

Community Health Needs Assessment (CHNA)



Adopted FY2024 for FY2025-27



MUSKEGON

This Community Health Needs Assessment was approved by the Trinity Health Muskegon Board of Trustees on May 23, 2024



TABLE OF CONTENTS

Mission Statement.....	3
- Core Values	
Organizational Overview.....	4
Description of Community Served and Map of Service Area	5
Summary – 2024 Muskegon County Community Health Needs Assessment	6
2021 CHNA & Trinity Health Muskegon and Hackley Response	7
Trinity Health Muskegon, Trinity Health Hackley, and the Muskegon County CHNA	13
Invitation to Submit Written Comments	13
Muskegon County Community Health Needs Assessment.....	14

Mission Statement

We, Trinity Health, serve together in the spirit of the Gospel as a compassionate and transforming healing presence within our communities.



Our Core Values

Reverence

We honor the sacredness and dignity of every person.

Commitment to Those Experiencing Poverty

We stand with and serve those who are experiencing poverty, especially the most vulnerable.

Safety

We embrace a culture that prevents harm and nurtures a healing, safe environment for all.

Justice

We foster right relationships to promote the common good, including sustainability of Earth.

Stewardship

We honor our heritage and hold ourselves accountable for the human, financial and natural resources entrusted to our care.

Integrity

We are faithful to who we say we are.





Organization Overview

Trinity Health Muskegon and Trinity Health Hackley are non-profit, mission-driven, faith-based health systems in Muskegon, Michigan. Both are members of Trinity Health, one of the nation's largest Catholic health systems. Trinity Health Muskegon and Hackley have served the West Michigan/Lakeshore region as medical providers for over 118 years.

This CHNA report is produced jointly for Trinity Health Muskegon and Trinity Health Hackley. The Trinity Health Muskegon campus includes a 331-bed acute care hospital, an Emergency Department, lab, imaging, a pharmacy, and specialty care including cardiothoracic surgery, neurosurgery, orthopedics, weight management, and spinal services. The campus sees more than 19,000 hospital discharges and more than 70,000 Emergency and Urgent Care visits per year.

The Trinity Health Hackley Campus houses the Trinity Health Behavioral Health center, a 22-bed inpatient psychiatric unit. The campus also has a professional building that houses a pharmacy and several specialty care services including obstetrics, gynecology, and infectious disease. Hackley Community Care, a non-Trinity Health Federally Qualified Health Center (FQHC) is located on the campus, as is the Health Project, the Trinity Health department that coordinates and oversees Community Health and Well-Being programming for the entire Trinity Health Lakeshore region.

Trinity Health Muskegon is the largest employer in Muskegon County, employing more than 3,500 individuals, including 375 physicians.

Trinity Health's affiliate physician organization, the Trinity Health Medical Group, is a primary care and specialty physician network employing more than five hundred providers across West Michigan.

Description of Community Served and Map of Service Area

Trinity Health Muskegon and Trinity Health Hackley serve a multicounty area with a primary service area consisting of Muskegon, Oceana, and Ottawa Counties with 80% of hospital patients residing in those three counties. The secondary market includes portions of Newaygo, Mason, and Allegan Counties. Key demographics of Muskegon County are contained in the full Muskegon County CHNA narrative that follows this introduction.



How Population Was Identified

Trinity Health Muskegon and Trinity Health Hackley serve residents of multiple counties, but the majority of patients reside in Muskegon County. The Trinity Health Muskegon acute care hospital, psychiatric unit, emergency department, lab, and radiology services are all located in Muskegon County, as is the entirety of the Hackley campus.

The Health Project, on behalf of both Trinity Health Muskegon and Trinity Health Hackley, is the primary funder and convening body for the creation of this Community Health Needs Assessment. This CHNA provides critical information about the health needs facing the patients and the members of the community served by both hospitals.

Summary--2024 Muskegon County Community Health Needs Assessment

In previous CHNA cycles, the Health Project, on behalf of Trinity Health Muskegon and Trinity Health Hackley, led efforts to conduct and publish CHNAs that covered both Muskegon and Oceana Counties. In 2023, an executive committee was established, and additional partners were recruited to participate in the CHNA process. The Health Project secured KWB Strategies to facilitate the CHNA meetings, oversee data collection/analysis, facilitate community level prioritization, and publish a final report that was easy to use and accessible to the community.

Members of the executive committee decided to conduct and publish separate CHNAs for Muskegon and Oceana Counties, although the committee would have representatives from both counties to share like goals, objectives and strategies that may lead to additional partnerships. In addition to an Executive Committee that met monthly during 2023 and 2024, an expanded CHNA Partner Committee of fourteen members was established to meet at least four times. The partner committee was charged with reviewing the data collection strategy, suggesting additional data elements, distributing a community survey, reviewing the collected data, assisting in prioritization of needs, and approving the final county-wide CHNA.

Methodology of Assessment and Prioritization

Utilizing the County Health Ranking Model framework in 2021 and continuing into 2024's CHNA, the committee recognized that health outcomes examine the current health of the community while health factors represent the things that can be modified within community to improve the length and quality of life for residents. Ranking and weight during prioritization utilized the general categories of health factors including health behaviors (30%), clinical care (20%), economic factors (40%) and physical environment (10%).

The CHNA committee also wanted to ensure that health inequities and disparities were closely examined during the data gathering process. Included in the document is a table that provides an overview of the populations that were identified who may be a greater risk of experiencing disparities in healthy behaviors and social and economic health factors.

Data collection took place in November and December 2023 with a draft profile developed in January 2024 with input to inform prioritization collected in February through three online surveys. Prioritization scoring included partner input who looked at magnitude and disparities; informed stakeholders who examined the ability to impact and lack of current effort which were added to resident priority scores.

On April 11th, 2024th the Coordinated CHNA Committee voted to approve the final CHNA with the 2024 Priorities for further consideration and implementation planning.

2024 CHNA Prioritized Areas

1. **Housing**
2. **Childcare**
3. **Homelessness**
4. **Access to healthy & affordable Food**
5. **Alcohol and other Drug Misuse**
6. **Transportation**
7. **Income/Poverty**
8. **Crimes and Violence**
9. **Early Childhood Education**
10. **Provider Adequacy for Behavioral Health**

2021 CHNA & Trinity Health Muskegon and Hackley Response

Trinity Health Muskegon and Hackley solicited and did not receive any written comments from the 2021 CHNA.

In August of 2021, the CHNA Advisory Committee began working on implementation planning from the three top rankings selected by the community through a prioritization process and affirmed by the Trinity Health Muskegon Board of Directors (on behalf of both Trinity Health Muskegon and Trinity Health Hackley). The top three prioritized areas for Muskegon County are included below.

Trinity Health Implementation Plan (2022-2024)

The fourteen member CHNA Advisory committee met to ensure the implementation plan included a process by which Trinity Health would engage the community in addition to recognizing current level of efforts within the community and emerging initiatives. Members also discussed that while planning was going on, the group would also make recommendations for action items and recognize other community organizations that currently supported the three priority areas. The committee also recognized that some additional planning needed to be done to further understand the root causes of an issue selected. The implementation plan was adopted by Trinity Health's Board of Directors in November 2021 with the following goals, strategies, and measures.

Trinity Health Muskegon and Hackley

2021 CHNA Priorities

1. **Education**
2. **Employment & Income**
3. **Community Safety – Racism & Discrimination**
4. **Healthy Behaviors (Tobacco, Nutrition, Exercise, Alcohol and Drug Use, Sexual Behavior)**

2021 Health Improvement Plan Goals and Strategies

1. **Education Goal: Increase educational attainment.**
2. **Employment & Income Goal: Increase access to Childcare in Muskegon and Oceana Counties.**
3. **Racism & Discrimination Goal: Decrease those reporting racism and discrimination in Muskegon County.**
4. **Healthy Behavior Goals:**
 - a. **Decrease Tobacco Use within Muskegon County**
 - b. **Increase Nutrition & Exercise in Muskegon County.**
 - c. **Decrease the consequences of Alcohol and Drug Use within Muskegon County**

Large-Scale Initiatives That Support All Goals

As Trinity Health expanded its efforts to screen patients for **Social Influencers of Health (SIOH)**, it was determined that this information would provide real time data on patient needs specific to priority populations. Trinity Health West Michigan rapidly improved rates of SIOH screening from 17% in 2021 to 76% in 2024. This patient data consistently shows that Muskegon residents top need is education and food access. Trinity

Health has a **Community Resource Directory** embedded in its electronic medical record, allowing care team staff to add community resource information directly to a patient's After Visit Summary.

The Health Project **Community Health Worker (CHW)** program provides outreach, enrollment, and care coordination to thousands of Muskegon area patients annually. Referred by physicians, community organizations and others, the fifteen employed CHWs work with patients to break down barriers to care for these experiencing poverty and vulnerability in our community.

The Health Project also maintains multiple **community coalitions** with over 115 active members who utilize a data driven decision making process that helps plan and implement initiatives annually. A team of Community Health Improvement staff, based at the Health Project, facilitate these coalitions and help implement annual action plans. With an annual cash spend of \$25,000 in the community, these collaboratives have leveraged additional local, state, and federal funds to improve community health.

The following implementation of the Community Health Improvement Plan (CHIP) was based on support from these internal programs, providing funding to local nonprofit agencies through their community grants, and opportunities that emerged over the past three years. Since 2022, The Health Project, on behalf of both Trinity Health Muskegon and Trinity Health Hackley, has provided \$735,000 in funding to multiple non-profit organizations to implement programs and services connected to the top 2021 CHNA priorities.


Education Goal: Increase educational attainment.

- Increase access to early education in Muskegon County by 5% by 2025
- Increase access to college enrollment for Muskegon County residents by 5% by 2025.
- Increase participation in career & skills training for adults in Muskegon County Residents by 5% by 2025

In fiscal year 2022, the Trinity Health Muskegon Board (on behalf of Trinity Health Muskegon and Hackley) approved **gifting eleven acres of land on the Trinity Health Hackley campus to Muskegon Public Schools (MPS)**. This \$627,068 in-kind donation included the demolition of an empty hospital building, environmental cleanup, and assistance in ensuring all utility services including electrical, gas, water and sewer were ready for new construction. MPS will open the Charles Hackley Middle School in September of 2024 which includes a career readiness center, state of the art connectivity and computer labs, new outdoor track, and gymnasiums.

Through this new partnership with Muskegon Public Schools Trinity Health also provided **\$25,000 in FY 23 to the Pre-K for All** program that provided early access to education for youth ages three to five in MPS and Muskegon Heights Public Schools.

Collaboration with the Muskegon Area Intermediate School District's Career Tech Center and local school districts yielded a **programs to area students interested in health care and STEM** (Science, Technology, Engineering and Math) careers. The first event attended by **Growing Our Own** was a career fair on February 9th in 2024 at the Career Tech Center. Twenty medical professionals attended, with personnel from several



practice areas, including OB/GYN, nursing, occupational therapy, pharmacy, physical therapy, and imaging. More than eight hundred students from Muskegon County schools attended.

The Health Project, on behalf of both Trinity Health Muskegon and Trinity Health Hackley, offers **cash grants** through the Sister Simone Courtade and Community Benefit Board Initiative (CBBI) on an annual basis. These grants fund programs that directly tie to the CHNA needs, including education. Over the past three years, eight education specific programs were supported in Muskegon County:

Read Muskegon –Over \$65,000 for three distinct programs offered by Read Muskegon, the area’s literacy organization. ***Health Education and Literacy (HEAL) Program*** in 2022, ***the Literacy Collaborative & Family Empowerment*** in 2023, ***and Engaging Learners as Movement Leaders*** in 2024.

Muskegon Area Intermediate School District (MAISD) Community Based/ Literacy Center Play & Learn Expansion – In FY 23, \$10,000 in funding was provided for this community-based outreach model that delivers early education opportunities to children from birth to age 5, equips parents and caregivers to be their first and best teachers, fosters early childhood development, connects families to social support and community resources, and promotes kindergarten readiness; these funds allow an expansion of new Great Start Play and Learn partners serving low-income, racially marginalized communities.

Lake Hawks in Flight Inc Employing, and Mentoring our Youth – In 2024, the Lake Hawks in Flight received \$10,000 to provide tutoring and mentorship programming at its community center in Muskegon Heights, Michigan, a safe haven for youth from a variety of backgrounds.

Greater Muskegon Economic Development’s (GMED), Workforce Education & Development for Youth in Muskegon County - In 2024, the GMED received \$8,000 with the purpose of exposing youth to livable-wage job opportunities, developing soft skills, and encouraging them to obtain the education/training needed to fill these jobs after high school.

Boys & Girls Club of Muskegon’s Making Minutes Count and Future Ready Workforce Programs – In 2022 The Boys and Girls Club received \$25,000 for the ***Making Minutes Count*** and in 2024 they received \$15,000 for the ***Future Ready Workforce Program***, which aims to bridge employment gaps by developing social-emotional skills, academic success, leadership, and healthy living, while also providing job-specific hard skills to prepare youth for employment. To ensure success and long-term impact, the program emphasizes collaboration between education, business, nonprofit, and government sectors.

Employment & Income Goal: Increase access to childcare in Muskegon County

To impact employment, The Health Project, on behalf of both Trinity Health Muskegon and Trinity Health Hackley, chose to provide funding to two organizations that increased capacity for area childcare providers and to add childcare slots in Muskegon County.

United Way of the Lakeshore to the Childcare Action Team--An annual grant of \$25,000 per year for a total of \$75,000 to the United Way of the Lakeshore to the Childcare Action Team to support and grow the number of home childcare providers participating in the Childcare Connections, a support/networking/training group that meets monthly at the United Way. The team hired two childcare navigators to assist families with connecting to quality childcare.


YMCA – Y Learning Centers - Grants of \$25,000 per year in FY 2022 and FY 2023 to expand capacity for growing the Y Learning Center and training program for additional childcare providers and support scholarships that subsidize the cost of childcare for low-income families in Muskegon County. The YMCA added seventy-two slots of day care in Muskegon County in FY 22.

Racism & Discrimination Goal: Decrease those reporting racism and discrimination in Muskegon County

- Increase in knowledge about unconscious bias, discrimination, and racial understanding to an additional three hundred community members by 2025.
- Decrease # of those reporting discrimination in Muskegon County on the CHNA survey by 15%.
- Decrease # of Muskegon County residents indicating they were not hired or promoted because of race by 5% by 2025.

Through its longtime collaborative, the **Muskegon Health Disparities Coalition**, the Health Project hosted two cohorts of **Coming Together for Racial Understanding (CTRU)** in FY 2022 and FY 2023 with over thirty-two participants. Over a six-week period, CTRU offers group talking sessions where participants share stories and perspectives about race, neighborhoods, experiences in community and examine data for Muskegon. Participants are also asked to produce action items to address the greatest disparities in the community.

Access Health, Inc, How U Birth HUB- Access to Doulas for Birthing Persons – The Health Project, on behalf of Trinity Health Muskegon and Trinity Health Hackley, in partnership with affiliate organizations, has provided \$72,000 during 2023 and 2024 for the “How U Birth” collaborative. This collaborative is a group of community professionals seeking to improve birthing outcomes for Muskegon County persons of color through orienting community to doula care, doula certification cohort, and training medical providers about integrating doulas into perinatal care. Doula support is a safe and cost-effective intervention to improve birth outcomes. In 2022, the program received \$10,000 in funding for a part time coordinator and to fund eleven women to attend doula training. This grant was renewed to provide \$25,000 in FY 2024



for ongoing support and Trinity Health’s Women for Health awarded the program \$37,000 in January of 2024. The program has established a Doula Certification Program and has added twelve certified doulas.

HealthWest: Suicide Prevention Coalition – In 2024, HealthWest’s Suicide Prevention Coalition received \$8,000 to support the Family Academy for Mental Health. The Family Academy is conducted over several months and kicked off with a "townhall" called "Raising Black Voices About Mental Health and Suicide." The goal is to decrease stigma, increase wellness, and save lives within the minority community by 2026.

Healthy Behavior Goal 1: Decrease Tobacco Use within Muskegon County

KnowSmoke, the Coalition for a Drug Free Muskegon County’s tobacco reduction collaborative, completed a youth vaping survey for 5th through 12th grade students across Muskegon County in the spring of 2023. More than 1,000 students participated. KnowSmoke provides online “alternative to suspension” cessation programming through VapeEducate to districts across the county with forty-five licenses being utilized since 2022. The coalition also created safe disposal kits for schools to ensure confiscated materials are disposed of properly. According to the Michigan Profile for Healthy Youth (MiPHY) student survey of 11th Grade Youth, Smoking has decreased from 2.4% in the baseline year 2019 to 1% in 2022 and vaping or the use of electronic vapor devices has decreased from 24.1% to 15.6% in 2022.


Healthy Behavior Goal 2: Increase Nutrition & Exercise in Muskegon County

- Increase referrals to Fresh Food Programs in Muskegon County by 10% by 2025
- Decrease # of Muskegon County residents reporting that not having enough money makes it hard to eat healthy by 10% by 2025.

Through its Health Project Hub, Trinity Health offers community health workers who enroll and refer community members into food and nutrition programs such as Meals on Wheels, area food pantries and trucks, and enrollment in SNAP benefits.

McLaughlin Grows Urban Farm - Trinity Health supported Community Encompass’s McLaughlin Grows Urban Farm with in-kind donations of land, water, electricity and maintenance in fiscal years 2022 and 2023. The farm provides access to fresh produce for community members who face barriers to accessing fresh fruits and vegetables. In September 2023, Community Encompass notified community members that operations were ceasing. Trinity Health offered immediate assistance to take on farm operations and provide ongoing support.

Diabetes Prevention Program (DPP) - Trinity Health hospitals along the Lakeshore partner with the Muskegon YMCA to offer the Diabetes Prevention Program (DPP) to patients identified by their medical provider as being at risk of developing diabetes. DPP is an evidence-based program endorsed by the Centers for Disease Control and Prevention (CDC). In addition to receiving funding from Trinity Health Michigan with a



grant from the CDC, The Health Project, on behalf of Trinity Health Muskegon and Trinity Health Hackley, supports this program with supplemental community benefit funds. With over 1,300 participants and 11,053 pounds lost, this program is helping to delay the onset of diabetes for our patients and reducing our cost of care. The YMCA's DPP has prevented or delayed the onset of type 2 diabetes by 58% and up to 71% for those aged 60+ in Muskegon.

Muskegon area Athletic Trainers - Trinity Health offers support to Muskegon County School Districts through athletic trainers working with youth and youth athletes in developing healthy habits. In over sixteen area schools in Muskegon, Oceana and Mason Counties, these athletic trainers offer support to youth by assessing their health needs, enhancing conditioning and injury prevention, and assessing youth for behavioral supports and referrals to services.

Grant Funding: Trinity Health granted funds to two organizations during fiscal years 2022, 2023 and 2024 to enhance nutritional needs, educate community about healthy eating and exercise and to connect families to available food and nutrition programs.

Pioneer Resources - Healthy Meals for Muskegon Senior Residents received \$10,000 in funding allowing Senior Citizen participants to learn about healthy meals, sourcing ingredients locally, cooking instruction, and preparation for future meals. Key outcomes of this program are demonstrated understanding of new cooking skills and education of meals to prepare and ways to get ingredients.

YMCA - Building a Healthier Families: Healthy Weight and Your Child (HWYC) – For the past two years, Trinity Health has provided \$10,000 in funding for the HWYC is a program designed specifically for children ages 7-13 that have a body mass index at the 95th percentile or higher. The program consists of twenty-five sessions that combine the following elements: Family time for discussion and goal setting, Child-only moderate to vigorous activity using Coordinated Approach to Child Health (CATCH), Parent-only peer group discussion and Family time for moderate to vigorous physical activity. 34 families attended the Healthy Weight and Your Child since 2022.

Healthy Behavior Goal 3: Decrease the consequences of Alcohol and Drug Use within Muskegon County

Trinity Health supports the **Alliance for Marijuana Prevention** and the Power of a Choice program – Since 2022 this program has been in nine school districts with fourteen presentations to over 4,800 high school youth.

Trinity Health supported the **Ride With Pride Program**, which supports Positive Behavioral Intervention and Support (PBIS) within schools. Trinity Health has provided \$10,000 per year (\$1,000 per school) to pay for supplies, signage, and printing costs associated with implementation.

For over 10 years, Trinity Health has supported the **Straight Talk About Tough Stuff (STATS)** peer education program. This youth leadership and peer education program provides educational messages to middle and elementary youth in Muskegon County. The STATS team annually travels to 6 to 10 school districts each year with presentations to approximately 1,200 youth annually.

Trinity Health has provided long-time funding to the **Coalition for a Drug Free Muskegon County (DFMC)**, which serves as an organizing body for over 65 community organizations (e.g. schools, healthcare, law enforcement, business, government, leaders, youth, etc.). Working through multiple subcommittees, the DFMC coalition has a larger impact than any one organization would be able to achieve independently. Three community-based coalitions were identified to help with prevention activities:

Muskegon Area Medication Disposal Program (MAMDP): MAMDP is a community takeback and education initiative facilitated by Health Project staff. MAMDP has permanent locations at all local police stations and multiple pharmacies. Additionally, MAMDP hosts two annual community takeback events at fire stations. This project has collected over 52,000 pounds of material.

