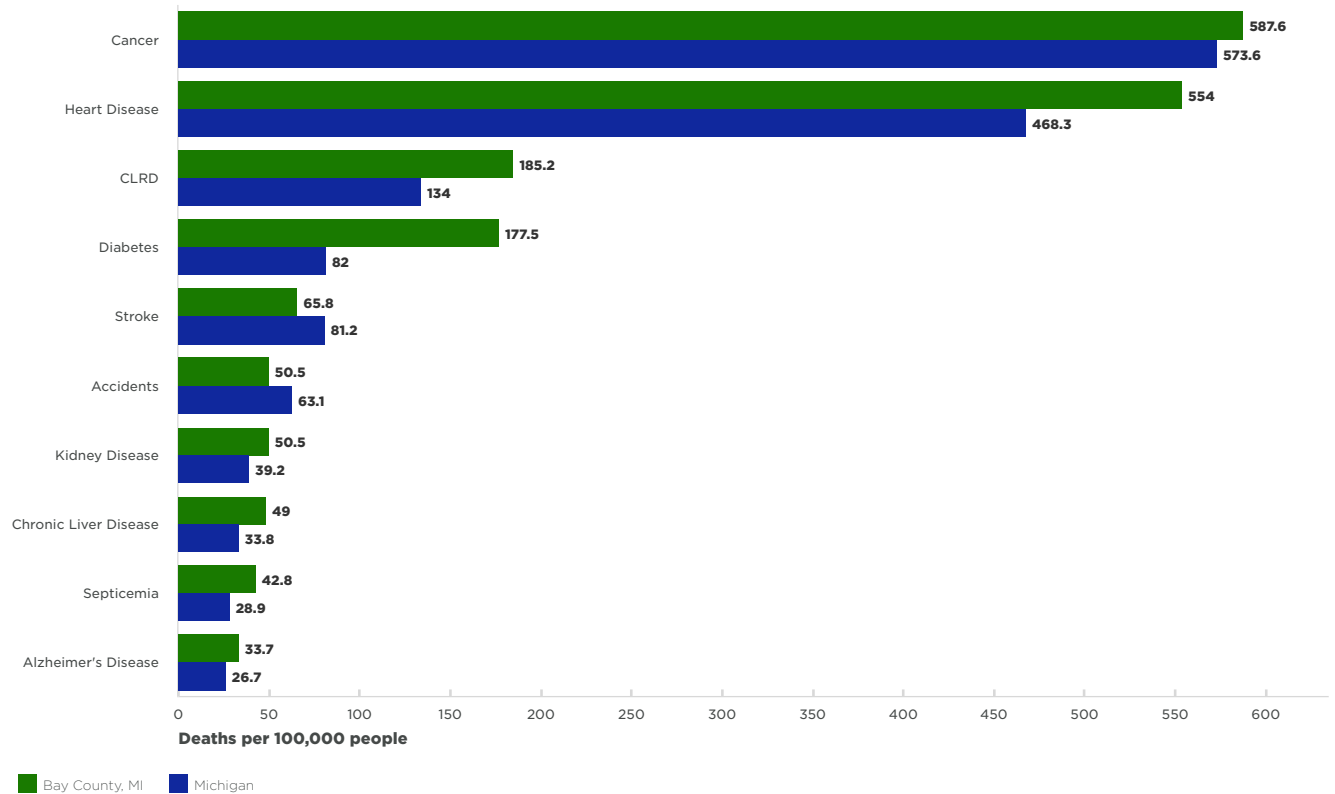


Sources: CDC WONDER Cause of Death 2019-2023 Crude

This data is sorted from highest to lowest based on national top causes of death for ages 55-64.

Age 65-74

Leading Causes of Death Age 65-74

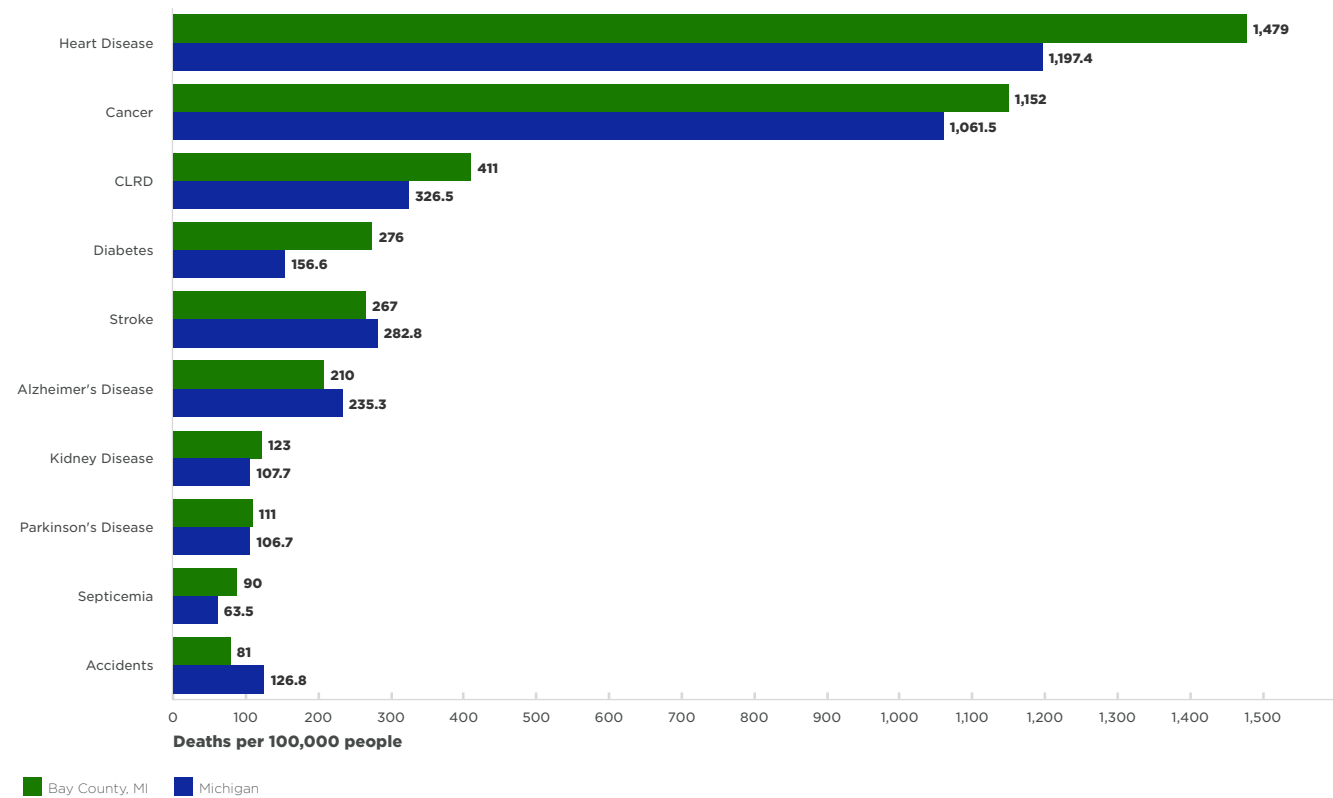


Sources: CDC WONDER Cause of Death 2019-2023 Crude

This data is sorted from highest to lowest based on national top causes of death for ages 65-74.

Age 75-84

Leading Causes of Death Age 75-84

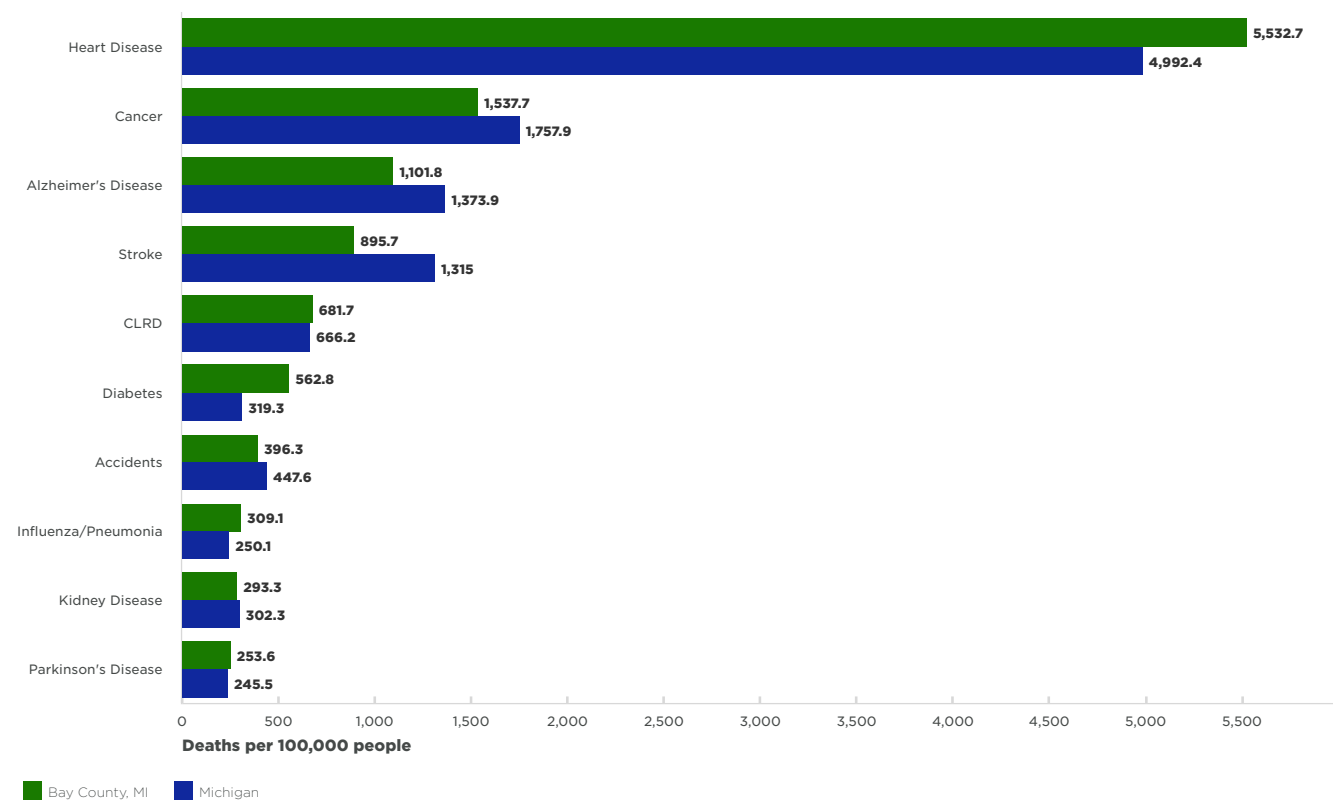


Sources: CDC WONDER Cause of Death 2019-2023 Crude

This data is sorted from highest to lowest based on national top causes of death for ages 75-84.

Age 85+

Leading Causes of Death Age 85+

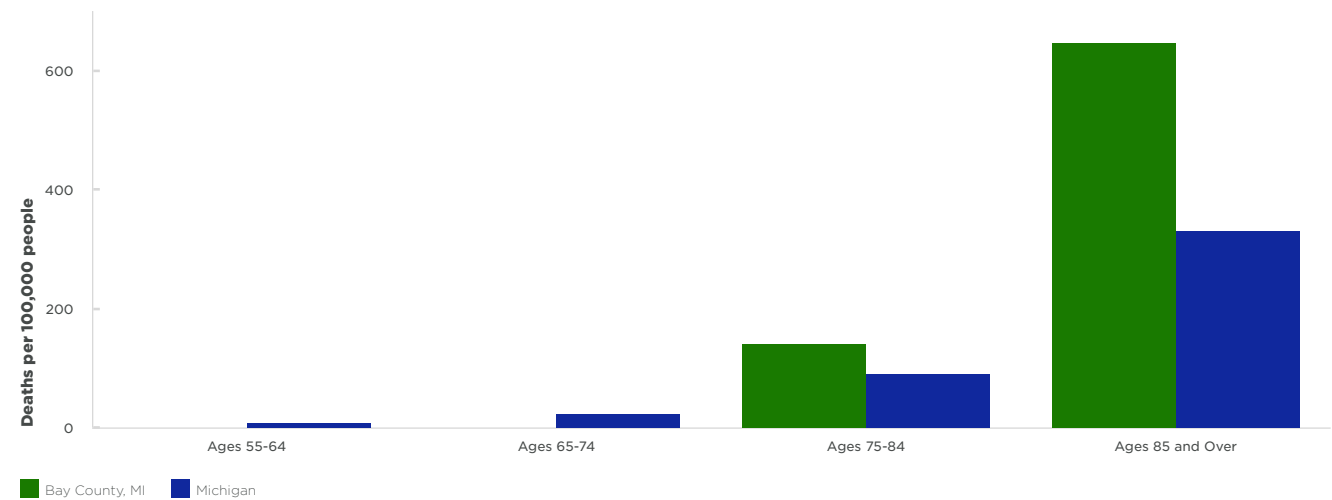


Sources: CDC WONDER Cause of Death 2019-2023 Crude

This data is sorted from highest to lowest based on national top causes of death for ages 85+.

COVID Death Rate by Age

COVID-19 Deaths by Age

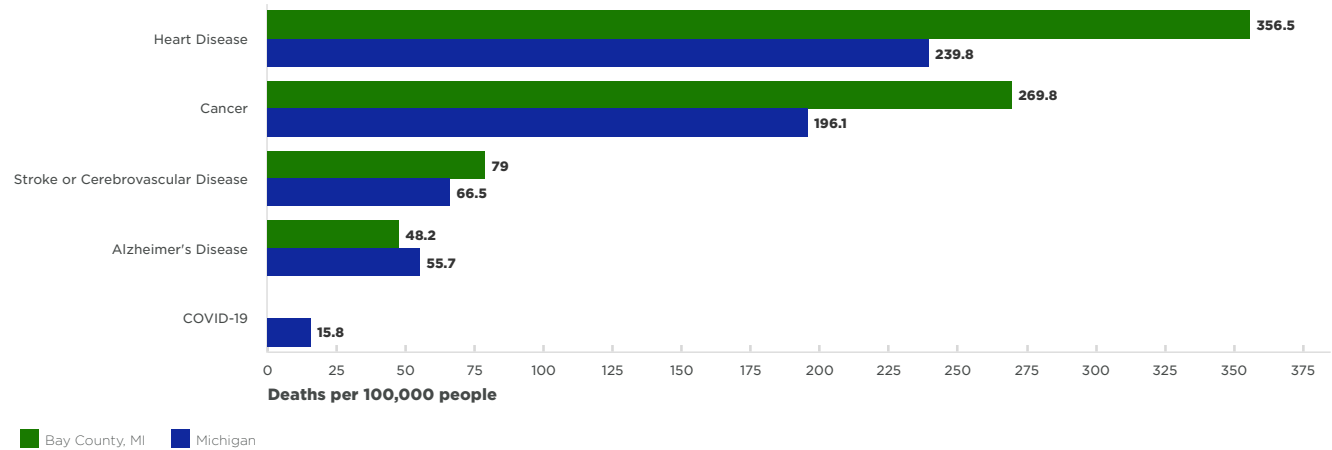


Sources: CDC WONDER Cause of Death 2023 Crude

Leading Causes of Death by Sex

Females

Leading Causes of Death Among Females

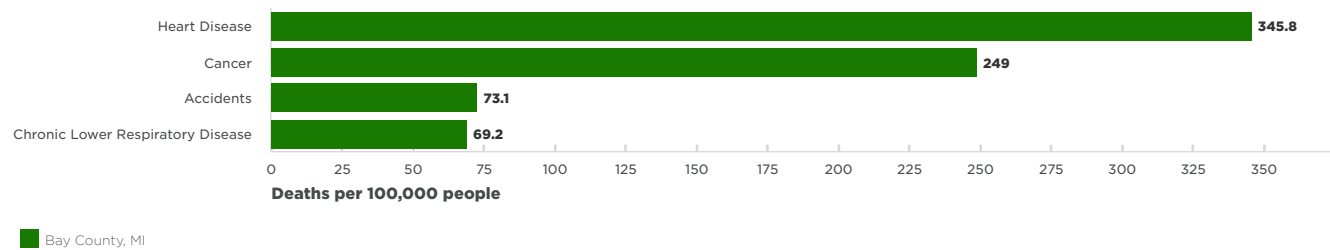


Sources: CDC WONDER Cause of Death 2023 Crude

This data is sorted from highest to lowest based on national top causes of death for females.

Males

Leading Causes of Death Among Males



Sources: CDC WONDER Cause of Death 2023 Crude

This data is sorted from highest to lowest based on national top causes of death for males.

How We Start Matters

When mothers and babies are healthy, our entire community is better. To make sure every baby has the best start in life, we must also focus on the health of their mothers. A healthy life begins long before birth, starting with resources for parents before pregnancy and continuing with support and access to medical care before, during, and after their pregnancy. Making sure people in all areas of our community have equal chances for healthy pregnancies and births will give every baby the start to life they deserve.

Throughout this dashboard, we are exploring how our **context** informs our personal **behaviors**, which produce our health **outcomes**—if you missed it, you can read more on the [home page](#). In this section, we'll look at each of those as it relates to the health of mothers and babies in our community.

Our zip code affects as much as our genetic code.

The neighborhood we call home, part of our **context**, affects our opportunities to make healthy choices. Research says that our zip code can have a greater impact on our health than our genetic code. Some zip codes have more resources to help families make healthier choices, while others have less. For neighborhoods without the same access, health is harder to come by. **Find out more in the [Context](#) section.**

A mother's behavior isn't all about personal choice.

The **behaviors** of a mother before, during, and after pregnancy are often informed by their context. Most parents want the best for their children. Unfortunately, not all parents can make healthy choices on a regular basis. It takes time, resources, and flexibility to go to regular doctor's visits during pregnancy, make lasting health decisions, or breastfeed after birth—and many families don't have those options. **Find out more in the [Behaviors](#) section.**

Improve access to improve outcomes.

Health **outcomes** are a result of our context and behaviors. Undesired outcomes in this section show us where we can better support and equip mothers and babies, starting with what they can access. Positive change such as more resources to help mothers make healthy choices can improve outcomes, meaning healthier moms and babies. **Find out more in the [Outcomes](#) section.**

Learn more:

¹ [Graham, Garth. "Why Your ZIP Code Matters More Than Your Genetic Code: Promoting Healthy Outcomes from Mother to Child." *Breastfeeding Medicine*, vol. 11, no. 8, Aug. 2016. ResearchGate, <https://doi.org/10.1089/bfm.2016.0113>.](#)

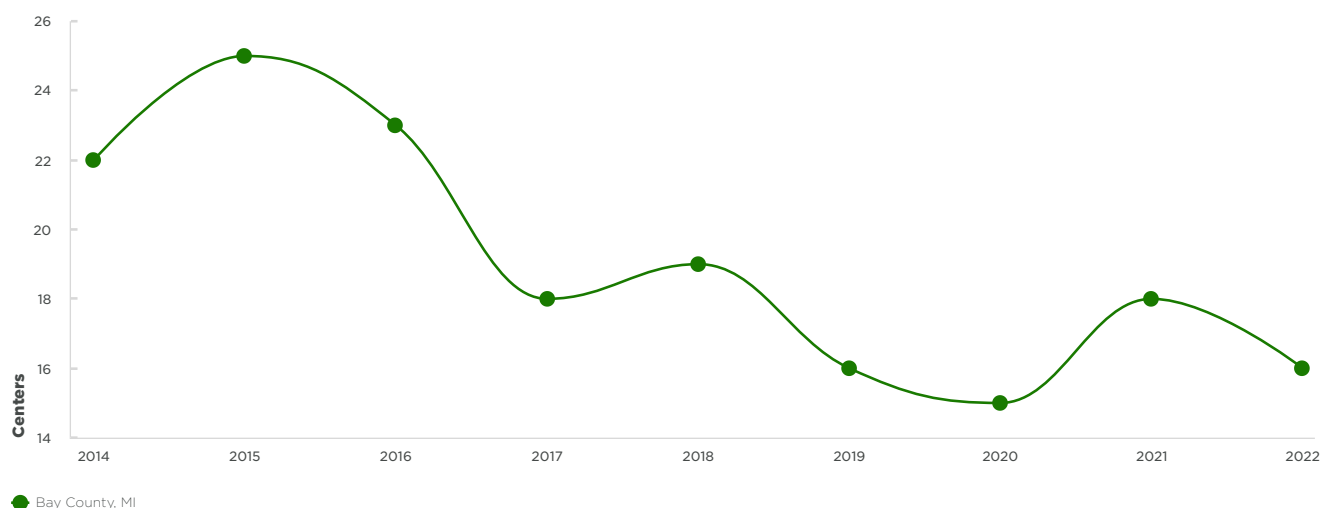
Health starts in our homes, schools, and jobs.

If our zip code impacts our health as much as our genetic code, then the neighborhood a baby is born into really matters. Giving children what they need to thrive is a challenge no matter where we live, but families in some areas find this even more challenging. Poverty can prevent parents from being able to give their children the life they deserve. Access to health insurance, being able to have a job that pays enough, the age of parents, childcare options once the baby is born, supportive family and friends, and access to healthy food are all parts of a mother and baby's **context**.

Our children deserve quality childcare.

Finding trusted, reliable, and affordable childcare is a challenge for families no matter how much money they make. Having at least one parent employed is required for most families to provide for their children. A lack of childcare can lead to more women leaving the workforce, families slipping into poverty, and food insecurity for children. Access to affordable childcare helps parents keep their jobs and afford housing, giving them financial security and opportunity. They can then pay for consistent childcare, along with their housing, healthy food, and medical care—which all benefit health. Parents need access to quality childcare options close to where they live in order to keep a stable job and allow their children to thrive in safe, caring environments.

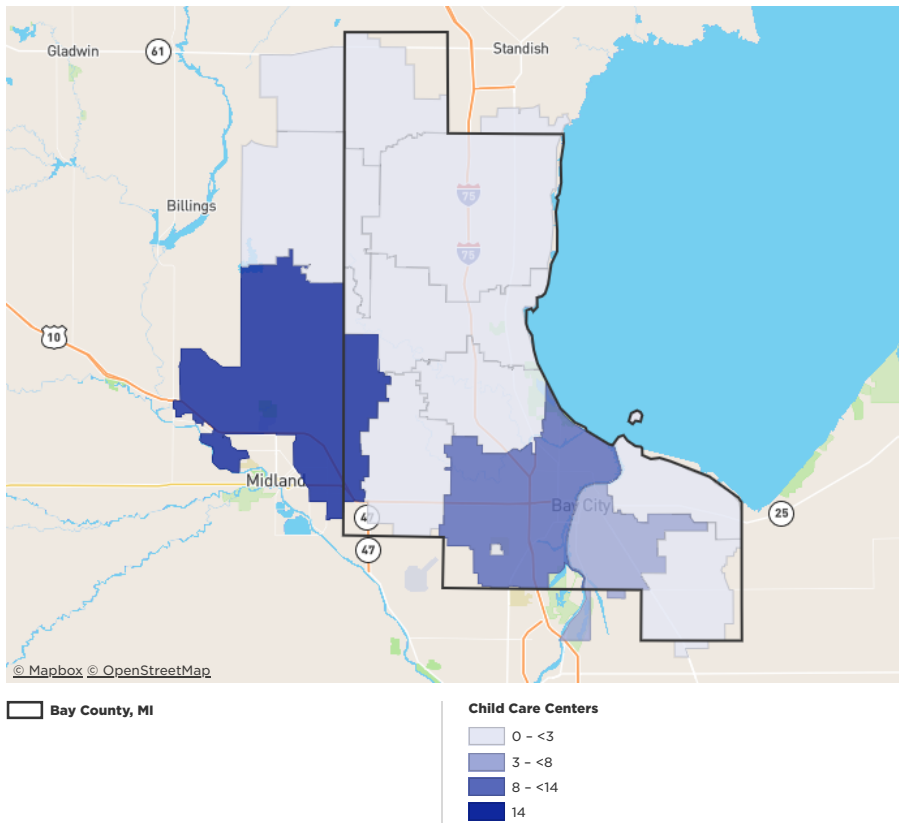
Child Care Centers Over Time



Sources: CBP

Note: If an area has fewer than 3 child care centers in a given year, data for those time periods is suppressed for that area. The businesses shown here typically care for preschoolers, but may offer pre-K or kindergarten educational programs as well as care for older children outside of school.

Child Care Centers



Sources: CBP 2023

Note: Data for ZIP Codes with fewer than 3 child care centers is suppressed. The businesses shown here typically care for preschoolers, but may offer pre-K or kindergarten educational programs as well as care for older children outside of school.

It takes a village to raise a child.

Parenting is a difficult task for anyone, and even more so for a single parent or grandparent raising a child. The health of caregivers and children can suffer because of the stress, increasing the risk for some chronic diseases or mental health issues. Single parents struggle more financially than families with more than one parent, affecting every area of life including health. Supporting caregivers in the important task of providing for children helps our entire community thrive.



