Making a Difference IN THE HEALTH OF OUR COMMUNITY

COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA)
Adopted FY2021 for FY2022-24

MUSKEGON AND OCEANA COUNTY

A Member of Trinity Health



Mercy Health Mission

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

Values

Reverence – We honor the sacredness and dignity of every person

Commitment to Those Who Are Poor – We stand with and serve those who are poor, especially those most vulnerable

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

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

"May the communal knowledge shared in these surveys further secure, promote and activate projects for greater well-being."

-2021 Mercy Health Community Survey Respondent

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Dear Readers,

Since the publication of Mercy Health Muskegon's 2019 Community Health Needs Assessment, our nation, state and communities have been fundamentally changed by COVID-19. Throughout this deadly pandemic, Mercy Health and our colleagues across Trinity Health have together treated more than 37,000 COVID-19 inpatients and another 100,000 patients in ambulatory settings. Our work in the front lines of this pandemic continues and we appreciate the tremendous support our colleagues and physicians have received from community groups and individuals.

With our extraordinary partnership with Public Health of Muskegon County, District Health Department # 10, local businesses, and many others we've established multiple testing and vaccination sites in our neighborhoods and are directly engaged in communities where individuals may be hesitant to take the vaccine.

The impact of COVID-19 has cut across every sector of our communities – devastating fundamental economic, social and educational infrastructure. It also brought to light many racial and social inequities that are present in the communities in which we serve. Our community's collective prosperity, health, and quality of life depends upon the equitable access for all regardless of the color of a person's skin, social status, or community in which they live.

Those of us at Mercy Health Muskegon which includes our Mercy Campus, Hackley Campus, and Lakeshore Campus in Shelby will continue to meet the needs of our communities and engage in partnership with members of all races, ethnicities, genders, identities, ages, political affiliations, professions and religions to identify and address the many challenges that confront our local communities and residents.

Mercy Health Muskegon believe that our previous CHNA and resulting priorities may no longer meet the compelling needs we face today and those we will continue to face as we work to regain a new normalcy. With this in mind, we have decided to initiate our CHNA process a year early to identify where new priorities for action have emerged and shift our resources to meet these new demands.

Community Health Needs Assessments are intended to be living documents that provide a pathway to improving health and wellbeing for all people. At no other time has this tool been more important to helping us assess need and to act. We are deeply grateful for everyone who has given of their time and talents for this effort.

Sincerely,

Gary AlloreChief Executive Officer

Stevi Riel, Regional Director

Mercy Health Community Health & Well Being
& Health Project Executive Director

SERVICE AREA AND SELECTED RESIDENT DEMOGRAPHICS

Description of Mercy Health Muskegon and Oceana Facilities

Mercy Health Muskegon has served the West Michigan/Lakeshore region as a medical provider for over 115 years. Currently, 267 licensed-bed primary, acute and specialty care system, Mercy Health Muskegon has three campuses including its main campus known as Mercy Campus which is located near U.S. 31 on Sherman Street in Muskegon, the



Mercy Health Service Area ----Primary Service Area -----

Hackley Campus, located in downtown Muskegon, and the Lakeshore Campus located in Shelby, Michigan. Mercy Health Muskegon is also part of Trinity Health's western region known as Mercy Health. With an employee base of 3,500 individuals, including 375 physicians, Mercy Health Muskegon has an annual rate of 17,500 in-patient discharges and nearly 145,000 emergency/urgent care visits. Specialty care services include cardiothoracic surgery, neurosurgery, orthopedics, bariatric surgery and spinal services. Mercy Health Muskegon serves a multicounty area with a primary service area consisting of Muskegon and Oceana Counties with 80% of hospital discharged patients residing in those two counties. Mercy Health Muskegon's secondary market includes portions of Newaygo, Mason, and Ottawa Counties.

The Mercy Campus is a full-service, acute facility located in Muskegon County, serving Muskegon, Oceana and Newaygo Counties.

The Lakeshore Campus is a critical access facility, serving Oceana County and parts of Newaygo County. The Lakeshore Campus is a short-term, critical access hospital facility located approximately 30 miles from Muskegon in neighboring Oceana County. Lakeshore Hospital has 24 beds and has served Oceana County and surrounding areas for 80 years. Lakeshore provides inpatient services and is continually expanding its outpatient services,

as well as outreach and wellness services in the community.