The DFMC Coalition also supports the work of the **Muskegon Opioid Task Force**, facilitated by Muskegon County Public Health. Trinity Health colleagues participate on this task force, reporting aggregate opiate overdose information and emerging drug trends seen in the Emergency Room, as well as updates on patient education, prescribing policies, and new efforts in pain management. The Opioid Task Force holds an annual Muskegon Opioid Summit, featuring activities on harm reduction and medication assisted therapies. Despite efforts to reduce opiate addiction and deaths, Muskegon continues to see increases in annual opiate deaths (94 in 2023, up from 50 in 2020). This almost 100% increase is attributed to the increased use of fentanyl in illicit opiate drugs. The work is ongoing.

Trinity Health provides funding for the **Muskegon Alcohol Liability Initiative (Muskegon ALI)**, a multi-jurisdictional law enforcement and public health collaborative that provides education, outreach and events to area schools and colleges to reduce alcohol consumption. Muskegon ALI also offers education to area alcohol retailers and checks them to ensure they are not selling alcohol to minors. Muskegon has had a 92-94% retailer compliance rate during the past three years.

Trinity Health Muskegon, Trinity Health Hackley, and the Muskegon County CHNA

The Health Project, on behalf of Trinity Health Muskegon and Trinity Health Hackley, is the funder of the Muskegon County CHNA. Health Project staff led the CHNA process and convened multiple community organizations and programs to participate in the work as collaborative partners. We are pleased to present this document to the community, offering information about the activities of Trinity Health Muskegon and Trinity Health Hackley, and as well as the full Community Health Needs Assessment for Muskegon County on the following pages.

Invitation to Submit Written Comments

Public feedback on this Community Health Needs Assessment document is welcome. If you would like to share feedback, please contact:

Muskegon Health Project

Attn: Director

1675 Leahy Street, Suite 210B

Muskegon, MI 49442

Trinity Health
Coordinated Community Health Needs Assessment
Muskegon County, Michigan



April 2024

This page
intentionally left
blank

Table of Contents

<u>ACKNOWLEDGEMENTS</u>	2.
<u>PROCESS & METHODOLOGY</u>	3.
<u>PRIORITIZED NEEDS</u>	4.
<u>COMMUNITY PROFILE</u>	5.
<u>DISPARITIES BY HEALTH FACTOR</u>	8.

HEALTH OUTCOMES	10.
------------------------------	-----

HEALTH BEHAVIORS

<u>DIET AND EXERCISE</u>	12.
Physical Activity	
Food Insecurity	
Access to Healthy Food	
<u>SUBSTANCE MISUSE</u>	14.
Tobacco Use	
Alcohol and Other Drug Misuse	
Accidental Overdoses	
<u>SEXUAL ACTIVITY</u>	17.
Sexually Transmitted Infections	
Access to Contraceptive Services	
Births to Teens	

CLINICAL CARE

<u>ACCESS TO CARE</u>	19.
Health Insurance	
Provider Adequacy	
<u>QUALITY OF CARE</u>	21.
Preventative Care	
Pregnancy and Birth	

SOCIAL AND ECONOMIC FACTORS

<u>EDUCATION</u>	23.
Educational Attainment	
Early Childhood Education	
<u>ECONOMICS</u>	26.
Income/Poverty	
Employment	
<u>FAMILY AND SOCIAL SUPPORT</u>	28.
Social Connectedness	
Child Care	
<u>COMMUNITY SAFETY</u>	31.
Injuries	
Suicide	
Crimes and Violence	
Youth Safety	

PHYSICAL ENVIRONMENT

<u>AIR & WATER QUALITY</u>	35.
<u>HOMELESSNESS AND HOUSING</u>	36.
<u>TRANSIT</u>	37.
<u>INTERNET COVERAGE</u>	38.
Infrastructure	
Affordability	

ATTACHMENTS:

A: <u>Summary of Scoring Results</u>	40.
B: <u>Data Sources</u>	42.
C: <u>Disparities by Health Factor References</u>	47.
D: <u>Partner Input</u>	51.

Clicking on underlined text throughout this report will direct you to the relevant part of this document or an external website.



Throughout the report this icon identifies data for which the county rate is substantially worse than statewide.

Acknowledgements

This coordinated community health needs assessment was an initiative of the following organizations.

The **Executive Committee** was supported by the following organizations. Their vision and commitment were crucial for the initiative's success.



A big thank you to Trinity Health for providing the financial support for this project.



Special thanks to the CHIR for convening the collaborative.



A heartfelt thank you to United Way for generously providing the meeting space for this initiative.



Thank you to Access Health for providing Livability Lab Data to help inform this report.



Partner organizations were actively involved in the process, aided in collecting and assessing health data, and took part in prioritization process. Consequently, they have pledged to incorporate the identified priorities into their organizational plans in alignment with their mission.



In addition, the **Supportive Organizations** below confirmed their commitment to endorse the initiative, share relevant data and provided valuable insights to assist in setting priorities.



Process and Methodology

This community health needs assessment was developed as a community-driven, collaborative process. An executive committee was established to invite partner organizations to the table, oversee the process, and to determine how priorities would be determined. A full committee, comprised of partner organizations began meeting in October 2023. The full committee was chaired by Jeff Fortenbacher of Access Health and co-chaired by Dom Bunker from United Way of the Lakeshore. Trinity Health provided financial support and contracted with KWB Strategies to facilitate the collaborative process and compile data reports.

In October 2023, partner organizations signed a collaborative memorandum of understanding that pledged their involvement throughout the six-month process, including the review of data in their areas of expertise. Additionally, the group decided on the criteria for prioritization of health needs as visualized to the right.

In November & December of 2023, the collaborative reviewed archival, publicly available data sources to identify data indicators for inclusion and identified key stakeholders to assist for each area of focus.

In January 2024, KWB Strategies compiled data for selected indicators and developed draft data summaries. Data included more than 100 data indicators, referencing numerous publicly available data sources with additional local data provided by partner organizations. No new data was collected for this assessment. Data sources are noted throughout the report and compiled in [Attachment B](#).

In early February 2024, the collaborative reviewed the draft report to determine revisions.

Input to inform prioritization was collected via three online surveys for residents, key informed stakeholders, and partner organizations from February 9th-25th. Analysis of these survey results resulted in an aggregate score for each issue within each health factor. Results were then summarized to provide a list of issues ranked from highest to lowest scores by county to inform discussion. A summary of the scoring results is provided in [Attachment A](#).

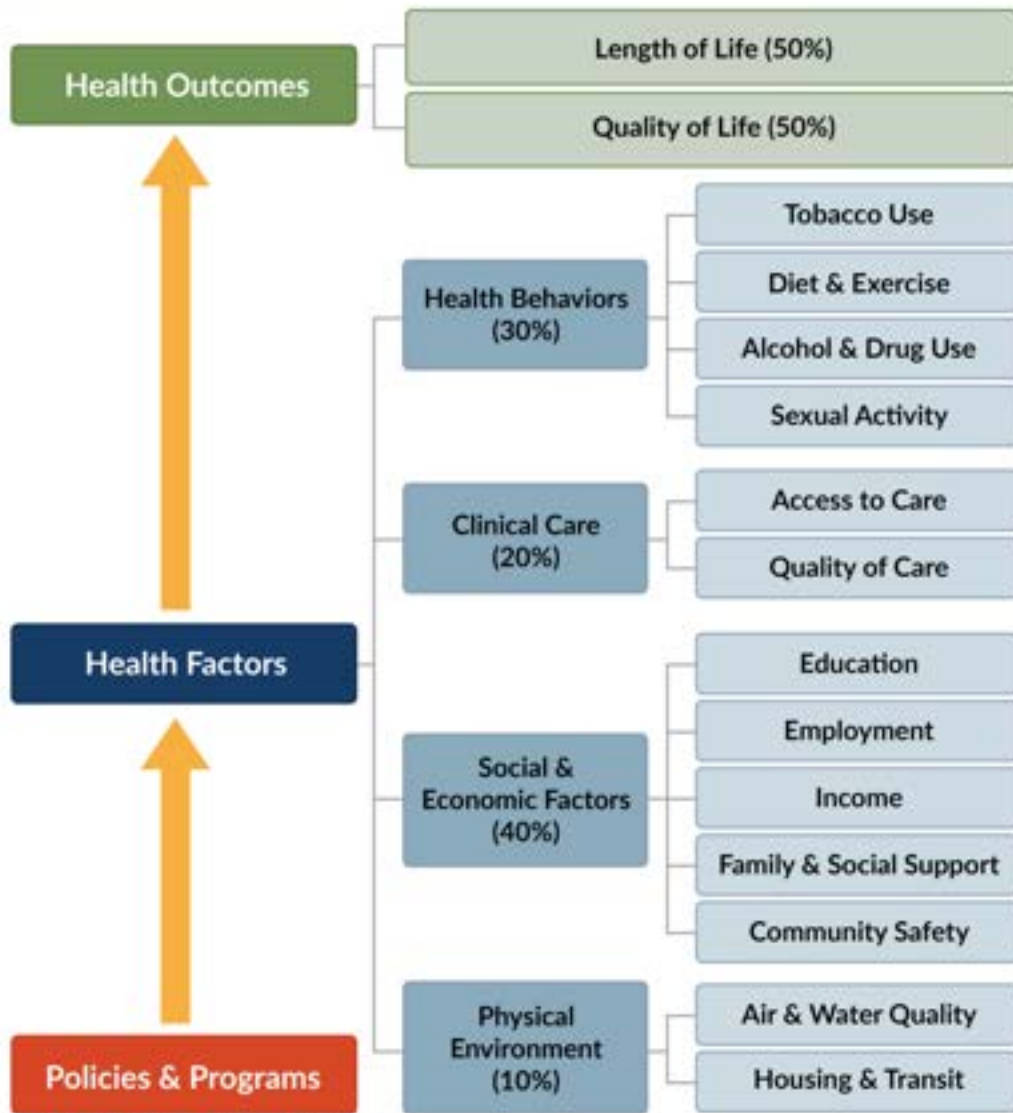
In March 2024, the collaborative reviewed results of the input and determined agreed upon health need priorities which are outlined on page 5. Partners then provided feedback about current efforts and opportunities for each priority area which are summarized in Attachment D.

Prioritization Criteria:



Survey Process:





County Health Rankings model © 2014 UWP18

For more info visit countyhealthrankings.org

This assessment of community health is based on the County Health Ranking Model framework. This model emphasizes that many factors influence how long and how well we live. Health outcomes examine the current health of the community while health factors represent the things can be modified to improve length and quality of life for residents.

Health factors include:

- *Health behaviors:* actions individuals take that affect their health such as eating well, being physically active, and avoiding harmful substances.
- *Clinical Care:* Explores access to affordable, quality, and timely health care can help prevent diseases and detect issues sooner, enabling individuals to live longer, healthier lives.
- *Social and economic factors:* Considers issues such as income, education, employment, community safety, and social supports. These affect our ability to make healthy choices, afford medical care and housing, manage stress, and more.
- *Physical environment:* Examines the impact of the air we breathe, water we drink, houses we live in, and transportation.



Prioritized Needs

The prioritization process resulted in the following priorities for Muskegon County:

For additional data and data sources, refer to the relevant section by clicking on the priority title.



1. Housing

25% of housing units are classified as substandard housing units and 23% of households in Muskegon County spend >30% of income on rent and utilities.



2. Child Care

All but one zip code in the county qualifies as a child care desert and on average, families with two children pay 43% their income toward child care.



3. Homelessness

576 individuals in Muskegon County were homeless at some point during 2022.



4. Access to healthy & affordable food

Among the 12% of Muskegon County residents who experienced food insecurity in 2021, it is estimated that 21% were ineligible for food assistance programs.



5. Alcohol and Other Drug Misuse

There were 1,076 publicly funded substance use disorder treatment admissions for Muskegon County Residents in FY23 and 72 accidental drug related overdose deaths in 2022.



6. Transportation

7% of occupied housing units have no vehicle available with many areas of the county exceeding 20%.



7. Income/Poverty

15% of residents are in poverty with 21% of children ages 0-17 in poverty.



8. Crimes and Violence

In 2022, Muskegon County had 687 violent crimes and 2,573 property crimes.



9. Early Childhood Education

31% of Muskegon County 3 and 4 year olds were enrolled in preschool, compared to 44.8% statewide in 2021.



10. Provider Adequacy for Behavioral Health

Per capita, compared to statewide, Muskegon county has less behavioral health providers.

Community Profile



Muskegon County, Michigan

Located on the western coast of Michigan, Muskegon County has 503.9 square miles of land area and is the 71st largest county in Michigan by total area.



Populations and People

Total Population

175,824

P1 2020 Decennial Census



Employment

Employment Rate

55.6%

DP03 2022 American Community Survey 1-Year Est.



Families and Living

Total Households

67,255

DP02 2022 American Community Survey 1-Year Est.



Business and Economy

Total Employer Establishments

3,088

CB2100CBP 2021 Economic Surveys Business Patterns



Housing

Total Housing Units

74,591

H1 2020 Decennial Census



Education

Bachelor's degree or higher

22.4%

S1501 2022 American Community Survey 1-Year Est.



Health

Without Health Care Coverage

4.1%

S2701 2022 American Community Survey 1-Year Est.



Language

Language Other than English Spoken At Home

10.2%

S1601 2022 American Community Survey 1-Year Est.

Muskegon County, Michigan

The following provides a snapshot of populations that were identified as experiencing disparities for many of the factors being assessed.



Seniors

65 Years and Older

18.2%

S0101 2022 American Community Survey 1-Year Est.



Veterans

Served in the Military

7.1%

S2101 2022 American Community Survey 1-Year Est.



Immigrant

1.9% Foreign Born Population

62.7% % of Foreign Born Population Not a U.S. Citizen

DP02 2022 American Community Survey 1-Year Est.



Disability

Disabled Population

15.7%

Types of Disabilities

7.8% Independent Living Difficulty

7.6% Cognitive Difficulty

7.5% Ambulatory Difficulty

3.6% Hearing Difficulty

2.6% Self-Care Difficulty

2.1% Vision Difficulty

S1810 2022 American Community Survey 1-Year Est.



Unhoused

576 Annual # Individuals experiencing homelessness

Muskegon County homeless Continuum of Care Network, 2022.

Retrieved via Livability Lab.



Black, Indigenous, and People of Color

0.9% American Indian and Alaska Native

0.7% Asian alone

14% Black or African American alone

6.4% Hispanic or Latino (of any race)

3.6% Two or More Races

P8 2020 Decennial Census



Single Parent Households

28.0% Female Householder, no spouse present, family

18.7% Male householder, no spouse present, family

DP02 2022 American Community Survey 1-Year Est.



Sexual Orientation

It is estimated that 4% of adults (18+) in Michigan are LGBTQ+ with a total of 373,000 over the age of 13.

Movement Advancement Project, [MI Equality Profile](#)

Of the 68,610 coupled households in Muskegon County, 411 were same-sex couples:

219 Same-Sex Married

192 Same-Sex Unmarried

PCT15 2020 Decennial Census

Disparities by Health Factor

The following table provides an overview of populations that were identified as populations who may be at greater risks of disparities. Items for which evidence of a disparity was found for the health factor are indicated with an “x”. Where analysis of local data is not available for the sub-population, evidence relied on state and national population studies, reports from organizations considered leaders in the field, and published research. It should be noted that for individuals who fall within more than one category, the disparities can be even greater.

Disclaimer: Lack of evidence (blank boxes) does not mean that there is not a disparity, it only means that evidence was not found.

These icons are used throughout the report to identify groups for which evidence of disparities was found: 

For more information, refer to [Attachment C|C](#) for a list of resources referenced as evidence.

Health Behaviors		Seniors 65+	Veterans	Immigrants	Persons with Disability	Unhoused Persons	BIPOC	Single Parent Households	LGBTQ+
Diet & Exercise	Physical Activity	x			x	x	x		x
	Food Insecurity	x	x	x	x	x	x	x	x
	Access to Healthy Food						x		
Substance Misuse	Tobacco Use		x		x	x	x		x
	Alcohol + Other Drug Use	x	x		x	x	x		x
	Overdose Deaths	x	x		x	x	x		
Social & Economic		Seniors 65+	Veterans	Immigrants	Persons with Disability	Unhoused Persons	BIPOC	Single Parent Households	LGBTQ+
Economic	Employment	x			x	x	x		x
	Poverty	x		x	x	x	x	x	x
Education	Early Childhood Education			x	x	x	x	x	x
	Academic Success/ Post Secondary Education				x	x (homeless students)	x		
Family & Social	Social Connectedness	x	x	x	x	x		x	x
	Childcare			x	x	x	x	x	x
Community Safety	Injuries	x					x		
	Crimes and Violence	x		x	x	x	x		x
	Suicide	x	x		x	x	x		x
	Youth Safety		x	x			x		

Clinical Care		Seniors 65+	Veterans	Immigrants	Persons with Disability	Unhoused Persons	BIPOC	Single Parent Households	LGBTQ+
Clinical	Access to Care			x	x	X	X (Hispanic)	X	X
	Quality of Care						x		x

Physical Environment		Seniors 65+	Veterans	Immigrants	Persons with Disability	Unhoused Persons	BIPOC	Single Parent Households	LGBTQ+
Physical Environment	Homelessness/Housing	x		x (crowding*)	x	-	x	x	x
	Transit	x	x		x	x	x		
	Internet Coverage	x		x	x	x	x	x	
	Air and Water Quality		x	x			x		

*Evidence was found to support disparities for immigrants related to overcrowding, which is one aspect of “substandard” housing. No evidence was found to support other aspects of substandard housing or the likelihood of homelessness.

Health Outcomes: Muskegon County

Health Outcomes reflect how long people live on average within a community, and how much health (physical and mental) people experience in a community while they are alive. Health outcomes are influenced by many factors, which are explored through the remainder of this report.

Life Expectancy:

76.2

In 2021, the average life expectancy for Muskegon County was 76.2 years, slightly lower than statewide at 77.

Life expectancy varies across the county, with a low of 70.8 and high of 84.6.

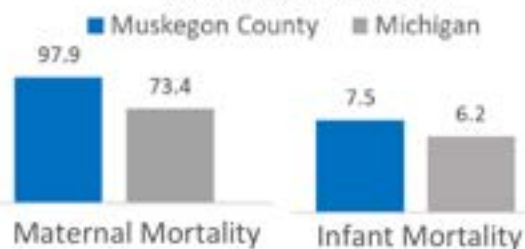
Municipality	Life Expectancy	Census Tract
City of Muskegon	70.8 years	5
City of Muskegon Heights	72.2 years	14.02
Holton Township	76.4 years	33
City of Norton Shores	83.1 years	26.02
Laketon Township	84.6 years	16

Source: County Health Rankings 2023, NCHS Nat. Vital Stat. System, [US Small-Area Life Expectancy Est. Project](#).

Birth Related Mortality:

Between 2019 and 2021 infant mortality in Muskegon County has increased, while statewide there has been an overall decrease.

Rate of Maternal and Infant Mortality (per 1,000 live births)



Source: Michigan Vital Statistics 2021

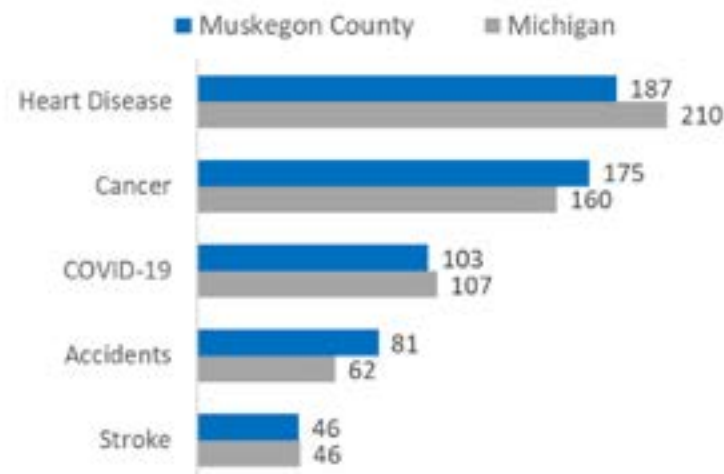
Infant Mortality, Trend (per 1,000 live births)



Rates for maternal and infant mortality exceed statewide rates.

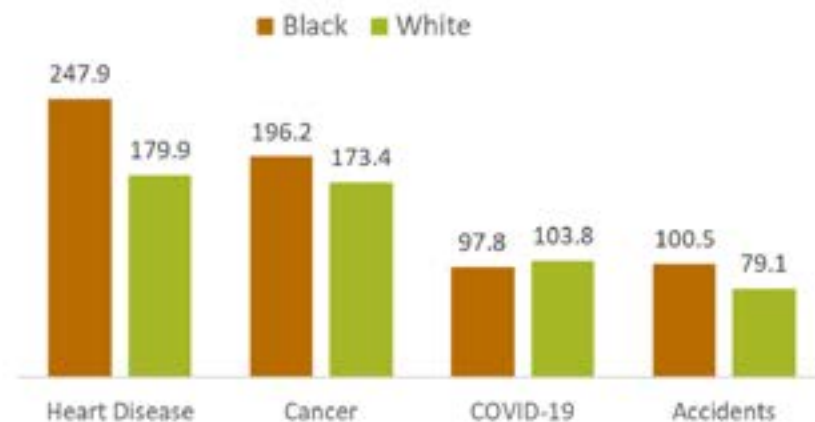
Leading Causes of Death:

Leading Causes of Death 2021 (Age Adjusted Rates per 100,000)



Black residents were more likely to die of heart disease, cancer, and from accidents than white residents in 2021.