Single Parent/Guardian Families with Children

40.9%

Families with children

Bay County, MI

33.3%

Families with children

Michigan



Single Parent/Guardian Families with Children

4,213

Families

Bay County, MI

333,289

Families

Michigan



WIC Authorized Stores

11

Stores

Bay County, MI

1,562

Stores

Michigan

Sources: US Census Bureau ACS 5-year 2019-2023; USDA ERS FEA 2022

Poverty Rate by Family Composition

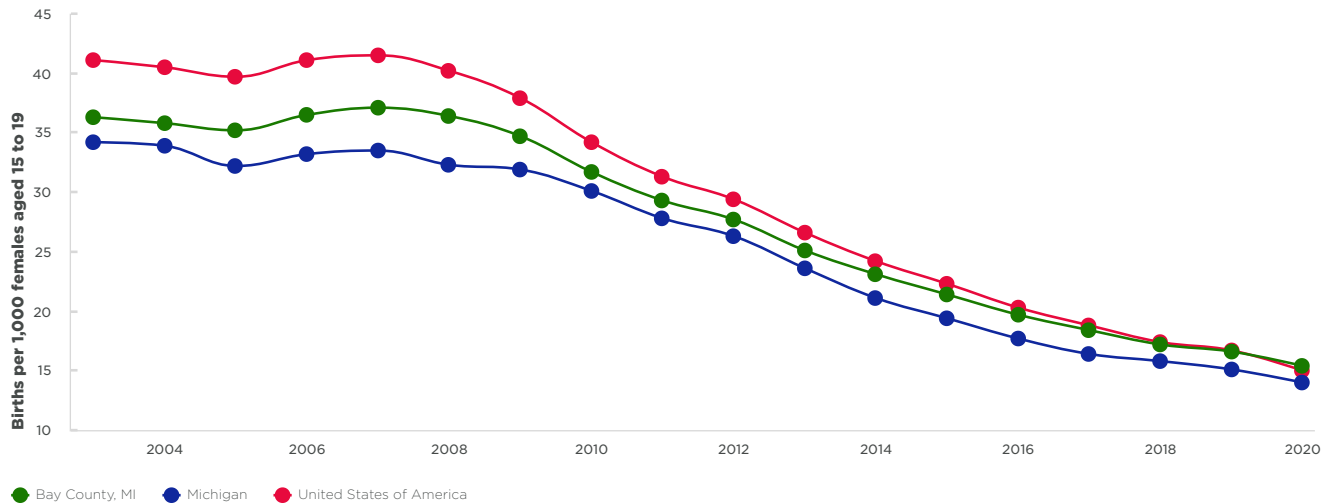
Geography	2019-2023 Married Couple with Children	2019-2023 Single Females with Children	2019-2023 Single Males with Children
Bay County, MI	8.7%	39.2%	8.9%
Michigan	6.2%	41%	19.1%
United States of America	6.2%	39%	19.1%

Sources: US Census Bureau ACS 5-year 2019-2023
This data represents the percent of each family type that is in poverty.

Address poverty to decrease teen births.

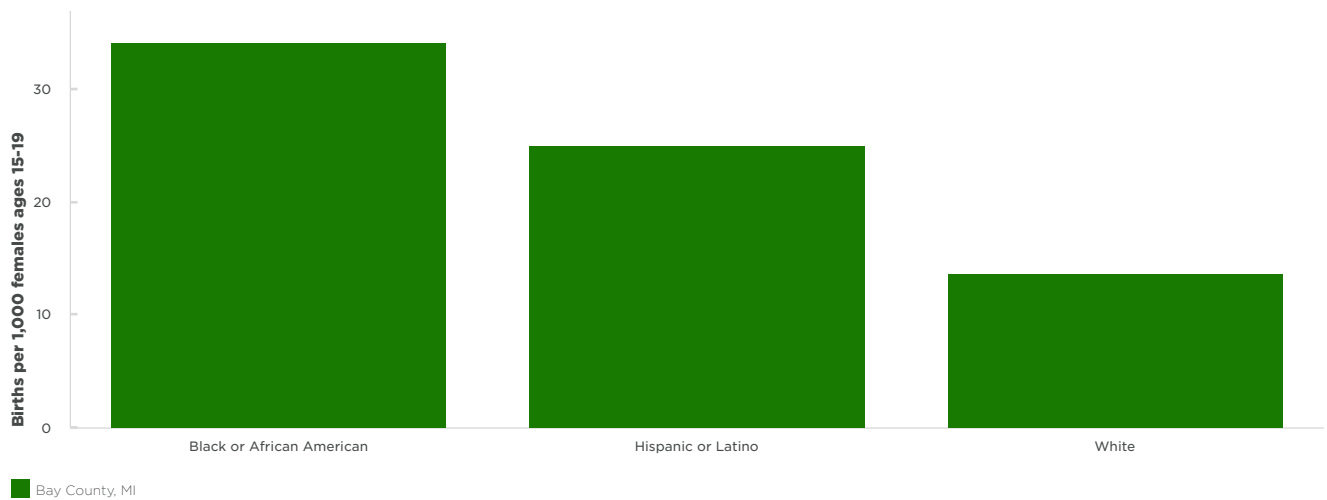
Teen pregnancies occur in all communities, but they are more likely to occur in areas of poverty. Programs or healthcare services that equip teens to make healthy choices can help, but research also shows factors like unemployment, lack of education, and low income are connected to higher teen birth rates. Meeting those needs can help reduce the difference in teen birth rate from one area to another, giving everyone an equal chance to prevent teen pregnancy. Sex education, access to contraception, healthcare for sexually transmitted infection, and sexual violence prevention can help lower teen pregnancy rates in our community.

Teen Birth Rate



Sources: CDC

Teen Birth Rate by Race/Ethnicity



Sources: National Center for Health Statistics - Natality Files; Census Population Estimates Program 2017-2023 via RWJF County Health Rankings & Roadmaps 2025

Learn more:

1. [Graham, Garth. "Why Your ZIP Code Matters More Than Your Genetic Code: Promoting Healthy Outcomes from Mother to Child." *Breastfeeding Medicine*, vol. 11, no. 8, Aug. 2016. *ResearchGate*, <https://doi.org/10.1089/bfm.2016.0113>. !\[\]\(6302aad5aed157b291fddf37b4870784_img.jpg\)](https://doi.org/10.1089/bfm.2016.0113)
2. [Birchfield Kennedy, Lauren. "Child Care and Early Education Is a Social Determinant of Health—For Children and Adults." *Center for Primary Care: Harvard Medical School*, 23 Oct. 2020. <https://info.primarycare.hms.harvard.edu/review/child-care-early-education>. !\[\]\(a9ca2c237943a6d0a9f22252f295b6f3_img.jpg\)](https://info.primarycare.hms.harvard.edu/review/child-care-early-education)
3. [Rice, Douglas, et al. "Child Care and Housing: Big Expenses With Too Little Help Available." *Center on Budget and Policy Priorities*, 26 Apr. 2019. <https://www.cbpp.org/research/housing/child-care-and-housing-big-expenses-with-too-little-help-available>. !\[\]\(9a01a64e0b4ff865df7d32ee7991fe8b_img.jpg\)](https://www.cbpp.org/research/housing/child-care-and-housing-big-expenses-with-too-little-help-available)
4. [Stokes, Natalie, et al. "The Effect of the Lone Parent Household on Cardiovascular Health \(National Health and Nutrition Examination Survey, 2015-2016\)." *American Heart Journal Plus*, 27 May, 2021. <https://pubmed.ncbi.nlm.nih.gov/34458881/>. !\[\]\(6aefe9a3d997eb8b55c40ecd5fa7053f_img.jpg\)](https://pubmed.ncbi.nlm.nih.gov/34458881/)
5. [Stack, Rebecca Jayne, and Alex Meredith. "The Impact of Financial Hardship on Single Parents: An Exploration of the Journey From Social Distress to Seeking Help." *Journal of Family and Economic Issues*, vol. 39, no. 2, 2018, pp. 233-42. *PubMed Central*, <https://doi.org/10.1007/s10834-017-9551-6>. !\[\]\(baa8f8ba8c970db55300f5bb45bb3460_img.jpg\)](https://doi.org/10.1007/s10834-017-9551-6)
6. [Romero, Lisa, et al. "Reduced Disparities in Birth Rates Among Teens Aged 15-19 Years — United States, 2006-2007 and 2013-2014." *MMWR. Morbidity and Mortality Weekly Report*, vol. 65, no. 16, Apr. 2016, pp. 409-14. *www.cdc.gov*, <https://doi.org/10.15585/mmwr.mm6516a1>. !\[\]\(a6e28495607b2299466d3d5d3193848c_img.jpg\)](https://doi.org/10.15585/mmwr.mm6516a1)
7. ["About Teen Pregnancy." *CDC*, 15 May, 2024. <https://www.cdc.gov/reproductive-health/teen-pregnancy/index.html>. !\[\]\(ed205fcb6e75c95529564351570724d7_img.jpg\)](https://www.cdc.gov/reproductive-health/teen-pregnancy/index.html)

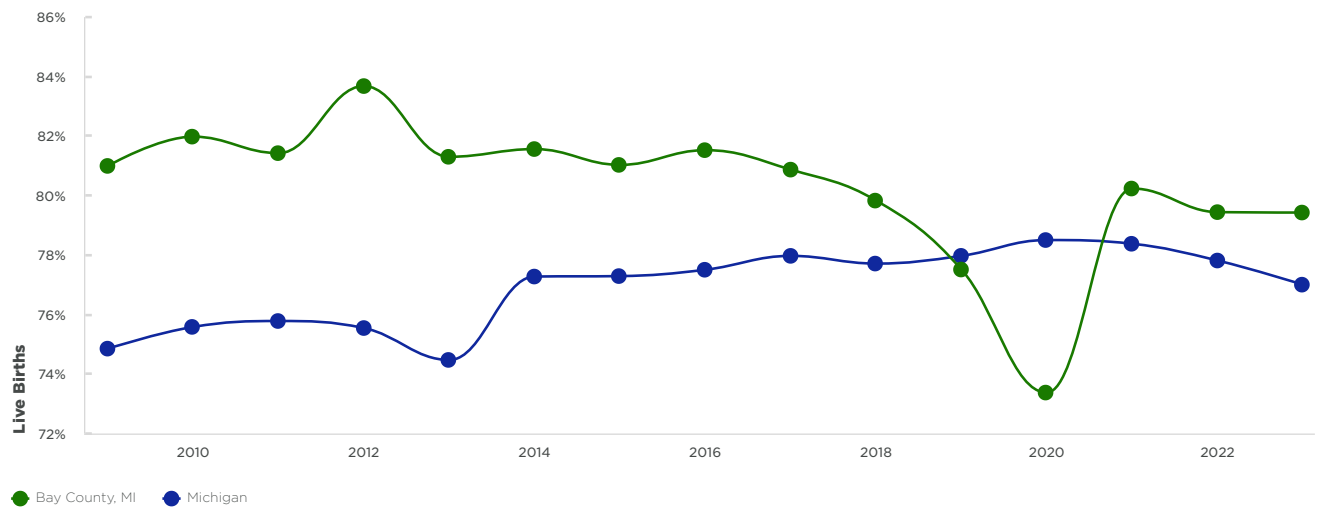
Healthy behaviors require support.

With the right support in place, we can help families make healthy choices. These **behaviors** often aren't possible with the barriers that exist for many in our community. A parent is more likely to choose healthy food if there's a grocery store in her neighborhood with fresh produce. A pregnant mother is more likely to go to the doctor's office if there's one nearby and if she has a job that allows her to attend appointments during the work day. **When families receive the support they deserve, they can make choices that give babies the best start to life.**

Healthy pregnancies lead to healthy births.

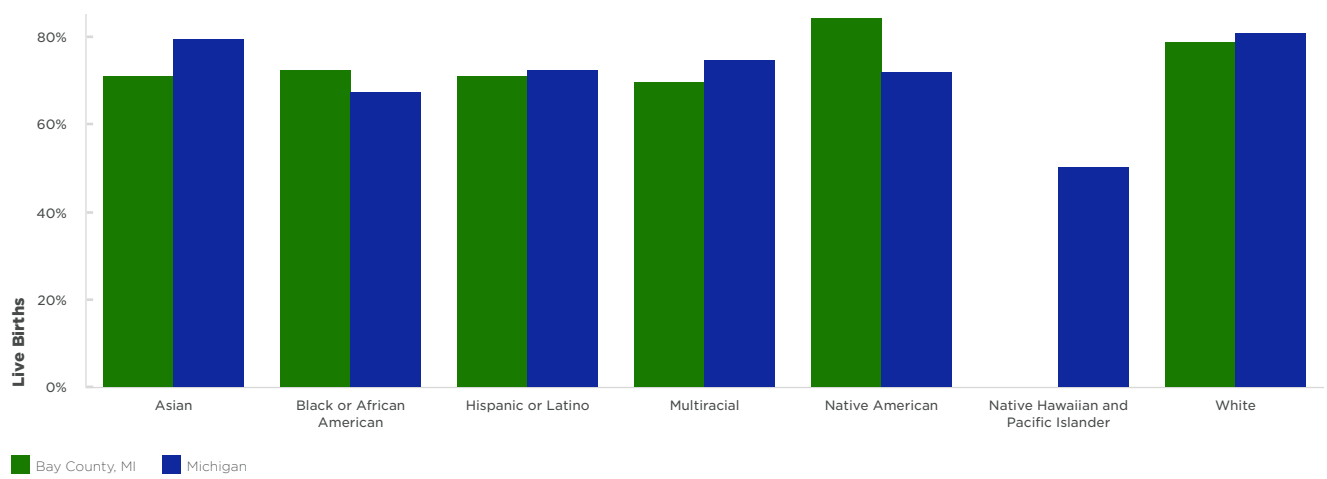
Regular visits to the doctor during pregnancy reduce the risks of pregnancy complications, helps prevent risks to the baby, and helps parents learn about healthy choices they can make along the way. For a mother to receive regular prenatal care, doctors must be easy to access, the care must be affordable, insurance must be available, and moms must have jobs that allow them to attend visits, which often take significant time over the course of a pregnancy. For parents who already face other barriers in life, including young parents or people in certain racial or ethnic groups, they may be even less likely to access healthcare early in pregnancy.

Prenatal Care Started in First Trimester



Sources: CDC WONDER Natality

Prenatal Care Started in First Trimester by Mother's Race/Ethnicity



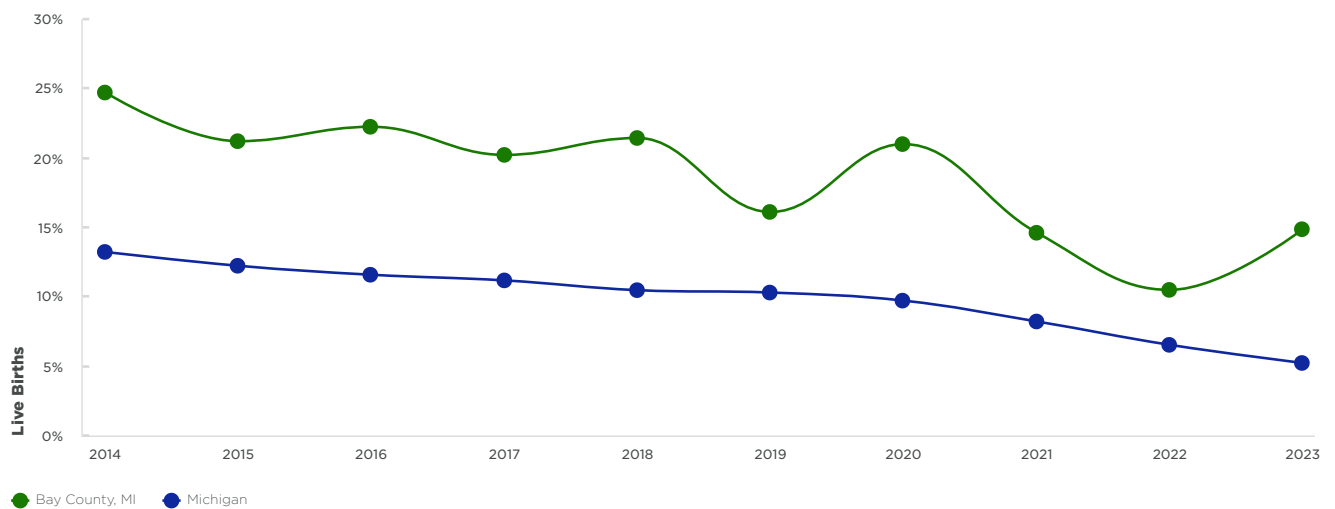
Sources: CDC WONDER Natality 2019-2023

Note: Unless otherwise indicated, all data is non-Hispanic or Latino.

Let's help moms stop smoking.

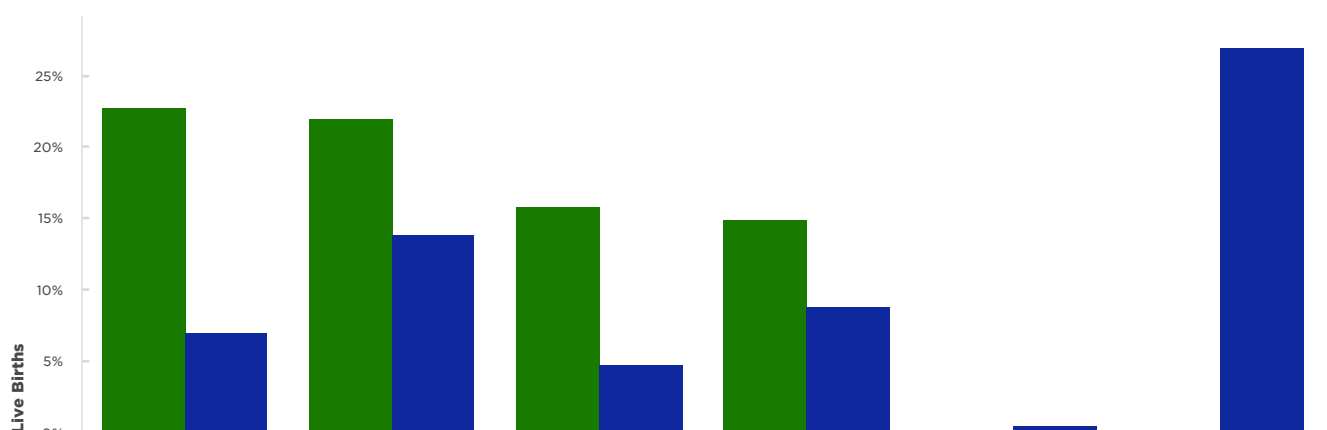
Nicotine is incredibly addictive. Quitting smoking is difficult for anyone, often taking multiple tries. When a woman becomes pregnant, stopping smoking is another challenge added to an already stressful time. However, stopping tobacco use is incredibly important for a safe pregnancy and baby. A mother who's able to stop smoking will reduce the risk of preterm birth and low birth weight, but they need additional support. Counseling, substance use programming, social support, incentives, and more can all help a mom sustain the choice to quit smoking.

Tobacco Use During Pregnancy



Sources: CDC WONDER Natality

Tobacco Use During Pregnancy by Mother's Race/Ethnicity



Black or African American

Multiracial

Hispanic or Latino

White

Asian

Native American

Bay County, MI Michigan

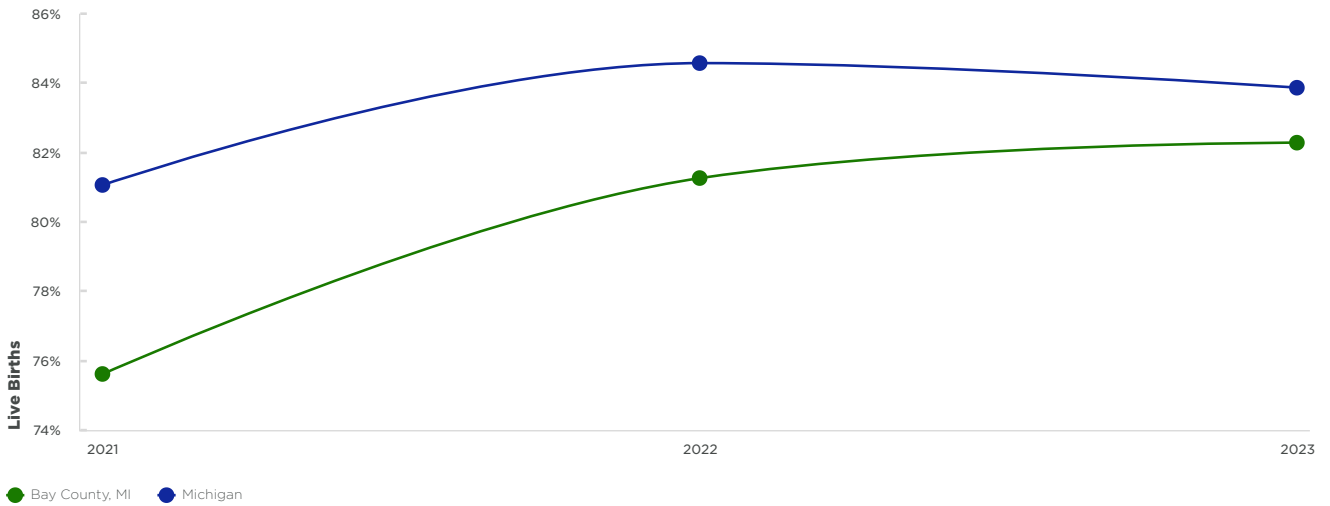
Sources: CDC WONDER Natality 2019-2023

Note: Unless otherwise indicated, all data is non-Hispanic or Latino.

Breastfeeding moms need fewer barriers.

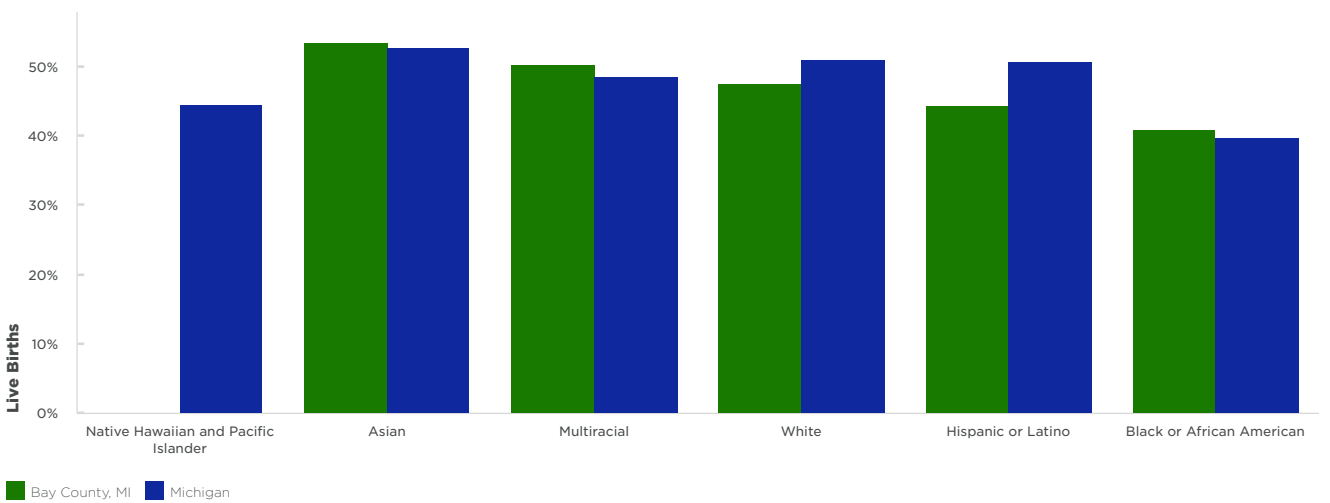
Every mother should be able to choose if breastfeeding or formula feeding is right for them, and should not be judged for their choice. However, not all mothers are physically able to breastfeed or live in an environment that makes breastfeeding a likely choice. Some may not have access to the information that breast milk provides ideal nutrition, can prevent illness, and reduces the mother's chance of developing some diseases. It also takes family, community, and financial support to make breastfeeding a reality. That support includes maternity leave, access to breast pumps and supplies, jobs that support mothers who need to pump during their shift, and community acceptance. If we want more babies to receive the best possible nutrition, we all have a role to play.

Infants Breastfed Before Being Discharged from Hospital



Sources: CDC WONDER Natality

Infants Breastfed Before Being Discharged from Hospital by Mother's Race & Ethnicity



Sources: CDC WONDER Natality 2019-2023

Note: Unless otherwise indicated, all data is non-Hispanic or Latino.

Learn more:


1. ["What Is Prenatal Care and Why Is It Important?" NIH National Institute of Child Health and Human Development. https://www.nichd.nih.gov/health/topics/pregnancy/conditioninfo/prenatal-care. Accessed 2 Nov. 2022.](https://www.nichd.nih.gov/health/topics/pregnancy/conditioninfo/prenatal-care)^[2]
2. [NIDA. "Is nicotine addictive?" National Institute on Drug Abuse. 12 Apr. 2021. https://nida.nih.gov/publications/research-reports/tobacco-nicotine-e-cigarettes/nicotine-addictive Accessed 2 Nov. 2022.](https://nida.nih.gov/publications/research-reports/tobacco-nicotine-e-cigarettes/nicotine-addictive)^[2]
3. [Chamberlain, Catherine, et al. "Psychosocial Interventions for Supporting Women to Stop Smoking in Pregnancy" Cochrane Database of Systematic Reviews, edited by Cochrane Pregnancy and Childbirth Group, vol. 2020, no. 3, Feb. 2017. DOI.org \(Crossref\). https://doi.org/10.1002/14651858.CD001055.pub5.](https://doi.org/10.1002/14651858.CD001055.pub5)^[2]
4. [CDC. "Breastfeeding Benefits Both Baby and Mom." Centers for Disease Control and Prevention, 14 December, 2023. https://www.cdc.gov/breastfeeding/features/breastfeeding-benefits.html](https://www.cdc.gov/breastfeeding/features/breastfeeding-benefits.html)^[2]
5. [CDC. The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies. 2013, p. 1-60.](#)^[2]

Healthier births are possible.

If we can improve the factors that affect a family’s context and behaviors, we can make a positive difference in the health of mothers and babies in our community. When we support, equip, and remove barriers along the way, the health outcomes in this section are more likely to improve. Every baby deserves a healthy start to life. Every mom deserves the same opportunities to make healthy choices. It takes all of us to make that happen.