In 2020, Hackley and Mercy campuses consolidated Muskegon's acute operations into a single, new facility on the site of the Mercy campus. Designed to address a model of health care that continues to reduce hospital stays and target community-wide population health improvement, this new \$291 million facility reduced the overall bed capacity in Muskegon from 408 to 267 beds. The Hackley Campus was reopened temporarily in December 2020 during the COVID 19 pandemic to support patients in their COVID recovery. In March 2021, Mercy Health permanently closed the hospital operations on the Hackley Campus, however they maintain administrative, specialty care, pharmaceutical services, behavioral health, and primary care presence. The consolidation has repurposed the Hackley facility maintaining behavioral health, pharmacy & specialty services, and a primary care.

Mercy Health Muskegon's community health and well-being unit, called the Health Project is community convener and facilitator of the Community Health Needs Assessment and the Community Health Improvement Plan for all three hospitals that are part of Mercy Health Muskegon. This arm of the health system coordinates and integrates community and social needs with the delivery of care to ensure high quality, equitable care that is accessible and timely.

Mercy Health's affiliate physician organization is Mercy Health Physician Partners is a multi-specialty physician network that employs more than 500 physicians and advanced practice professionals in Grand Rapids, Muskegon, Holland and the Lakeshore. Mercy Health Muskegon is a member of Trinity Health, one of the largest Catholic multi-institutional health care delivery systems in the United States. Locally, Mercy Health Muskegon embraces its role in the West Michigan community as a trusted medical provider and partner.

Muskegon County, Michigan

Muskegon County is located in the west-central Lower Peninsula of Michigan on the eastern shores of Lake Michigan. The county is comprised of 7 cities, 3 villages and 16 townships. The county seat is the city of Muskegon—the largest city in the county and service area.

Muskegon County has had more than one billion dollars in new investment over the past three years, signaling significant economic revitalization of the area. Despite this, the Lakeshore Chamber of Commerce indicates the area has a workforce shortage and, at this writing, there are approximately 1,400 job openings in the area.

The cities of Muskegon and Muskegon Heights are each designated as Federal Enterprise Communities and, most recently, Federal Opportunity Zones. Within Muskegon County, there are three Entitlement Communities that receive Community Development Block Grant funds. The Entitlement Communities are the cities of Muskegon, Muskegon Heights and Norton Shores. There are also two Federally Qualified Health Centers serving residents of Muskegon County. Both centers are in the city of Muskegon Heights.

Oceana County, Michigan

Oceana County is located immediately north of Muskegon County and along the Lake Michigan coastline. Oceana is a rural county with the second largest fruit tree acreage in the state. Because of its proximity to Lake Michigan, tourism also plays a vital part in the local economy. Oceana County is comprised of 1 city, 6 villages and 16 townships. The county seat is the city of Hart. Oceana County is ranked as a Health Professional Shortage Area and Medically Underserved Population by the federal government.

Service Area Population Demographics

The race, age and gender demographic breakdown of the primary and secondary service area served by Mercy Health Muskegon and Oceana along with continuous counties and the state are as follows.

	Primary Service Market		Secondary	Secondary Service Market		
	Muskegon	Oceana	Mason	Ottawa	Newaygo	State of Michigan
Population	173,408	26,027	28,876	282,250	47,938	9,928,300
% below 18 years of age	23.5%	23.5%	20.7%	24.4%	22.6%	22.1%
% 65 and older	15.9%	19.7%	22.1%	14.0%	18.7%	16.2%
% Non-Hispanic African American	14.1%	0.6%	0.8%	1.5%	1.1%	13.8%
% Native American/Alaskan Native	1.0%	1.6%	1.1%	0.6%	0.9%	0.7%
% Asian	0.7%	0.3%	0.7%	2.9%	0.5%	3.1%
% Native Hawaiian/Pacific Islander	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% Hispanic	5.6%	14.8%	4.6%	9.5%	5.6%	5.0%
% Non-Hispanic White	76.4%	82.1%	91.4%	84.2%	90.7%	75.4%
% Not proficient in English	0%	3%	0%	2%	1%	1%
% Female	50.2%	49.6%	50.1%	50.7%	49.7%	50.8%
% Rural	23.3%	89.9%	62.7%	20.3%	83.8%	25.4%
% Disability Under 65	11.2%	11.7%				
# of Veterans	1,694	11,780				

A total of 199,713 people live in the 1,041.98 square mile area for Muskegon and Oceana Counties, the population density for this area, estimated at 191.67 persons per square mile, is greater than the national average population density of 91.93 persons per square mile.