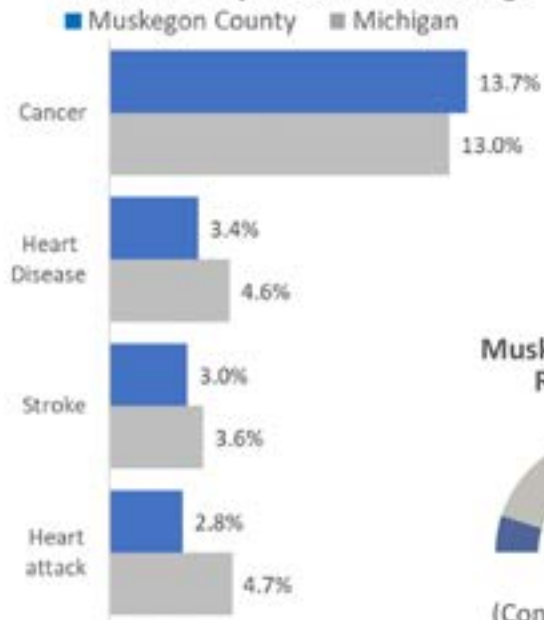
Leading Causes of Death Muskegon County Residents by Race, 2021 (Age Adjusted Rates per 100,000)



Source: Michigan Vital Statistics 2021

Chronic Disease:

Adults Age 18+, Who Have Ever Been Told by a Doctor They Have The Following:



Muskegon county residents were less likely to have experienced a heart attack and heart disease.

Prevalence for diabetes and high blood pressure were similar to statewide.

Muskegon County Adults, Aged 18+, Who Report Living With the Following:

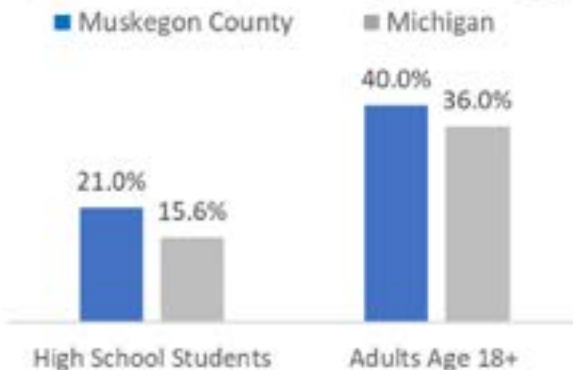


Source: BRFSS 2019-2021 & CDC Places

Obesity:*

Rates of obesity are higher than statewide for both teens and adults.

Percentage Classified as Obese (based on self-reported height and weight)



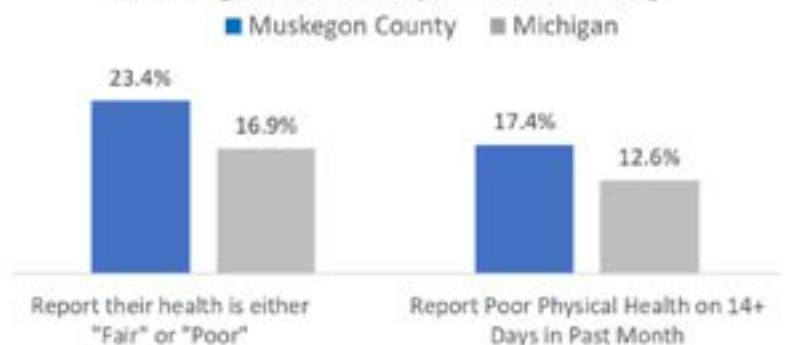
23.7% of 7th grade students are obese

* Obesity calculated as ≥95th percentile for body mass index (BMI).

Sources: BRFSS 2019-2021, MIPHY 2022

Poor Physical Health:

Adults Age 18+ Who Report the Following:



4.6

Average # poor physical health days reported per month

Residents of Muskegon County report higher rates of poor physical health than statewide.

Sources: BRFSS 2019-2021 & County Health Rankings

Mental Health:

Residents of Muskegon County reported higher rates of depressive disorders than statewide.

	Muskegon County	Michigan
% of adults ever told by a Dr. that they had a depressive disorder	28.6%	21.2%
% of adults reporting Poor Mental Health on 14+ Days in Past Month	12.6%	15.2%
Average number of mentally unhealthy days in past 30 days	5.4	5.2

Sources: BRFSS 2019-2021 & County Health Rankings

Health Behaviors: Diet and Exercise

The environments where we live, learn, work, and play affect our access to healthy food and opportunities for physical activity which, along with genetic factors and personal choices, shape our health and our risk of being overweight and obese.

Physical Activity: Icons identify populations disproportionately impacted



Almost 1-in-4 adults (23.1%) in Muskegon County reported no leisure-time physical activity, similar to statewide (23.9%).

Among adults statewide, individuals with lower household income, less education, and those with a disability were more likely to report no physical activity during their leisure time.

Michigan:



Household Income

<20,000	40.5%
\$35,000-\$49,000	26.6%
≥\$75,000	12.6%

Education

Less than High School	37.9%
High School graduate	28.4%
Some college	24.6%
College graduate	13.8%

Race and Ethnicity

Black (non-Hispanic)	31.8%
Hispanic	28.2%
White (non-Hispanic)	22.2%

Disability Status

No disabilities	16.8%
Adults with disabilities	39.9%

Source: [Michigan BRFSS Tables 2022](#) (state) and [Michigan BRFSS Tables 2019-2021](#) (county)



Among Muskegon County high school students, approximately half (51.7%) reported adequate physical activity (60+minutes on 5+days per week), similar to rates statewide (44.2%).

Rates in Muskegon County were highest amongst 9th grade students and lowest amongst Hispanic and Black students.

Grade Level

7th grade	49.9%
9th grade	53.7%
11th grade	49.1%

Race and Ethnicity

Black	49.5%
Hispanic/Latino	44.3%
White	54.5%

Sources: [BRFS 2019-2021](#) (state) & [MIPHY 2022](#) (county)

Place to Exercise:



The County Health Rankings reported that 88% of residents in the county had adequate access for physical activity which they define as living close to a park or recreation area. This rate is slightly higher than statewide (85%).

Source: County Health Rankings calculated from ArcGIS Business Analyst and Living Atlas of the World, 2023.

Rate of Recreation and Fitness Establishments, 2021 (per 100,000 population)

Muskegon County	5.12
Michigan	8.42
United States	9.47

In 2021, Muskegon County had 7 fitness and recreation facilities. This calculates as 3.98 facilities for every 100,000 residents in the county, substantially lower than statewide (8.32).

Fitness and recreation facilities are defined as establishments primarily engaged in operating fitness and recreational sports facilities featuring exercise and other active physical fitness conditioning or recreational sports activities, such as swimming, skating, or racquet sports.

Source: US Census Bureau, County Business Patterns, retrieved via [TrinityHealthDataHub.org](#), Feb 6, 2024.

Food Insecurity: 🇺🇸 🇲🇮 🏠 🍷 🍷 🏠 🏠 🏠

Icons identify populations disproportionately impacted

11.7% In 2021 more than 1-in-9 residents (11.7%) of Muskegon County experienced food insecurity in the past year, similar to statewide (11.7%). However, rates were much higher among Black residents with more than 1-in-4 experiencing food insecurity.

20,680

Number of Food Insecure Residents

\$12,521,000

Additional Money Required to Meet Food Needs in Muskegon County

21% Among people in Muskegon County who experienced food insecurity, the percentage who were ineligible for food assistance programs (above SNAP threshold of 200% poverty).

Sources: [Overall \(all ages\) Hunger & Poverty in the United States](#), | [Map the Meal Gap](#) ([feedingamerica.org](#))

Access to Healthy Food: 🏠

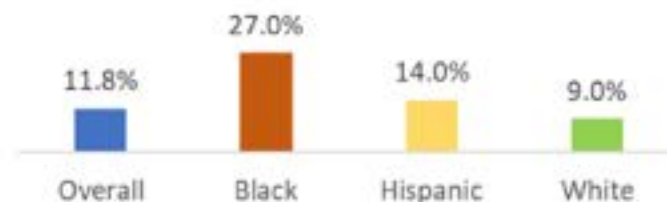
Icons identify populations disproportionately impacted

17.0%

1-in-6 residents of Muskegon County who lived in low-income areas, qualified as having low food access (defined as living more than 1 mile urban or 10 miles rural from the nearest supermarket, supercenter, or large grocery store.)

Sources: USDA Economic Research Service, [Food Atlas](#), 2015

Estimated Percentage of the Population That Experienced Food Insecurity During Past Year, Muskegon County 2021



Sources: [Map the Meal Gap](#) ([feedingamerica.org](#))

Food Insecurity Among Youth (0-17) in Past Year, 2021



Source: [Kids Count 2023](#)

10.9%

1-in-10 patients screened in 2023 reported that they sometimes eat less than they feel they should because there is not enough food. Food was the 2nd most reported need identified among patients screened.

Source: SIOH Screenings Consolidated 2023

Health Behaviors: Substance Misuse

When consumed in excess, alcohol is harmful to the health and well-being of those that drink as well as their families, friends, and communities. Prescription drug misuse and illicit drug use also have substantial health, economic, and social consequences. Tobacco use has been identified as a major cause of premature death and the cause of various cancers, cardiovascular disease, respiratory conditions, as well as low birthweight.

Tobacco Use: Icons identify populations disproportionately impacted



Almost 1-in-5 adults (18.6%) in Muskegon County reported current smoking, slightly higher than statewide. The age-adjusted rate for Muskegon County is 19.1%

Muskegon County	18.6%
Michigan	17.0%

Sources: [BRFSS 2019-2021](#)



Percentage of mothers who smoked during pregnancy:

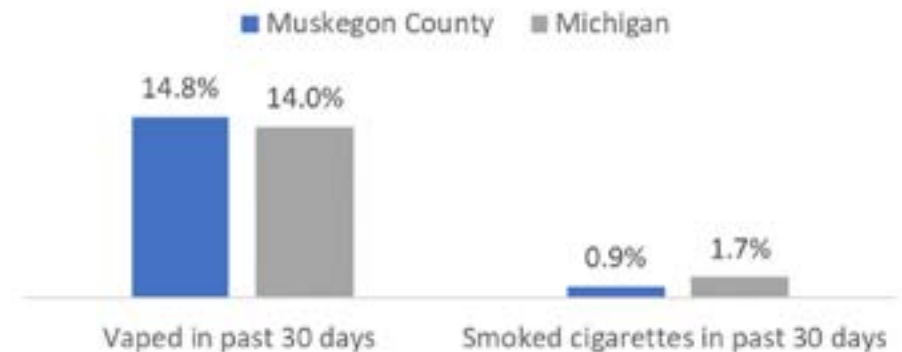
Muskegon County	18.4%
Michigan	10.6%

Smoking during pregnancy continues to be higher than statewide in Muskegon County. Smoking during pregnancy can lead to low birthweight, premature births, and poor outcomes for both mom and baby.

Sources: 2021 Geocoded Michigan Birth Certificate Registry., Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services.

Among high school (HS) students, vaping is reported much more than smoking with both similar to statewide levels.

Percentage of HS Students who Report the Following:



Rates of vaping vary by subpopulation with a much higher rate of female students reporting vaping. Black students report substantially lower rates of vaping than Hispanic or white students.

HS Students in Muskegon County who Report Recent Vaping:

Race/Ethnicity:

Black	10.7%
Hispanic or Latino	15.5%
White	15.4%

Sex:

Female	17.3%
Male	11.6%

Source: Michigan Profile for Healthy Youth, Muskegon County 2022

Alcohol & Other Drug Use:

Icons identify populations disproportionately impacted

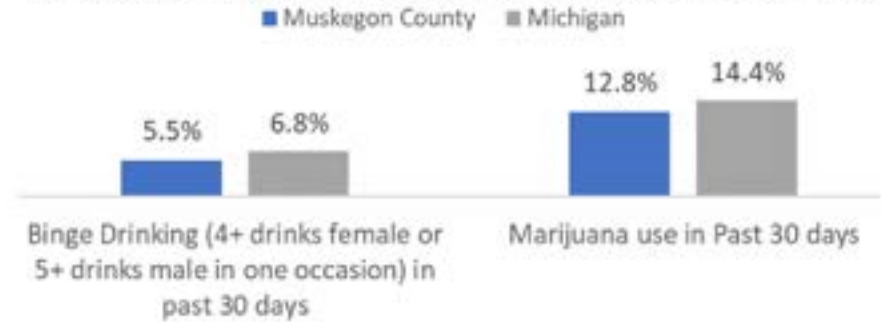


Almost 1-in-6 adults reported recent binge drinking or heavy drinking (age-adjusted). Binge drinking is defined as 5+ drinks on one occasion and heavy drinking is defined as males consuming an average of 2+ drinks /day or females drinking 1+ drinks per day.

Muskegon County	16.5%
Michigan	16.1%

Sources: BRFSS 2019-2021 estimates

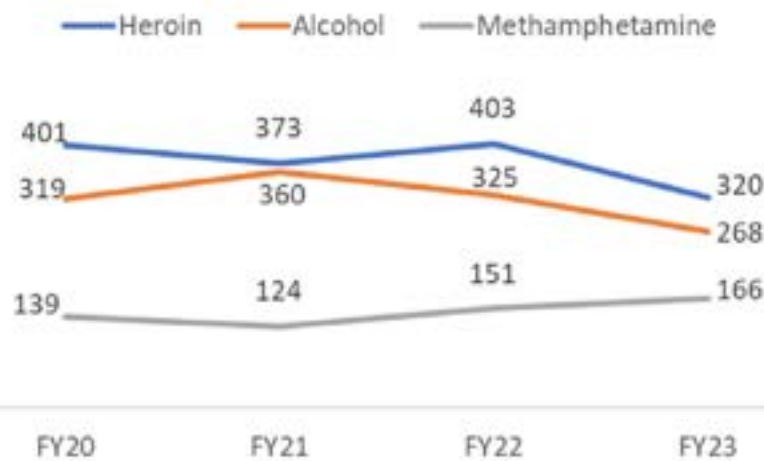
Percentage of High School Students Who Report the Following:



Source: Michigan Profile for Healthy Youth, Muskegon County 2022

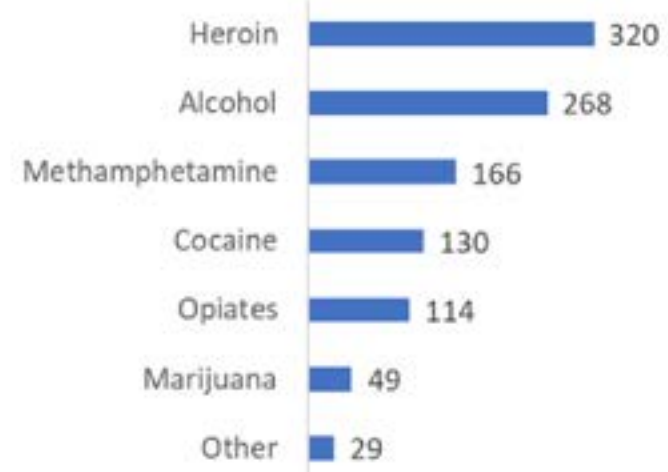
1,076 Number of publicly funded treatment admissions for substance use disorder for Muskegon County Residents between October 2022 & September 2023. The most frequently reported primary drug of choice at admission was heroin, followed closely by alcohol.

Substance Use Disorder Treatment Admission for Top 3 Substances, Trend FY20-23



Source: Lakeshore Regional Entity, Publicly Funded Treatment Admissions

Number of Substance Use Disorder Treatment Admission FY22/23 Publicly Funded in FY23 (10/22-09/23)



Source: Lakeshore Regional Entity

Substance Use Vulnerability:

The substance use vulnerability index (SUVI) measures vulnerability to individuals and community adverse substance use outcomes providing a composite score based on substance use burden, resources, and social vulnerability. For more information about this index [click here](#).

MI-SUVI Scorecard: Muskegon County

MI-SUVI Rank
27

Muskegon County is the 27th most vulnerable county (out of 83) in Michigan with regards to substance use, with a MI-SUVI score worse than the state average.

Burden Rank
10

Muskegon County ranks 10th in substance use burden in Michigan, with a composite burden score worse than the state average.

Resources Rank
18

Muskegon County ranks 18th in substance use resources in Michigan, with a composite resource score better than the state average.

Social Vuln. Rank
29

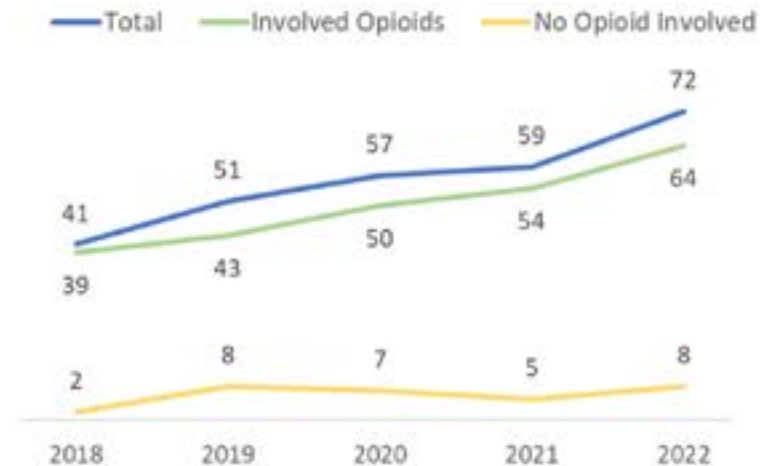
Muskegon County ranks 29th in social vulnerability in Michigan, with a composite social vulnerability score comparable to the state average.

Source: [Michigan Overdose Data to Action Dashboard](#)

Accidental Overdoses:

Icons identify populations disproportionately impacted

Number of Drug-Related Overdoses, Muskegon County



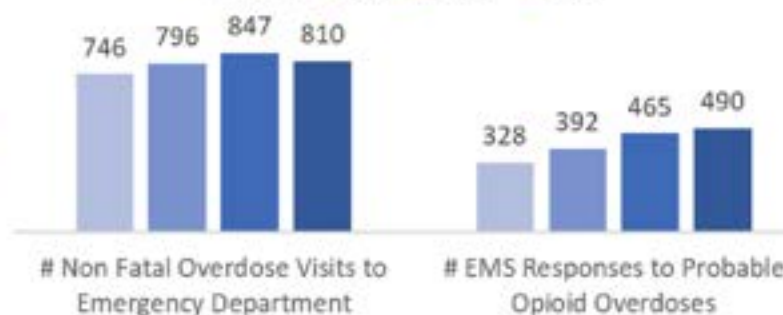
Of the 72 drug related overdose deaths for Muskegon County in 2022:

- 75% involved fentanyl
- 49% involved cocaine, 80% of which involved fentanyl
- 30% involved methamphetamine, 78% of which involved fentanyl
- 7% involved heroin

Source: Medical Examiner's Office, 2022 [Annual Report](#), WMU

Number of Drug-Related Overdose Responses, Muskegon County

■ 2019 ■ 2020 ■ 2021 ■ 2022



Source: [Michigan Overdose Data to Action Dashboard](#)

Health Behavior: Sexual Activity

Sexual activity and unsafe sex can lead to sexually transmitted infections (STIs) and unplanned pregnancies which can affect immediate and long-term health as well as economic and social well-being.

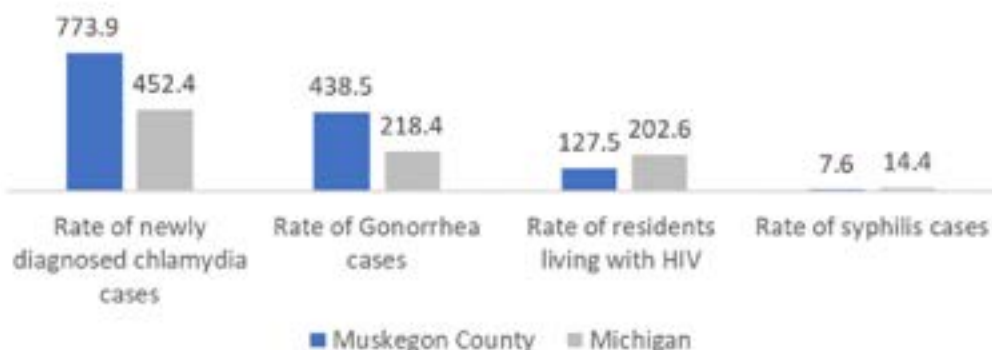


This icon identifies data for which the county rate is substantially worse than statewide.