Every baby should have a chance.

Reducing infant mortality starts well before pregnancy with the mother’s own health and continues with regular medical care throughout pregnancy. This is another piece of information that can show differences in healthcare access. Families in rural communities and Black families tend to have fewer doctors, hospitals, and other resources available where they live. Because of the lack of access, rural families can have higher rates of infant mortality than those in cities, and Black families can have higher rates than white families. No family should have to suffer the loss of a child. Improving access to healthcare for every geographic region and racial or ethnic group benefits us all.



Infant Mortality Rate

4.6

Deaths per 1,000 live births

Bay County, MI

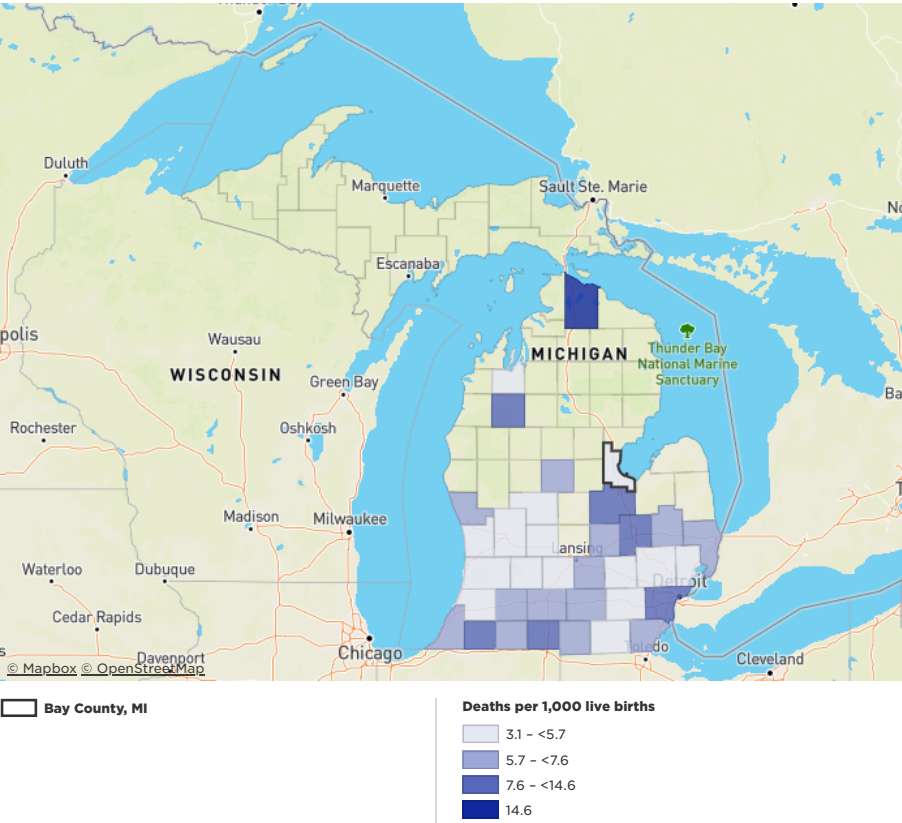
6.5

Deaths per 1,000 live births

Michigan

Sources: National Center for Health Statistics - Natality and Mortality Files 2016-2022 via RWJF County Health Rankings & Roadmaps 2025

Infant Mortality Rate



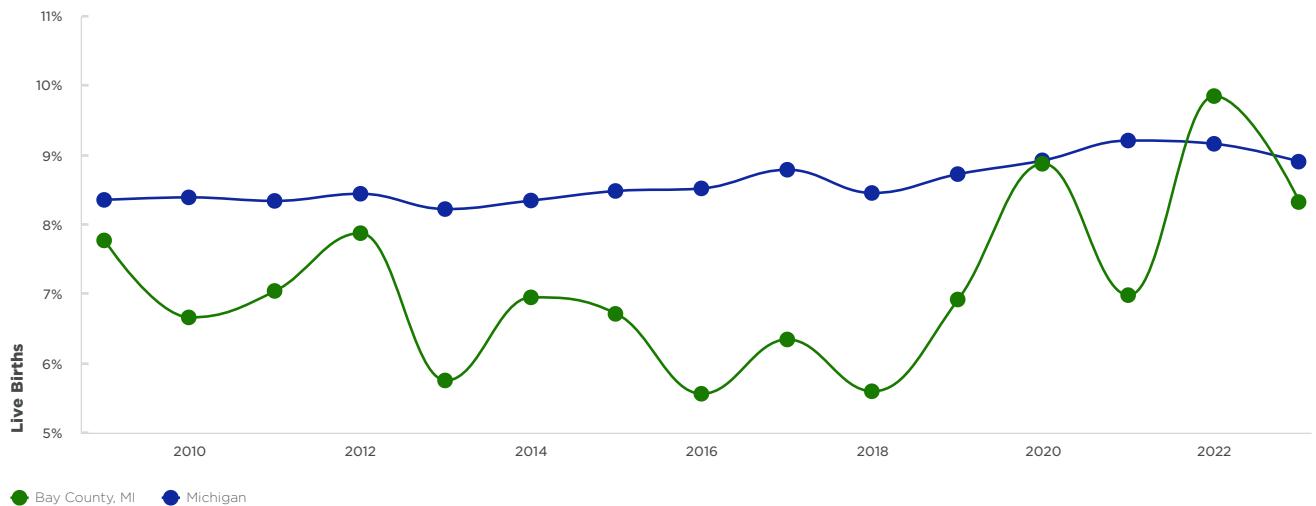
Sources: National Center for Health Statistics - Natality and Mortality Files 2016-2022 via RWJF County Health Rankings & Roadmaps 2025

A strong start paves the way for a healthy life.

Babies who are born preterm are more likely to have serious health complications, including low birth weight, that can impact their health for the rest of their lives. Factors such as a mother's age, ongoing health conditions, exposure to pollution, substance use, the effects of racism, and more increase the risk of a baby being born too early and with too low of a birth weight. When preterm births and low birth weight outcomes rise in our community, our families need better access to education, resources, and healthcare providers to help them deliver a healthy baby.

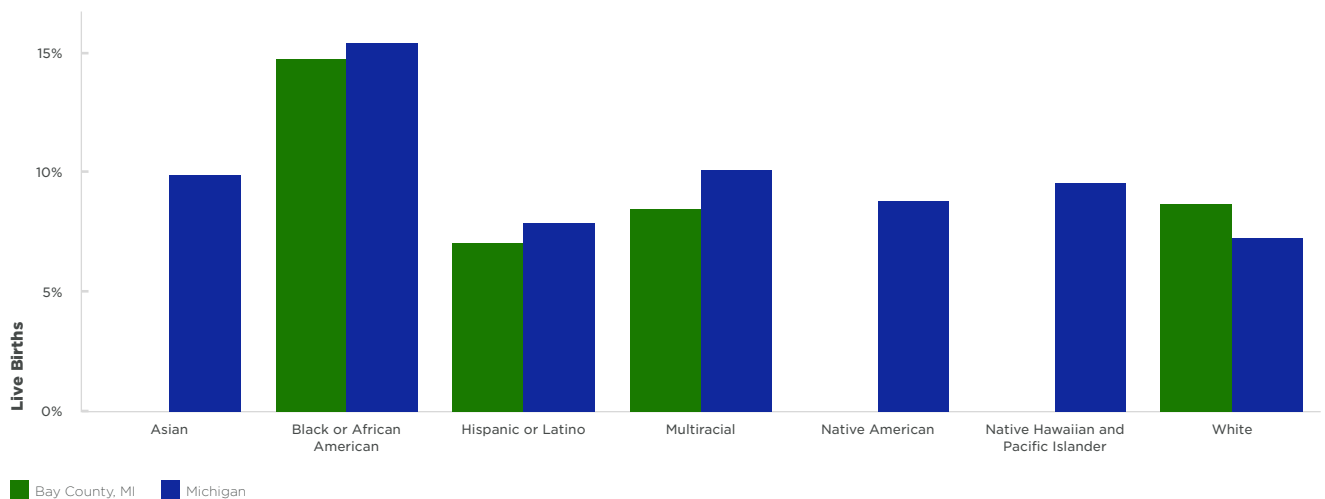
Low Birth Weight

Low Birth Weight



Sources: CDC WONDER Natality

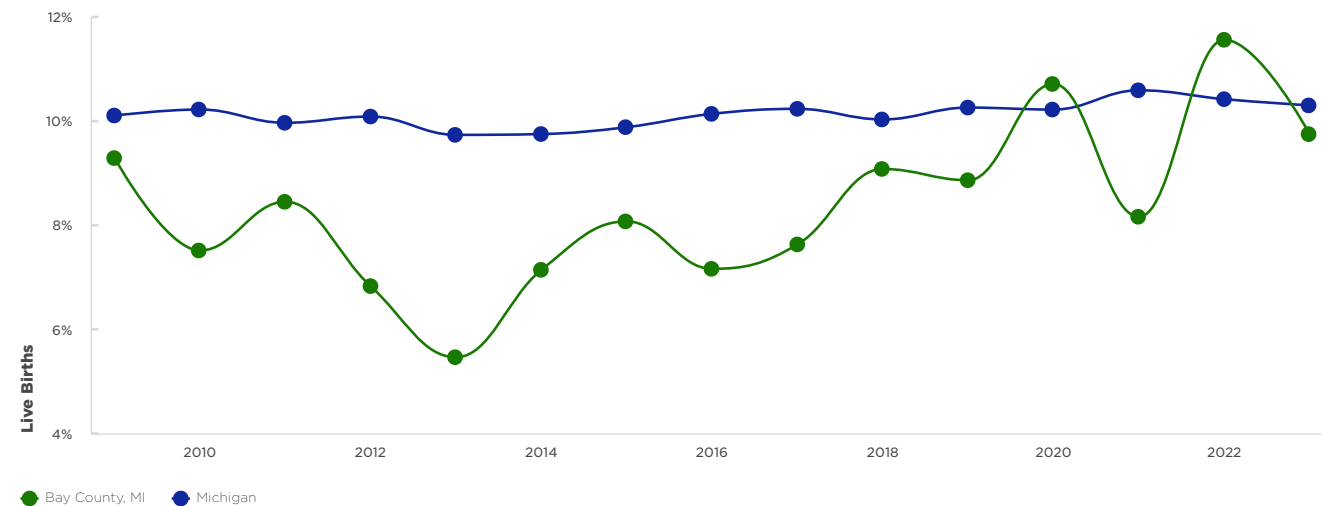
Low Birth Weight Rate by Mother's Race/Ethnicity



Sources: CDC WONDER Natality 2019-2023

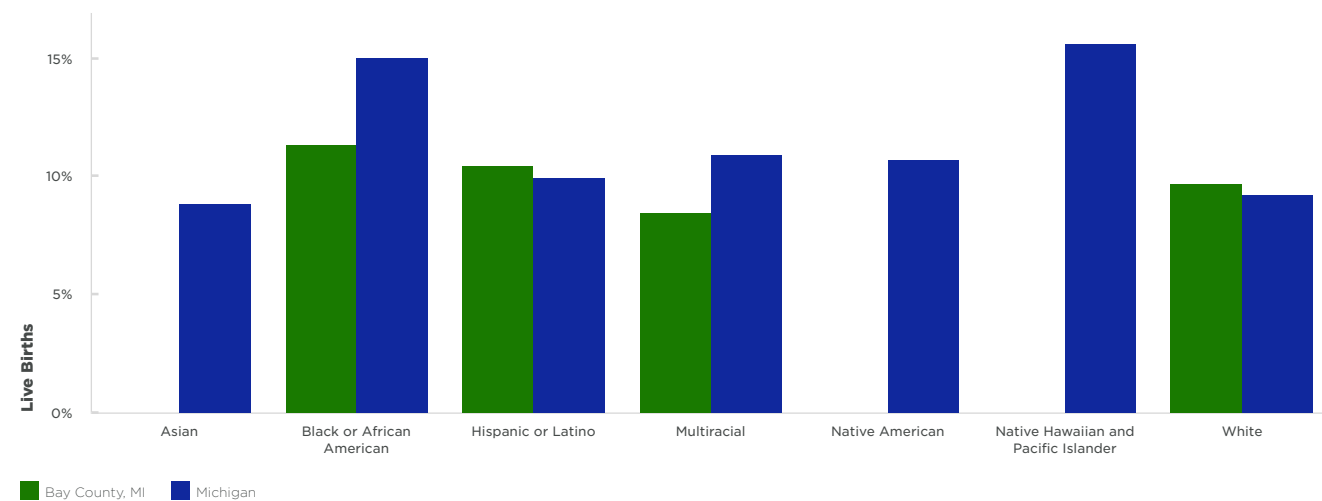
Preterm Births

Preterm Births

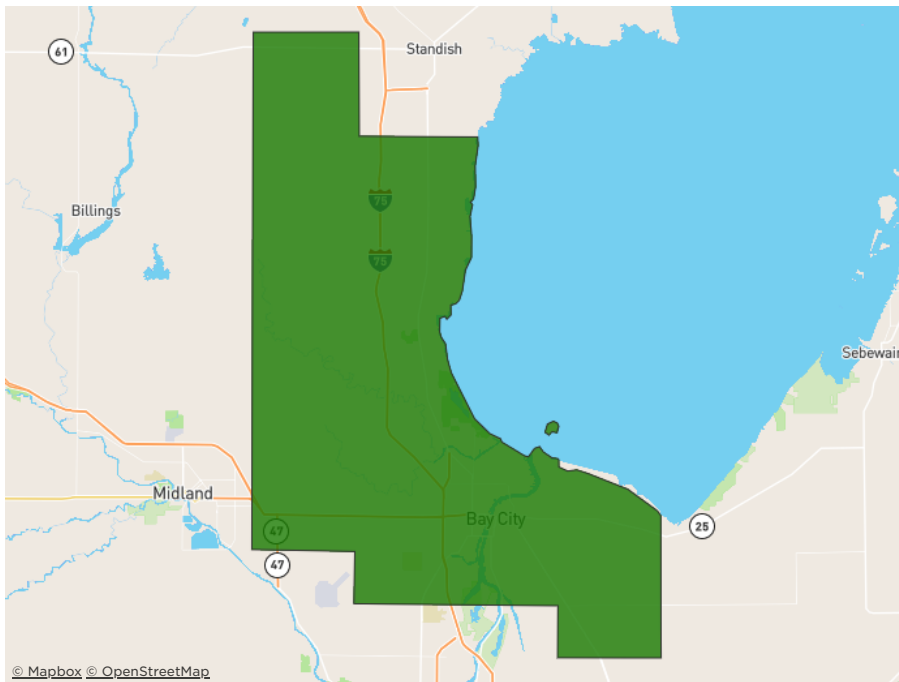


Sources: CDC WONDER Natality

Preterm Birth Rate by Mother's Race/Ethnicity



Sources: CDC WONDER Natality 2019-2023



© Mapbox © OpenStreetMap

Counties inside Bay County, MI



© Mapbox © OpenStreetMap

Learn more:

1. [U.S. Health and Human Services Department. "Are There Ways to Reduce the Risk of Infant Mortality?" National Institute of Child Health and Human Development, 29 Oct. 2021. <https://www.nichd.nih.gov/health/topics/infant-mortality/topicinfo/reduce-risk>](https://www.nichd.nih.gov/health/topics/infant-mortality/topicinfo/reduce-risk)

2. ["Low Birthweight." March of Dimes, <https://www.marchofdimes.org/find-support/topics/birth/low-birthweight>](https://www.marchofdimes.org/find-support/topics/birth/low-birthweight)

How We Live Matters

We don't want to just treat illness—we want to prevent it from even happening. When we wait to receive medical care for health issues, it's more costly physically, personally, and financially. Focusing on prevention as a community allows us to turn healthy choices into easy choices. Prevention doesn't mean being in a doctor's office all the time, although regular check-ups are great. It means having the opportunity to choose healthy food, be outside, move our bodies, connect with friends, and live and work in places where health is possible.

This section will highlight our physical health throughout life and how our **context** informs our personal **behaviors**, which produce our health **outcomes**. If you missed why we talk about context, behaviors, and outcomes, you can learn more on the home page.

Our community affects our lifestyle.

Health is often linked closely to our lifestyle, a blend of factors that has a strong influence on how healthy or unhealthy we are. Lifestyle is heavily influenced by our **context**, or what our community has to offer. When our neighborhood doesn't provide options for healthy living, such as easy access to primary care providers or safe places to exercise outdoors, it's more challenging to achieve the same healthy lifestyle as people who live in areas with more to offer. All people should have the chance to create a lifestyle that prevents disease. **Find out more in the [Context](#) section.**

We don't control every choice.

We all make health decisions every day, but our health **behaviors** are not only determined by personal choice. Many of our daily actions are limited by what's available—or not—in our neighborhoods. If we can't find healthy food, let alone afford a healthy diet, we will not achieve the same health as someone who has more chances to buy fresh fruits and vegetables. These health decisions add up over time to affect our lifelong health. **Find out more in the [Behaviors](#) section.**

Preventing illness leads to better outcomes.

Healthy **outcomes** are about more than just the absence of illness and how long we live—it's about our overall well-being. Improving outcomes in our community means looking at the whole person and meeting their needs in all areas of life. It means giving all people the chance to have a healthy context that encourages healthy behaviors, preventing health problems before they even start. **Find out more in the [Outcomes](#) section.**

Learn more:

1. FARHUD, Dariush D. "Impact of Lifestyle on Health." *Iranian Journal of Public Health*, vol. 44, no. 11, Nov. 2015, pp. 1442-44. [↗](#)

2. Short, Susan E., and Stefanie Mollborn. "Social Determinants and Health Behaviors: Conceptual Frames and Empirical Advances." *Current Opinion in Psychology*, vol. 5, Oct. 2015, pp. 78-84. *PubMed Central*, <https://doi.org/10.1016/i.copsyc.2015.05.002>. [↗](#)

3. Drewnowski, Adam, and Petra Eichelsdoerfer. "Can Low-Income Americans Afford a Healthy Diet?" *Nutrition Today*, vol. 44, no. 6, Nov. 2010, pp. 246-49. *PubMed Central*, <https://doi.org/10.1097/NT.0b013e3181c29f79>. [↗](#)

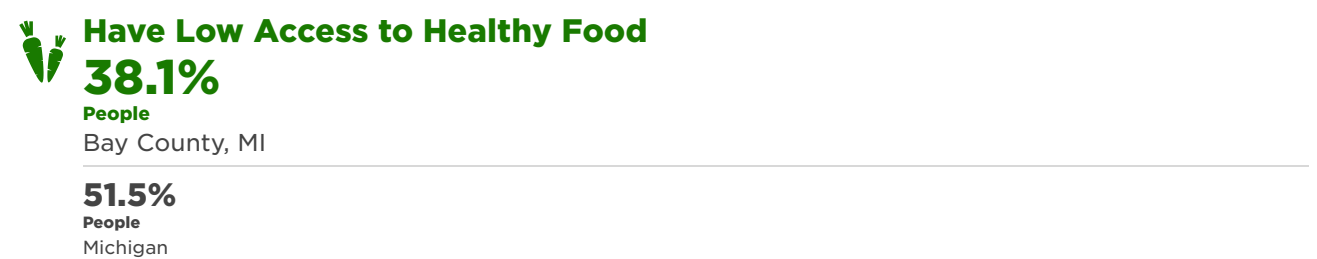
Health begins where we live, work, and play.

Our physical health throughout our lives is influenced by where we live and what we have access to—our **context**. Access means being able to have what we need at the time we need it, including the ability to find a healthcare provider nearby. Lower income and underserved communities don't often have the same chances to eat healthy food or get medical treatments they need to be healthy. The goal is to improve our community so we can give all people the same access to healthy food and safe places to exercise so they can be as healthy as possible.

Food is a basic human need.

All people should be able to eat food that fuels their bodies, yet many people struggle to find or afford any kind of food, let alone food that will help them be healthier. Poor diets lead to many serious diseases, but sometimes it's the only option available in a community. How far a family lives from healthy food options is one factor that limits their ability to choose. This might affect older adults in more rural areas or lower income families who don't have a car who can't easily travel to other areas to purchase healthy food. Improving access to and the quality of the food we eat is an important step to make our community healthier.

Low Access Overall and by Select Characteristics



Sources: USDA ERS FARA 2019
Low access is defined as living more than 1/2 mile in urban areas or more than 10 miles in rural areas from a supermarket, wholesale club, supercenter, or grocery store.

Low Access to Healthy Food by Select Characteristics

Geography	2019 Low Income People	2019 Housing Units without Vehicles
Bay County, MI	48.1%	51.3%
Michigan	51.3%	52%

Sources: USDA ERS FARA 2019
Low access is defined as living more than 1/2 mile in urban areas or more than 10 miles in rural areas from a supermarket, wholesale club, supercenter, or grocery store.
Low Income is defined as as either a poverty rate of 20 percent or more, or the median family income is 80 percent or less of the state or metro area median income

Low Access by Race or Ethnicity

Low Access to Healthy Food by Race or Ethnicity

Data Sources	Bay County, MI	Michigan
2019 Asian	38.9%	63.7%
2019 Black or African American	63.6%	59.5%
2019 Hispanic or Latino	53%	51.5%
2019 Multiracial or Other Race	52%	52%
2019 Native American	43.8%	40.3%
2019 Native Hawaiian and Pacific Islander	28.6%	51.6%
2019 White	37.1%	49.8%

Sources: USDA ERS FARA 2019

Low access is defined as living more than 1/2 mile in urban areas or more than 10 miles in rural areas from a supermarket, wholesale club, supercenter, or grocery store.

Data includes both Hispanic/Latino and non-Hispanic/Latino unless otherwise noted.

Low Access Among Children, Seniors

Low Access to Healthy Food by Select Age Groups

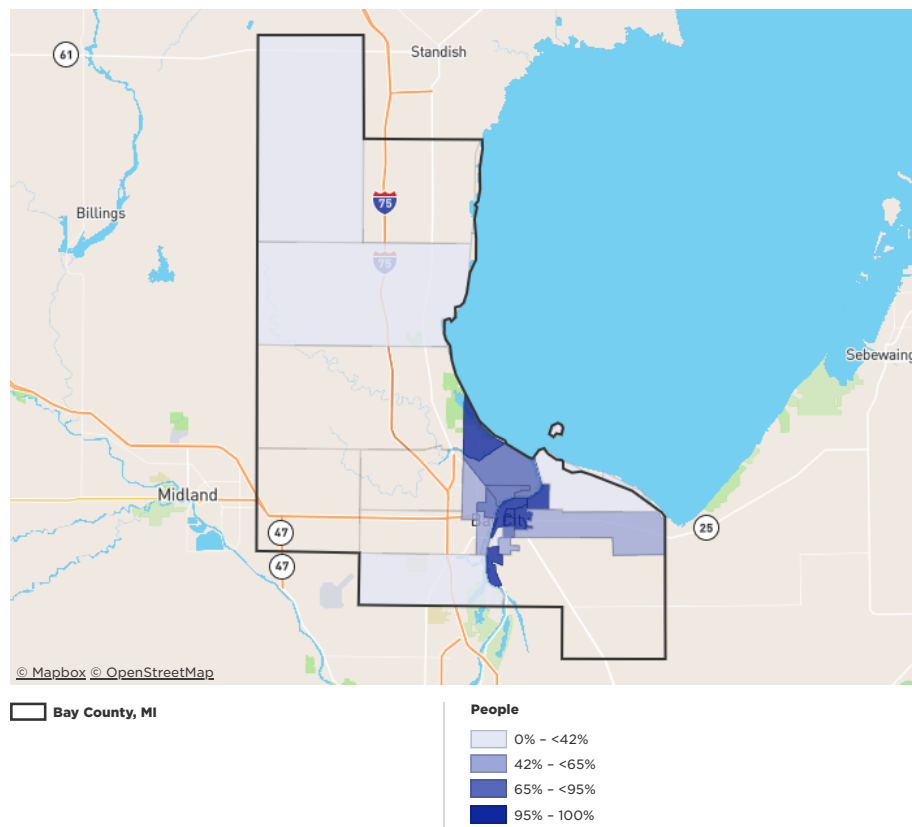
Geography	2019 Children ages 0 to 17	2019 Seniors ages 65+
Bay County, MI	39.9%	33.5%
Michigan	51.7%	49.5%

Sources: USDA ERS FARA 2019

Low access is defined as living more than 1/2 mile in urban areas or more than 10 miles in rural areas from a supermarket, wholesale club, supercenter, or grocery store.

Map: People with Low Access

People with Low Access to Healthy Food



Sources: USDA ERS FARA 2019

Low access is defined as living more than 1/2 mile in urban areas or more than 10 miles in rural areas from a supermarket, wholesale club, supercenter, or grocery store.