Zero to Four

Of the estimated 199,713 total population in Muskegon and Oceana Counties, an estimated 12,061 are children under the age of 5, representing 6.04% of the population. These data are based on the latest U.S. Census Bureau American Community Survey 5-year estimates.

	Total Population	Population Age 0-4	% Population Age 0-4	Females	Males
Muskegon County, MI	173,297	10,615	6.13%	5,195	5,420
Oceana County, MI	26,416	1,446	5.47%	736	710
Michigan	9,965,265	571,094	5.73%	292,118	278,976
	U.S. C	ensus, American Comm	unity Survey (2015-19	9)	

There are an estimated 34,324 persons are youth between the ages of 5 and 17, representing 17.19% of the population, 16,881 persons are between the ages of 18 and 24, representing 8.45%, and 119,405 persons are between the ages of 18 and 64, representing 59.79% of the population.

Population Age 65+

Of the estimated 199,713 total population in the report area, an estimated 33,923 persons are adults aged 65 and older, representing 17% of the population.

People with Disabilities

While the U.S Census records disabilities under the age of 65, additional data from the Centers for Disease Control Disability for Health Data Systems show that this number is much higher. A disability is any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity limitation) and interact with the world around them (participation restrictions). There are many types of disabilities, such as those that affect a person vision, movement, thinking, remembering, learning, communicating, hearing, mental health, and social relationships. Although "people with disabilities" sometimes refers to a single population, this is a diverse group of people with a wide range of abilities.

Michigan Disabilities by Type

Type of Disability	% of Population	Total Population
Any Disability	29%	2,310,271
Cognitive Disability	13.9%	1,023,923
Hearing Disability	6.8%	603,527
Mobility Disability	13.5%	1,159,068
Vision Disability	4.2%	335,916
Self-care Disability	4.3%	358,862
Independent Living Disability	8.4%	661,348
U.S. Centers for Disease Control, Disability for Health Data	Systems	

LGBTQI Community Demographics

The Gallop company provides some of the only sampling on the current population of lesbian, gay, bisexual or transgender identification and in their 2020 survey finds 5.6% of U.S. adults identifying as LGBT. Using the Gallup percentage, the LGBT population of Muskegon County may be estimated at 9,704 people and 1,479 people in Oceana County.

Immigrant Community Demographics

Based on 2017 data compiled by the Michigan League for Public Policy and released in January 2019, most immigrants living in Muskegon and Oceana Counties originate from Latin America. 37%, or 1,058, immigrants in Muskegon County and 89%, or 1,318, immigrants in Oceana County, are from Latin America nations. Poverty rates among immigrant populations in Michigan exceed those of U.S. born families. At present, 21.6% of all Michigan immigrants who are uninsured are not citizens.

2021 EXECUTIVE SUMMARY

Community Health Needs Assessment Purpose

Community Health Needs Assessments (CHNA) are federally mandated processes that help a nonprofit hospital identify and prioritize local health and other related needs for action. The resulting document is to be inclusive of community voiceand representation from organizations or individuals who are affiliated with public health. The CHNA examines the medical and other needs of a community, as well as, the role of prevention in supporting health improvement and wellbeing.

Priorities identified through an assessment process create a road map for a hospital's local medical care delivery and investment strategy. This investment is reported to the Internal Revenue Service (IRS) on a hospital's annual 990H filing as Community Benefit. The CHNA process ensures that the hospital's priorities align with community stakeholders and residents when considering local need. A CHNA uses both qualitative and quantitative data to identify, measure and prioritize specific need. Special attention is given to input received from residents living in distressed communities. CHNA processes are mandated to target underserved and marginalized populations within the service area to ensure the priorities of all residents are identified and integrated into the assessment document.