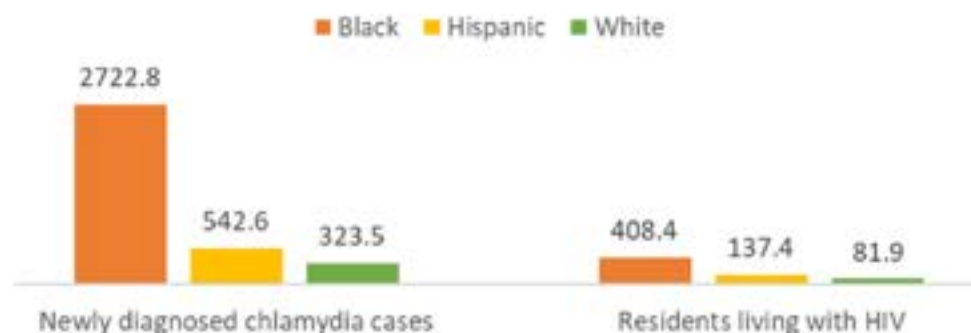
Sexually Transmitted Infections: 🇺🇸 🇧🇷 🇩🇪

Icons identify populations disproportionately impacted

Rates of Sexually Transmitted Infections Per 100,000 Residents, 2021

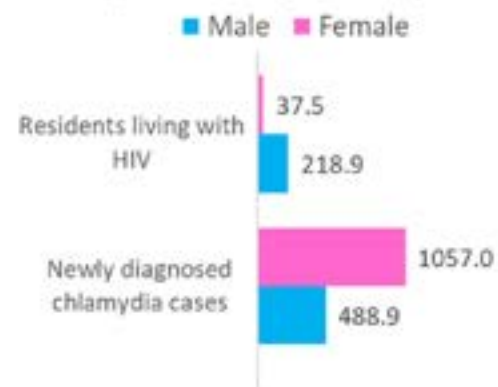


Rates of Sexually Transmitted Infections Per 100,000 Residents By Race Ethnicity, Muskegon County 2021



Black and Hispanic residents experience higher rates of STIs. Black residents account for only 14% of the population but 76% of Chlamydia cases and 65% of individuals living with HIV in 2021. Hispanic residents account for only 6.4% of the population but 15% of chlamydia cases and 22% of residents living with HIV.

Rates of Sexually Transmitted Infections Per 100,000 Residents by Sex, Muskegon County 2021



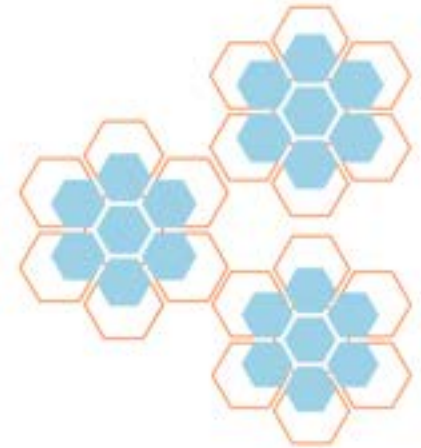
As of 2021, Muskegon County had the second highest Chlamydia and Gonorrhea rates in the state.

Chlamydia cases occur more frequently among females, while males are more likely to be living with HIV.

Access to Contraceptive Services:


12,910 Number of women aged 13-44 in need of publicly funded contraceptive services & supplies in Muskegon County.

Source: [Publicly Supported Family Planning Services in the United States: Likely Need, Availability and Impact, 2016](#)



Births to Teens: 🚩 🚩

Icons identify populations disproportionately impacted

 This icon identifies data for which the county rate is substantially worse than statewide.

121 In 2022 there were a total of 121 births to teens ages 15-19 for Muskegon County residents. The rate of teen births has been declining in Muskegon County but remains high at more than double the state rate in 2022.

Rate of Teen Births Among Females Aged 15-19
(per 1,000 births)



Births to Black and Hispanic teens were disproportionately high. Although only 14% of residents are Black, 41% of teen births were to Black mothers. Hispanic mothers accounted for 10% of teen births while only 6% of the county's residents are Hispanic.

Race of Mother	# of Teen Births	% of Teen Births
Black	54	41%
Hispanic	13	10%
White	57	44%
Other Race	7	5%

Sources: Michigan Department of Health and Human Services, Division for Vital Records and Health Statistics

Clinical Care: Access to Care

Access to affordable, quality health care is important to physical, social, and mental health. Health insurance helps individuals and families access care but affordable care in relatively close proximity to patients is also necessary.



Icons identify populations disproportionately impacted when accessing healthcare

Health Insurance:

Percentage of Population Without Health Insurance, Muskegon County (2022 1-year Estimates)

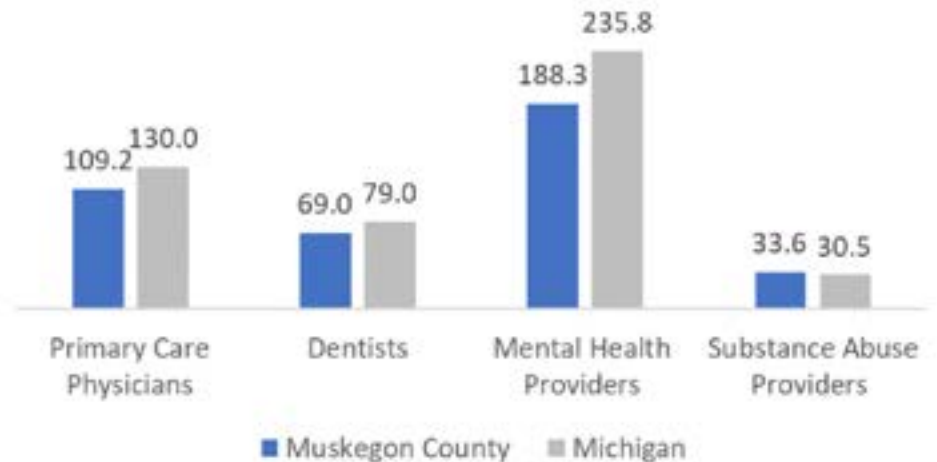
The chart below demonstrates the percentage of population within the county without health insurance by race and ethnicity, income, and disability status. Overall, **4.1%** of Muskegon County residents do not have health insurance, compared to 4.5% in Michigan.



Provider Adequacy:

Compared to statewide, for the population size, Muskegon County has less primary care physicians, dentists, and mental health providers.

Rate of Providers per 100,000 Population



Provider Type	# Providers
Primary Care Physicians	192
Dentists	121
Mental Health Providers	331
Substance Abuse Providers	58

Source: CMS, National Provider Identification, January 2024. Retrieved via Trinity Data Hub January 3, 2023

Routine Care:

3.8%

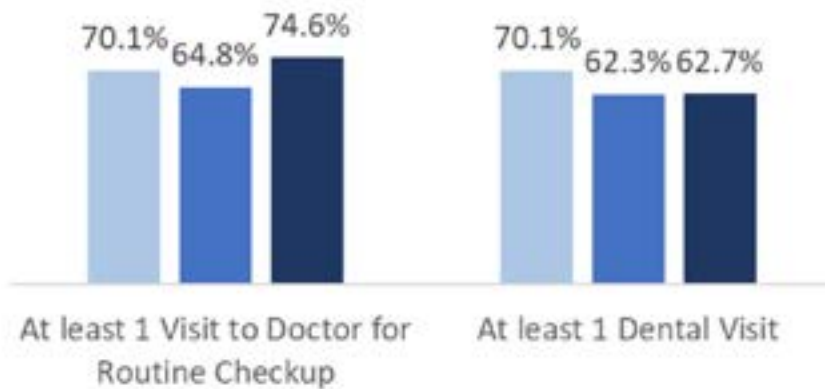
The % of patients screened who report there was a time in the past year when they needed to see a doctor but could not because it cost too much.

Source: SIOH Screenings Consolidated 2023

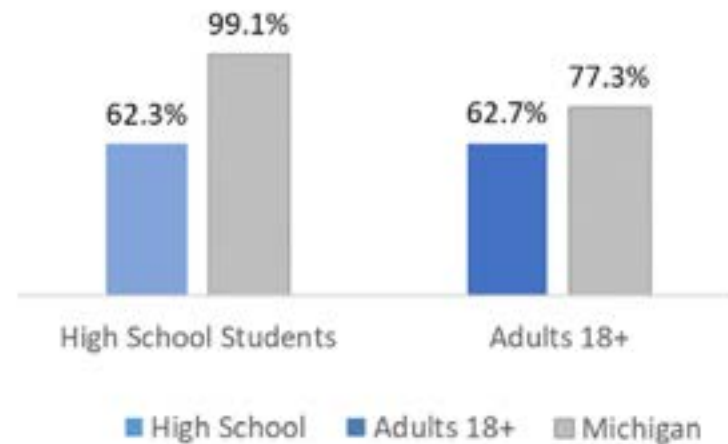


Percentage Reporting They Received the Following Medical Care in the Past Year by Age Group, Muskegon County

■ Middle School ■ High School ■ Adults 18+



Percentage Reporting They Received Dental Care in the Past Year



High school students in Muskegon County were substantially less likely to receive dental care than statewide, while adults were slightly less likely to have received dental care.

Data Sources: MIPHY 2022 Muskegon County, Centers for Medicare and Medicaid Services, CMS - National Plan and Provider Enumeration System (NPPES). December 2023. Retrieved via Trinity Data Hub on January 2, 2023, US Department of Health & Human Services, Health Resources and Services Administration, [HRSA - Area Health Resource File](#). Accessed via [County Health Rankings](#). 2021.

Clinical Care: Quality of Care

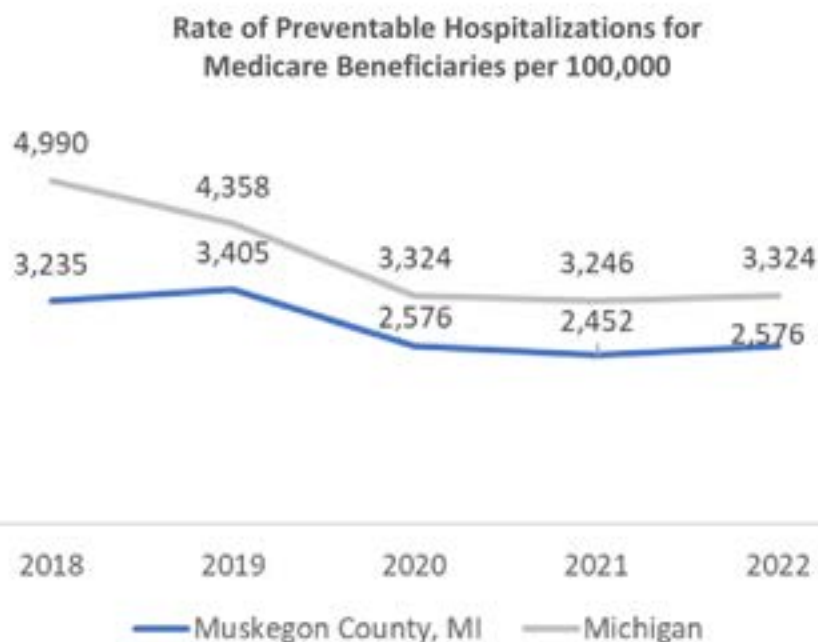
High quality health care is timely, safe, effective, and affordable—the right care for the right person at the right time. High quality care in inpatient and outpatient settings can help protect and improve health and reduce the likelihood of receiving unnecessary or inappropriate care.

  Icons identify populations that are disproportionately impacted

Preventative Care:

Preventable hospitalizations are those that could have been prevented by access to medications, doctors, and regular care.

Among senior Medicare Beneficiaries in Muskegon County, the rate of preventable hospitalizations has been decreasing since 2019 and remains lower than statewide.



Source: The Centers for Medicare & Medicaid Services Office of Minority Health's Mapping Medicare Disparities (MMD)

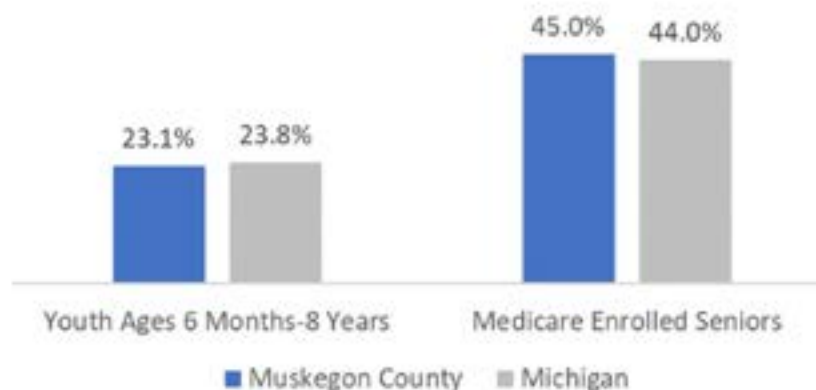
Mammography screening and flu vaccination rates in Muskegon County are similar to statewide.

Mammography Use Among Women Aged 50 - 74 Years



Source: CDC Places, 2020

Flu Vaccination Rates Among Youth and Seniors



Source: MDHHS County Quarterly Immunization Report Card, 2022-2023 season

Pregnancy and Birth:

Maternal and Infant Mortality

Rates for maternal and infant mortality exceed statewide rates.

Between 2019 and 2021, infant mortality in Muskegon County has increased while statewide there has been an overall decrease.



Births with Less Than Adequate Prenatal Care

Almost half of Muskegon County mothers who gave birth in 2021 had less than adequate prenatal care. (Measured by the month care began, number of prenatal visits, and length of pregnancy.)

Muskegon County	45.7%
Michigan	30.1%

Mothers in Muskegon County were less likely to have received adequate prenatal care than statewide. Mothers of color were less likely to have received adequate prenatal care than white mothers.

Source: [Michigan Vital Statistics 2022](#)



Rate of Births with Low Birth Weight (per 1,000 Live Births)

The % of live births where the infant weighed less than 5lb 8oz.

Muskegon County	92.6 (per 1,000 births)
Michigan	92.5 (per 1,000 births)

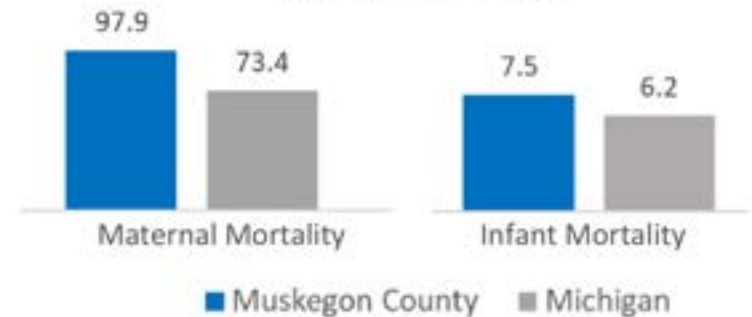
Although the rate of low birth weight for the county is similar to statewide, among Black mothers the rate of low birth weight is much higher.

Source: [Michigan Vital Statistics 2021](#)

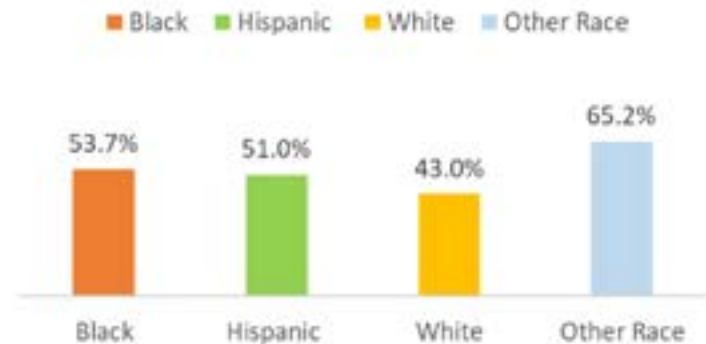


This icon identifies data for which the county rate is substantially worse than statewide.

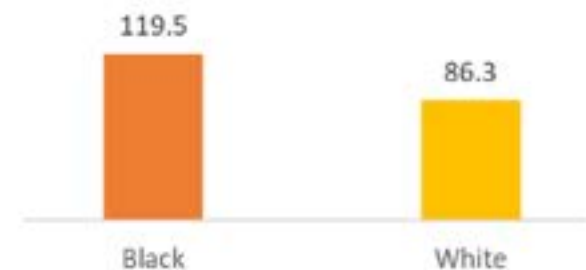
Rate of Maternal and Infant Mortality (per 1,000 live births)



Births with Less Than Adequate Prenatal Care by Race/Ethnicity of the Mother



Rate of Births with Low Birth Weight (per 1,000 Live Births) by Race of the Mother

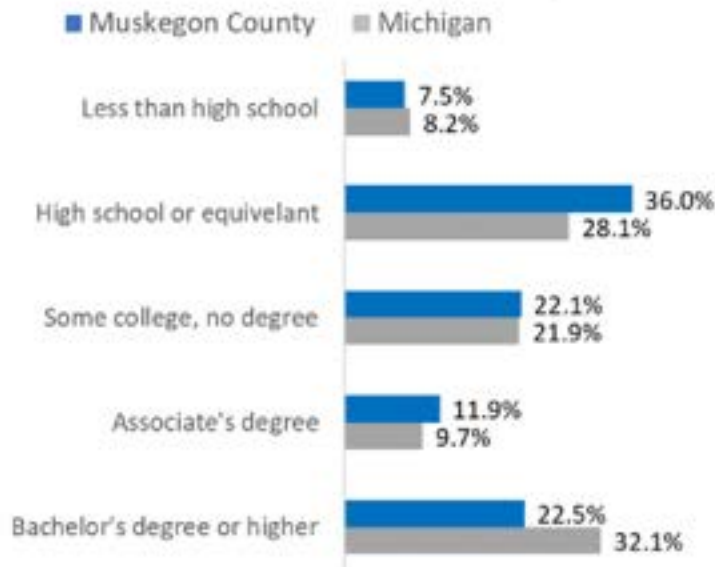


Social & Economic Factors: Education

Better educated individuals live longer, healthier lives than those with less education and their children are more likely to thrive. This is true even when factors like income are taken into account. Higher levels of education can lead to a greater sense of control over one's life, which is linked to better health, healthier lifestyle decisions, and fewer chronic conditions.

Educational Attainment: Icons identify populations disproportionately impacted

Educational Attainment Among Adults Age 25+



14.9%

The % of patients screened who report that completing more education or training, like finishing a GED, going to college, or learning a trade, would be helpful. This was the most frequently identified need by patients screened in 2023.

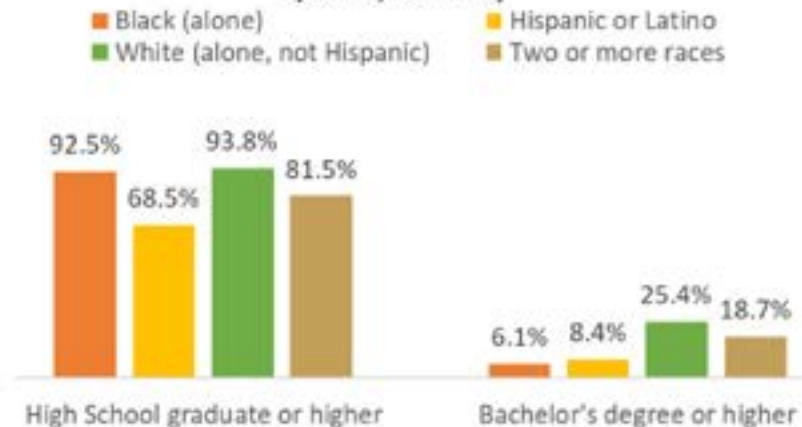
Source: SIDH Screenings Consolidated 2023



It is estimated that 20% of adults living in Muskegon County function at the lowest literacy level, compared to 18% statewide. Adults at this level are at risk for difficulties using or comprehending print materials.

Source: [US PIAAC, US Skills Map](#) retrieved January 12, 2023

Educational Attainment Among Adults Age 25+ by Race/Ethnicity



Source: 2022 ACS 1-Year Estimates [Table S1501](#)

School Segregation:

This index measures the extent to which students within different race and ethnicity groups are unevenly distributed across schools when compared with the composition of the local population. Segregation in schools has been found to be negatively associated with achievement, college success, long-term employment, and income for students of color.

The index ranges from 0 to 1 with higher values representing greater levels of segregation. Based on data from 2021-2022, Muskegon County had a lower level of school segregation than statewide.

Muskegon County	0.23
Michigan	0.34

Source: [County Health Rankings](#) based on school year 2021/2022 data

Academic Success:

Graduation and dropout rates varied greatly throughout Muskegon County in 2022. Among the 9th grade cohort set to graduate in 2025, the graduation rate ranged from a low of 56% to a high of 100%. Dropout rates in 2022 ranged from a low of 1.9% to a high of 23% in 2022.

Overall, 1-in-3 Muskegon County students (33.2%) missed 10% or more school days, which is defined as chronic absenteeism. Slightly higher than statewide (30.8%). Rates were higher among certain sub-populations as shown in the table below.