Food Insecurity



Food Insecurity

16.2%

of People

Bay County, MI

14.2%

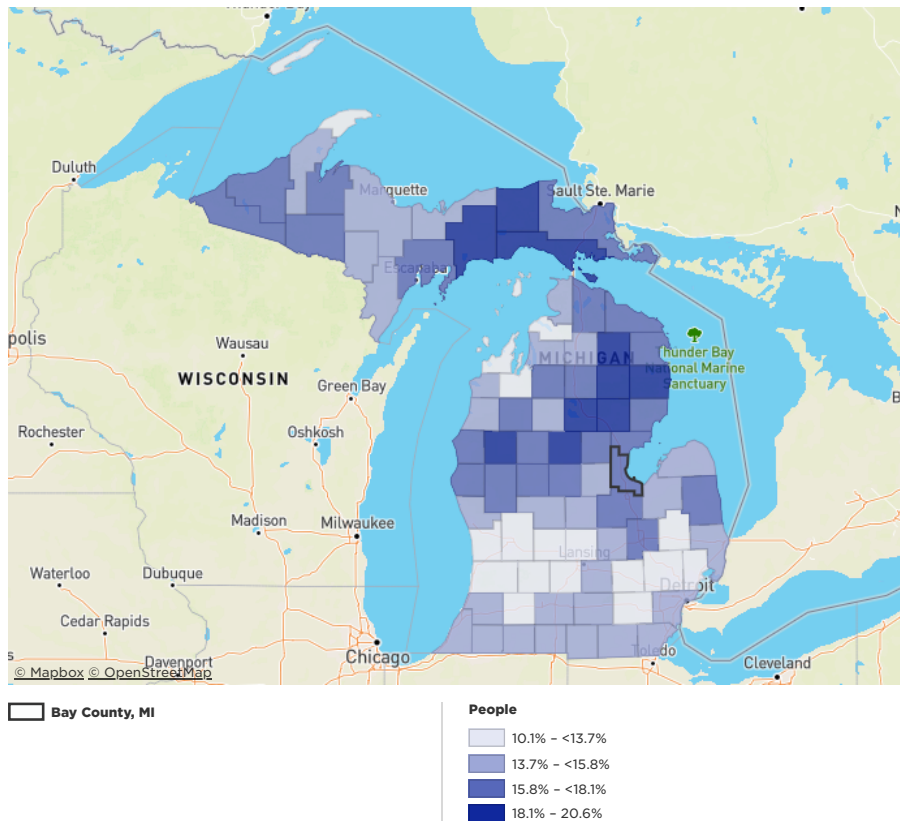
of People

Michigan

Sources: Map the Meal Gap 2022 via RWJF County Health Rankings & Roadmaps 2025

Note: Food insecurity is defined as not having access to a reliable food source during the past year.

Food Insecurity



Sources: Map the Meal Gap 2022 via RWJF County Health Rankings & Roadmaps 2025

Note: Food insecurity is defined as not having access to a reliable food source during the past year.

Where we buy food makes a difference.

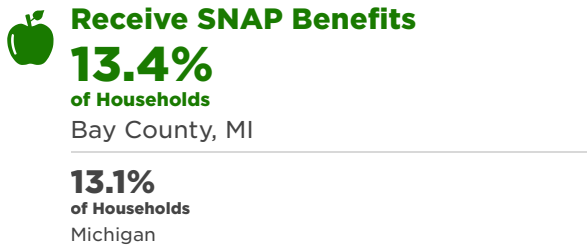
Food affects so much about our lives. Like blood vessels that reach every part of our bodies, our food system reaches every part of our society. How and where we get food affects our health, education, economy, and more. If we want to make healthy choices but can't easily find or afford fresh food, we are unlikely to make that choice. Low income neighborhoods often have more unhealthy options such as fast food or gas stations, leading to choices that are higher in fat, salt, and sugar. Eating a regular diet with those options can lead to heart disease, stroke, and increase risk for some types of cancer. Just as people in rural areas might not have many options available, lower income areas in cities also might not have access. Making sure healthy food options are available allows us all to have an equal chance at good physical health throughout life.

Purchasing Options

Bay County, MI	
Fast Food Restaurants per 1,000 People	0.81 Restaurants per 1,000 People
Grocery Stores	17 Stores
Supercenters / Club Stores	3 Stores
Sources: USDA ERS FEA 2016	

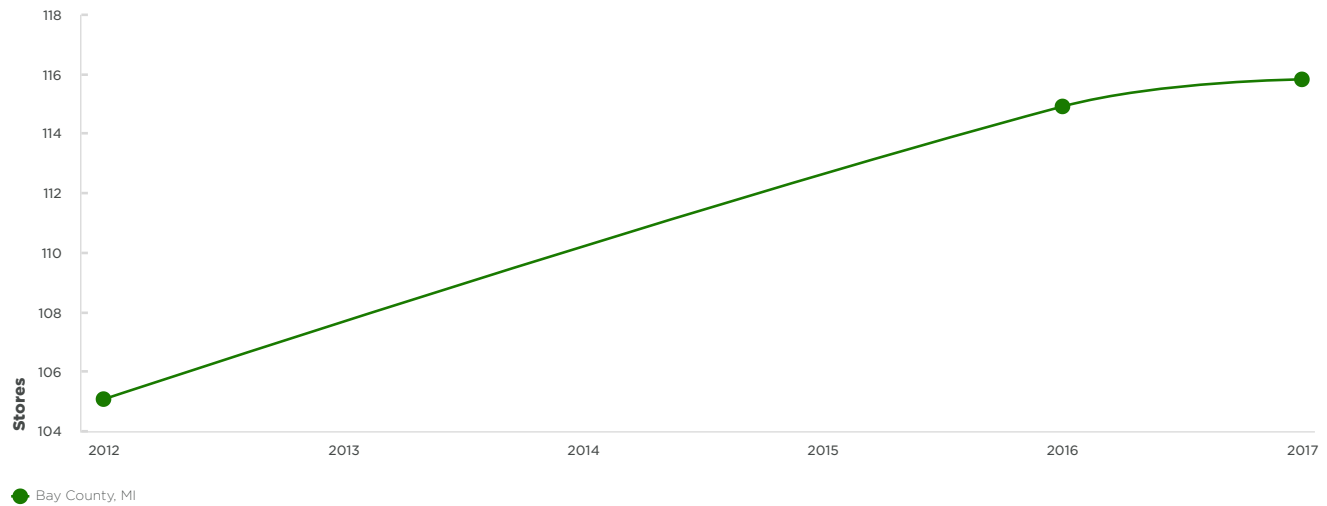
Help fight hunger with SNAP.

The cost of groceries, especially fresh produce, is rising and sometimes we may need help purchasing healthy food. Programs like SNAP (Supplemental Nutrition Assistance Program) help fight hunger and equip families to make healthy choices. This program has been linked to lower healthcare costs and improved health outcomes for those who use it. SNAP helps people get enough food to eat, including children from lower income households who are at high risk for not having enough food without this help. When families receive this assistance and have stores in their community that allow them to use it, fewer people are going to bed hungry at night.



Sources: US Census Bureau ACS 5-year 2019-2023

SNAP Authorized Stores






Sources: USDA ERS FEA

Learn more:

1. CDC. "Healthy Food Environments: Improving Access to Healthier Food." Centers for Disease Control and Prevention, 10 Sept. 2020. <https://www.cdc.gov/nutrition/media/pdfs/healthy-food-environment-infographic-508.pdf>

2. CDC. "Health Equity." Centers for Disease Control and Prevention, <https://www.cdc.gov/health-equity/index.html>

3. DHHS. "Access to Foods That Support Healthy Dietary Patterns." Healthy People 2030. <https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/access-foods-support-healthy-dietary-patterns>

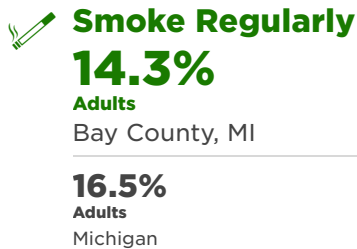
4. [CDC. "About the Division of Nutrition, Physical Activity, and Obesity." Centers for Disease Control and Prevention, 10 Sept. 2024. https://www.cdc.gov/nccdphp/divisions-offices/about-the-division-of-nutrition-physical-activity-and-obesity.html.](https://www.cdc.gov/nccdphp/divisions-offices/about-the-division-of-nutrition-physical-activity-and-obesity.html) 
5. [Hilmers, Angela, et al. "Neighborhood Disparities in Access to Healthy Foods and Their Effects on Environmental Justice." American Journal of Public Health, vol. 102, no. 9, Sept. 2012, pp. 1644-54. PubMed Central. https://doi.org/10.2105/AJPH.2012.300865.](https://doi.org/10.2105/AJPH.2012.300865) 
6. [Carlson, Steven, and Brynne Keith-Jennings. SNAP Is Linked with Improved Nutritional Outcomes and Lower Health Care Costs. Center on Budget and Policy Priorities, 17 Jan. 2018. https://www.cbpp.org/research/food-assistance/snap-is-linked-with-improved-nutritional-outcomes-and-lower-health-care.](https://www.cbpp.org/research/food-assistance/snap-is-linked-with-improved-nutritional-outcomes-and-lower-health-care) 

Daily behaviors add up to lifelong health.

When it comes to our health, preventing illness and long-lasting disease saves us time, money, and hardship. Treating or trying to cure a disease is much more costly. Our **behaviors** over time can help prevent health issues from even happening, including not smoking, eating well, getting enough sleep, exercise, and going to the doctor for regular check-ups. We can help our community choose these types of behaviors by giving them better access to the support they need to make it an easy decision.

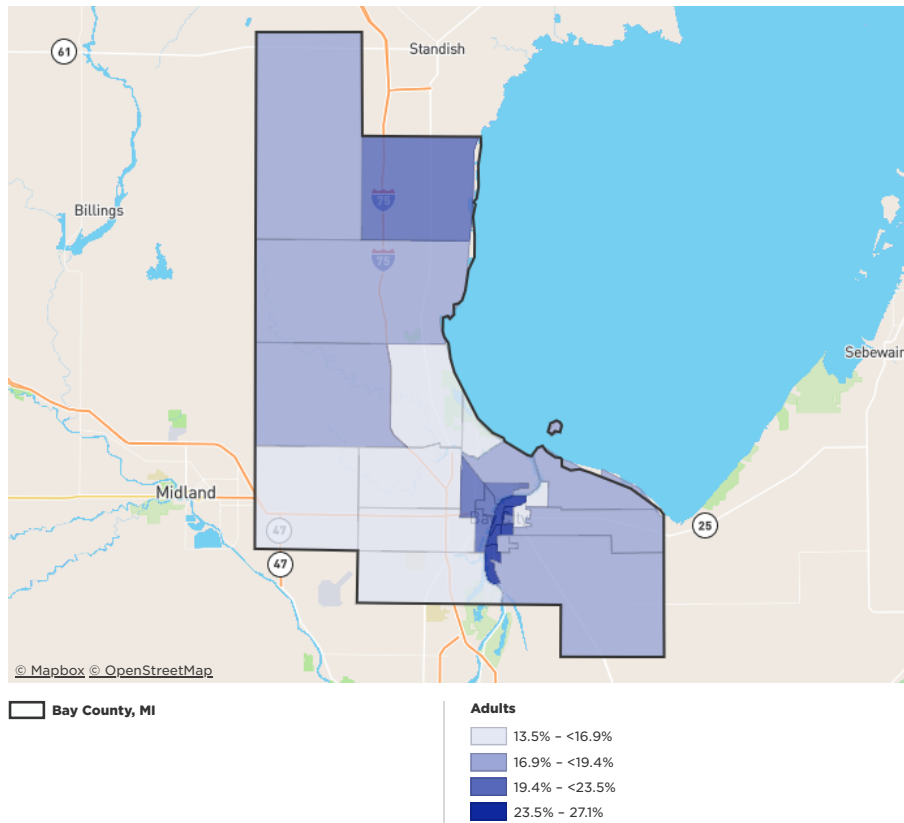
Smoking is deadly.

Smoking is the number one cause of preventable death and affects nearly every organ in the body. The earlier someone smokes the more likely they are to become addicted, a concerning fact since smoking usually starts in youth. Alternative smoking options such as e-cigarettes introduce even more challenges. The most risky and inexpensive tobacco products are often advertised and sold in low-income areas, causing even greater health risk to a community already facing more barriers. Programs and policies that support healthy choices and help someone stop smoking are an important piece to prevent disease in our community.



Sources: CDC BRFSS PLACES 2022
This data represents the share of adults who have smoked at least 100 cigarettes in their lifetime and currently smoke every day or some days.

Smoking Regularly



Sources: CDC BRFSS PLACES 2022

This data represents the share of adults who have smoked at least 100 cigarettes in their lifetime and currently smoke every day or some days.

Forward movement benefits everyone.

From childhood through adulthood, physical activity is a key factor to improve physical and mental health and prevent disease. However, many of us are not as active as we might want to be with lack of time and energy, low social support, or limited access to a safe place to exercise on the list of barriers. Creating a community where exercise is available for all people might include creating more parks and greenspaces, adding bicycle lanes, ensuring safe walking paths, equipping people to walk or bike to work, and more.

Overview



Physical Inactivity

21.6%

of Adults

Bay County, MI

24.3%

of Adults

Michigan

Active Commuters who Walk, Bike, or Take Public Transit

2.4%

of Commuters

Bay County, MI

3.9%

of Commuters

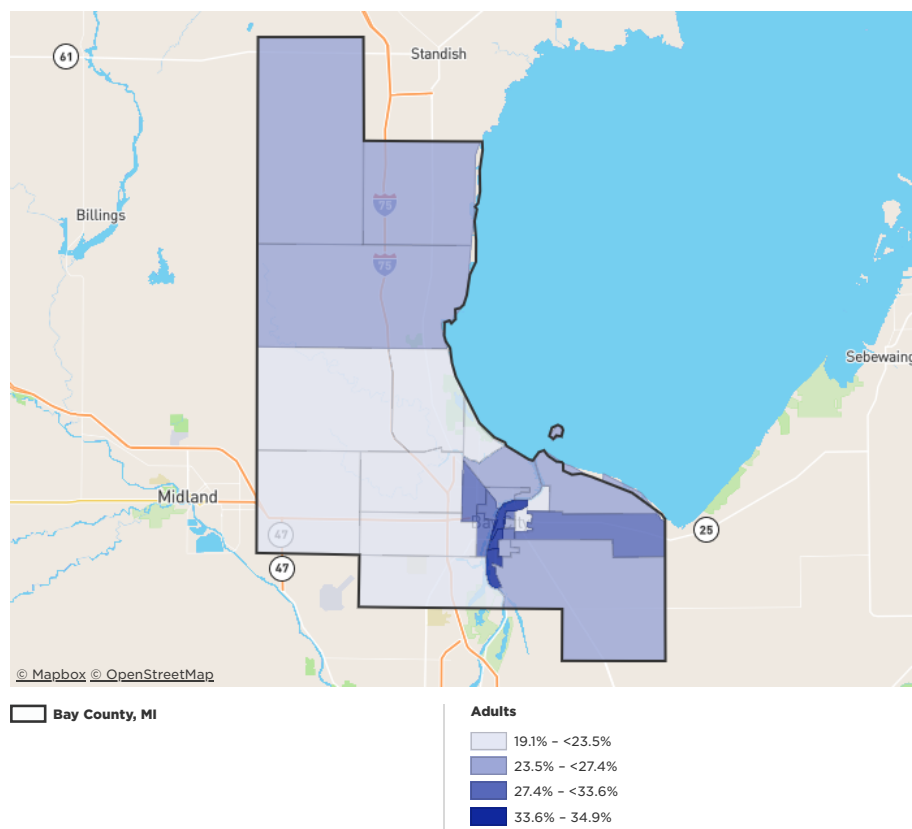
Michigan

Sources: CDC BRFSS PLACES 2022; US Census Bureau ACS 5-year 2019-2023

Physical inactivity represents the proportion of adults who report no physical activity outside of work in the past month.

Map: Physical Inactivity

Physical Inactivity

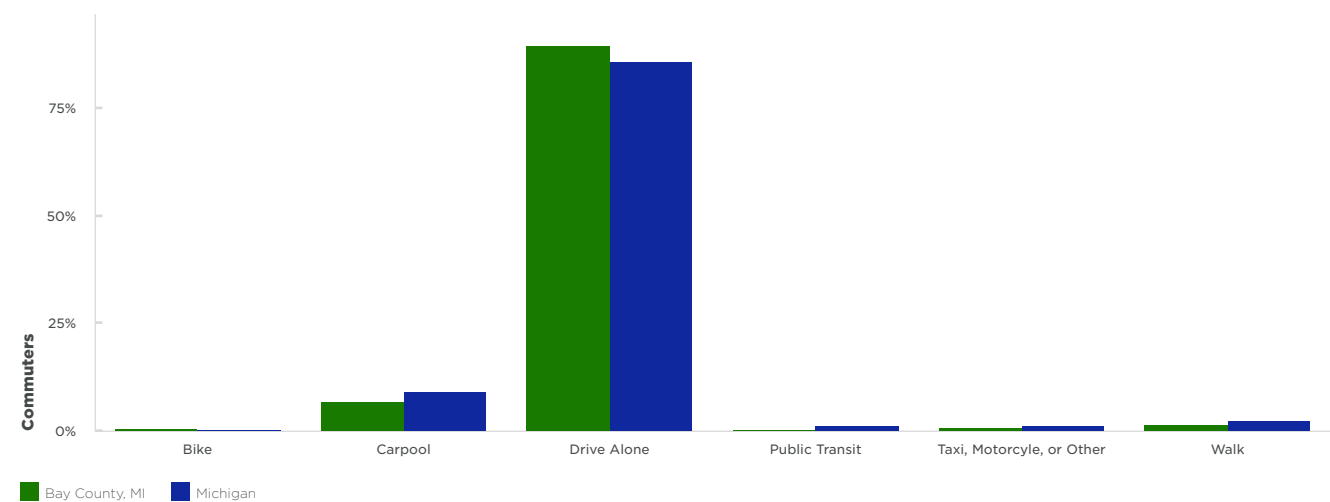


Sources: CDC BRFSS PLACES 2022

Physical inactivity represents the proportion of adults who report no physical activity outside of work in the past month.

Transportation Method to Travel to Work

Method of Transportation to Work



Sources: US Census Bureau ACS 5-year 2019-2023

Prevention is better than treatment.

We've heard that finding a problem before it gets worse is a great way to improve our health. This reduces our risk for disease and death, but many people still don't get this kind of healthcare. The barriers might include cost, not having a relationship with a primary care provider, and distance from healthcare services. Educating people about the benefits of

proactive healthcare and reducing the cost, distance, and time burden for them to receive this care can improve individual lives and the burden on our healthcare system.

Doctor Checkup in Past Year



Doctor Checkup in Past Year

79.4%

of Adults

Bay County, MI

78.1%

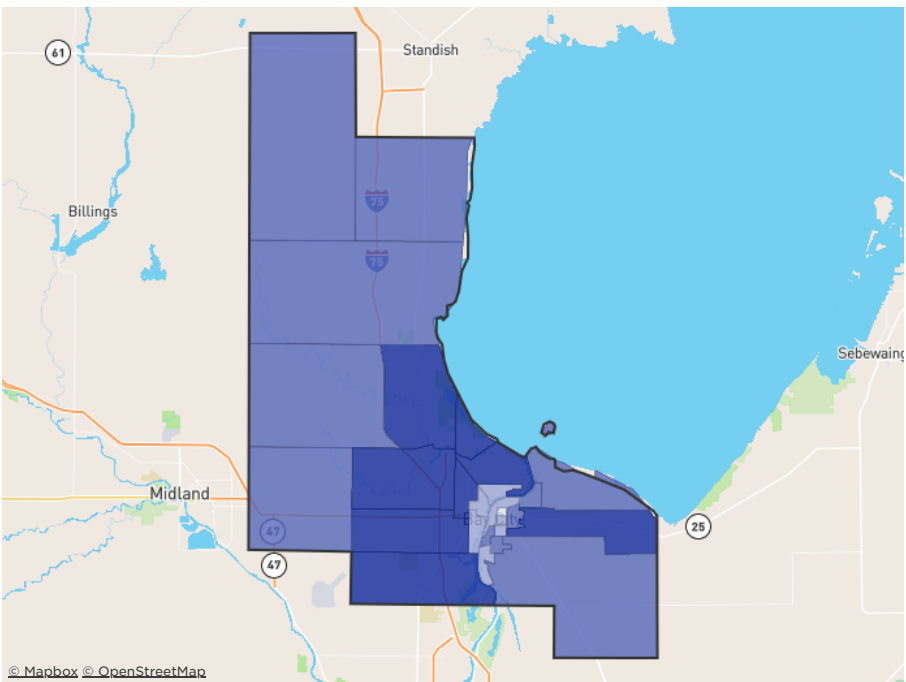
of Adults

Michigan

Sources: CDC BRFSS PLACES 2022

This data represents the proportion of adults who report having been to a doctor for a routine checkup (e.g., a general physical exam, not an exam for a specific injury, illness, condition) in the previous year.

Doctor Checkup in Past Year



Sources: CDC BRFSS PLACES 2022

This data represents the proportion of adults who report having been to a doctor for a routine checkup (e.g., a general physical exam, not an exam for a specific injury, illness, condition) in the previous year.

Preventive Care Utilization

Data Sources	Bay County, MI	Michigan
2022 Colorectal Cancer Screening Among Adults 50 to 75	69.1%	69%
2020 Core Preventive Services for Men 65+	46.3%	45.4%
2020 Core Preventive Services for Women 65+	40%	40%
2022 Dental Visit Among Adults	71.4%	67.5%
2020 Pap Smear Among Women 21 to 65	83%	83.9%
2022 Mammography Among Women 50 to 74	77.6%	76.6%

Sources: CDC BRFSS PLACES 2020, 2022

Learn more:

1. CDC. "Preventing Chronic Diseases: What You Can Do Now." Centers for Disease Control and Prevention, 15 May, 2024. <https://www.cdc.gov/chronic-disease/prevention/index.html>.
2. DHHS. "Preventive Care." Healthy People 2030. <https://health.gov/healthypeople/objectives-and-data/browse-objectives/preventive-care>.
3. Institute of Medicine (US) Roundtable on Evidence-Based Medicine. "6. Missed Prevention Opportunities." The Healthcare Imperative: Lowering Costs and Improving Outcomes: Workshop Series Summary, edited by Pierre L. Yong et al., National Academies Press, 2010. www.ncbi.nlm.nih.gov. <https://www.ncbi.nlm.nih.gov/books/NBK53914/>.
4. Spillane, Torra E., and Julv M. Merizier. "Study Looks at Tobacco Marketing in Low-Income Communities." Columbia Mailman School of Public Health, 5 Dec. 2018. <https://www.publichealth.columbia.edu/public-health-now/news/study-looks-tobacco-marketing-low-income-communities>.
5. NIH. "How Can We Prevent Tobacco Use?" NIH National Institute on Drug Abuse, 12 Apr. 2021. <https://nida.nih.gov/publications/research-reports/tobacco-nicotine-e-cigarettes/how-can-we-prevent-tobacco-use>.
6. CDC. "Physical Activity Basics." Centers for Disease Control and Prevention, 8 July 2022. <https://www.cdc.gov/physicalactivity/basics/index.htm>.
7. CDC. "Overcoming Barriers to Physical Activity." Centers for Disease Control and Prevention, 5 April 2024. <https://www.cdc.gov/physical-activity-basics/overcoming-barriers/>.


It's not just how long we live, but how we live.

Making a difference in the factors we've covered in the previous sections will improve our entire lives, leading to better health **outcomes**. Opportunities to eat good food, exercise regularly, and get the medical care we need when we need it allow us to live full lives. The quality of that lifetime is just as important as how long it lasts. Every person deserves to experience a high quality of life. Making healthy choices easier no matter a person's location or income will improve our entire community.

We want everyone to thrive, not just survive.

Our community thrives when our people thrive. Poor health limits our quality of life, makes us less productive or unable to work, impacts our mental health, and might increase our costs for medical care or to simply live. Working together to improve the quality of life for our residents lifts everyone up.

Poor Physical Health Overall

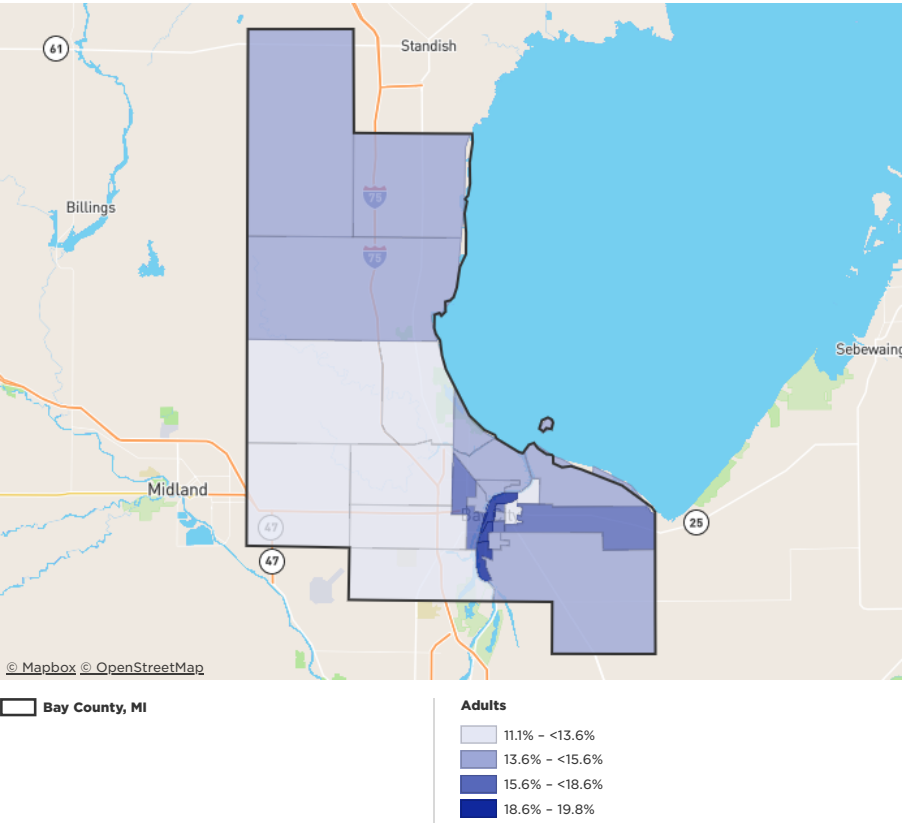
 **Poor Physical Health**
12.3%
of Adults
Bay County, MI

13.2%
of Adults
Michigan

Sources: CDC BRFSS PLACES 2022

This data represents the proportion of adults who report 14 or more days during the past 30 days during which their physical health was not good.