The CHNA process also incorporates a separate Community Health Investment Plan (CHIP). This Plan takes the priorities identified in the assessment process and then details where and how the hospital and other partnering organizations will invest resources and establishes specific outcome measures. In addition to helping a hospital, the CHNA process fulfills many other functions. Examples include:

- · Community-based planning and investment by other nonprofit, government and for-profit entities
- Identifying those members of a community who are most at risk and in need of support
- Grant making grant seeking around shared community objectives
- Federal and State Regulatory Requirements
- · Alignment with system wide medical targets and goals to address the underlying drivers of health
- Measuring the success of interventions across multiple sectors

CHNAs can drive significant change in communities and are an important part of a hospital's commitment to improving population health and wellbeing.

A 2021 Consolidated Facility Assessment Process

This 2021 Community Health Needs Assessment (CHNA) was conducted jointly with the three hospital system facilities comprising Mercy Health Muskegon: Mercy Health Mercy Campus, Mercy Health Hackley Campus, and Mercy Health Lakeshore Campus. These hospitals are required to conduct assessments at least once every three years. The use of a single CHNA document for multiple sites is permitted under IRS Section 501 (r) Final Rule, as all three West Michigan entities serve a common geography that incorporates two contiguous counties. The Lakeshore Campus Advisory Board has agreed to participate in this joint CHNA process, based on the overlap of medical and other community services.

While this is a single CHNA, separate planning committees were convened in the primary service areas of Muskegon and Oceana Counties. The Mercy Health CHNA document highlights the views and needs of all facilities and reflect their unique surrounding communities. Although the hospital service area for all three campuses is considered the same, the population base of each county is very different. Muskegon County is predominantly urban and suburban, while Oceana County is majority rural with smaller municipal centers.

The two CHNA Advisory groups were responsible for overseeing their local process ensuring that the resulting document appropriately represents the many multi-sector views of their respective communities. Mercy Health is grateful for the participation of the many community leaders who gave their time and skills throughout this process. More than 45 partner organizations with 65 community members participated in an advisory capacity to offer their insights, review

strategy, oversee the survey process and participate in priority setting. The CHNA Advisory Committee thought that community opinion, experiences, and voice was crucial in helping to determine the priorities for the next three years.

Over a five-month period data was collected from national, state, and local sources and a community survey with 45 questions was conducted through April 2021 with 1,257 responses. The CHNA Team also conducted 13 focus groups with 138 participants. In May of 2021, CHNA Advisory Committees and Health Project Advisory Community conduced their prioritization process and recommended priorities with the Mercy Health Board of Directors approving them at their June 24th Board Meeting.

Priorities for the Mercy Health 2021 CHNA

Muskegon Priority Areas

- 1. Education
- 2. Employment & Income
- 3. Community Safety Racism & Discrimination
- Disparities in Housing Residential Housing & Water
- Healthy Behaviors (Tobacco, Nutrition, Exercise, Alcohol and Drug Use, Sexual Behavior)

Oceana Priority Areas

- 1. Education
- 2. Access to Care
- 3. Housing & Transit
- Employment Childcare & Training Opportunities
- 5. Diet & Exercise

We also want to thank our partners from Muskegon County Public Health Department and District #10 Health Department for their exceptional expertise and input. These are extraordinary times for our nation's public health professionals. Their service to this process and to their communities during the COVID-19 pandemic is deeply appreciated.

This CHNA will be published on Mercy Health's website at www.mercyhealth.com and the Health Project's at www.mercyhealth.com at www.mercyhealth.com at www.mercyhealth.com at www.mercyhealth.com at www.mercy

Mercy Health CHNA Advisory Council

After the 2019 CHNA, Mercy Health reestablished their CHNA Advisory council, two Health Project board members, Kate Kesteloot Scarbrough and Jim Fisher volunteered to oversee this committee, establishing a core decision team with Health Project staff. The core team hired a strategic planner, facilitated several implementation meetings, and helped plan and write the 2019 Implementation Plan that was approved by the Mercy Health Board in November of 2019.