% Students Chronically Absent (absent 10%+ school days/school year)	%
Overall	33.2%
Economically Disadvantaged	42.1%
English Learners	42.0%
Migrant Students	71.0%
Students with Disabilities	40.5%
Black students	50.0%
Hispanic students	40.3%
White students	26.8%

Source: [MiSchoolData.org](https://mischooldata.org)

School District	Chronic Absenteeism*	Graduation Rate**	Drop Out Rate 2022***
Muskegon Area ISD	33.2%	NA	NA
Fruitport Community Schools	25.6%	82.7%	5.6%
Holton Public Schools	23.8%	71.6%	10.5%
Mona Shores Public School District	18.9%	91.6%	5.7%
Montague Area Public Schools	25.4%	82.2%	7.5%
Muskegon Heights Public School Academy System	75.7%	55.6%	22.2%
Muskegon, Public Schools of the City of	56.4%	78.8%	11.6%
North Muskegon Public Schools	15.3%	100.0%	0.0%
Oakridge Public Schools	33.7%	71.9%	19.8%
Orchard View Schools	41.6%	56.1%	22.6%
Ravenna Public Schools	24.4%	90.0%	6.3%
Reeths-Puffer Schools	28.1%	93.6%	1.9%
Whitehall District Schools	27.3%	90.6%	4.4%

*% Students Chronically Absent (10%+ school days/school year) in 2022/2023

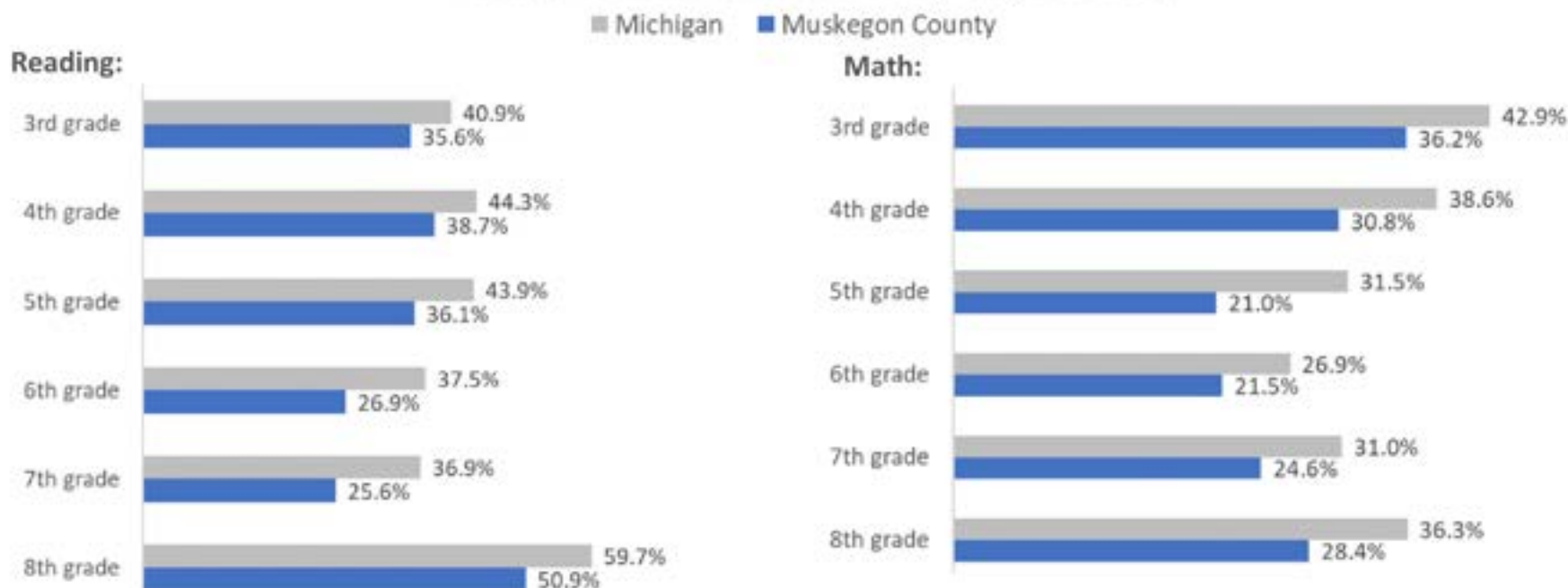
**% of ninth-grade cohort that graduates in 4 years, 2022

***Students who dropped out of high school # and %, 2022

English & Math Proficiency:  This icon identifies data for which the county rate is substantially worse than statewide.

The following charts show the percentage of students in Muskegon County who scored “proficient” or higher during state testing. Compared to statewide, less students in Muskegon County scored as “proficient”, in every grade, for both math and reading.

Percent of Students Proficient or Above (M-Step 2022-2023)

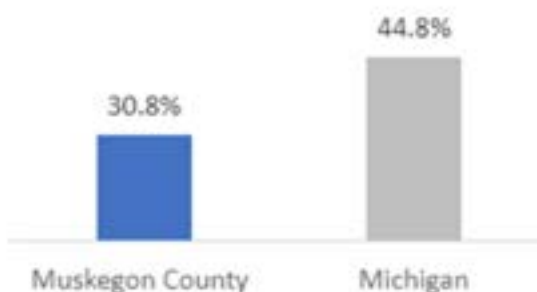


Source: [MiSchoolData.org](https://mischooldata.org)

Early Childhood Education: 

Icons identify populations disproportionately impacted

Percent of Children Ages 3 and 4 Enrolled in Preschool



Source: [Kids.County.2023](https://kids.county.2023) based on 2021 school year.

Research indicates that students who participate in preschool are more likely to succeed academically.

Source: [The Case for Child Care and Early Learning for All: Healthy Child Development and School Readiness](https://www.centuryfoundation.org/research/the-case-for-child-care-and-early-learning-for-all/), The Century Foundation, Retrieved Feb. 6 2024

Less students in Muskegon County scored as “proficient” than statewide in every grade for both Math and Reading.

Social & Economic Factors: Economics

Income provides economic resources that shapes choices about housing, education, child care, food, medical care, and more. Wealth, the accumulation of savings and assets, helps cushion and protect us in times of economic distress. The ongoing stress and challenges associated with poverty can lead to cumulative health damage, both physical and mental. Chronic illness is more likely to affect those with the lowest incomes, and children in low-income families are sicker than their high-income counterparts.

Income/Poverty:

Icons identify populations disproportionately impacted

	Muskegon County	Michigan
Median Household Income	\$66,986	\$74,755
- Families	\$69,556	\$85,865
- Married-couple families	\$81,933	\$102,076
- Non family households	\$32,420	\$40,459
Percentage of Persons in Poverty	14.5%	13.4%
% of Children ages 0-17 in Poverty	20.7%	18.0%

Employment:

Icons identify populations disproportionately impacted

% of people who are not working but willing and able to do so (November 2023 not seasonally adjusted)

Muskegon County 3.7%
Michigan 3.6%

Muskegon ranked 42nd of 83 counties for unemployment.

7% of teens and young adults (16-19) are neither working or in school, equivalent to statewide.

Sources: [2018-2022 ACS 5-Year Estimates](#) & Small Area Income & Poverty Estimates, [Interactive Tool](#), [2022 1-year estimate](#), [S1901 2022 American Community Survey 1-Year Estimates](#)

Percent of Persons in Poverty (all ages)



Student Loan Debt:

15% of residents have student loan debt compared to 17% statewide. Statewide 16% of white residents have student loan debt, compared to 20% for communities of color.

11% of student loans are in default, compared to 9% statewide. Statewide, the share of student loan holders in default for communities of color is more than twice that of white communities (7% vs. 18%).

\$18,233 median amount of student loan debt, compared to \$20,603 statewide.

Sources: [2018-2022 ACS 5-Year Estimates](#) & Small Area Income & Poverty Estimates, [Interactive Tool](#), [2022 1-year estimate](#), [S1901 2022 American Community Survey 1-Year Estimates](#)

Sources: Dept. of Technology, Management, & Budget [Press Release](#), [November Rates](#), [Debt In America](#), [Urban Institute](#) retrieved January 12, 2024

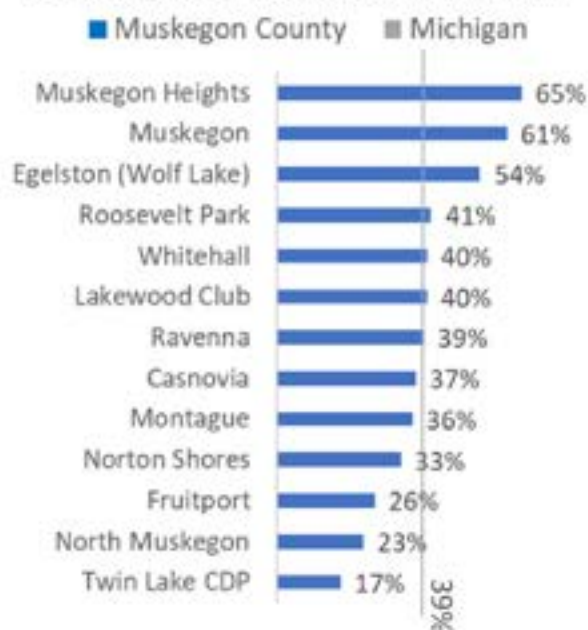
Asset-Limited, Income Constrained, Employed:

The Household Survival Budget reflects the minimum cost to live and work in the modern economy and includes housing, child care, food, transportation, health care, a smartphone plan, and taxes. It does not include savings for emergencies or future goals like college or retirement.

Percentages of Households, Muskegon County



Percentages of Households Below ALICE

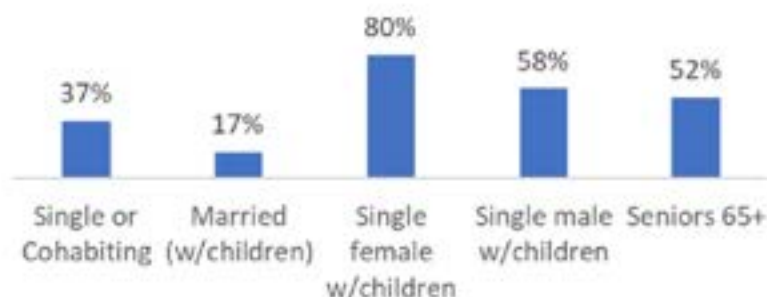


The following table shows the total household income required for a survival budget in Muskegon County by household makeup:

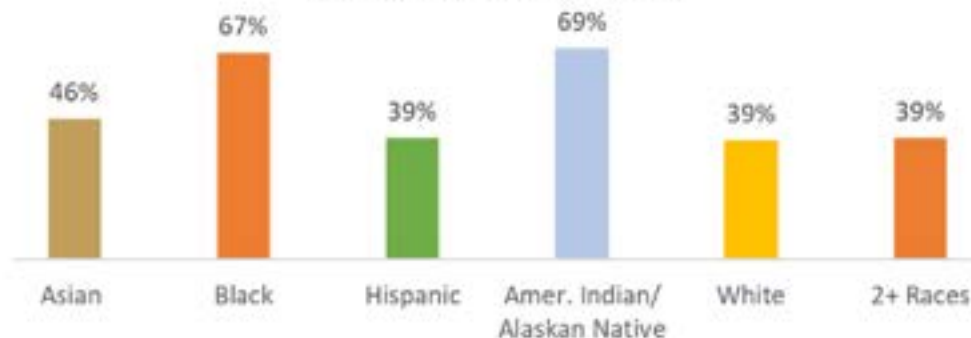
Monthly Costs	Annual Total
One adult, one infant in care	\$35,784
Two adults, 1 infant and 1 preschooler in care	\$57,264
Single Senior	\$29,148
Two Seniors	\$45,576

Source: unitedforallice.org/household-budgets-2021-Point-in-Time

Percentages of Households Below ALICE Threshold by Household Type, Muskegon County



Percentages of Households Below ALICE Threshold by Race and Ethnicity, Muskegon County



Source: unitedforallice.org/county-reports/michigan 2021 Point in Time

Social & Economic Factors: Family and Social Support

People with greater social support, less isolation, and greater interpersonal trust live longer and healthier lives than those who are socially isolated. Neighborhoods richer in social capital provide residents with greater access to support and resources than those with less social capital.

Social Connectedness:

Icons identify populations disproportionately impacted

Family Support:



In 2022, three-fourths (76.2%) of Muskegon County high school students reported they could ask their mom or dad for help with a personal problem. Rates were slightly higher among middle school students.

Middle School (7th)	80.3%
High School (9th & 11th)	76.2%

Among high school students in Muskegon County, the percentage of youth who could ask their parents for help was slightly higher for male students, and white students.

Black	73.9%	Female	73.5%
Hispanic	70.9%	Male	79.3%
White	79.1%		

Source: MIPHY 2022 Muskegon County

Voter Participation:



Half (51.5%) of the 74,369 registered voters in Muskegon County voted in the November 2022 general election. This is slightly lower than statewide turnout which was approximately 55%.

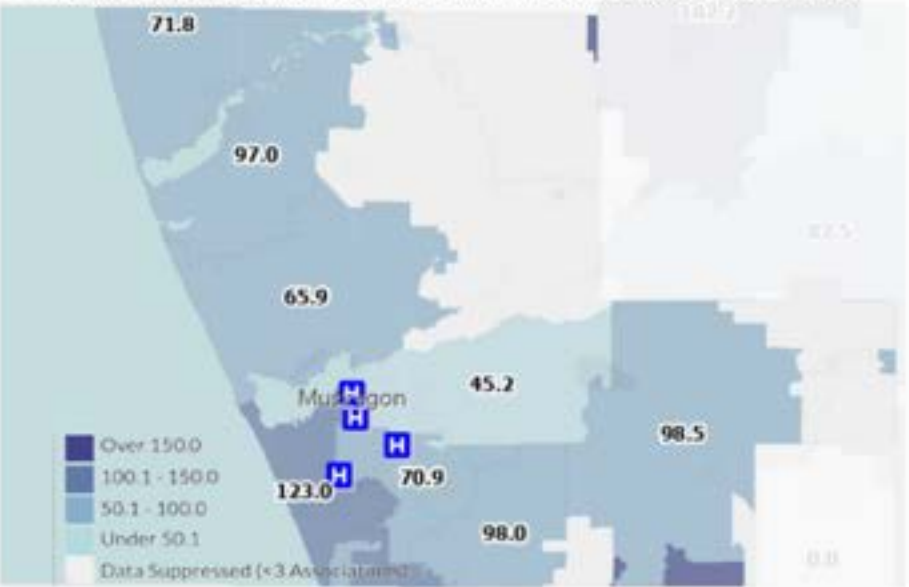
Sources: [Muskegon County Election Results Archive](#); Michigan Department of State Election Results and Data, Census Bureau, 2017

Membership Associations: The number of membership associations (civic, political, religious, sports, and professional organizations) per 100,000 people.

Muskegon County	105
Michigan	97

Muskegon County has slightly more membership associations than statewide. However, the rate varies greatly throughout the county as shown in the map below, with a high of 123 and a low of 45.2.

Membership Associations, Rate (per 100,000 Population), 2020



Source: Census Bureau, 2017-2021 American Community Survey 5-Year Est. Table CB2000CBP

Residential Segregation:

Segregation caused by structural, institutional, and individual racism still exists in many parts of the country. Residential segregation of Black and white residents is considered a fundamental cause of health disparities in the United States and has been linked to poor health outcomes, including mortality, a wide variety of reproductive, infectious, and chronic diseases, and other adverse conditions. Structural racism is also linked to poor-quality housing and disproportionate exposure to environmental toxins. Individuals living in segregated neighborhoods often experience increased violence, reduced educational and employment opportunities, limited access to quality health care and restrictions to upward mobility.

[1]

Residential Segregation Index Score

This score ranks residential segregation between Black and white county residents on a scale of 0-100 based on 5 key dimensions of segregation. Higher values indicate greater residential segregation.

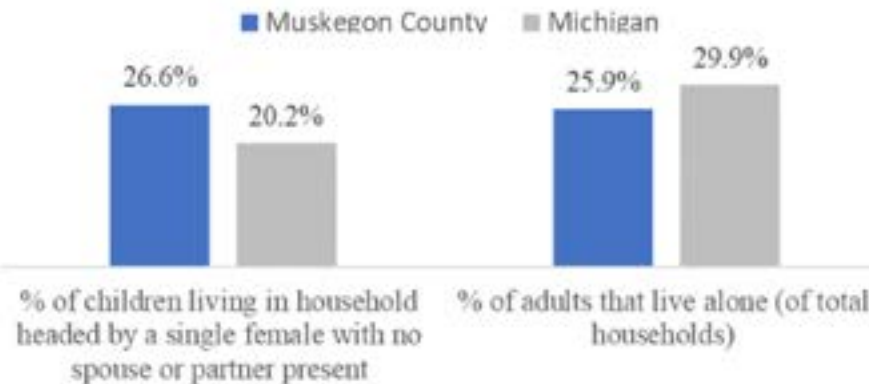
Muskegon County	75
Michigan	73

Muskegon County has slightly higher index score for residential segregation than statewide.

For more information about how this index is calculated [click here](#).



Living Arrangements (ACS 2017-2021 estimate)



Compared to statewide, in Muskegon County:

- Children are more likely to live in a home with a single mother.
- Adults are less likely to live alone.

[1] County Health Rankings, Residential Segregation, [retrieved on January 3, 2023](#).
Sources: Michigan Profile for Healthy Youth 2022 & American Community Survey 5-year Estimates, 2017-2021

Child Care:

Icons identify populations disproportionately impacted

Child Care Availability:

The table below shows how many children were competing for one slot in a nearby licensed child care facility suitable for their age. An area having three or more children competing for one slot is considered to be a “child care desert.”

According to the Center for American Progress, more than half of America’s children, particularly those from low- and middle-income, Hispanic, and rural communities, live in a child care desert.

In Muskegon County, there are a total of 180 licensed child care facilities (centers + homes) with >3 children competing for spots in every zip code except Fruitport.

The table below shows the ratio of children to available slots for each zip code identified as a child care desert (>3).

Child Care Ratio of Children per Available Slot		
Zip Code	Infant/Toddler (Ages 0-3)	Preschool (Ages 3-5)
49457 (Twin Lake)	13.1	13.98
49442 (Muskegon)	9.18	2.37
49444 (Muskegon)	8.76	4.31
49425 (Holton)	7.95	7.89
49437 (Montague)	6.29	3.46
49451 (Ravenna)	4.1	3.32
49461 (Whitehall)	3.16	3.43

Source: MSU Community Evaluation Programs, [child care Dessert Map](#), based on child care providers available in Feb 2023

Child care Affordability:

\$ 1,110

Estimated monthly cost of child care for a family with 2 children in care in Muskegon County.

\$\$\$\$\$

On average, families in Muskegon County with two children pay **43%** their income toward child care, driving some out of the workforce altogether.

Source: [United Way, ALICE County Reports 2021](#) & US Census SAIPE 2021-2022

Child Care Payment Subsidies:

In 2022, a total of **1,136** Muskegon County children ages 12 and younger received subsidized child care payments, representing **4.0%** of the children in this age range, and almost double the rate statewide (2.1%).



Source: [Michigan Department of Health and Human Services, Assistance Payment Statistics - Table 41.J](#), retrieved via KidsCount

◆ Of the more than 23,000 patients screened in 2023, approximately 2% reported that getting child care makes it hard for them to work, go to school, or study. ◆

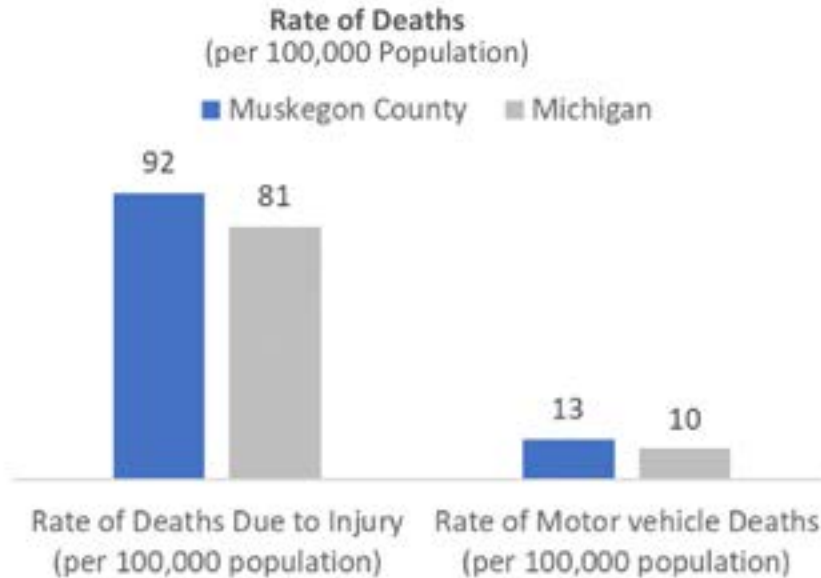
Source: SIOH Screenings Consolidated 2023

Social & Economic Factors: Community Safety

Community safety reflects not only violent acts in neighborhoods and homes, but also injuries caused unintentionally through accidents. Accidents and violence affect health and quality of life in the short and long-term, for those both directly and indirectly affected. Also, living in unsafe neighborhoods can impact health in a multitude of ways.

Injuries:   *Icons identify priority populations disproportionately impacted*

The rate of deaths due to injury and motor vehicle deaths are higher in Muskegon County than statewide. Rates of death due to injury were highest among residents who were American Indian/Alaskan Native (164) and Black (118).



% of motor vehicle crashes that involved the following:	Muskegon County	Michigan
Alcohol	3.8%	3.26%
Drugs	1.2%	0.91%

4,730

Total motor vehicle crashes in Muskegon County in 2022.