Poor Physical Health



Sources: CDC BRFSS PLACES 2022

This data represents the proportion of adults who report 14 or more days during the past 30 days during which their physical health was not good.

Preventable Hospitalizations Over Time and by Race/Ethnicity

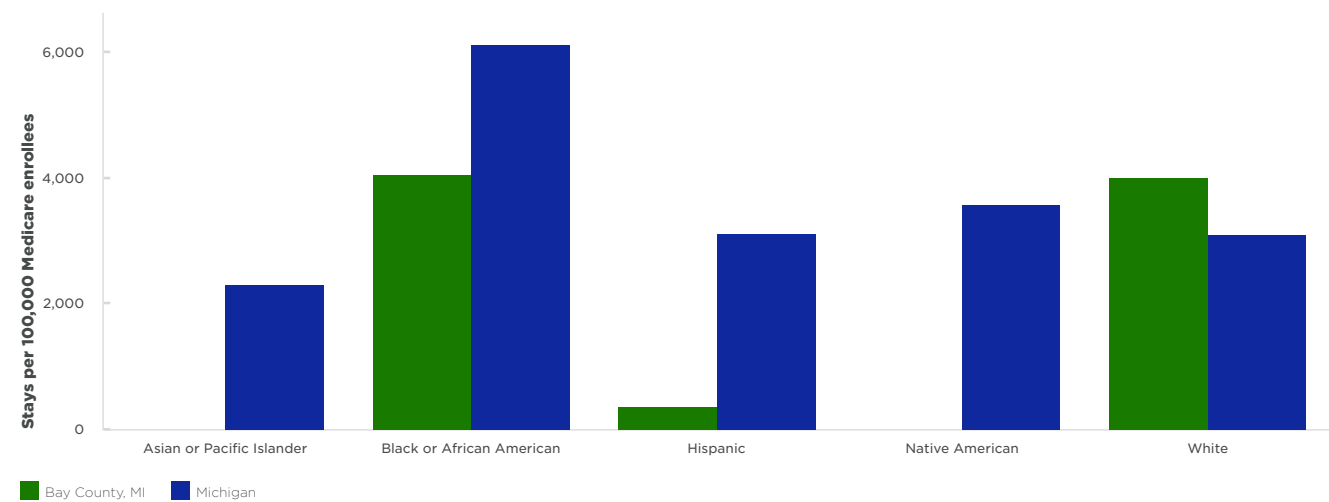
Medicare Preventable Hospital Stays



Sources: CMS MMD

Note: Preventable hospital stays include diabetes (complications, uncontrolled diabetes, and diabetes-related amputations), perforated appendix, COPD or asthma in older adults, hypertension, heart failure, dehydration, bacterial pneumonia, and UTIs. Appendix and dehydration are not included after 2019.

Medicare Preventable Hospital Stays by Race/ Ethnicity




Sources: CMS MMD 2023

Note: Preventable hospital stays after 2019 include diabetes (complications, uncontrolled diabetes, and diabetes-related amputations), COPD or asthma in older adults, hypertension, heart failure, bacterial pneumonia, and UTIs.

COVID-19 deaths highlight other issues.

The effects of COVID-19 on our community are far-reaching, from economic to social to physical. People at higher risk for COVID-19 death often have other health conditions, such as obesity, diabetes, and lung disease. Preventing these physical illnesses can decrease the amount of people who die from COVID-19.

Overall



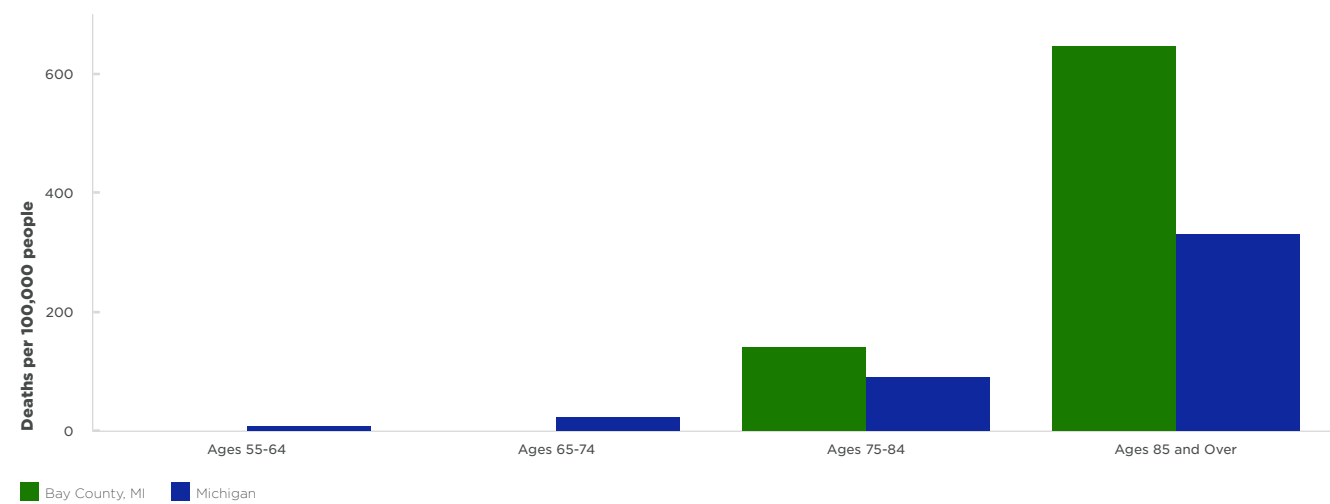
COVID-19 Death Rate
30.2
Deaths per 100,000 people
Bay County, MI

16.2
Deaths per 100,000 people
Michigan

Sources: CDC WONDER Cause of Death 2023 Crude

By Age

COVID-19 Death Rate by Age



Sources: CDC WONDER Cause of Death 2023 Crude

By Sex



COVID-19 Death Rate - Female
No data
Deaths per 100,000 people
Bay County, MI

15.8
Deaths per 100,000 people
Michigan



COVID-19 Death Rate - Male
No data
Deaths per 100,000 people
Bay County, MI

16.7
Deaths per 100,000 people
Michigan

Sources: CDC WONDER Cause of Death 2023 Crude

Listen to the warning signs before it's too late.

High blood pressure and obesity are two factors that can lead to many other health problems that affect a person's quality of life. Smoking, stress, unhealthy diet, and not getting enough physical activity can make these even worse. Improving those lifestyle factors can help prevent high blood pressure and obesity, stopping the advancement of disease.

Geography	2021 High Blood Pressure Among Adults	2022 Obesity Among Adults
Bay County, MI	38.3%	37.3%
Michigan	33.5%	35.9%

Sources: CDC BRFSS PLACES 2021, 2022

Decreasing risk factors improves lives.

When our community experiences high levels of chronic disease, something needs to change. Many chronic illnesses can be more common, detected later, and have more serious outcomes for people in rural communities, people with disabilities, older adults, and people of color. These are communities that tend to have less access to healthy choices and more barriers to lifelong health. Providing resources to remove more risk factors gives everyone an equal chance at a healthy life and reduces the likelihood of serious diseases.

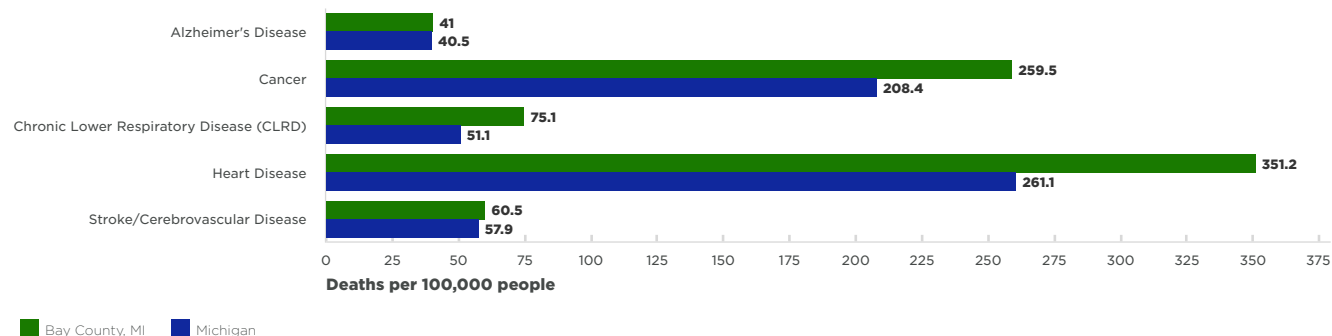
Chronic Disease Overall

Chronic Disease Prevalence

Geography	2022 Cancer (except skin cancers) Among Adults	2022 Coronary Heart Disease Among Adults	2022 Diagnosed Diabetes Among Adults	2022 Stroke Among Adults
Bay County, MI	10.1%	7.7%	11.3%	3.6%
Michigan	8.6%	7.1%	11.4%	3.7%

Sources: CDC BRFSS PLACES 2022

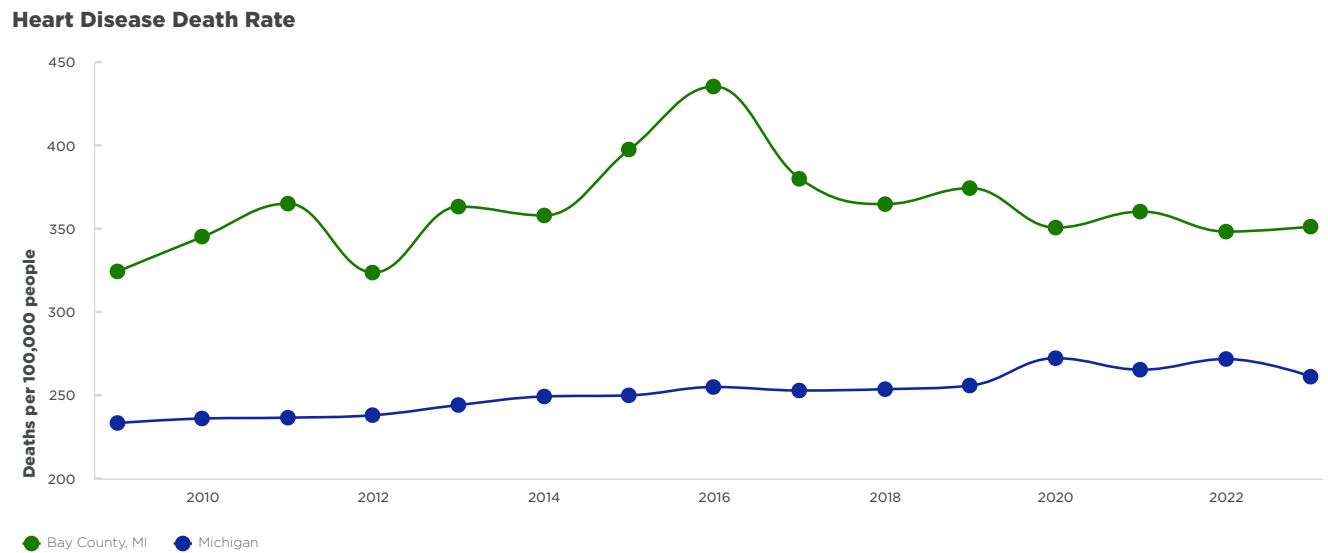
Top Chronic Disease Causes of Death



Sources: CDC WONDER Cause of Death 2023 Crude

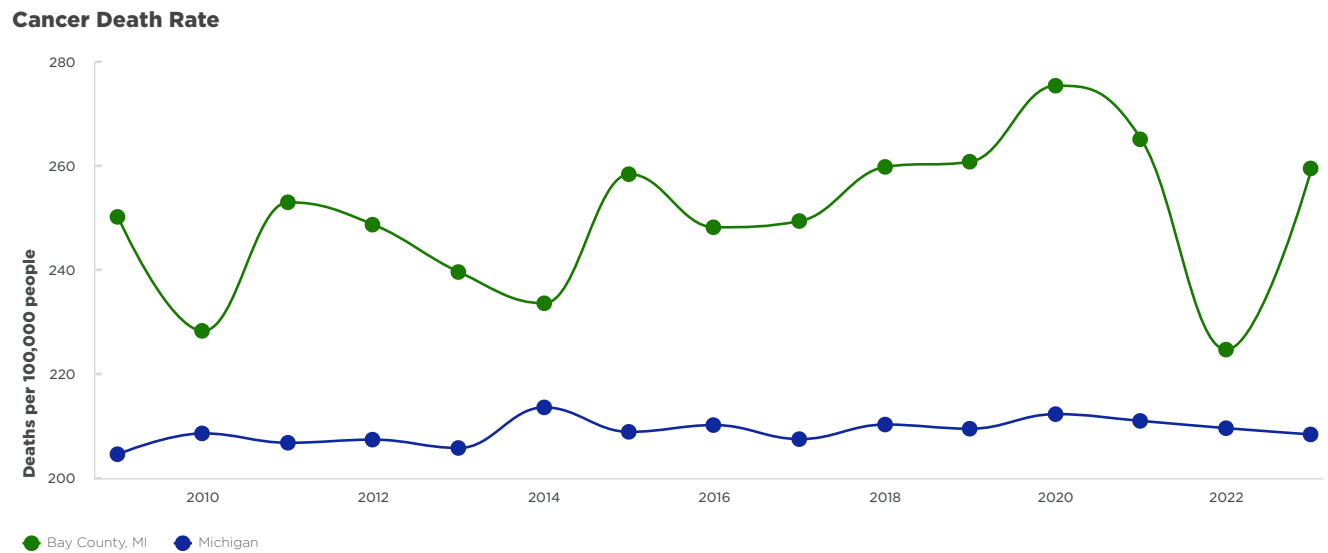
This data includes the national top causes of death due to chronic disease.

Heart Disease Death Rate Over Time



Sources: CDC WONDER Cause of Death

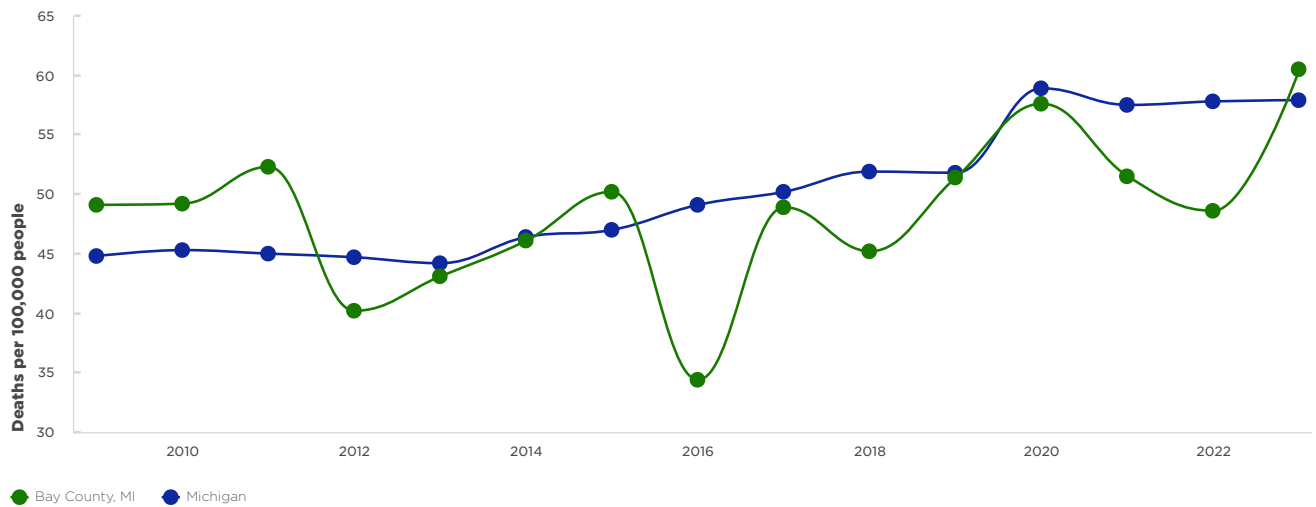
Cancer Death Rate Over Time



Sources: CDC WONDER Cause of Death

Stroke or Cerebrovascular Disease Death Rate Over Time

Stroke or Cerebrovascular Disease Death Rate



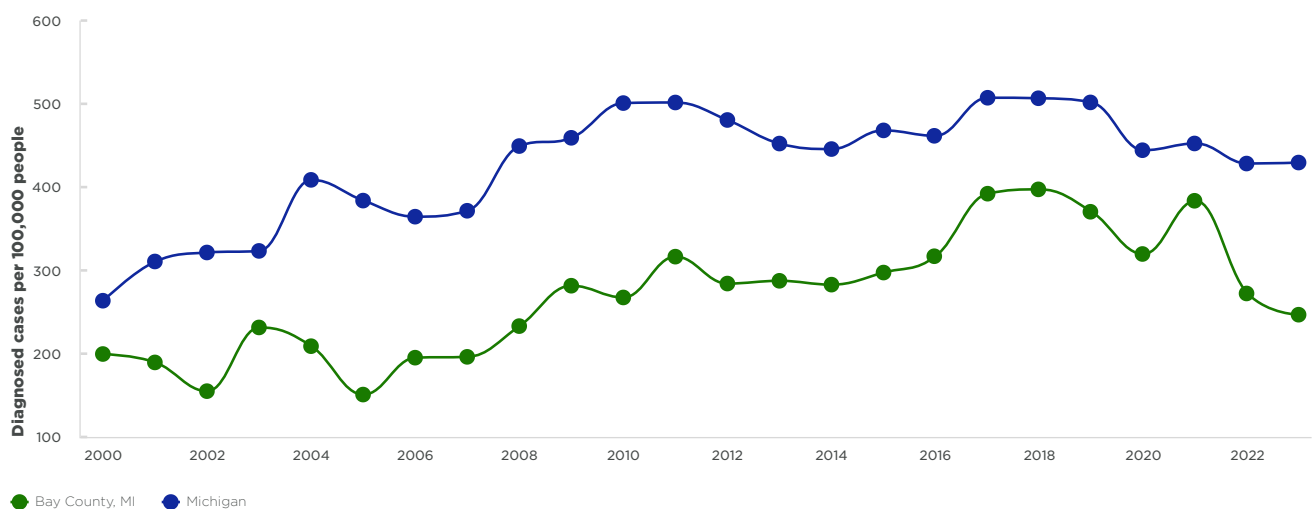
Sources: CDC WONDER Cause of Death

Change the environment to change the rate of STIs.

Sexual health is another way to look at our community's health and access to needed services. Studies show certain racial and ethnic groups have higher rates of sexually transmitted infections (STIs) than white populations. This isn't because of their heritage, but by other factors that people of color often face. When an environment doesn't allow for access to quality healthcare, well-paying jobs, or the opportunity for education, sexual health is even more challenging. Our community can help by improving those factors first, while also educating on personal health from a young age and creating community-based programs to help prevent STIs.

Chlamydia

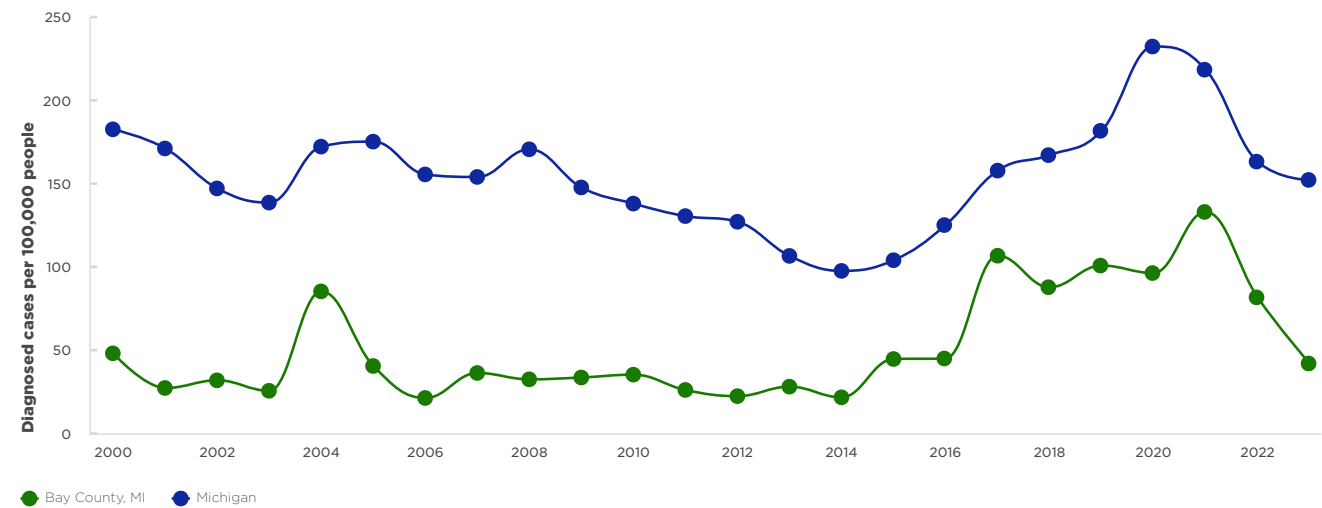
Chlamydia Rate



Sources: CDC NCHHSTP AtlasPlus

Gonorrhea

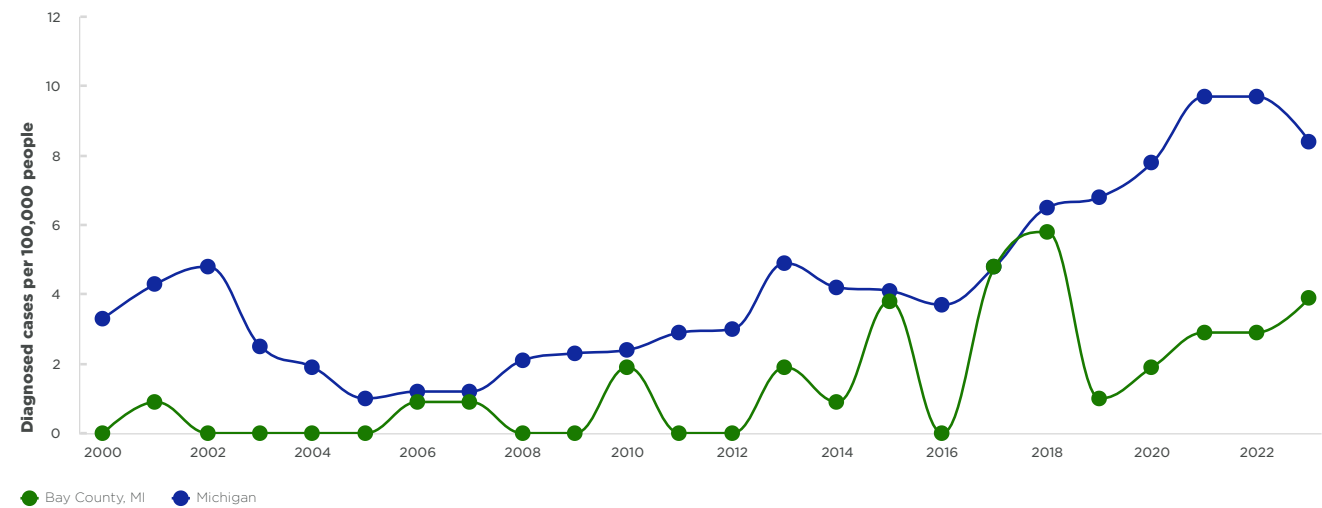
Gonorrhea Rate



Sources: CDC NCHHSTP AtlasPlus

Syphilis

Primary and Secondary Syphilis Rate

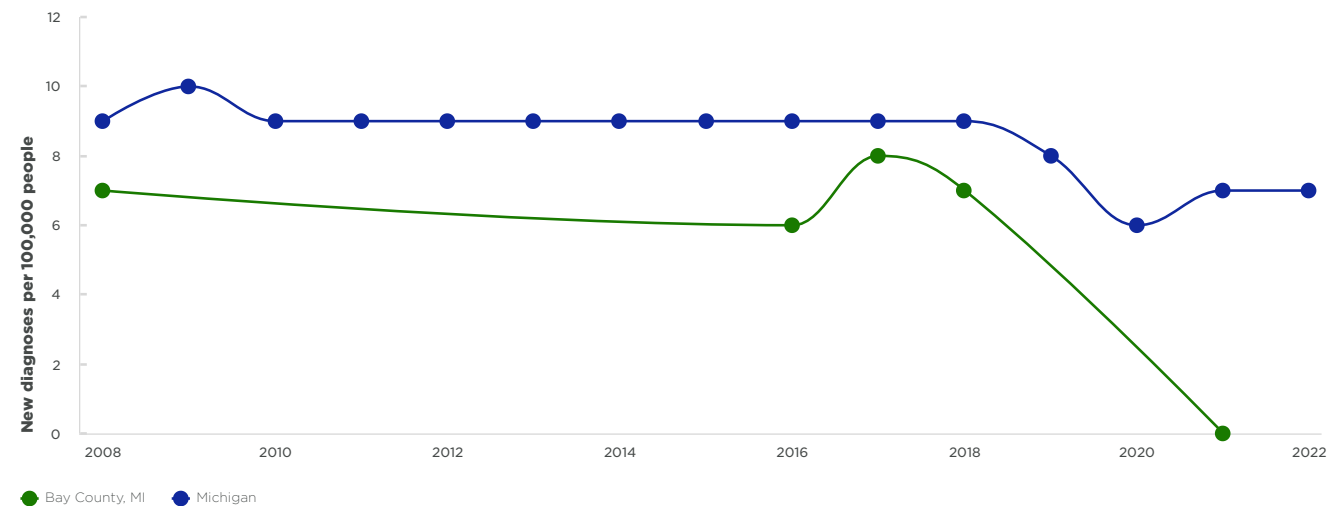


Sources: CDC NCHHSTP AtlasPlus

Primary and secondary syphilis represent the symptomatic and earliest stages of infection.