In addition to aligning current initiatives of the community and Health Project, this team worked with Executive Director, Stevi Riel to make recommendations to the Health Project Board to support organizations on their implementation strategies through the Community Benefit Board Initiatives (CBBI) granting process.

Regular meetings were held every other month except for a six-month disruption due to the COVID-19 pandemic. While Health Project staff were furloughed during this time, the Health Project board volunteers screened applications and made grants to community organizations working on CHNA priority areas. Thee CHNA Advisory committee resumed meeting in December 2020 to produce an updated implementation document, to discuss needed support for initiatives, and when the next CHNA planning would commence.

In late December of 2020, Health Project leadership and advisory board members made the decision to move up the Mercy Health CHNA to discover issues surrounding the COVID-19 pandemic as well as to align with the

Alexis Dye Hackley Community Care Center

Allison Keessen MAISD Great Start

Amy Moore Community Foundation for Muskegon Co.
Arturo Puckerin Muskegon/Oceana Comm. Action Partner.

Bruce Spoelman YMCA of the Lakeshore Carol Towne Oceana County Leader

Chris Patterson Muskegon Community College

Christine Jensen Oceana County Leader
Christine Robere United Way of the Lakeshore
Cindy Larsen Lakeshore Chamber of Commerce

Cindy Santiago Oceana County Leader

Cory Mitchell Mercy Health Mission Services

Dave Ramos Auto Body/MH Board of Trustees

Dr. Dave Wingard True North Community Services

Emma Kirwin Walkerville Thrives

Irma Hinojosa Hart Public Schools Board of Education

Jeanette Hoyer Goodwill West Michigan

Jill Montgomery Keast Public Health Muskegon County

Jim Fisher Health Project Board
John T. Foss Mercy Health Lakeshore
Kate Kesteloot Scarbrough Health Project Board
Kathy Rohlman Michigan Works
Kathy Sales Childcare Action Team
Kevin Hughes District Health Depart. #10

Marquis Childers Muskegon Heights Neighborhood Assoc.

LifeCircle/Pace / MCHP Board

Marty Grenier Muskegon Food Alliance
Matt Cortez Muskegon Public Schools
Michael C. Ramsey Community Encompass/HP

Morgan Carroll Lakeshore Chamber of Commerce
Randy Lindquist Muskegon Intermediate School District

Robert Tolbert Muskegon Public Schools

Stevi Riel The Health Project
Virginia Taylor Community Encompass

Kent County CHNA process. Community partnerships with organizations was broadly expanded with recruitment of additional members to assist with the 2021 CHNA process. The current advisory council is comprised of 34 members of whom 21 are women, 14 men and 10 who are African American or Hispanic.

Luke Reynolds

In January 2021, the CHNA Advisory Council officially approved their new designation as the 2021 CHNA Advisory Committee and to complete the process by June 30, 2021 in an expedited six-month process.

Oceana County had extraordinary representation from the community for the CHNA. In addition to the CHNA Advisory Committee members, 227 survey participants and over 50 people participated in focus groups. The following people from the partner organizations attended one or all four stakeholder meetings, hosted focus groups, helped to prioritize the issues, or offered assistance of another kind.

Additional Oceana County Stakeholder & CHNA Participants

John T. Foss Mercy Health Lakeshore Campus

Barbara Saunders Sims United Way of the Lakeshore, Oceana Co.

Bob Thompson Peterson Farms

Cindy Vinke Oceana County Family Court
Craig Mast Oceana County Sheriff

Cyndi Cruz Michigan Department of Health & Human Services Oceana

Danielle Siegel Oceana Community Foundation
Deb Cholka Mercy Health Lakeshore Campus
Erin Barrett District Health Department #10

Heather Douglas Pentwater Township

Irma Hinojosa Hart Public Schools Board of Education/WMMRC

Janet Vyse Staszak MDHHS - Mason/Oceana

Jason Kraft Representative Scott VanSingel, 100th House District

John Cooney Mercy Health Sable Point

Juan Salazar City of Hart

Karen MacWilliams Lakeshore Medical Ctr-Mercy
Kathleen Rash Hart Area Public Library