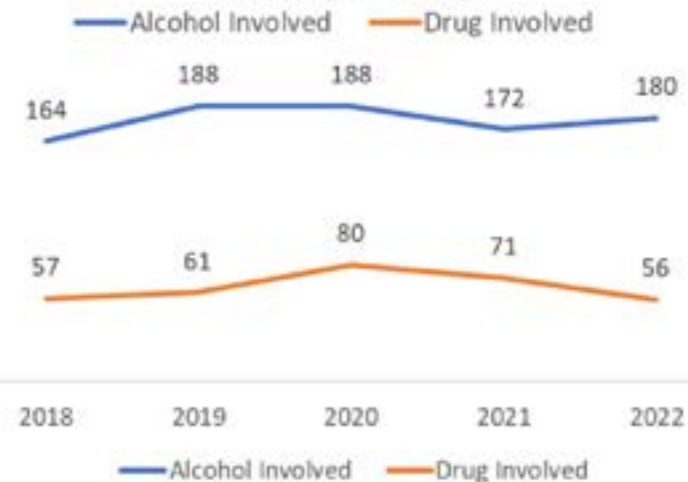
70.6%

Traffic crashes with a fatality in 2022 that involved alcohol or drugs.

12

Fatalities that occurred due to motor vehicle crashes involving alcohol and/or drugs in 2022.

Number of Motor Vehicle Crashes Involving Substance, Muskegon County



Suicide: 🇺🇸 🇲🇮 🏠 🌟 🇪🇺 🇬🇧 🇮🇹 *Icons identify populations disproportionately impacted*

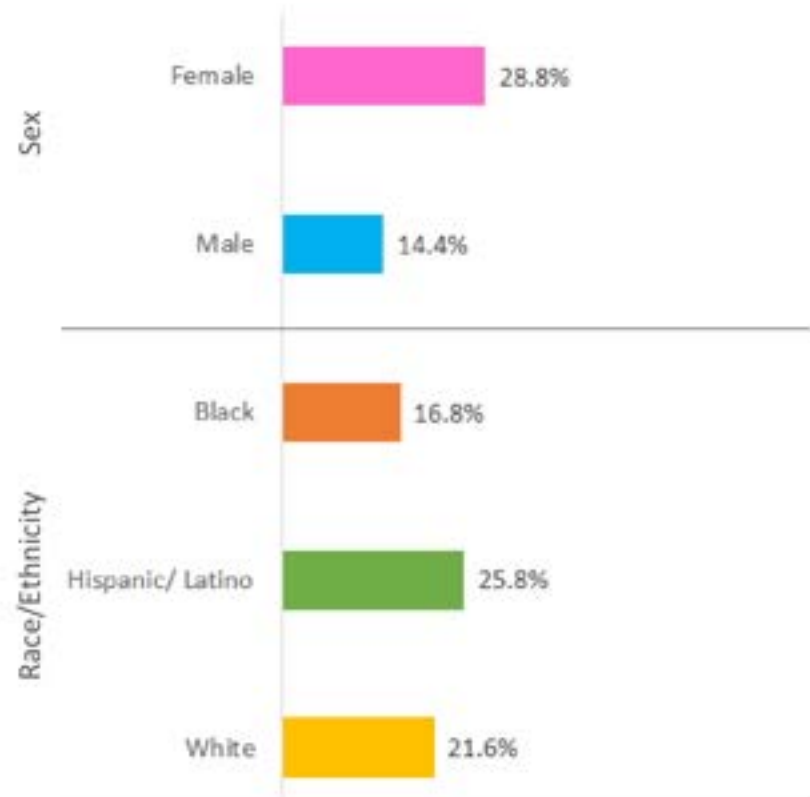
29 In 2021, there were 29 deaths due to suicide in Muskegon County.

Suicide Rate (Rate per 100,000 Population)

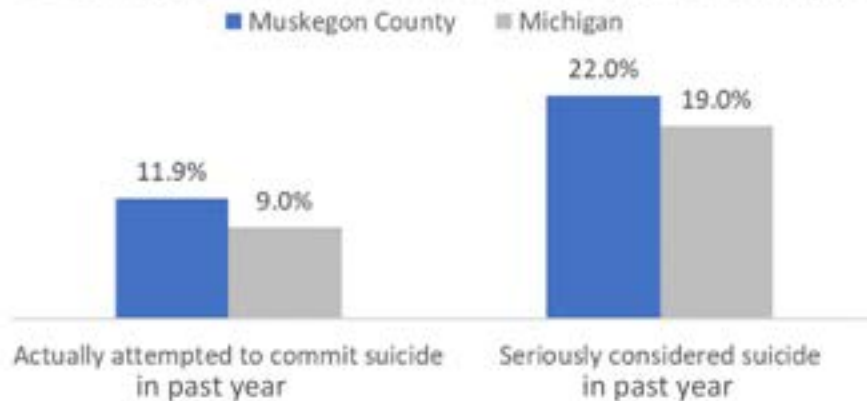


In 2022, among high school students, females were much more likely to report having seriously considered suicide in the past year. Hispanic or Latino students were more likely to report seriously having considered suicide, while Black students were the least likely.

Percentage of High School Students who Report Seriously Considering Suicide in the Past Year by Race and Gender, 2022



Percentage of High School Students Reporting the Following, 2022



Among Muskegon County 7th grade students:

12.8% Ever attempted suicide

31.4% Ever seriously considered suicide

Crimes and Violence: 🌐 🏠 🚓 🚔 🇺🇸 *Icons identify populations disproportionately impacted*

687

In 2022, Muskegon County had 687 violent crimes including homicide (12), rape (151), robbery (53), and aggravated assault (470). There were no carjackings reported.

2,573

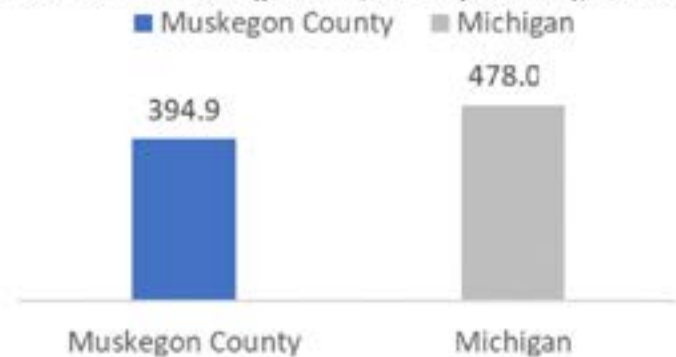
In 2022, Muskegon County had 2,573 property crimes including burglary (391), larceny-theft (1,861), motor vehicle theft (287), and arson (34).

The ten areas with the greatest number of crimes are detailed below.

Number Crimes	Violent Crimes	Property Crimes
County Total	687	2,537
Muskegon	298	940
Muskegon Heights	149	327
Norton Shores	45	348
Muskegon Township	47	267
Fruitport Township	24	162
Egelston Township	33	106
Roosevelt Park	9	71
Dalton Township	14	62
Laketon Township	6	34
Whitehall	3	29



Violent Crime Rate (per 100,000 Population), 2015-2017



Crime Grade's violent crime map shows areas where violent crime per person is highest, weighted by the type and severity of the crime. An F grade means the rate of violent crime is much higher than the average US county. They score Muskegon County in the 1st percentile for safety, meaning **99% of counties are considered safer** and 1% of counties are more dangerous.



A+ (dark green) areas are safest

1,207

In 2023, Muskegon County had 1,207 referrals to Adult Protective Services* for concerns of abuse, neglect or exploitation resulting in 474 cases being opened (39% of referrals). Statewide, 38% of referrals resulted in cases being opened.

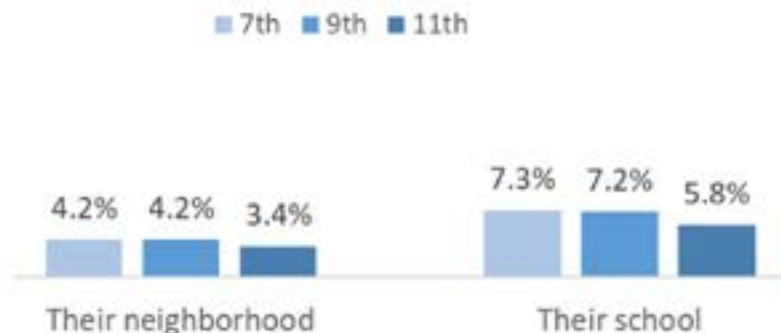
*APS serves of adults age 60+ and vulnerable adults 18+ with serious disabilities.

Sources: MDHHS APS Data accessed via AgeWell Services of West Michigan, 2023.

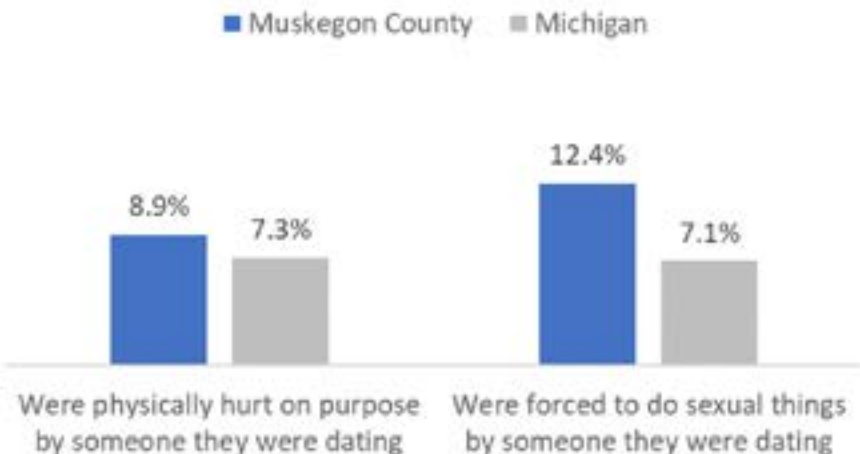
Sources: FBI UCR 2015-2017, MI Incident Crime Reporting Supplemental Report, 2022 Offenses by County and City/Township, Crime Grade retrieved 1.11.24.

Youth Safety: 🏠 🚶 🇲🇮 *Icons identify populations disproportionately impacted*

Percentage of Students who Report Feeling Unsafe in the Following Locations in the Past 12 Months



Percentage of High School Students who Report Experiencing the Following in the Past 12 Months



High School students in Muskegon County report higher rates of relationship violence than statewide.

806

Confirmed cases of child abuse and/or neglect for children in Muskegon County in 2022.



This icon identifies data for which the county rate is substantially worse than statewide.

Rates of Confirmed Cases of Child Abuse (per 100,000)

Muskegon County	20.0
Michigan	11.7

Rates of confirmed child abuse were substantially higher in Muskegon County than statewide in 2022.

In the Past 12 Months...	Black	Hispanic/Latino	White
Were physically hurt on purpose by someone they were dating	5.5%	8.3%	9.6%
Were forced to do sexual things by someone they were dating	4.2%	13.5%	15.1%

Black students reported the lowest level of relationship violence. Hispanic/Latino and white students reported the highest rates of relationship violence.

18.7%

Among female high school students, almost 1-in-5 were forced to do sexual things they did not want to do by someone they were dating in the past 12 months, compared to 5.0% of male students.

Physical Environment: Air and Water Quality

Clean air and safe water are prerequisites for health and support healthy brain and body function, growth, and development. Poor air or water quality can be particularly detrimental to vulnerable populations such as the very young, elderly, and those with chronic health conditions.

Icons identify populations disproportionately impacted

Air Quality:

5.6 On average, there are 5.6 Clean Air Action Days per year. These typically occur on hot, hazy days and vary depending on seasonal weather.

Source: West Michigan Clean Air Coalition, 2018-2022.

Water Quality:

Arsenic is an element that is toxic to humans when ingested and present in groundwater. Laboratory testing is done to measure arsenic levels to identify water supplies not safe for consumption. Individuals exposed to arsenic are at higher risk of cancer and developmental delays in children.

Source: [MI Department of Environment, Great Lakes, and Energy, Arsenic \(2019\)](#).

Source: [CDC Toxic FAQs for Arsenic, 2015](#)

PFAS are chemicals that are used commercially that have been released into the environment and can be detected in drinking water. Exposure to PFAS has been linked to several health conditions including high cholesterol, liver damage, cancer, infertility and low birth weight.

Source: [MI Department of Environment, Great Lakes, and Energy, PFAS \(2024\)](#)

Lead can be found in drinking water when plumbing materials corrode. The CDC reports that no level of exposure is safe and recommends a blood test in children <6 as exposure can lead to developmental delays. Additionally, water sampling is done to ID whether residents are exposed to high levels of lead (over 15 PPB) which results in a corrective action plan. No lead testing sites in Muskegon were over the 15 PPB threshold in 2023.

Source: [CDC Lead in drinking water, 2023](#).

Source: [Michigan Lead Safe, 2024](#).

Water Testing Results			
Location	Arsenic Sites, PPB*	PFAS*	Lead 90th Percentile PPB*
Muskegon 49441	*	2 sites	1 site at 2PPB
Muskegon 49442	1 site tested, no arsenic detected	3 sites	3 sites at 1PPB, 1 site at 2 PPB
Muskegon 49443	*	1 site	
N. Muskegon 49445	3 test sites, no arsenic detected.	2 sites	1 site at 2 PPB, 1 site at 7 PPB
Muskegon Heights 49444	1 site tested, no arsenic detected.	4 sites	1 site at 3 PPB
Norton Shores 49456	*	*	1 site at 2 PPB
Fruitport Township 49415	1 site tested, arsenic 5-10 PPB	*	1 site at 3 PPB
Egelston Township 49451 + 49457	1 site tested, no arsenic detected	1 Site	1 site at 2 PPB, 1 site at 9 PPB
Whitehall 49461 + 49437	3 sites tested, no arsenic detected.	4 sites	1 site at 1PPB, 1 site at 2 PPB, 1 site at 8 PPB

*PPB = Parts Per Billion

*PFAS sites are confirmed by EGLE to have PFAS contamination. For more info click [here](#).

*Lead 90th Percentile PPB: is an aggregate measure of lead samples taken at sites during a monitoring period. >15 PPB is the threshold for a corrective action plan. For more info click [here](#).

6% of children tested for lead in Muskegon had elevated blood lead levels. This is higher than the state rate of 3.7%.

Source: [Michigan Tracking Blood Lead Level, 2022](#).

Physical Environment: Homelessness and Housing

The housing options and transit systems in our communities affect where we live and how we get from place to place. The choices we make about housing and transportation, and the opportunities underlying these choices also affect our health.

Icons identify populations disproportionately impacted

Homelessness:

Homelessness is defined as living in a place not suitable for habitation including emergency shelters, transitional housing, safe havens, and on the street.

Across the country, HARA (Housing Assessment Resource Agency) conducts a point in time count for individuals and families experiencing homelessness every January.

157 Individuals identified as homeless in the January 2023 point in time study.

576 individuals that were homeless at some point during 2022.

Source: [Muskegon County homeless Continuum of Care Network](#). Retrieved via Livability Lab Data January 3, 2024.

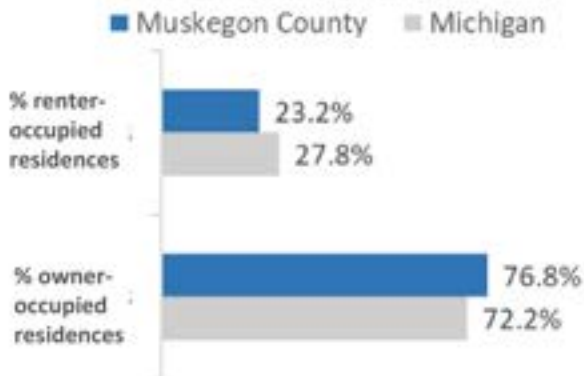
Homeless children are more likely to experience illness and chronic health problems. The table below shows the # of students reported as “homeless”. This is higher than the annual count because of it has a broader definition, including “doubled up” and staying in a motels or shelters.

School District	# Homeless Students
Muskegon Area ISD	17
Fruitport Community Schools	31
Holton Public Schools	37
Mona Shores Public School District	15
Montague Area Public Schools	37
Muskegon Heights Public Academy	67
Muskegon, Public Schools of the City of	268
North Muskegon Public Schools	25
Oakridge Public Schools	91
Orchard View Schools	45
Ravenna Public Schools	34
Reeths-Puffer Schools	80
Whitehall District Schools	55
Total	802

Source: [MISchoolData.org](#), school year 2022/2023

Housing:

Home Ownership and Rental Rates



Although Black residents account for 14% of the population, they represent only 6.8% of homeowners. Hispanic residents account for 6.4% of the population but only 3.3% of homeowners.

24.6% of housing units are classified substandard housing units (defined as overcrowding, high housing costs, lack of kitchen facilities, or lack of plumbing).

23% of households in Muskegon County spend >30% of income on rent and utilities. This varies by area from a low of 15.4% in North Muskegon (49445) to a high of 57.1% in Muskegon City (49440).

Sources: [2022 Annual Report Ending Homelessness in Michigan](#) & [Census.gov, Homeownership By Race and Ethnicity of Householder, 2020](#)

Source: [CDC Places, 2017-2021](#).

Physical and Environment: Transit

Icons identify populations disproportionately impacted

Transportation:

4.9%

Of the more than 23,000 patients screened in 2023 who live in Muskegon County, 1-in-20 reported that they do not have a dependable way to get to work or school and appointments.

Source: SIOH Screenings Consolidated 2023

159

Residents of Muskegon County are estimated to use public transportation as their primary means of commuting to work, representing less than 1% of the populations.

Source: ACS 5-Year Estimates 2017-2021.

In Muskegon County, 7.1% of occupied housing units have no vehicle available, similar to statewide. However, this varies greatly by area.

In 2020, 20% of Black households had no car, compared to 6% of white households.

# Vehicle	Muskegon County	Michigan
No vehicle	7.1%	7.2%
One vehicle	32.8%	34.2%
Two vehicles	38.9%	38.4%

Census tracts with more than 20% of households having no vehicle include the following:

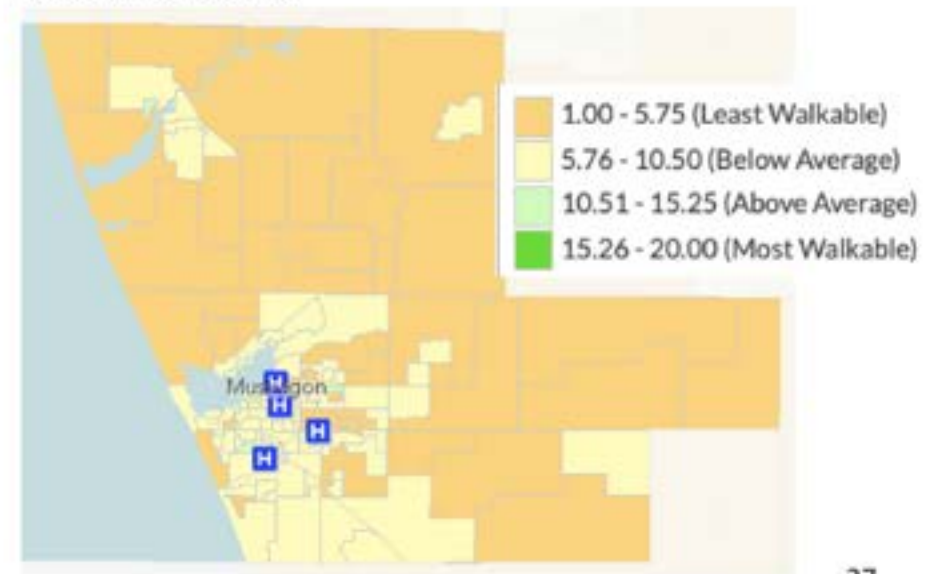
Census Tract	% w/ No Vehicle
4.02 (Muskegon Heights)	26.3%
42 (Muskegon)	24.3%
19.02 (Muskegon Heights)	21.4%
3 (Muskegon)	20.6%

Sources: Census Bureau, 2017-2021 American Community Survey 5-Year Estimates. retrieved via Trinity Data Hub [Map Room](#) & [National Equity Atlas, 2020](#)


Walkability:

According to the United States Environmental Protection Agency, walkable neighborhoods make it easier to walk to stores, jobs, and other places, which encourages people to be more active and can help them stay healthier. In addition, when people choose to walk, bike, or take transit, they drive less, which reduces pollution from vehicles and improves human and environmental health.

The Walkability Index measures the relative walkability a community. Walkability scores were below average in most of the county, ranging from a high of 12 in the Muskegon area to a low of 1.83 in Ravenna Township. The lowest scores are primarily located in eastern portions of the county, with the exclusion of Ravenna.



Physical and Environment: Internet Coverage

 *Icons identify populations disproportionately impacted*

According to the National Institute on Health, internet access is correlated with health as it can increase access to healthcare services and provide resources for patient education.

Source: [NIH.GOV_Yu_2022](https://www.nih.gov/health-topics/internet-access)

A permanent internet subscription includes cable (ie: Dish TV), DSL, or Fiber internet (ie: AT&T and Comcast). Another category of internet subscription are individuals that access internet through cellular data alone instead of through an internet subscription. The third category are residents who live in a residence where internet infrastructure is available, but the home does not have an internet subscription.