HIV New Diagnoses

HIV New Diagnoses Rate



Sources: *AIDSVu Emory University*

Learn more:

1. CDC. "People with Certain Medical Conditions and COVID-19 Risk Factors." Centers for Disease Control and Prevention, 6 Jan. 2025. <https://www.cdc.gov/covid/risk-factors/index.html>.¹
2. Hill, Latoya, and Samantha Artiga. "COVID-19 Cases and Deaths by Race/Ethnicity: Current Data and Changes Over Time." Kauffman Family Foundation, 22 Aug. 2022. <https://www.kff.org/coronavirus-covid-19/issue-brief/covid-19-cases-and-deaths-by-race-ethnicity-current-data-and-changes-over-time/>.²
3. CDC. "Using Health Equity Principles in Communities." Centers for Disease Control and Prevention, 11 Dec. 2023. <https://www.cdc.gov/dnpao-state-local-programs/php/practitioners-guide/equity-principles.html>. Accessed 31 Jan. 2025.
4. CDC. "Health Equity and STIs." Centers for Disease Control and Prevention, 22 Apr. 2024. <https://www.cdc.gov/sti/php/projects/health-equity.html>.³
5. CDC. "CDC Community Approaches to Reducing Sexually Transmitted Diseases." Centers for Disease Control and Prevention, January 2021. <https://stacks.cdc.gov/view/cdc/99809>.⁴

How We Connect Matters

One in five adults in the United States struggles with their mental health at some point in life. And every one of us *has* mental health, just as we all have physical health. It's time we talk openly about mental and behavioral health. We likely wouldn't be afraid to tell someone we have a broken arm, but when it comes to mental health issues, outdated ideas about why it happens can keep people from seeking help.

Connection makes a difference. Connection to ourselves helps us recognize when we need to ask for help. Strong relationships with other people can reduce mental health struggles. Connection within our community means more people know where to turn when they need help. These many forms of connection can improve our quality of life and even prevent death.

This section will highlight mental and behavioral health and how our **context** informs our personal **behaviors**, which produce our health **outcomes**. If you missed why we talk about context, behaviors, and outcomes, you can learn more on the home page.

Where we live can help or harm our mental health.

Besides our genetics, the physical and social environments we live in have a direct impact on our mental well-being. These factors are part of our **context** and include how connected we are to other people around us, if we speak the same language as our neighbors, if we can access mental health support, and other factors that affect our daily lives and mental health. **Find out more in the [Context](#) section.**

Behaviors shine a light on other needs.

Our personal **behaviors**, especially those that might be harmful, could be a sign that we need help with other issues that lead to our behaviors. Substance use or not being able to sleep might point to a mental health challenge, for example. Meeting those other needs or addressing the underlying factors before behavioral health issues happen will make a difference. **Find out more in the [Behaviors](#) section.**

Let's help people before they're in crisis.

Outcomes are a result of a person's context and behaviors. With mental and behavioral health, having the right support and access can improve our quality of life, increase connections to our families and friends, and even prevent things like injuries or early death. Increasing education, focusing on prevention, and improving support systems and programs for mental and behavioral health issues can make a difference. **Find out more in the [Outcomes](#) section.**

Learn more:

1. "Stigma, Prejudice and Discrimination Against People with Mental Illness." *PsychiatryOrg*, Aug. 2020. <https://www.psychiatry.org/443/patients-families/stigma-and-discrimination>. 

2. House, James S., et al. "Social Relationships and Health." *Science*, vol. 241, no. 4865, July 1988, pp. 540–45. <https://doi.org/10.1126/science.3399889>. 

3. Helbich, Marco. "Mental Health and Environmental Exposures: An Editorial." *International Journal of Environmental Research and Public Health*, vol. 15, no. 10, Oct. 2018, p. 2207. *PubMed Central*. <https://doi.org/10.3390/ijerph15102207>. 

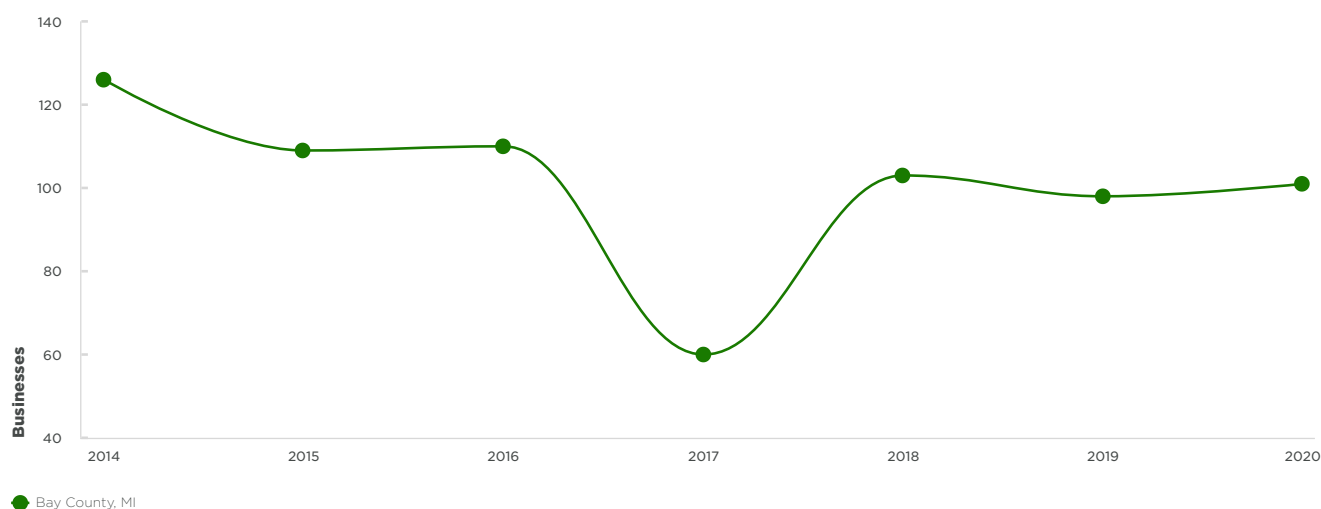
We're wired for connection.

Having social support isn't just good for our mental health—it can even affect our physical well-being. Social support makes up a big part of our **context**, the building block for many of our decisions related to health. As our world becomes more digitally connected, staying personally connected to the community around us is even more important for our health. Communities that provide access to mental health care providers and encourage and enable connection amongst families, friends, and neighbors are creating an environment where positive mental health can grow.

Common interests build relationships.

Being able to connect in social settings with friends and neighbors has a positive impact on our mental and physical health. Meeting regularly with people who share an interest, belief system, or career path lets us grow the number of meaningful relationships we have in our community. More chances to do this makes us more likely to feel healthier.

Social Associations Over Time



Sources: CBP

This data includes membership organizations such as civic organizations, bowling centers, golf clubs, fitness and recreational centers, sports teams, religious organizations, political organizations, labor unions, business associations, and professional organizations.

Loneliness is a serious health concern.

Social isolation comes with serious risks, including higher rates of depression and early death. One study says that loneliness and social isolation are twice as harmful to our physical and mental health than obesity. This problem affects everyone, no matter their age. Youth who aren't connected to our community have an increased risk of violence, substance use, and may struggle in school or work. Our aging parents and grandparents who live alone are at an even higher risk. Isolation may also be caused by other barriers, such as speaking a different language than your neighbors. Providing more chances for people of all ages to connect through community programs or other resources can help keep everyone in our community feeling cared for and connected.

Overview



Seniors Living Alone

32.3%

People age 65+

Bay County, MI

29.2%

People age 65+

Michigan

Language Isolation: Limited English Speaking Households

0.1%

Households

Bay County, MI

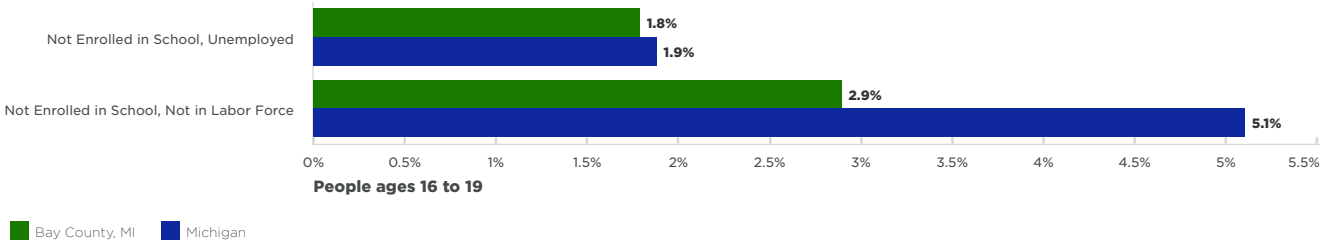
1.8%

Households

Michigan

Sources: US Census Bureau ACS 5-year 2019-2023

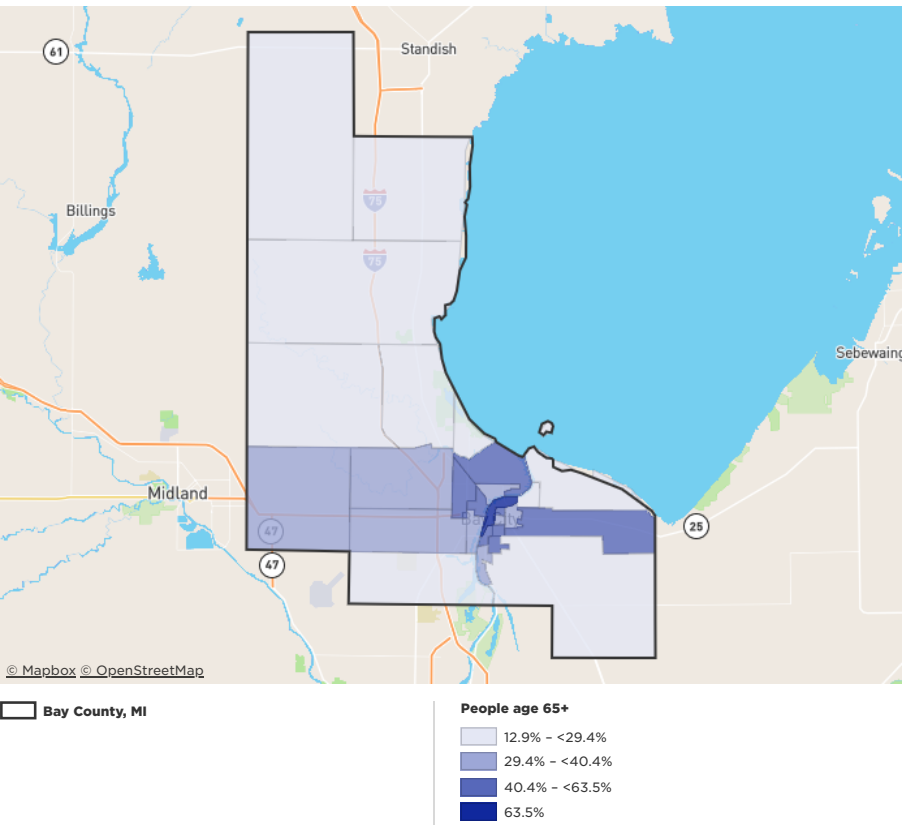
Disconnected Youth



Sources: US Census Bureau ACS 5-year 2019-2023

Map: Seniors Living Alone

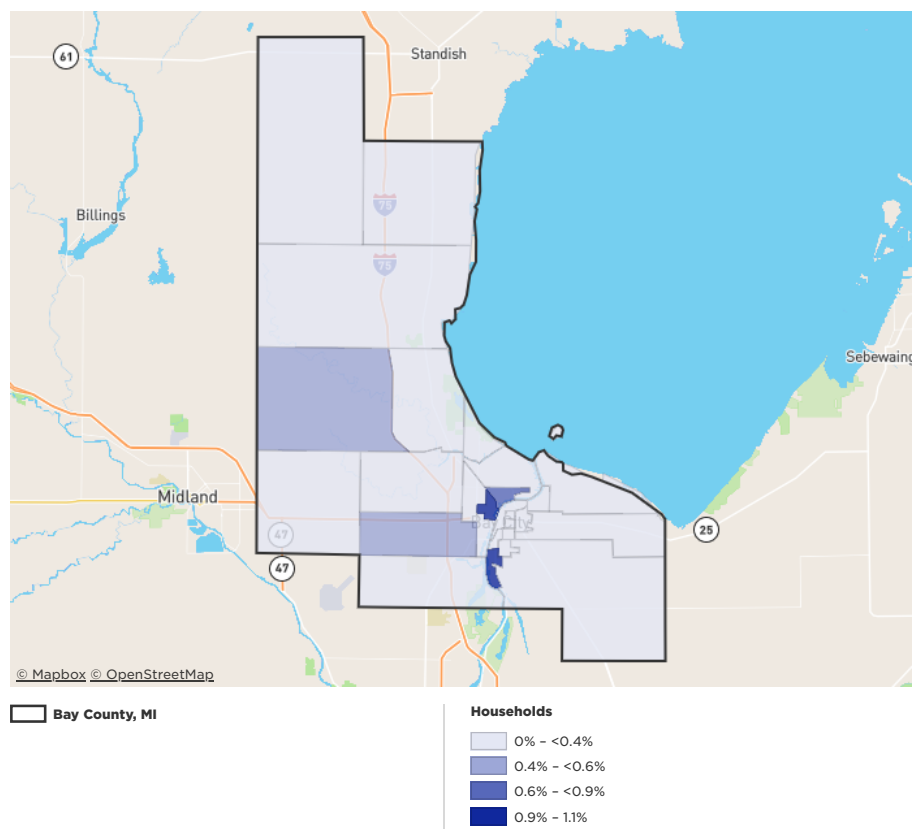
Seniors Living Alone



Sources: US Census Bureau ACS 5-year 2019-2023

Map: Language Isolation

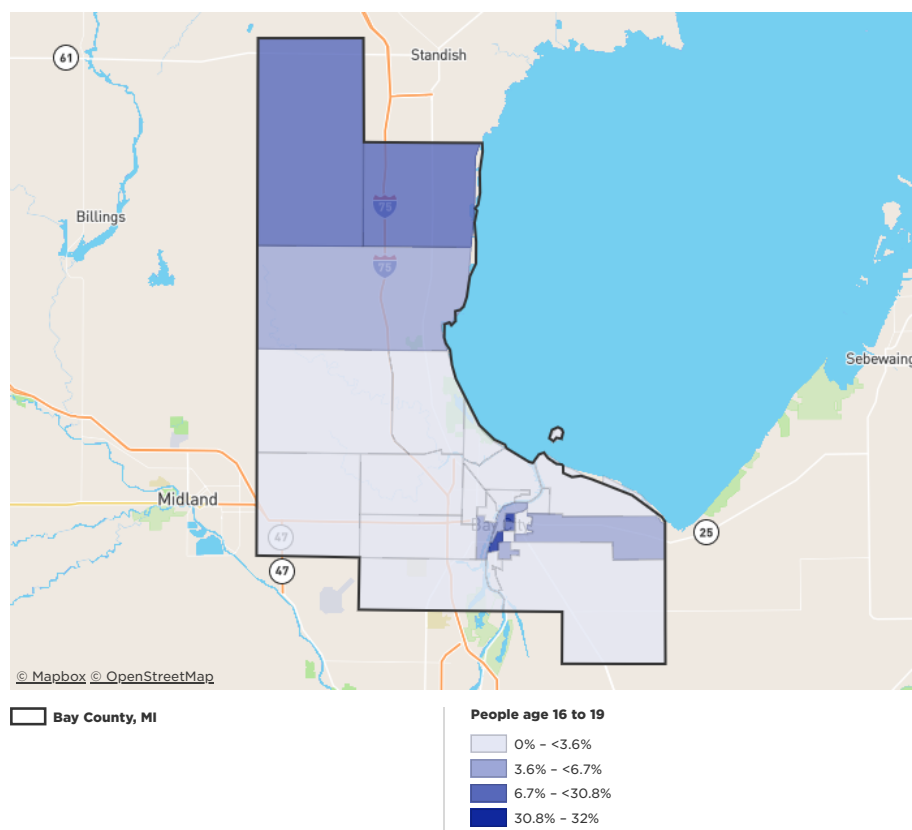
Language Isolation



Sources: US Census Bureau ACS 5-year 2019-2023

Map: Disconnected Youth

Disconnected Youth: Not in School or Labor Force

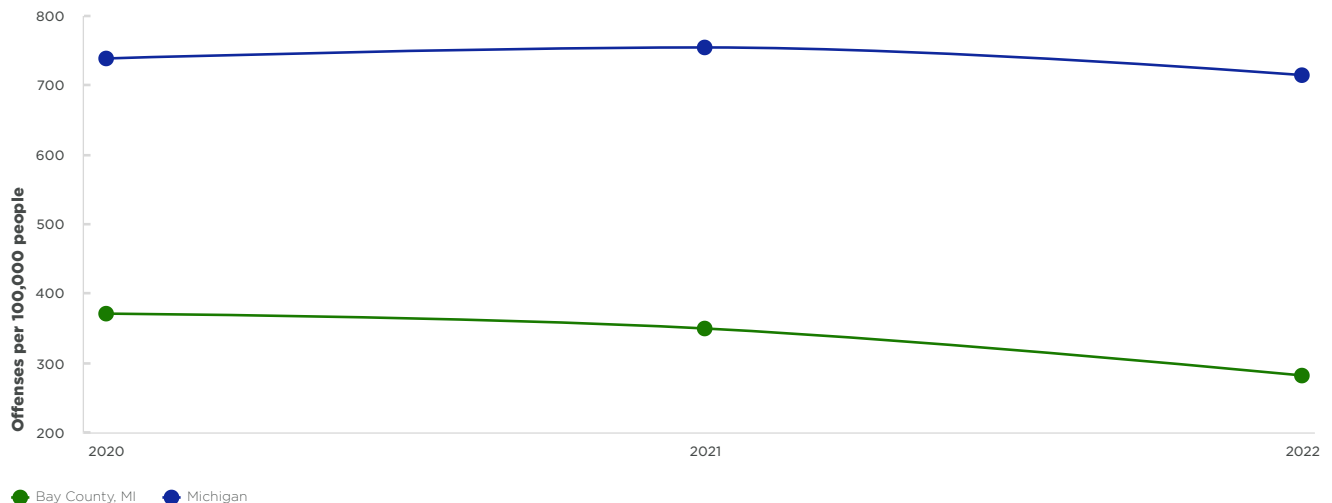


Sources: US Census Bureau ACS 5-year 2019-2023

No one should have to live in fear.

People with mental illness are actually more likely to be a victim of a violent crime than to be a criminal. Mental illness doesn't cause violence. An individual's decision to commit a violent crime is informed by many factors, including past trauma. Trauma can be associated with higher levels of violence. If we can reduce the amount of traumatic life events a person experiences—including witnessing a violent crime themselves—we can make a difference. This might start with addressing poverty, unemployment, or access to safe housing. We can also help prevent crime before it happens by giving youth chances to connect with caring adults, access to a quality education starting in preschool, and family support to equip parents of young children. **Seeing crime as a community issue rather than an individual's bad decisions allows us to make real progress towards a safer community.**

Violent Crime Rate



Sources: FBI UCR

Law enforcement jurisdictions provide this data to the FBI each year; missing data or years will occur if that data has not been provided. This data represents reported crimes only. Data includes murder and nonnegligent manslaughter, rape, robbery, and aggravated assault.

Learn more:

- [Martino, Jessica, et al. "The Connection Prescription: Using the Power of Social Interactions and the Deep Desire for Connectedness to Empower Health and Wellness." American Journal of Lifestyle Medicine, vol. 11, no. 6, Oct. 2015, pp. 466-75. PubMed Central, <https://doi.org/10.1177/1559827615608788>.](#)
- [Holt-Lunstad, Julianne, et al. "Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review." Perspectives on Psychological Science, vol. 10, no. 2, Mar. 2015, pp. 227-37. SAGE Journals, <https://doi.org/10.1177/1745691614568352>.](#)
- [Novotney, Amy. "The Risks of Social Isolation." American Psychological Association, May 2019, <https://www.apa.org/monitor/2019/05/ce-corner-isolation>.](#)
- [Zhang, Donglan, et al. "Linguistic Isolation and Mortality in Older Mexican Americans: Findings from the Hispanic Established Populations Epidemiologic Studies of the Elderly." Health Equity, vol. 5, no. 1, June 2021, pp. 375-81. PubMed Central, <https://doi.org/10.1089/hec.2020.0139>.](#)
- [Ghiasi, Noman, et al. "Psychiatric Illness And Criminality." StatPearls, StatPearls Publishing, 2022. PubMed, <http://www.ncbi.nlm.nih.gov/books/NBK537064/>.](#)
- [Stuart, Heather. "Violence and Mental Illness: An Overview." World Psychiatry, vol. 2, no. 2, June 2003, pp. 121-24.](#)
- [Wolff, Nancy, and Jing Shi. "Childhood and Adult Trauma Experiences of Incarcerated Persons and Their Relationship to Adult Behavioral Health Problems and Treatment." International Journal of Environmental Research and Public Health, vol. 9, no. 5, May 2012, pp. 1908-26. PubMed Central, <https://doi.org/10.3390/ijerph9051908>.](#)
- [Peltonen, Kirsi, et al. "Trauma and Violent Offending among Adolescents: A Birth Cohort Study." Journal of Epidemiology and Community Health, vol. 74, no. 10, Oct. 2020, pp. 845-50. PubMed Central, <https://doi.org/10.1136/jech-2020-214188>.](#)
- [CDC. "About Youth Violence." Centers for Disease Control and Prevention, 15 Feb. 2024, <https://www.cdc.gov/youth-violence/about/index.html>.](#)

How we feel affects what we do.

Our mental state plays a big role in the decisions we make and the actions we take. Our **behaviors** aren't simply about personal decisions. Having a serious mental illness isn't a character flaw, a weakness, or even a choice. Understanding this is important so that we can better support people in our community who are struggling. The behaviors caused by poor mental health can also be behaviors that make our mental health suffer more. When we feel connected, supported, and resourced, our mental well-being and behaviors can all improve.

Let's protect our youth from bullying.

Bullying is the most widespread form of youth violence and needs our attention. People who bully, victims, and bystanders are all negatively impacted by this trauma. It can lead to low self-esteem, self-harm, depression, struggles in school, and long-term effects on a person's life. The risk factors are as vast as the types of bullying, including appearance, race, disabilities, gender, mental health, and social challenges. For those who already struggle with mental health, behavioral health, or social isolation, bullying only makes it worse. Our community's response needs to include increased prevention of bullying as well as better support and intervention for youth who have experienced or witnessed bullying.

Students Reporting Being Bullied

Geography	2021-2022 On Basis of Disability	2021-2022 On Basis of Sex	2021-2022 On Basis of Race, Color, or National Origin
Bay County, MI	0	0	0
Michigan	164	726	636

Sources: CRDC 2021-2022

Students Reporting Being Bullied on Basis of Sex by Sex

Geography	2021-2022 Male	2021-2022 Female
Bay County, MI	0	0
Michigan	294	432

Sources: CRDC 2021-2022

Students Reporting Being Bullied on Basis of Race, Color, or National Origin by Race or Ethnicity

Data Sources	Bay County, MI	Michigan
2021-2022 Asian	0	11
2021-2022 Black	0	309
2021-2022 Hispanic	0	84
2021-2022 Multiracial	0	53
2021-2022 Native American	0	5
2021-2022 Native Hawaiian or Pacific Islander	0	2
2021-2022 White	0	172

Sources: CRDC 2021-2022

Substance use recovery requires a community response.

It's been shown that about half of individuals who have mental illness at some point in life will also struggle with a substance use disorder. Substances such as alcohol have a strong hold on those who get stuck in the pattern and they often can't just quit on their own, even if they have the desire to. Equipping people to improve their mental well-being in healthier ways can help prevent the misuse of substances such as alcohol. By increasing the layers of support available for everyone in the community, including peer groups, professional help, and educating family and friends, people who struggle with substance use can find a path toward recovery. Community efforts such as limiting the amount of places to buy alcohol and enforcing laws preventing the sale of alcohol to minors can also help.