Katie Miller District Health Department #10
Kevin Hughes District Health Department #10

Kori Montney Muskegon Oceana Community Action Partnership

Leaann Haase Hart Family Medical-Mercy
Melissa Schneider Mercy Health Lakeshore Campus

Michelle Comstock Mercy Health Lakeshore Advisory Board
Patti Hammond Lakeshore Hospital Advisory Board

Paul Inglis Village of Shelby
Penny Burillo Oceana County Leader
Rachel Sollner MDHHS - Oceana & Mason

Rep. Scott VanSingel 100th House District Ruby Salgado State of Michigan

Scott Beal Silver Lake-Hart Chamber & Visitor Bureau

Sharon Hallack Oceana's Herald Journal

Sr. Guadalupe Moreno St. Gregory-Our Lady of Fatima
Tammy Carey Oceana Community Foundation

Tim Horton Mercy Health Lakeshore Advisory Board Wendy Taylor West Michigan Community Mental Health

Staff & Consultants

The Health Project's Executive Director, Stevi Riel oversaw the CHNA with Community Health Improvement Manager, Laura Fitzpatrick acting as project manager, writer, and final editing. Colleagues Catalina Burillo, Tressa Crosby, and Neema Maharajan were responsible for data collection, analysis, meeting and focus group facilitation, community outreach,. Colleagues Melissa Blackmer and Rachel McCoy assisted with marketing. Kori White Bissot of KWB Strategies was hired to provide structural oversight, strategic planning process facilitation, and data dissemination

for the team. The Health Project also hired Vondie Woodbury of the Woodbury Group to design, write and edit the CHNA document.

The Decision Making and Priority Setting Process

The decision making and priority setting process for the 2021 Community Health Needs Assessment for Muskegon and Oceana Counties incorporated a six-step structure. This approach was organized around the use of the County Health Rankings and Roadmaps framework, which categorizes data and identifies health risk and behavioral issues. Primary resources used for the process are available at Association for Community Health Improvement's Community Health Assessment Toolkit and the County Health Rankings & Roadmaps Action Center.

Details of the six-step approach were discussed within each CHNA Advisory committee and the decision points determined as follows:

STEP 1 - Organize and update data around location, population and health factors

<u>Service Delivery Parameters</u> the CHNA process focused on data from Muskegon and Oceana Counties. The counties are contiguous and are the home counties of the three Mercy Health hospital facilities representing the primary geographic service delivery area. Mercy's secondary service area locations have other resident hospital systems ⁱthat could conduct more localized and robust CHNA processes in those sites.

<u>Populations of Focus</u> CHNA intentionally focuses on how and why specific issues adversely impact communities of color, those living in rural areas, and those who have been most vulnerable to COVID-19 morbidity/mortality rates.

<u>Data Deliberations</u> Data is organized and updated to assess thirteen identified health factors that align with the County Health Rankings and Roadmaps model. Additional data that is more recent and/or provides important context is also incorporated. Root Cause Analysis is also initiated as decision-making pivots to selection and prioritization. Both qualitative and quantitative data are used to ensure the process clearly identified the individual needs and priorities for each county.

A compilation of health factor data (quantitative) was presented to Advisory Group stakeholders in Muskegon County on February 18, 2021 and in Oceana County on February 25, 2021. A broad overview was shared with each group to help initiate discussion about health-related impact and stimulate deliberation.

An online community survey was then developed and distributed to members of each Advisory panel as well as to stakeholder groups in both counties on March 11th. Participants were asked to review survey data and rate each factor using the three prioritization criteria: Importance, Racial Disparity and Ability to Impact. Fifty-three Oceana stakeholders participated in the survey and forty-nine stakeholders from Muskegon.

STEP 2 – Determine the health factors that should be explored further in data collection

Stakeholder Survey Review

The results of the individual stakeholder surveys were reviewed with the broader CHNA Advisory Council and the Oceana group on March 11, 2021. Each panel determined that more information was needed to better understand and target specific root cause drivers of health outcomes. In Muskegon County, members wanted more information on access to care, education, community safety, employment and income, social and family support, sexual activity. In Oceana County more information on diet and exercise, education, housing and transit and employment was recommended for more data analysis.