15% or 4,499 of senior residents 65+ in Muskegon County do not have internet access. (ACS table B28005, 2018-2022)

Source: ACS 2018-2022, Table B28005

Internet Infrastructure:

The Federal Communications Commission identifies internet speeds of <100/20 as the benchmark for minimum broadband speeds for residences.

92.0% or 71,387 of Muskegon County households can be serviced by internet infrastructure. This is slightly higher than the state rate of 90%.

 There is no access to internet infrastructure in the Owasippe Scout Reservation (49457) and portions of Ravenna (49451), Norton Shores (49441), and Holton (49425).

Source: [FCC National Broadband Map](https://www.fcc.gov/national-broadband-map)

Household Internet Status*	Muskegon County	Michigan
Permanent Internet Subscription	63.6%	70.6%
Internet access through cellular data alone	16.9%	12.6%
Internet access is available but no internet subscription	15.2%	12.0%

*This data does not account for quality or usability of the internet service.

Source: ACS 2018-2022, Table S2801

Location	Internet Infrastructure Coverage >=100/20 MPDS	Total # broadband serviceable locations
Montague (49437)	89.29%	3,643
Fruitport (49415)	80.76%	3,114
Holton (49425)	40.79%	1,552
Muskegon (49440)	99.7%	338
Muskegon (49441)	99.66%	14,477
Muskegon (49442)	98.16%	15,626
Muskegon Hts. (49444)	99.34%	10,794
North Muskegon (49445)	90.95%	8,963
Ravenna (49451)	66.67%	2,532
Whitehall (49461)	86.06%	4,269

Source: FCC Fabric Data, June 2023 via Trinity Data Hub

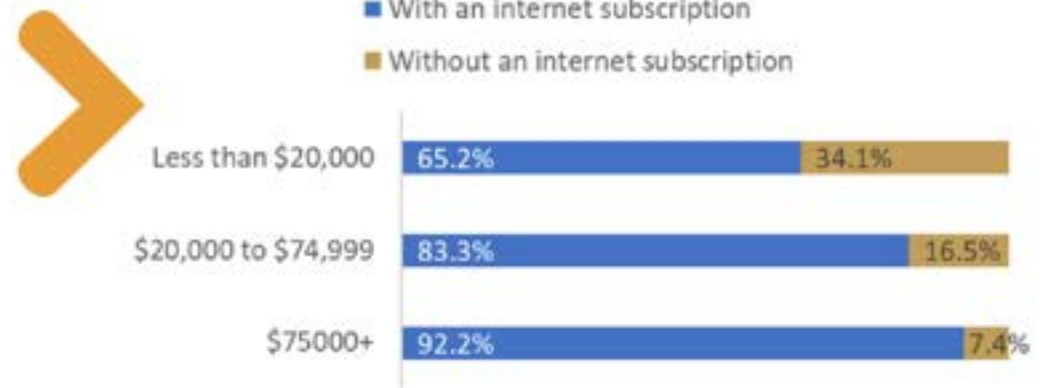
Internet Affordability:

Internet coverage is also affected by the ability to afford the service. The percentage of residents who have an internet subscription based on income level is visualized in the graph on the right. Residents making less than \$20,000 are substantially less likely to have internet access than those who have a higher income.

17,221 households in Muskegon County are receiving government assistance to decrease or cover the cost of internet based on income level.

Source: [Federal Communications Commission, EBB& ACP Support, 2024](#).

Percentage of Residents with an Internet Subscription by Household Income, Muskegon County:



Source: ACS 2018-2022, Table S2801



Attachment A: Summary of Scoring Results

MUSKEGON COUNTY Coordinated CHNA 2024 - Scoring and Ranking Summary

SCORING BY PRIORITIZATION CRITERIA - ALL HEALTH FACTORS AND SUB CATEGORIES (not ranked)

	TOTAL SCORE	PARTNER INPUT		Informed Stakeholders		Resident Priority Score
		Magnitude Score	Disparities Score	Ability to Impact Score	Lack of Current Effort Score	
Physical activity	26.5	6.50	5.00	6.00	3.50	5.50
Food insecurity	29.0	5.50	6.50	8.00	3.50	5.50
Access to healthy food	32.0	7.50	7.50	8.00	3.50	5.50
Diet and Exercise Total	29.0	6.50	6.00	7.50	3.50	5.50
Tobacco use	21.5	4.00	3.50	4.00	5.00	5.00
Alcohol and other drug use	29.5	8.00	5.00	6.00	4.50	6.00
Overdose deaths	30.0	6.50	6.50	6.50	5.00	5.50
Substance Misuse Total	27.0	6.00	5.00	5.50	5.00	5.50
Sexually transmitted infections	21.5	3.50	6.50	2.50	5.00	4.00
Contraceptive services to prevent pregnancy	21.0	3.00	5.50	2.50	5.00	5.00
Teen births	24.0	5.50	5.50	2.50	5.00	5.50
Sexual Activity Total	22.0	4.00	6.00	2.50	5.00	4.50
Health Insurance Coverage	25.5	4.50	6.50	5.00	5.00	4.50
Provider Adequacy	25.0	5.00	5.00	4.00	5.00	6.00
Preventative Care	25.5	6.50	5.50	5.00	5.00	3.50
Pregnancy and Birth Outcomes	26.0	4.50	7.00	5.00	5.00	4.50
Clinical Care Total	25.5	5.00	6.00	5.00	5.00	4.50
Academic success	26.0	5.50	7.50	5.50	4.00	3.50
Post secondary education	19.0	3.00	5.00	4.50	3.00	3.50
Early childhood education	26.5	6.50	6.00	6.00	3.50	4.50
Education Total	24.0	5.00	6.00	5.50	3.50	4.00

Continued...

	TOTAL SCORE	PARTNER INPUT		Informed Stakeholders		Resident Priority Score
		Magnitude Score	Disparities Score	Ability to Impact Score	Lack of Current Effort Score	
Employment	25.5	3.50	5.50	6.50	4.50	5.50
Income/Poverty	29.0	5.50	7.00	6.00	4.50	6.00
Economics Total	27.5	4.50	6.00	6.50	4.50	6.00
Social Connections/ Community engagement	23.5	4.00	5.50	4.50	5.50	4.00
Childcare	33.5	7.50	7.00	6.50	6.00	6.50
Family and Social Total	29.0	5.50	6.50	5.50	6.00	5.50
Injuries	19.0	3.00	4.00	4.00	5.50	2.50
Crimes and Violence	27.0	6.50	7.00	5.00	4.50	4.00
Suicide	27.5	7.00	5.00	7.00	4.00	4.50
Youth Safety	29.0	6.00	8.00	6.00	3.50	5.50
Community Safety	25.5	5.50	6.00	5.50	4.50	4.00
Air Quality	20.5	2.50	2.50	4.50	7.50	3.50
Water Quality	24.5	4.50	6.50	5.00	5.00	3.50
Air and Water Total	22.5	3.50	4.50	4.50	6.50	3.50
Homelessness	32.5	5.00	8.00	6.50	7.50	5.50
Housing	35.5	6.50	7.50	6.50	7.50	7.50
Housing Total	34.5	6.00	8.00	6.50	7.50	6.50
Transportation	29.5	6.50	6.50	8.50	2.00	6.00
Transportation Total	29.5	6.50	6.50	8.50	2.00	6.00
Internet coverage	13.5	4.00	2.50	1.50	1.50	4.00
Internet affordability	16.0	3.00	4.50	1.50	1.50	5.50
Internet Total	14.5	3.50	3.50	1.50	1.50	4.50

Attachment B: Data Sources

The following provides a list of data sources for the county profile and each health factor issue.

Health Factor	Data Sources
Community Profile	<ol style="list-style-type: none"> 1. U.S. Census Bureau. (2021). All Sectors: County Business Patterns, including ZIP Code Business Patterns, by Legal Form of Organization and Employment Size Class for the U.S., States, and Selected Geographies: 2021. Economic Surveys, ECNSVY Business Patterns County Business Patterns, Table CB2100CBP. 2. U.S. Census Bureau. (2020). COUPLED HOUSEHOLDS, BY TYPE. Decennial Census, DEC Demographic and Housing Characteristics, Table PCT15. 3. U.S. Census Bureau. (2022). Disability Characteristics. American Community Survey, ACS 1-Year Estimates Subject Tables, Table S1810. 4. U.S. Census Bureau. (2020). HOUSING UNITS. Decennial Census, DEC Demographic and Housing Characteristics, Table H1. Housing Units. 5. U.S. Census Bureau. (2022). Language Spoken at Home. American Community Survey, ACS 1-Year Estimates Subject Tables, Table S1601. 6. U.S. Census Bureau. (2020). RACE. Decennial Census, DEC Demographic and Housing Characteristics, Table P8. 7. U.S. Census Bureau. (2022). Selected Economic Characteristics. American Community Survey, ACS 1-Year Estimates Data Profiles, Table DP03. 8. U.S. Census Bureau. (2022). Selected Social Characteristics in the United States. American Community Survey, ACS 1-Year Estimates Data Profiles, Table DP02. 9. U.S. Census Bureau. (2020). TOTAL POPULATION. Decennial Census, DEC Demographic and Housing Characteristics, Table P1. 10. U.S. Census Bureau. (2022). Veteran Status. American Community Survey, ACS 1-Year Estimates Subject Tables, Table S2101. 11. U.S. Census Bureau. (2022). Age and Sex. American Community Survey, ACS 1-Year Estimates Subject Tables, S0101. 12. Muskegon County Homeless Continuum of Care Network. (2022). Retrieved via Livability Lab data. 13. U.S. Census Bureau. (2022). Educational Attainment. American Community Survey, ACS 1-Year Estimates Subject Tables, Table S1501. 14. U.S. Census Bureau. (2022). Selected Characteristics of Health Insurance Coverage. American Community Survey, ACS 1-Year Estimates Subject Table S2701.
Health Outcomes	<ol style="list-style-type: none"> 1. Michigan Department of Health and Human Services. Teen Pregnancy and Live Birth in Michigan: 2021. 2. Michigan Vital Statistics. Profile of Muskegon County, 2021 3. NCHS, National Vital Statistics System. US Small-area Life Expectancy Estimates Project (USALEEP) 4. COVID--19 Reduced Life Expectancy Especially among Black and Latino Populations. Princeton University, Jan 15, 2021 retrieved 2.5.24 5. Michigan Behavioral Risk Factor Surveillance System, 2019-2021. 6. Centers for Disease Control. PLACES 2022 7. Michigan Profile for Healthy Youth (MIPHY), Muskegon County 2022.

Health Factor		Data Sources
Diet & Exercise	Physical Activity	<ol style="list-style-type: none"> 1. Adult Physical Inactivity Prevalence Maps by Race/Ethnicity. CDC. 2. Michigan Behavioral Risk Factor Survey 2019-2021. 3. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. PLACES Data [online]. 2022 https://www.cdc.gov/PLACES. 4. County Health Rankings calculated from ArcGIS Business Analyst and Living Atlas of the World, 2023. CHR 5. Michigan Profile for Healthy Youth (MIPHY), Muskegon County 2022. 6. US Census Bureau, County Business Patterns, 2021. Retrieved via TrinityHealthDataHub.org.
	Food Insecurity	<ol style="list-style-type: none"> 1. Feeding America, Food Insecurity among overall population by County, 2021. 2. Social Influencers of Health Screening Consolidated Results, Community Health Innovation Region, 2023. For all clients screened by Trinity Health, HealthWest, Muskegon Family Care, Access Health, and Hackley County Community Care Center. 3. Kids Count Profile, Muskegon County, 2021.
	Access to Healthy Food	<ol style="list-style-type: none"> 1. USDA Economic Research Service, Food Atlas. 2. NIH Food accessibility and insecurity is a social determinant of health, 2023.
Substance Misuse	Tobacco Use	<ol style="list-style-type: none"> 1. Michigan Behavioral Risk Factor Survey, 2019-2021. 2. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. PLACES Data [online]. 2022 https://www.cdc.gov/PLACES. 3. Michigan Profile for Healthy Youth (MIPHY), Muskegon County 2022. 4. Geocoded Michigan Birth Certificate Registry, Division for Vital Records & Health Statistics, 2021.
	Alcohol & Other Drug Misuse	<ol style="list-style-type: none"> 1. Michigan Behavioral Risk Factor Survey, 2019-2021. 2. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. PLACES Data [online]. 2022 3. Michigan Profile for Healthy Youth (MIPHY), Muskegon County 2022. 4. Publicly Funded Treatment Admissions, provided by Lakeshore Regional Entity 5. Online High School Results, Michigan Youth Risk Behavior Survey, Centers for Disease Control, 2021. 6. Michigan Overdose Data to Action Dashboard
	Accidental Overdose	<ol style="list-style-type: none"> 1. Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Mortality 2018-2021 on CDC WONDER Online Database, 2021. 2. Western Michigan University, Medical Examiner and Forensic Services Report, 2022.
Sexual Activity	Sexually Transmitted Infections	<ol style="list-style-type: none"> 1. National Notifiable Diseases Surveillance System (NNDSS) STD data, 2021
	Family Planning/ Unintended Pregnancy	<ol style="list-style-type: none"> 1. Publicly Supported Family Planning Services in the United States: Likely Need, Availability and Impact, 2016 2. Michigan Department of Health and Human Services, Division for Vital Records and Health Statistics, 2022.
	Births to Teens	<ol style="list-style-type: none"> 1. Teen Pregnancy and Live Birth In Michigan, 2022. Michigan Department of Health and Human Services.

Health Factor		Data Sources
Clinical Care	Access to Care	<ol style="list-style-type: none"> Centers for Medicare and Medicaid Services, CMS - National Plan and Provider Enumeration System (NPPES), December 2023. Centers for Medicare and Medicaid Services, CMS. National Provider Identification. Retrieved via Trinity Data Hub. U.S. Census Bureau. (2022). Selected Characteristics of Health Insurance Coverage in the United States. American Community Survey, ACS 1-Year Estimates Subject Tables, Table S2701. U.S. Census Bureau. (2020) US Department of Health & Human Services, Health Resources and Services Administration, HRSA - Area Health Resource File. Accessed via County Health Rankings. 2021. Michigan Profile for Healthy Youth (MIPHY), Muskegon County 2022. Michigan Behavioral Risk Factor Survey, 2019-2021. Social Influencers of Health Screening Consolidated Results, Community Health Innovation Region, 2023. For all clients screened by Trinity Health, HealthWest, Muskegon Family Care, Access Health, and Hackley County Community Care Center.
	Quality of Care	<ol style="list-style-type: none"> Michigan Department of Health and Human Services. County Quarterly Immunization Report Card, 2022-2023 season. The Centers for Medicare & Medicaid Services Office of Minority Health's Mapping Medicare Disparities (MMD) Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. PLACES Data [online]. 2020. https://places.cdc.gov/?view=county&locationIds=26121,26127. Michigan Vital Statistics. Profile of Muskegon County, 2021. https://vitalstats.michigan.gov/osr/chi/profiles/frame.html.

Health Factor		Data Sources
Education	Educational Attainment	<ol style="list-style-type: none"> PIACC. U.S. Skills Map: State and County Indicators of Adult Literacy and Numeracy. https://nces.ed.gov/surveys/piaac/skillsmap/ U.S. Census Bureau. (2022). Educational Attainment. American Community Survey, ACS 1-Year Estimates Subject Tables, Table S1501. Social Influencers of Health Screening Results Consolidated Results, Community Health Innovation Region, 2023. For all clients screened by Trinity Health, HealthWest, Muskegon Family Care, Access Health, and Hackley County Community Care Center. Michigan School Data, 2022. County Health Rankings, 2022.
	Early Childhood Education	<ol style="list-style-type: none"> The Case for Child Care and Early Learning for All: Healthy Child Development and School Readiness, The Century Foundation, Retrieved Feb. 6 2024. Michigan League for Public Policy. Kids Count in Michigan 2023: Muskegon County. https://mlpp.org/2023kccdataprofiles/Muskegon.pdf.
Economics	Income/Poverty	<ol style="list-style-type: none"> U.S. Census Bureau. (2021). All Sectors: County Business Patterns, including ZIP Code Business Patterns, by Legal Form of Organization and Employment Size Class for the U.S., States, and Selected Geographies: 2021. Economic Surveys, ECNSVY Business Patterns County Business Patterns, Table CB2100CBP. U.S. Census Bureau. 2017-2021 American Community Survey 5-Year Estimates. Retrieved via Trinity Data Hub Map Room. Trinity Map Room. U.S. Census Bureau, Small Area Income and Poverty Estimates, 2021-2022. SAIPE. U.S. Census Bureau. (2022). Poverty Status in the Past 12 Months. American Community Survey, ACS 1-Year Estimates Subject Tables, Table S1701. U.S. Census Bureau. (2022). Income in the Past 12 Months. American Community Survey, ACS 1-Year Estimates Subject Tables, Table S1901 Dept. of Technology, Management, & Budget Press Release, November 2023 Rates. Debt In America, Urban Institute retrieved January 12, 2024 United for Alice. Michigan: County reports 2021. United for Alice. Michigan: Household Budgets, Point In Time 2021.
	Employment	<ol style="list-style-type: none"> U.S. Census Bureau, 2018-2022 American Community Survey, 5-Year Estimates, Retrieved via Kids Count

Health Factor		Data Sources
Family & Social Support	Social Connectedness	<ol style="list-style-type: none"> 1. Michigan Profile for Healthy Youth (MIPHY), Muskegon County 2022. 2. U.S. Census Bureau, Michigan Department of State Election Results and Data, Muskegon County Election Results Archive, 2017. 3. American Community Survey 5-Year Estimates Table CB2000CBP, 2017-2021. 4. County Health Rankings, Residential Segregation, 2022.
	Child Care	<ol style="list-style-type: none"> 1. Michigan Department of Health and Human Services, Assistance Payment Statistics - Table 41.J, 2022, retrieved via KidsCount. 2. Michigan State University Community Evaluation Programs, child care Desert Map, based on childcare providers available in Feb 2023. 3. United for Alice. Michigan: County reports 2021. 4. U.S. Census Bureau, Small Area Income and Poverty Estimates, 2021-2022, SAIPE. 5. Social Influencers of Health Screening Results Consolidated Results, Community Health Innovation Region, 2023. For all clients screened by Trinity Health, HealthWest, Muskegon Family Care, Access Health, and Hackley County Community Care Center.

Health Factor		Data Sources
Community Safety	Injuries	<ol style="list-style-type: none"> 1. National Center for Health Statistics, Mortality Files, 2016-2020 2. Michigan Traffic Crash Facts, Muskegon County 2022 Traffic Crash Data & 2018-2022 5-year Trends.
	Suicide	<ol style="list-style-type: none"> 1. Michigan Profile for Healthy Youth (MIPHY), Muskegon County 2022. 2. MI SUDDR, Suicide Deaths Annual Number 2021. 3. Online High School Results, Michigan Youth Risk Behavior Survey, Centers for Disease Control, 2021.
	Crimes and Violence	<ol style="list-style-type: none"> 1. MDHHS APS Data accessed via AgeWell Services of West Michigan, 2023. 2. FBI UCR 2015-2017, Michigan Incident Crime Reporting Supplemental Report, 2022, Offenses by County and City/Township. 3. Crime Grade retrieved January 11, 2023.
	Youth Safety	<ol style="list-style-type: none"> 1. Michigan Department of Health and Human Services, Children's Protective Services, 2022. 2. Michigan Profile for Healthy Youth (MIPHY), Muskegon County 2022. 3. Online High School Results, Michigan Youth Risk Behavior Survey, Centers for Disease Control, 2021.

Health Factor		Data Sources
Physical Environment	Air and Water Quality	<ol style="list-style-type: none"> Agency for Toxic Substances and Disease Registry (ATSDR). 2007. Toxicological Profile for Arsenic (Update). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service. Centers for Disease Control and Prevention. Lead in Drinking Water. 2023. MI Department of Environment, Great Lakes, and Energy. Arsenic (2019) Michigan Department of Environment, Great Lakes, and Energy. (2024) PFAS and Health MI Lead Safe. Water Supply Lead Results 2024. MI Tracking, Blood Lead Levels, 2022. MDHHS. West Michigan Clean Air Coalition, 2023.
	Homelessness/Housing	<ol style="list-style-type: none"> Muskegon County homeless Continuum of Care Network. Retrieved via Livability Lab Data January 3, 2024. MI School Data. Homeless Student Data (MSDS), school year 2022-2023 [Dataset] Ending Homelessness In Michigan, 2022 Annual Report. U.S. Census Bureau. Homeownership By Race and Ethnicity of Householder. 2020. Centers for Disease Control, PLACES 2017-2021.
	Transit	<ol style="list-style-type: none"> U.S. Census Bureau. 2017-2021 American Community Survey 5-Year Estimates. retrieved via Trinity Data Hub Map Room. U.S. Environmental Protection Agency, National Walkability Index, June 2021. Social Influencers of Health Screening Results Consolidated Results, Community Health Innovation Region, 2023. For all clients screened by Trinity Health, HealthWest, Muskegon Family Care, Access Health, and Hackley County Community Care Center.
	Internet Coverage	<ol style="list-style-type: none"> Federal Communications Commission. FCC National Broadband Map. Washington, D.C.: FCC. 2024 Federal Communications Commission. Total EBB & ACP Support by Geographic Region. Washington, D.C.: FCC. 2024 U.S. Census Bureau. (2022). Types of Computers and Internet Subscriptions. American Community Survey, ACS 5-Year Estimates Subject Tables. Table S2801 and Table B28005.