Binge Drinking in the Past Month

17.9%

Adults

Bay County, MI

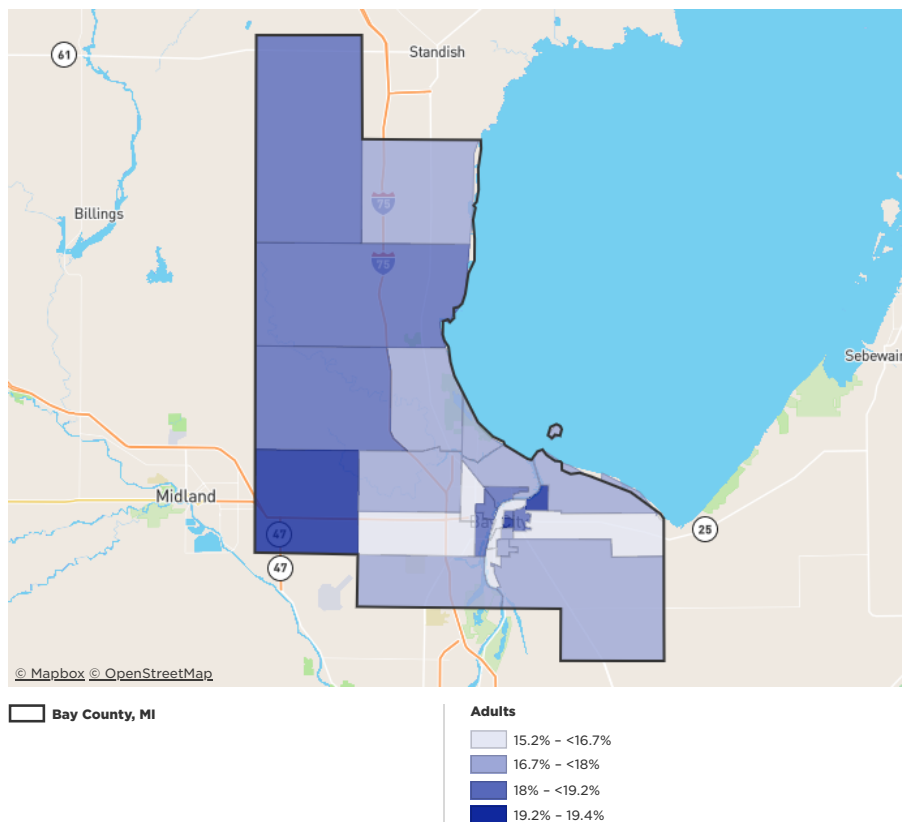
17.7%

Adults

Michigan

Sources: CDC BRFSS PLACES 2022

Binge Drinking in Past Month



Sources: CDC BRFSS PLACES 2022

We all need a good night's rest.

Sleep is needed to recharge the brain and body, and without enough sleep a person is more likely to struggle with mental health challenges. Getting enough sleep helps us control our emotions and behaviors, and poor sleep makes it even more challenging to handle the stress life brings. Sleep health is an often overlooked way we can improve health outcomes and our quality of life, but making a difference requires addressing the causes of people getting too little sleep. Shift work, drinking caffeine or alcohol, mental health conditions, too much noise or light, and the inability to control the temperature where you sleep all have an impact. At least one of these factors may be a reality for many people in our community.



Less Than 7 Hours Sleep

32.1%

Adults

Bay County, MI

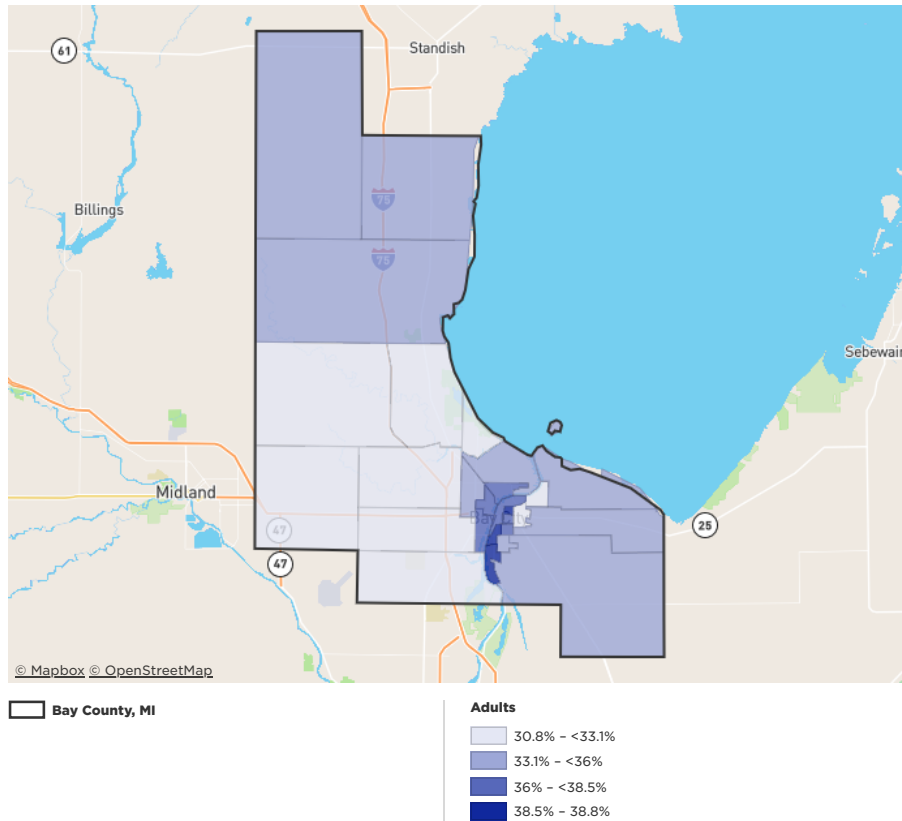
35.2%

Adults

Michigan

Sources: CDC BRFSS PLACES 2022

Insufficient Sleep



Sources: CDC BRFSS PLACES 2022

A long commute takes a daily toll.

When we can't afford to live where we work, we are more likely to have long commute times. Any time spent driving or riding public transit to work is lost time for creating social connection with our families, friends, and neighbors. The stress of rush hour also affects our mental health, and time spent sitting in traffic affects us physically. By improving job opportunities, access to services, and housing costs in our community, we can reduce daily stress and give people time back to connect with others, move their bodies, and other activities that impact their overall well-being.



Long Commute (30+ minutes), Drive Alone

24.9%

Commuters

Bay County, MI

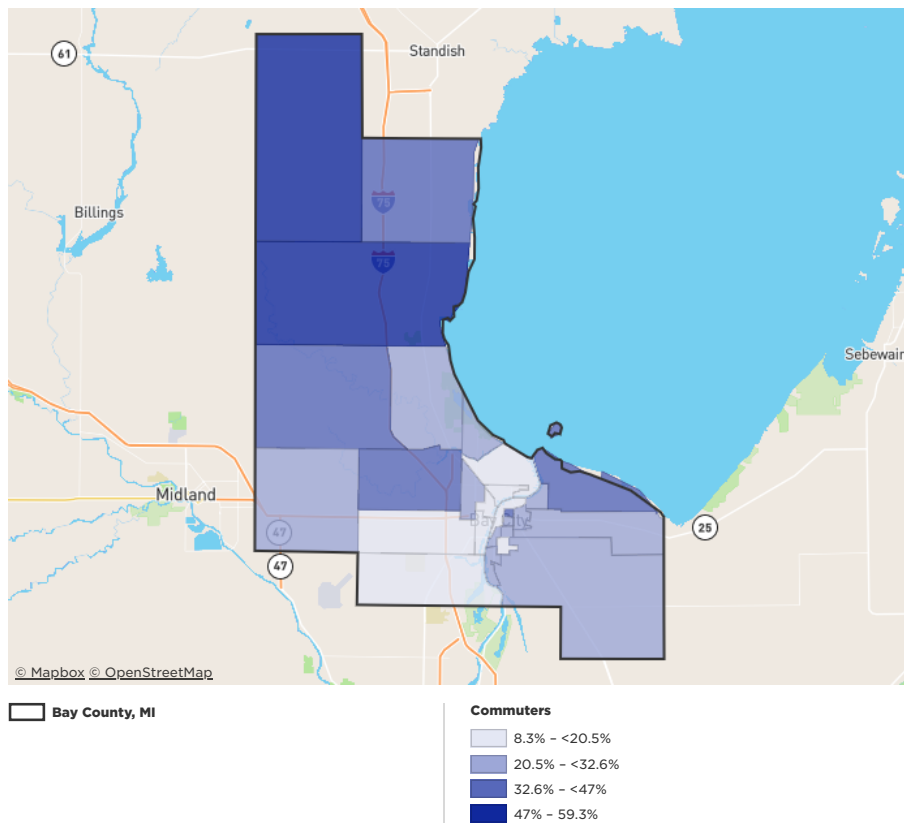
28.5%

Commuters

Michigan

Sources: US Census Bureau ACS 5-year 2019-2023

Long Commute (30+ Minutes) Driving Alone



Sources: US Census Bureau ACS 5-year 2019-2023

Learn more:

1. SAMHSA. "Living Well with Serious Mental Illness." Substance Abuse and Mental Health Services Administration, 28 June 2022. <https://www.samhsa.gov/serious-mental-illness>.
2. Ahmed, Gellian K., et al. "Risk Factors of School Bullying and Its Relationship with Psychiatric Comorbidities: A Literature Review." *The Egyptian Journal of Neurology, Psychiatry and Neurosurgery*, vol. 58, no. 1, Feb. 2022, p. 16. [BioMed Central, https://doi.org/10.1186/s41983-022-00449-x](https://doi.org/10.1186/s41983-022-00449-x).
3. Evans, Caroline B. R., et al. "Cumulative Bullying Experiences, Adolescent Behavioral and Mental Health, and Academic Achievement: An Integrative Model of Perpetration, Victimization, and Bystander Behavior." *Journal of Child and Family Studies*, vol. 28, no. 9, Sept. 2019, pp. 2415-28. [Springer Link, https://doi.org/10.1007/s10826-018-1078-4](https://doi.org/10.1007/s10826-018-1078-4).
4. Arseneault, Louise. "The Long-term Impact of Bullying Victimization on Mental Health." *World Psychiatry*, vol. 16, no. 1, Feb. 2017, pp. 27-28. [PubMed Central, https://doi.org/10.1002/wps.20399](https://doi.org/10.1002/wps.20399).
5. NIDA. Part 1: The Connection Between Substance Use Disorders and Mental Illness. NIH National Institute on Drug Abuse, 27 Sept. 2022. <https://nida.nih.gov/publications/research-reports/common-comorbidities-substance-use-disorders/part-1-connection-between-substance-use-disorders-mental-illness>.
6. NIAAA. "Social Support (Friends and Family)." *Rethinking Drinking | NIH National Institute on Alcohol Abuse and Alcoholism*. <https://www.rethinkingdrinking.niaaa.nih.gov/Thinking-about-a-change/Support-for-quitting/Social-Support.aspx>.
7. [Guide to Community Preventive Services. "CPSTF Findings for Excessive Alcohol Consumption." Community Preventive Services Task Force, 16 Apr. 2019, https://www.thecommunityguide.org/pages/task-force-findings-excessive-alcohol-consumption.html](https://www.thecommunityguide.org/pages/task-force-findings-excessive-alcohol-consumption.html).
8. [Columbia Psychiatry News. "How Sleep Deprivation Impacts Mental Health." Columbia University Department of Psychiatry, 16 Mar. 2022, https://www.columbiapsychiatry.org/news/how-sleep-deprivation-affects-your-mental-health](https://www.columbiapsychiatry.org/news/how-sleep-deprivation-affects-your-mental-health).
9. Hale, Lauren, et al. "Sleep Health: An Opportunity for Public Health to Address Health Equity." *Annual Review of Public Health*, vol. 41, Apr. 2020, pp. 81-99. [PubMed Central, https://doi.org/10.1146/annurev-publhealth-040119-094412](https://doi.org/10.1146/annurev-publhealth-040119-094412).
10. Hale, Lauren, and Benjamin Hale. "Treat the Source Not the Symptoms: Why Thinking about Sleep Informs the Social Determinants of Health." *Health Education Research*, vol. 25, no. 3, June 2010, pp. 395-400. [PubMed, https://doi.org/10.1093/her/cyq027](https://doi.org/10.1093/her/cyq027).
11. [Division of Sleep Medicine at Harvard Medical School. "Healthy Sleep." 16 Apr. 2021, https://sleep.hms.harvard.edu/education-training/public-education/sleep-and-health-education-program/sleep-health-education-40](https://sleep.hms.harvard.edu/education-training/public-education/sleep-and-health-education-program/sleep-health-education-40).

We need support in every way.

We can take action as a community to increase the support and strategies to help improve mental and behavioral health **outcomes**, such as preventing injuries or decreasing suicide. When we understand lifelong impacts, like how low income as a child may lead to increased depression as an adult, we see how interconnected our experiences and environments are to both current and future mental health. To give everyone equal opportunities to access the right resources and mental and behavioral healthcare, we need to work together to create more community-based services, remove barriers to getting help, and increase the diversity of mental health care providers.

Let's give the right care at the right time.

Being mentally well allows us to complete daily tasks, succeed in school or at work, make other healthy choices, and form strong relationships. It's important to remember that anyone can experience poor mental health throughout life, even without being diagnosed with a mental illness. Black and Hispanic populations have the same or lower rates of many mental illnesses compared to white populations. However, if Black and Hispanic people do become mentally ill, they tend to have more serious illnesses with symptoms that last longer. Less access to mental health services, lower quality of care providers, and high cost of treatment are all factors. When our mental health suffers for short or long periods of time, it affects the rest of our life. Treating mental health equal to physical health starts with prevention efforts. This could mean more education or addressing foundational issues that can lead to poor mental health, including job loss or struggling to pay for basic needs. Making sure everyone has equal access to the right care at the right time can stop poor mental health from becoming worse.

Overview



Poor Mental Health

15.8%

Adults

Bay County, MI

17.5%

Adults

Michigan

Diagnosed Depression

24.1%

Adults

Bay County, MI

24.3%

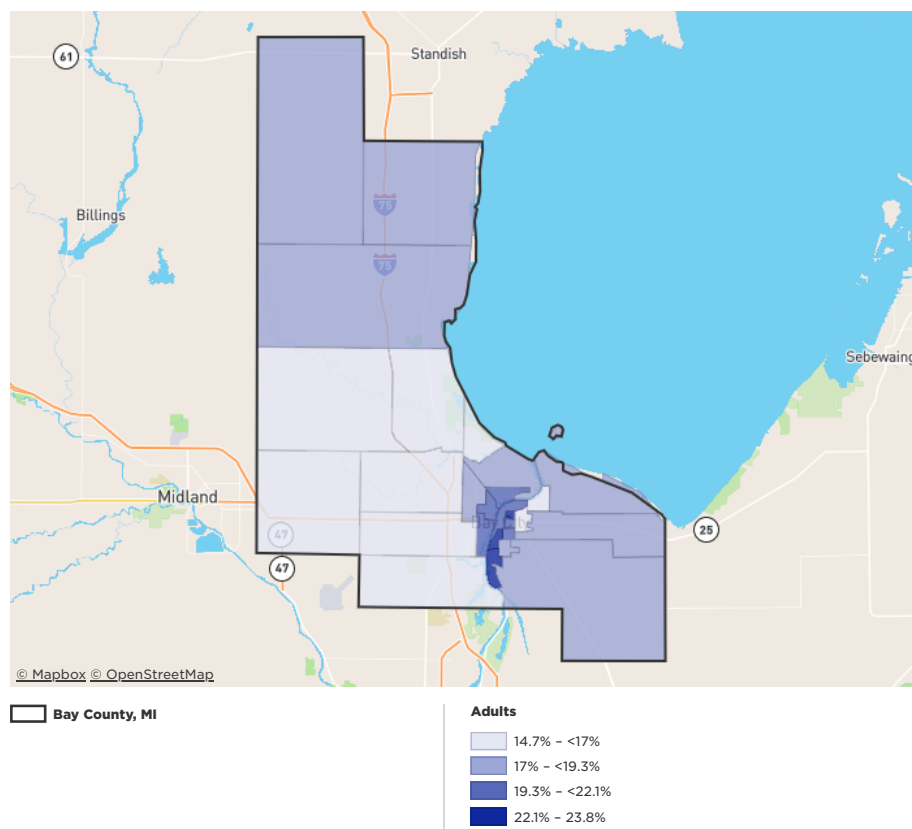
Adults

Michigan

Sources: CDC BRFSS PLACES 2022

Map: Poor Mental Health

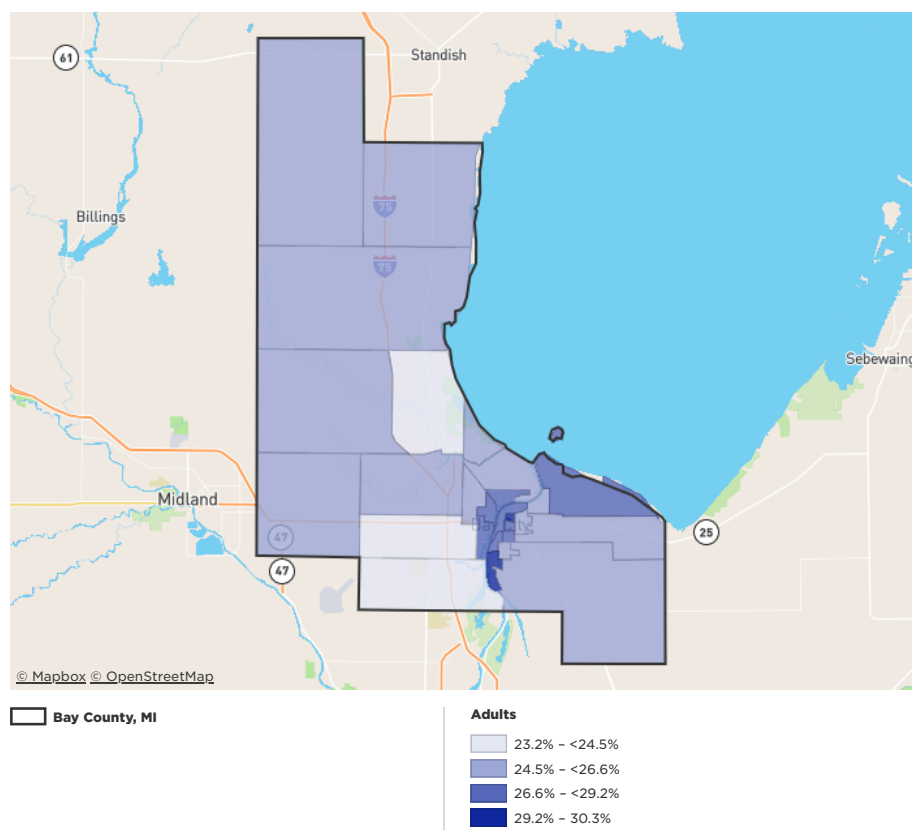
Poor Mental Health



Sources: CDC BRFSS PLACES 2022

Map: Diagnosed Depression

Diagnosed Depression



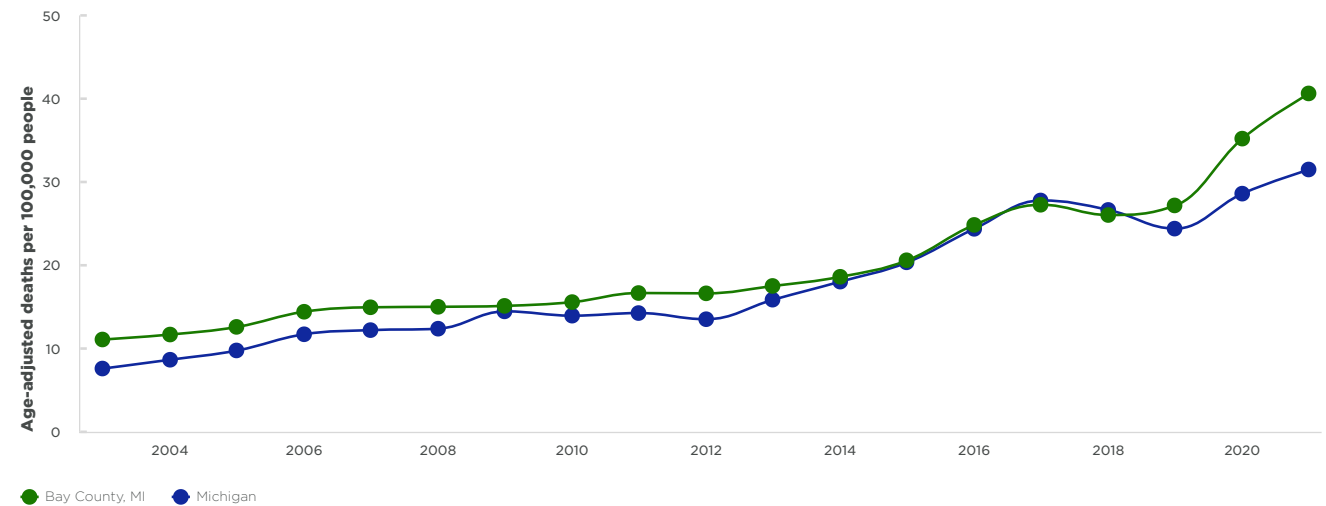
Sources: CDC BRFSS PLACES 2022

Mental and behavioral health-related deaths are preventable.

Mental and behavioral health issues are serious. Deaths related to these challenges are preventable, but it takes all of us to play a part. Providing better treatment and resources is a key part of prevention. This can include supporting people financially or with their housing, improving access to professional help, encouraging peer and community-based programs, and teaching coping skills and mental health education early to set people up for success. Losing one life is too many. And when we see a rise in mental health-related deaths, our community must come together to save lives before it's too late.

Drug Overdose Death Rate

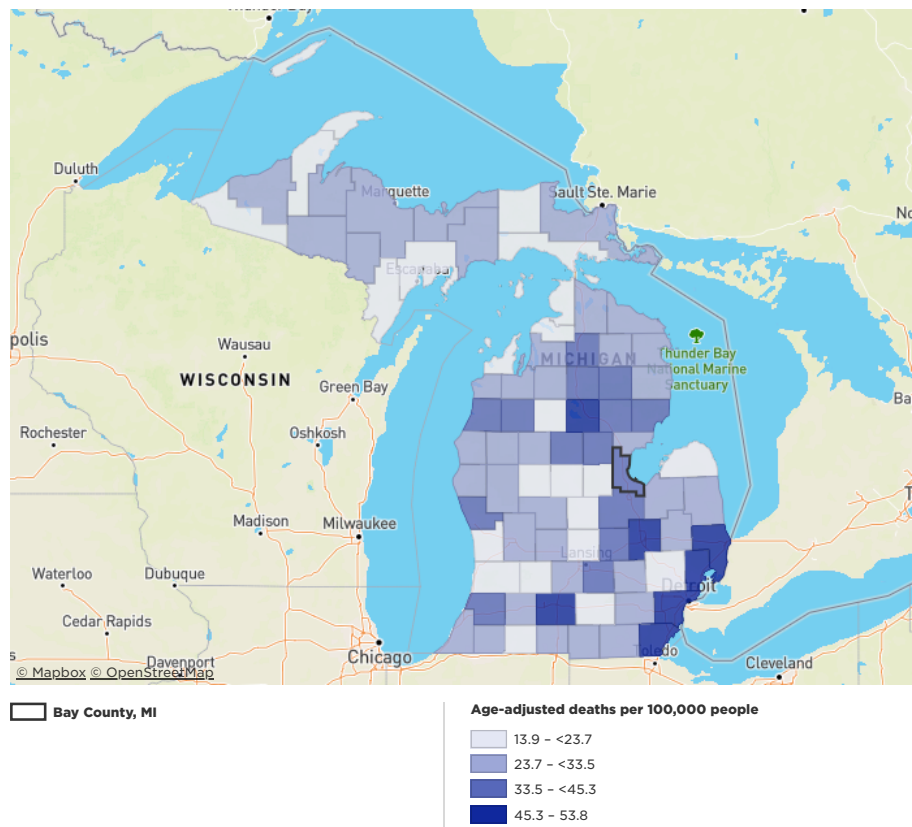
Drug Overdose Death Rate



Sources: CDC

Map: Drug Overdose Death Rate by County

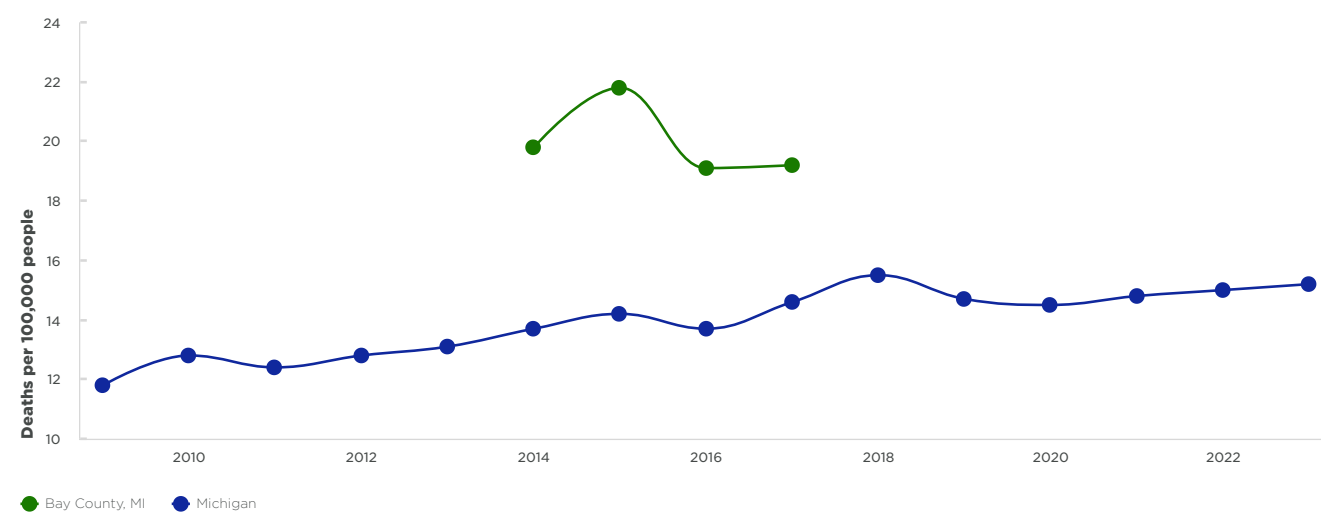
Drug Overdose Death Rate



Sources: CDC 2021

Suicide Death Rate

Suicide Death Rate



Sources: CDC WONDER Cause of Death

Suicide Death Rate by Sex



Suicide Death Rate Among Females

No data

Deaths per 100,000 people
Bay County, MI

6

Deaths per 100,000 people
Michigan

Suicide Death Rate Among Males

No data

Deaths per 100,000 people
Bay County, MI

24.7

Deaths per 100,000 people
Michigan

Sources: CDC WONDER Cause of Death 2023 Crude

Suicide Death Rate by Age

Suicide Death Rate by Age

Data Sources	Bay County, MI	Michigan
2019-2023 Crude Age 1-14	No data	1
2019-2023 Crude Age 15-24	No data	14.3
2019-2023 Crude Age 25-34	20.4	19.7
2019-2023 Crude Age 35-44	No data	20.2
2019-2023 Crude Age 45-54	24.1	19.5
2019-2023 Crude Age 55-64	16.9	17.9
2019-2023 Crude Age 65-74	No data	13.7
2019-2023 Crude Age 75-84	No data	19.4
2019-2023 Crude Age 85+	No data	19.6

Sources: CDC WONDER Cause of Death 2019-2023 Crude

Deaths per 100,000 people within each age range

Suicide Death Rate by Race & Ethnicity

Suicide Death Rate by Race & Ethnicity

Data Sources	Bay County, MI	Michigan
2019-2023 Crude Asian	No data	7.1
2019-2023 Crude Black or African American	No data	9.5
2019-2023 Crude Hispanic or Latino	No data	10.6
2019-2023 Crude Native American	No data	18.5
2019-2023 Crude White	15.5	16.6

Sources: CDC WONDER Cause of Death 2019-2023 Crude

Age-adjusted deaths per 100,000 people within each group

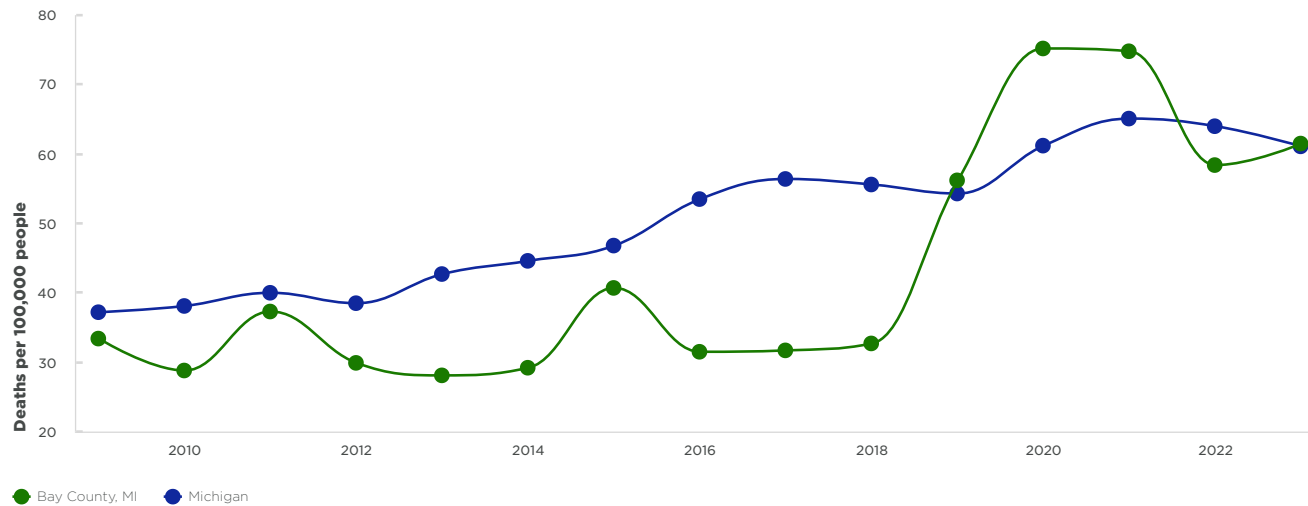
Note: All groups are not Hispanic or Latino unless otherwise listed.

Support gives a safety net.

Injuries can be prevented with more community support. From education on safe driving to substance use recovery programs, we can help reduce injuries and give our residents a better chance at long, healthy lives. Our mental and behavioral health can also affect how likely we are to be in an accident or injure ourselves. Mental disorders are associated with an increased risk of injury. Early diagnosis of a mental health disorder may help reduce this number, as well as ongoing mental health and community support.

Accidents Death Rate

Accidents Death Rate



Sources: CDC WONDER Cause of Death

Accidents Death Rate by Sex



Accidents Death Rate Among Females

50.1

Deaths per 100,000 people
Bay County, MI

43.2

Deaths per 100,000 people
Michigan

Accidents Death Rate Among Males

73.1

Deaths per 100,000 people
Bay County, MI

79.3

Deaths per 100,000 people
Michigan

Sources: CDC WONDER Cause of Death 2023 Crude

Accidents Death Rate by Age

Accidents Death Rate by Age

Data Sources	Bay County, MI	Michigan
2019-2023 Crude Age 1-14	No data	4.7
2019-2023 Crude Age 15-24	42.6	25
2019-2023 Crude Age 25-34	81.4	61.8
2019-2023 Crude Age 35-44	99.9	72.8
2019-2023 Crude Age 45-54	56.3	64
2019-2023 Crude Age 55-64	54.8	66
2019-2023 Crude Age 65-74	50.5	63.1
2019-2023 Crude Age 75-84	81	126.8
2019-2023 Crude Age 85+	396.3	447.6

Sources: CDC WONDER Cause of Death 2019-2023 Crude

Deaths per 100,000 within each age range

Accidents Death Rate by Race & Ethnicity

Accidents Death Rate by Race & Ethnicity

Data Sources	Bay County, MI	Michigan
2019-2023 Crude Asian	No data	14.5
2019-2023 Crude Black or African American	No data	85.4
2019-2023 Crude Hispanic or Latino	No data	43.5
2019-2023 Crude Native American	No data	66.5
2019-2023 Crude White	65.8	60.6

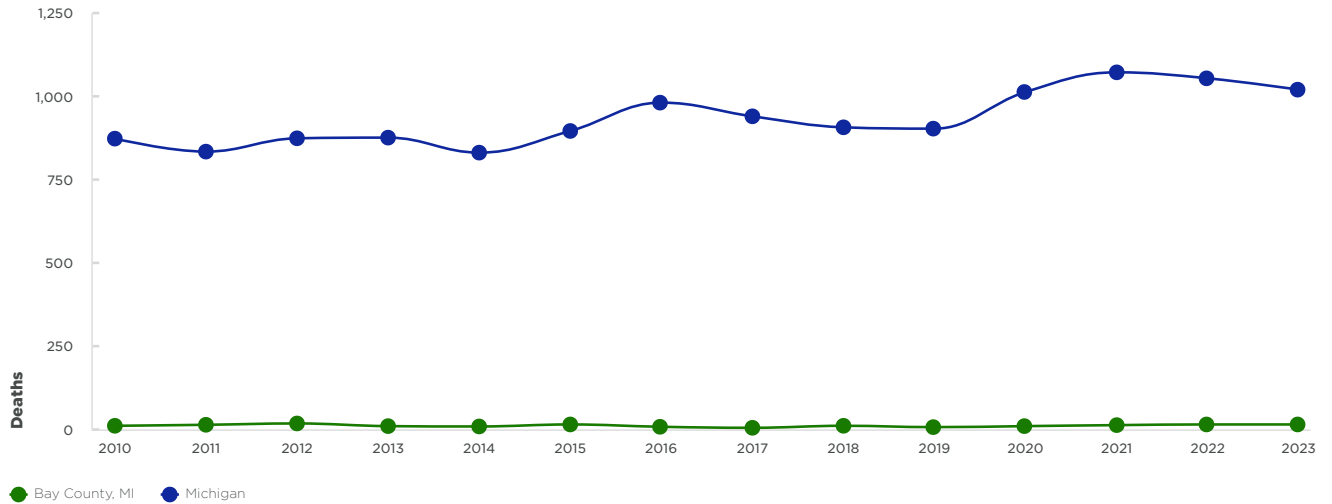
Sources: CDC WONDER Cause of Death 2019-2023 Crude

Age-adjusted deaths per 100,000 people within each group

Note: All groups are not Hispanic or Latino unless otherwise listed.

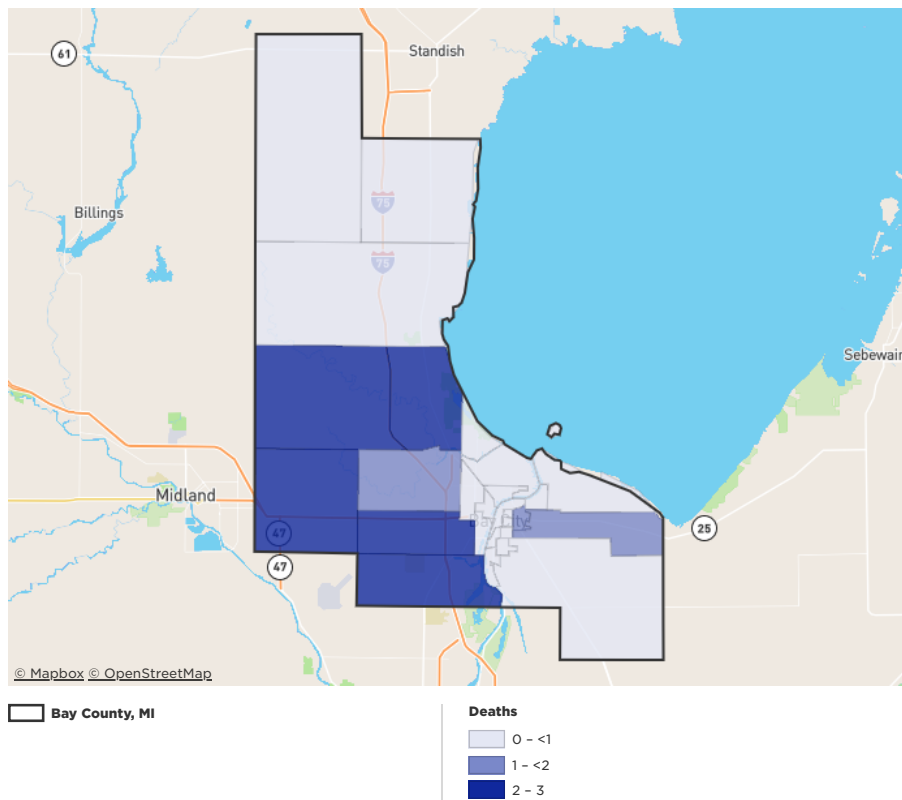
Motor Vehicle Crash Fatalities

Motor Vehicle Crash Fatalities



Sources: NHTSA FARS

Motor Vehicle Crash Fatalities



Sources: NHTSA FARS 2023

Fatal Crashes Involving Drunk, Distracted, or Drowsy Drivers

Fatal Motor Vehicle Accidents by Selected Factors

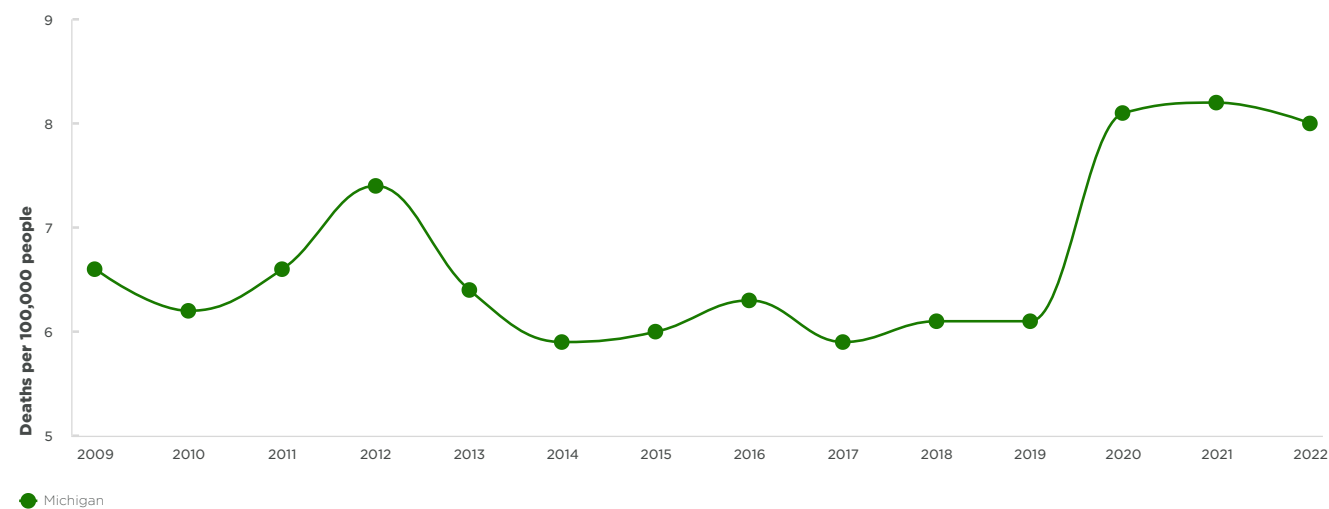


Sources: NHTSA FARS 2023

We must start early to stop violence.

We shouldn't be afraid of mental illness. Mental disorders are not causes of violence. In fact, social and economic factors affect violence rates most often. This is good news if we want to see positive change. To stop the cycle of violence, we must look at the social and economic factors that inform why a person might be at risk for violence in the first place. Our relationships, jobs, schools, where we live, youth resources, and what we have access to all play a role. Mental health support can also help people before they become victims of violent crime, such as in cases of intimate partner violence. Victims or witnesses of such violence will need layers of support. It's important to remember that no one treatment fits for all situations. Addressing the many individual, family, peer, and community risk factors that are related to increased violence will make our community a safer place to live.

Homicides



Sources: CDC WONDER Cause of Death

Learn more:

1. Sims, Jacqueline, and Rebekah Levine Coley. "Examining Economic Risks in Adolescents' Families, Neighborhoods, and Schools: Implications for Mental and Behavioral Health in Early Adulthood." *Journal of Adolescent Health*, vol. 70, no. 5, May 2022, pp. 774-80. ScienceDirect, <https://doi.org/10.1016/j.jadohealth.2021.11.020>.[🔗]
2. Alves-Bradford, Jean-Marie, et al. "Mental Health Equity in the Twenty-First Century: Setting the Stage." *The Psychiatric Clinics of North America*, vol. 43, no. 3, Sept. 2020, pp. 415-28. PubMed, <https://doi.org/10.1016/j.psc.2020.05.001>.[🔗]
3. CDC. "About Mental Health." Centers for Disease Control and Prevention, 8 Aug. 2024. <https://www.cdc.gov/mental-health/about/>.[🔗]
4. McGuire, Thomas G., and Jeanne Miranda. "Racial and Ethnic Disparities in Mental Health Care: Evidence and Policy Implications." *Health Affairs (Project Hope)*, vol. 27, no. 2, Mar. 2008, pp. 393-403. PubMed Central, <https://doi.org/10.1377/hlthaff.27.2.393>.[🔗]
5. CDC. "Prevention Strategies | Suicide." Centers for Disease Control and Prevention, 11 Oct. 2022. <https://www.cdc.gov/suicide/prevention/index.html>.[🔗]

6. [Shadloo, Behrang, et al. "Psychiatric Disorders Are Associated with an Increased Risk of Injuries: Data from the Iranian Mental Health Survey \(IranMHS\)." *Iranian Journal of Public Health*, vol. 45, no. 5, May 2016, pp. 623-35.](#) 
7. [Cameron, Cate M., et al. "Mental Health: A Cause or Consequence of Injury? A Population-Based Matched Cohort Study." *BMC Public Health*, vol. 6, May 2006, p. 114. PubMed Central, <https://doi.org/10.1186/1471-2458-6-114>.](#) 
8. [Stuart, Heather. "Violence and Mental Illness: An Overview." *World Psychiatry*, vol. 2, no. 2, June 2003, pp. 121-24.](#) 
9. [Warshaw, Carole, and Phyllis Brashler. "Mental Health Treatment for Survivors of Intimate Partner Violence." *Intimate Partner Violence: A Health-Based Perspective*, edited by C Mitchell and D Anglin, Oxford University Press, 2009, pp. 335-87.](#) 
10. [CDC. "Risk and Protective Factors |Violence Prevention| Injury Center." Centers for Disease Control and Prevention, 12 Mar. 2024, <https://www.cdc.gov/youth-violence/risk-factors>.](#) 



*The Connect Up Community Information Exchange was designed in collaboration with partners such as:
United Way of Bay County, Northeast Michigan 211, Bay County Health Department, Delta College, Bay-Arenac ISD, and the Brightstreet Group.*

The Community Information Exchange

ConnectUP is a partnership of community organizations that provides a coordination of resources for Bay County residents. Please complete this referral form with the most accurate information possible. Upon submission, please allow up to 48 hours for a Community Navigator to contact the client.

Community Information Exchange (CIE) is a localized effort to create and sustain the technology and relationships required to support Social Determinants of Health (SDOH) needs of both individuals and the community. CIE maximizes a person-centered approach by ensuring social care information is collected only as needed and is stored safely. CIE also promotes streamlined access to health-enhancing non-clinical services (e.g., social services and supports), helping to coordinate care across a variety of clinical and non-clinical partners, while using data on existing community resources, needs, and gaps to drive policy change.

In addition to the closed-loop referral and follow-up system, participants may also qualify for subsidized assistance with barriers such as transportation, childcare, health services, rent & utilities, materials, or supplies through United Ways ALICE fund.

Financial coaching is available during group or one-on-one sessions.

For a list of resources, visit 211nemichigan.org or dial 2 - 1 - 1

Bridging the Gap

Connecting people to resources, to create sustainable, and effective care for ALL

IF YOU NEED HELP CLICK BELOW

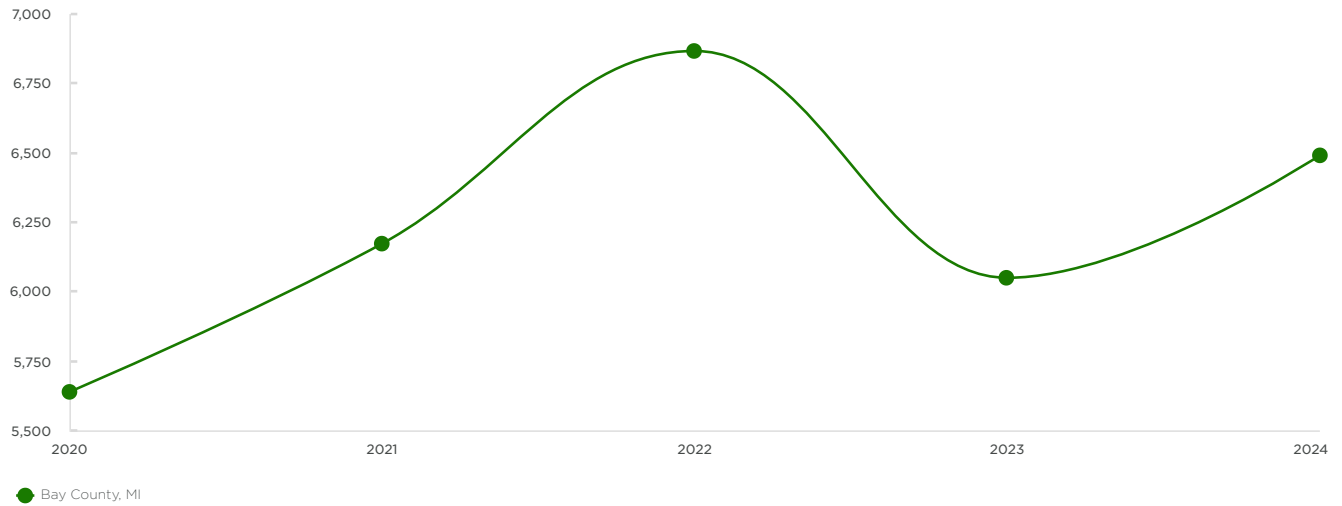
[Click Here For Assistance](#)

211 Northeast Michigan

Northeast Michigan 211 is a free, confidential service that acts as a vital link between individuals and families in Northeast Michigan and the essential resources they need. Available 24/7 by simply dialing 2-1-1, texting your zip code to 898211, or visiting their website, this service connects people to a comprehensive database of health and human service programs.

Whether it's finding food assistance, shelter, utility aid, healthcare services, mental health support, or even resources for seniors, children, or those facing a crisis, Northeast Michigan 211 provides timely and accurate referrals. Trained specialists offer information, guidance, and advocacy, ensuring that community members can navigate challenging situations and access the support necessary for their well-being.

United Way 211 Data 2020-2024 Connections



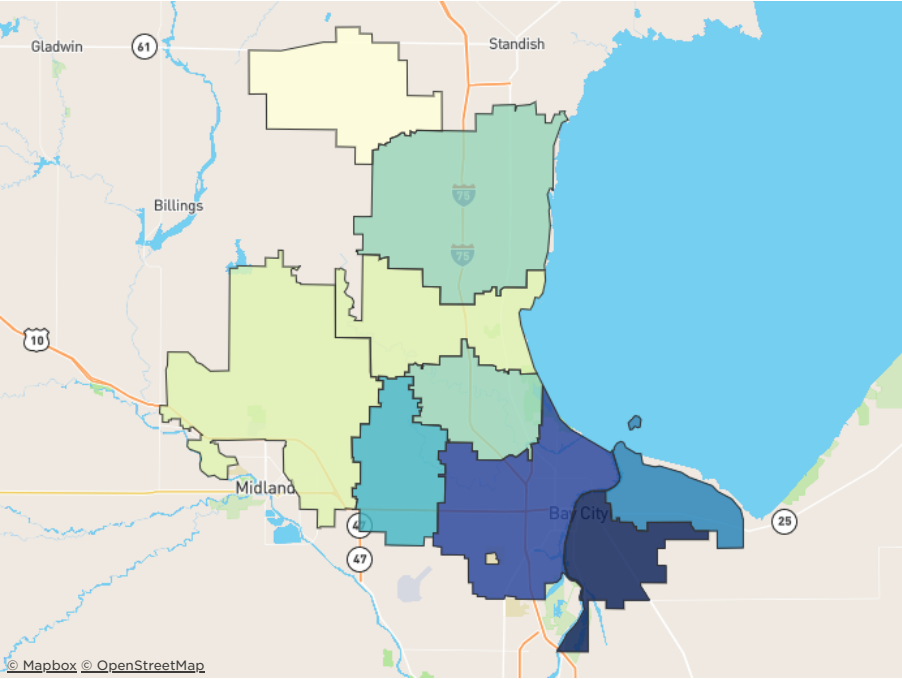
A closer look at connections...

A close look at services requested to Northeast Michigan 211 reveals the challenges people in our community are facing. Like much of Michigan and the U.S., the biggest needs consistently fall into three categories: housing, utility assistance, and food.

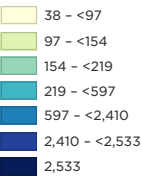
Requests for housing help—whether it's preventing homelessness or getting rental aid—have significantly increased. Many residents are also struggling with the rising costs of electricity, gas, and other essential services, leading to frequent calls for utility assistance. Sadly, food insecurity remains a persistent issue, with many seeking referrals to food pantries and meal programs.

Beyond these top three, Northeast Michigan 211 also connects people to support for personal needs (like clothing or diapers), income support (such as unemployment benefits), and transportation for vital appointments. This detailed look at connection data helps local leaders and organizations understand where the greatest needs are, allowing them to better allocate resources and respond to our community's evolving challenges.

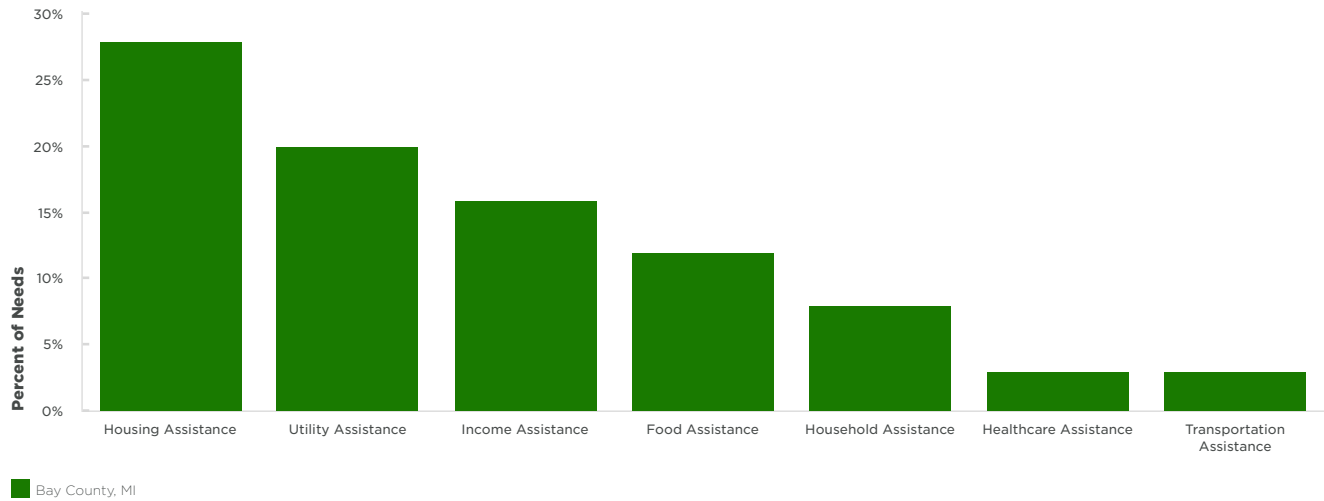
Connections Activity by Zip Code



2024 Number of Connections



211 Services Requested in 2024



Based on the data for 211 Northeast Michigan's services requested, the most frequently sought categories include utility assistance, housing support, and income support, highlighting key areas of community need.



UNITED WAY

Bay County



211

Northeast Michigan