Attachment C: Disparities By Health Factor References

The following provides a list of resources used to support evidence of a disparity for populations.

Health Factor		Reference in Support of Identified Disparities
Diet & Exercise	Physical Activity	<ol style="list-style-type: none"> 1. Adult Physical Inactivity Prevalence Maps by Race/Ethnicity, CDC. 2. Physical Activity for People with Disability CDC 3. Physical Activity Guidelines for Americans (health.gov) 2019. 4. Frederick, G. M., Castillo-Hernández, I. M., Williams, E. R., Singh, A. A., & Evans, E. M. (2022). Differences in physical activity and perceived benefits and barriers to physical activity between LGBTQ+Q+ and non-LGBTQ+Q+ college students. <i>Journal of American college health: J of ACH</i>, 70(7), 2085–2090. https://doi.org/10.1080/07448481.2020.1842426. 5. Kiernan, S., Mockler, D., Ni Cheallaigh, C., & Broderick, J. (2021). Physical functioning limitations and physical activity of people experiencing homelessness: A scoping review. <i>HRB Open Research</i>, 3, 14. https://doi.org/10.1
	Food Insecurity	<ol style="list-style-type: none"> 1. Feeding America, 2022 2. Feeding America, Map the Gap, Senior Hunger, 2021. 3. Feeding America, Active Military and Veteran Food Insecurity. 4. Sharareh, N., Seligman, H. K., Adesoba, T. P., Wallace, A. S., Hess, R., & Wilson, F. A. (2023). Food Insecurity Disparities Among Immigrants in the U.S. AJPM focus, 2(3), 100113. https://doi.org/10.1016/j.focus.2023.100113 5. Alleviating Food Insecurity in the Disabled Community, 2021. 6. USDA Food Security and Nutrition, 2022. 7. Feeding America Press Release, 2022. 8. Fitzpatrick, K.M., Willis, D.E. Homeless and hungry: food insecurity in the land of plenty. <i>Food Sec.</i> 13, 3–12 (2021).
	Access to Healthy Food	<ol style="list-style-type: none"> 1. NIH Food accessibility and insecurity is a social determinant of health, 2023.
Substance Misuse	Tobacco Use	<ol style="list-style-type: none"> 1. Population Disproportionately Impacted By Tobacco Use in Michigan, MI Department of Health & Human Services Tobacco Prevention & Control, 2011-2021 2. Military Service Members and Veterans For Specific Groups Tips From Former Smokers CDC 3. People Experiencing Homelessness Smoking Cessation Leadership Center (ucsf.edu)
	Alcohol & Other Drug Misuse	<ol style="list-style-type: none"> 1. SAMHSA Racial and Ethnic Disparities, 2021. 2. NIH Substance Use and SUDs in LGBTQ+Q Populations, 2020. 3. CDC Mental Health and Substance Use Among Disabilities During the COVID-19 Pandemic, 2021. 4. SAMHSA Addressing SDOH among individuals experiencing Homelessness, 2023. 5. NIDA Substance Use and Military Life Drug Facts, 2019. 6. NIDA Scope of Substance Use in Older Adults Drug Facts, 2020.
	Overdose Deaths	<ol style="list-style-type: none"> 1. CDC Vital Signs, 2022. 2. CDC Drug Overdose Deaths in individuals 65 and over, 2022. 3. Begley, M. R., Ravindran, C., Peltzman, T., Morley, S. W., Stephens, B. M., Ashrafioun, L., & McCarthy, J. F. (2022). Veteran drug overdose mortality, 2010-2019. Drug and alcohol dependence, 233, 109296. https://doi.org/10.1016/j.drugalcdep.2022.109296 4. Aram, J., Dallal, C. M., Cosgrove, C., Arria, A., Liu, H., & Slopen, N. (2024). The risk of drug overdose death among adults with select types of disabilities in the United States - A longitudinal study using nationally representative data, <i>Preventive medicine</i>, 178, 107799. 5. Doran KM, Fockele CE, Maguire M. Overdose and Homelessness—Why We Need to Talk About Housing. <i>JAMA Netw Open</i>. 2022;5(1):e2142685. doi:10.1001/jamanetworkopen.2021.42685

Health Factor		Reference in Support of Identified Disparities
Economic	Employment	<ol style="list-style-type: none"> 1. Get the Facts on Economic Security for Seniors (ncoa.org) 2. People Of Color See Higher And Rising Unemployment In Possible Signs Of Softening Economy (forbes.com), March 2023 3. Persons with a Disability: Labor Force Characteristics - 2022 (bls.gov) 4. Homelessness and Employment, Homelessness Policy Research Institute, 2020 5. Same-Sex Couples Experience Higher Unemployment Rates Throughout an Economic Recovery - Center for American Progress, May 2020
	Poverty/Income	<ol style="list-style-type: none"> 1. Get the Facts on Economic Security for Seniors (ncoa.org) 2. Disability & Socioeconomic Status (apa.org) 3. Fact Sheet: LGBTQ+ Workers in the Labor Market - Center for American Progress, June 2022 4. Assimilation and Emerging Health Disparities Among New Generations of U.S. Children - Center for Poverty and Inequality Research (ucdavis.edu) 5. Homelessness and Racial Disparities - National Alliance to End Homelessness
Education	Early Childhood Education	<ol style="list-style-type: none"> 1. Healthy People 2030, Sexually Transmitted Infections Workgroup, Health.gov 2. Parekh, T., Gimm, G., & Kitsantas, P. (2023). Sexually Transmitted Infections in Women of Reproductive Age by Disability Type. American journal of preventive medicine, 64(3), 393–404. 3. CDC Sexually Transmitted Diseases, 2022 4. Alhusen, J. L., Bloom, T., Laughon, K., Behan, L., & Hughes, R. B. (2021). Perceptions of barriers to effective family planning services among women with disabilities. Disability and health journal, 14(3), 101055. 5. Healthy People 2030, Reduce the Proportion of Unintended Pregnancies- FP-01, Health.gov 6. Disability Impacts All of Us Infographic CDC 7. Assimilation and Emerging Health Disparities Among New Generations of U.S. Children - Center for Poverty and Inequality Research (ucdavis.edu) 8. Egede LE. Race, ethnicity, culture, and disparities in health care. J Gen Intern Med. 2006 Jun;21(6):667-9. doi: 10.1111/j.1525-1497.2006.0512.x. PMID: 16808759; PMCID: PMC1924616. 9. Discrimination and Barriers to Well-Being: The State of the LGBTQ+QI+ Community in 2022. Center for American Progress 10. Preparing the Future Workforce, Early Care and Education Participation among Children of Immigrants, Center on Education and Data Policy, March 2019 11. Access to High-Quality Early Education and Racial Equity, National Institute for Early Education Research, Special Report June 2020 f 12. Policy Statement On Inclusion Of Children With Disabilities In Early Childhood Programs, March 2023 U.S. Departments of Education (ED) and Health and Human Services (HHS) 13. Closing the Opportunity Gap for Young Children. Washington (DC): National Academies Press (US); 2023 Oct, National Academies of Sciences, Engineering, and Medicine 14. INFANTS AND TODDLERS EXPERIENCING HOMELESSNESS November 2022 Prevalence & Access To Early Learning in Twenty States, School House Connection 15. Coulter-Thompson EI. Bias and Discrimination Against Lesbian, Gay, Bisexual, Transgender, and Queer Parents Accessing Care for Their Children: A Literature Review. Health Educ Behav.
	Academic Success/ Post Secondary Education	<ol style="list-style-type: none"> 1. Michigan's Black-white college graduation gap is one of largest in nation Bridge Michigan 2. Latino Education Profile in the United States and Michigan - Julian Samora Research Institute - Michigan State University (msu.edu) 3. Access and Participation of Students with Disabilities: The Challenge for Higher Education - PMC (nih.gov) 4. EDUCATING CHILDREN AND YOUTH EXPERIENCING HOMELESSNESS, Summary of Research 2015-2022, National Center for Homeless Education March 2023

Health Factor		Reference in Support of Identified Disparities
Family & Social Support	Community Engagement	<ol style="list-style-type: none"> 1. Health Risks of Social Isolation and Loneliness CDC, retrieved Jan 19, 2024 2. Combating Social Isolation and Loneliness Among Veterans after Separation from Military Service (svr.edu) 3. Social relationships, stigma, and wellbeing through experiences of homelessness in the United Kingdom - Rea - 2023 - Journal of Social Issues - Wiley Online Library 4. Social Determinants of Health and Older Adults, Health.gov
	Childcare	<ol style="list-style-type: none"> 1. The Child Care Crisis Disproportionately Affects Children With Disabilities, Center for American Progress, REPORT JAN 29, 2020 2. Lack of Universal Childcare and Other Family Benefits Hurts LGBTQ+ Parents and Caregivers, Center for Economic and Policy Research, June 29 2022 3. How the High Cost of Child Care Hurts Families, Workers and the Economy, Annie E. Casey Foundation, June 14 2023 4. Poverty Solutions, University of Michigan Report, November 18 2022
Health Factor		Reference in Support of Identified Disparities
Community Safety	Injuries	<ol style="list-style-type: none"> 1. Road Users, Disparities by Race or Ethnic Origin, National Safety Council, 2022.
	Crimes and Violence	<ol style="list-style-type: none"> 1. Healthy People 2030, Crime and Violence, Health.gov 2. CDC Common Barriers to Participation Experienced by People with Disabilities 3. Healthy People 2030, LGBTQ+Q 4. S. Guillot-Wright, E. Cherryhomes, L. Wang, M. Overcash, Systems and subversion: A review of structural violence and im/migrant health, 5. Current Opinion in Psychology, Volume 47, 2022, 101431, ISSN 2352-250X, https://doi.org/10.1016/j.copsyc.2022.101431. 6. World Health Organization, Abuse of older people, 2022.
	Suicide	<ol style="list-style-type: none"> 1. Disparities in Suicide Suicide Prevention CDC 2. Depression and suicide in older adults resource guide (apa.org) 3. Marlow NM, Xie Z, Tanner R, Jo A, Kirby AV. Association Between Disability and Suicide-Related Outcomes Among U.S. Adults. Am J Prev Med. 2021 Dec;61(6):852-862. doi: 10.1016/j.amepre.2021.05.035. Epub 2021 Aug 28. PMID: 34465506. 4. Ayano G, Tsegay L, Abraha M, Yohannes K. Suicidal Ideation and Attempt among Homeless People: a Systematic Review and Meta-Analysis. Psychiatr Q. 2019 Dec;90(4):829-842. doi: 10.1007/s11126-019-09667-8. PMID: 31463733.
	Youth Safety	<ol style="list-style-type: none"> 1. Ayano G, Tsegay L, Abraha M, Yohannes K. Suicidal Ideation and Attempt among Homeless People: a Systematic Review and Meta-Analysis. Psychiatr Q. 2019 Dec;90(4):829-842. doi: 10.1007/s11126-019-09667-8. PMID: 31463733. 2. CDC Health Youth Disparities Among LGBTQ+Q Youth
Health Factor		Reference in Support of Identified Disparities
Clinical Care	Access to Care	<ol style="list-style-type: none"> 1. Disability Impacts All of Us Infographic CDC 2. Assimilation and Emerging Health Disparities Among New Generations of U.S. Children - Center for Poverty and Inequality Research (ucdavis.edu) 3. Discrimination and Barriers to Well-Being: The State of the LGBTQ+QI+ Community in 2022, Center for American Progress
	Quality of Care	<ol style="list-style-type: none"> 1. Egede LE. Race, ethnicity, culture, and disparities in health care. J Gen Intern Med. 2006 Jun;21(6):667-9. doi: 10.1111/j.1525-1497.2006.0512.x. PMID: 16808759; PMCID: PMC1924616. 2. Discrimination and Barriers to Well-Being: The State of the LGBTQ+QI+ Community in 2022, Center for American Progress

Physical Environment		Reference in Support of Identified Disparities
Physical Environment	Homelessness/ Housing	<ol style="list-style-type: none"> 1. Assimilation and Emerging Health Disparities Among New Generations of U.S. Children - Center for Poverty and Inequality Research (ucdavis.edu) 2. Homelessness and Racial Disparities - National Alliance to End Homelessness 3. Homelessness (va.gov), retrieved Jan 15, 2024 4. Aging on the Street: Homeless Older Adults in America - PubMed (nih.gov) 5. Homelessness Among Individuals with Disabilities: Influential Factors and Scalable Solutions - NACCHO 6. On the Margins of Motherhood: Homelessness as a Single Mother - Housing Up 7. LGBTQ+ people are more likely than non-LGBTQ+ people to face housing instability - Williams Institute (ucla.edu)
	Transit	<ol style="list-style-type: none"> 1. Lack of Reliable Transportation for Daily Living Among Adults, United States, 2022, retrieved January 2024 2. Car Access National Equity Atlas, 2020 3. The Key to Escaping Poverty: Transportation Planetizen News
	Internet Coverage	<ol style="list-style-type: none"> 1. It's Time to Address Broadband Connectivity Issues for Older Adults (ncoa.org) 2. Black, Hispanic adults less likely to have broadband or traditional PC than White adults Pew Research Center 3. Article: The Digital Divide Hits U.S. Immigrant Household During Covid migrationpolicy.org 4. Americans with disabilities less likely to own computer, smartphone Pew Research Center 5. Part 4: Single Parents Pew Research Center
	Air and Water Quality	<ol style="list-style-type: none"> 1. Homelessness (va.gov), retrieved Jan 15, 2024 2. Aging on the Street: Homeless Older Adults in America - PubMed (nih.gov) 3. Homelessness Among Individuals with Disabilities: Influential Factors and Scalable Solutions - NACCHO

Attachment D: Partner Input

The following provides an overview of input provided by partner organizations following selection of prioritized health needs regarding underlying issues contributing to each need, opportunities to address the need, and community partners who work to address each issue.

Priority	Underlying Issues	Opportunities	Key Partners/Initiatives
1. Housing	<ul style="list-style-type: none"> - Rental costs have increased while earning power has decreased - Aging housing stock - Poor Credit and evictions 	<ul style="list-style-type: none"> - City and County housing initiatives/plans for development - Providing more HUD supportive housing options. 	<ul style="list-style-type: none"> - Muskegon Housing Commission - City of Muskegon - Muskegon Heights Housing Commission - United Way of the Lakeshore - Dwelling Place - Samaritas
2. Childcare	<ul style="list-style-type: none"> - Affordable access needed - Childcare deserts / Not enough providers - Provider availability for different shifts (evening, overnight) - Barriers to providers to expand or improve in-home care - None/limited drop-in options for school-age youth, such as open gyms or after-school programs 	<ul style="list-style-type: none"> - Training & supports for providers - Educational career pathways for providers - Provider substitute pool - Increase wages for child care providers, and DHHS reimbursement rate. - Cost sharing benefits programs (both for providers and families) - Family access & one-time usage 	<ul style="list-style-type: none"> - Goodwill Industries Tri-Share - United Way - Employer Resource Network - Access Health - Muskegon Area Intermediate School District (MAISD)/Great Start - Childcare Action Group/Team - Arbor Circle - Childcare Connections - Regional Childcare Planning Grant
3. Homelessness	<ul style="list-style-type: none"> - Inadequate permanent supportive housing (PSH) units for chronically homeless - Inadequate rental support (funding) to avoid evictions & rehouse homeless - Lack of sustainable affordable rentals - Lack of funding for case management support services - Services + housing in all areas of the county 	<ul style="list-style-type: none"> - (More providers) Build capacity of additional organizations to provide housing & services - Build/rebuild relationships with landlords to rent to PSH, voucher clients - Need additional funding to build capacity – HUD, philanthropic - Increase rural supports for transportation 	<ul style="list-style-type: none"> - Muskegon Community of Care - True North Community Services - Mission for Area People - Muskegon Rescue Mission - Health West - Every Woman’s Place - City Governments - Life Align - United Way of the Lakeshore

Priority	Underlying Issues	Opportunities	Key Partners/Initiatives
4. Access to Healthy & Affordable Food	<ul style="list-style-type: none"> - Access to healthy food (e.g. Mobile veggie van, Healthy foods in stores) - Inadequate grocery stores in underserved areas/zip codes - Lack of affordable food - Food insecurity - Youth access to food outside of school time - Senior food access 	<ul style="list-style-type: none"> - Increase grocery stores in underserved areas/zip codes - Mobile farmers market - Increase youth and senior access to food - Work with local sources for affordability - Expand Double Up Food Bucks program - List of access programs/locations (map) - Culturally appropriate food access - Community gardens and deck/backyard gardening - Funding 	<ul style="list-style-type: none"> - Food council - Muskegon YMCA - McGloughlin Grows Neighborhood Farm - Prison à Grow Program - MAISD – Creating Healthy Schools - AgeWell
5. Alcohol and other drug Misuse	<ul style="list-style-type: none"> - Lack of available treatment facilities. - Fentanyl issue 	<ul style="list-style-type: none"> - Build a treatment and addiction facility. Accessible, provide transportation. - Social media and ad campaigns - Limit/Regulate marijuana distributors. - Target specific age groups regarding vaping - Diversify funding and spending (at the county level). For example, allocate funds to smaller, grassroots organizations. - Educating parents about protective factors at home that help prevent substance use. 	<ul style="list-style-type: none"> - Coalition for a Drug Free Muskegon - HealthWest - Fresh Coast Alliance - Public Health Muskegon County - Arbor Circle
6. Transportation	<ul style="list-style-type: none"> - Accessible & affordable - Barriers to cross-country options of public transit - Geographical access to all Muskegon County residents (currently only in cities of Muskegon, Muskegon Heights, and Norton Shores) - Transportation availability for all hours of day to ensure employees have access on varying shifts - Additional funding needed for on-demand transportation 	<ul style="list-style-type: none"> - Utilization of electric vehicles (lower costs) - MDOT grant funding to increase accessible, on-demand transportation - Adding Uber/Lyft options (incentivize this to start) - Rental options of safe vehicles (grants)? - More research on outcomes of current needs & current on-demand transportation - More ride share options coordination; possibly coordinate with grant(?) for vehicles - Create/Expand Ride to Work 	<ul style="list-style-type: none"> - West Michigan Shoreline Regional Development Commission - AgeWell (senior transportation) - Senior Mileage - Senior Resources (grant funding) - Pioneer Resources - Muskegon Area Transit System (MATS) - MI Dept. Of Transportation

Priority	Underlying Issues	Opportunities	Key Partners/Initiatives
7. Income/ Poverty	<ul style="list-style-type: none"> – Root cause barriers to income mobility – Access to local resources, especially childcare & transportation – Benefits Cliff: structural policy barriers that trap folks in poverty, ex: wage increase is less than benefits lost 	<ul style="list-style-type: none"> – Aligned/coordinated access to local resources – navigating the safety net takes tremendous time – Increased access to childcare, transportation, housing, etc. à resources need more capacity – Job training, trades training, post-secondary education, information & access to all of the aforementioned options – Specific support to folks with OWIs or felonies 	<ul style="list-style-type: none"> – United Way of the Lakeshore – Michigan Works! / Muskegon Community College – Muskegon Community Health Innovation Region (Access Health)
8. Crime & Violence	<ul style="list-style-type: none"> – Preventing crime & violence – Youth safety – Gun violence 	<ul style="list-style-type: none"> – Increase the number of law enforcement officers + education; proactive approach – Out-of-school programs to provide safe youth opportunities – Conflict resolution skills/classes to increase social-emotional skills – Promoting the free QPR classes. 	<ul style="list-style-type: none"> – MAISD (Project SAFE + Operation Graduation: Jon Gale & Alex Bodenbergl) – District school resource officers (Kiana Longnecker, Matt Dye – truancy) - School climate & culture – Gun Violence Coalition
9. Early Childhood Education	<ul style="list-style-type: none"> – Priority focus for early intervention (increase impact) – Encompasses childcare + resources for children home with parents – Requires investment in childcare providers – ensure it can provide living wage + focus on increasing access to resources for stay-at-home parents – Grandparents raising/caring for children 	<ul style="list-style-type: none"> – IFF funding in Muskegon – Great Start Collaborative is a great resource to answer this! – Upcoming state funding for universal pre-K/expansion of GSRP 	<ul style="list-style-type: none"> – Good will Tri-Share – United Way of the Lakeshore – MAISD, Great Start Collaborative – Faith-based partners – Libraries – Muskegon Oral Health Coalition
10. Provider Adequacy	<ul style="list-style-type: none"> – Loss of Medicaid benefits due to the COVID pandemic officially ending. – Not enough Primary Care Physicians – Access to specialists, both physical & behavioral health – Chronic illness prevention (primary/secondary interventions) 	<ul style="list-style-type: none"> – Increase access to primary care physicians – Education on where to access services (ex: ED vs. Urgent Care vs. PCP) 	<ul style="list-style-type: none"> – Trinity Health Behavioral Services – HealthWest – My Alliance (MAISD mental health systems coordinator)