STEP 3 – In-depth Data collection for priority health factors

Between April 1 and April 30, additional data collection was conducted. This collection period focused on data that would allow the CHNA to "tell the story" by targeting root causes and other underlying issues that influence health factors. This material was drawn from the following sources:

- Archival data (secondary) that relates to root causes;
- Qualitative community survey (attitudes and beliefs)
- Focus groups and community conversations with residents
- Resource and gap analysis/assessment

An extensive CHNA Community Survey was posted online on April 1, 2021 through May 10th in English and Spanish. Mercy Health had a comprehensive social media marketing and community presence with overall total of 1,257 individuals completing the survey.

In addition to the survey, a total of thirteen focus groups were conducted, nine in Muskegon, four in Oceana. This process engaged about 128 people and targeted key stakeholder constituencies. Respondent groups were seniors, individuals with low socioeconomic status, individuals with disabilities, African American youth, LGBTQ+ & Allies, Muskegon Heights residents, social justice, health disparities, Oceana Rotary, church groups, & employer stakeholders. Significant attention was given to understanding the issues in community regarding the COVID-19 Pandemic as well as a deep dive into understanding inequities with regard to race, cultural and sexual identity, and socio-economic status.

2021 CHNA Community Survey & Focus Groups

A total of 1,257 community surveys were taken in Mercy Health's two counties:

- Muskegon 980
- Oceana County 277

13 Focus Groups were facilitated:

- Muskegon 9
- Oceana 4

STEP 4 – Priorities Determined for Recommendation

Prioritization Process Three criteria were used when determining the final priorities for action.

- The importance of a health-related issue to health outcomes, cost, and quality of life;
- The impact of an issue on health inequity or disparity, particularly when these disparities are often identified or affiliated with health disparities in communities of color;
- The ability to make a measurable difference on a particular issue when considering overall cost, the scope/depth of need and other variables.

Following completion and analysis of the community survey and focus groups, Muskegon County's Advisory Committee met on May 20th and May 27th, 2021 with Oceana's CHNA Stakeholder group to make final prioritization decisions. Members reviewed data as a group and were given opportunity to further discuss priority areas in break-out sessions. Participants were then asked to report back from the breakouts and take a final prioritization survey during the meeting.

Discussion followed to affirm the survey and make final recommendation for the HP Advisory Board. On June 4, 2021 the Health Project's Advisory Board affirmed these areas.

Priorities for Mercy Health 2021 CHNA

Muskegon Priority Areas

- 1. Education
- 2. Employment & Income
- 3. Community Safety Racism & Discrimination
- Disparities in Housing Residential Housing & Water
- 5. Healthy Behaviors (Tobacco, Nutrition, Exercise, Alcohol and Drug Use, Sexual Behavior

Oceana Priority Areas

- 1. Education
- 2. Access to Care
- 3. Housing & Transit
- Employment Childcare & Training Opportunities
- 5. Diet & Exercise

STEP 5 – <u>Develop and Complete the CHNA Report</u> The CHNA report was compiled and written concurrently as key portions of the community process enfolded. An initial draft of the document was completed on May 25, 2020, for full team review, editing, and preparation for a final draft to be given to each hospital's Board of Trustees for finalization.

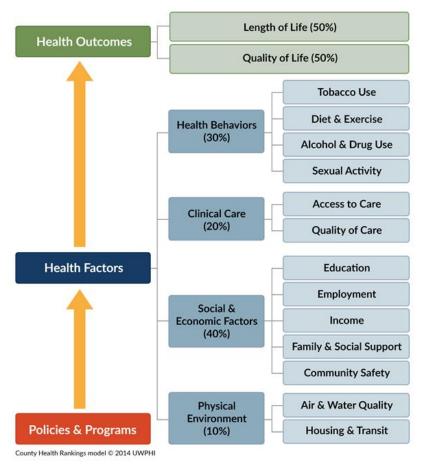
STEP 6 – Mercy Board of Trustees Formal Approval The consolidated 2021 Consolidated CHNA was presented to the Mercy Health Board of Trustees and approved on June 24th, 2021.

The ranked priorities of the 2021 CHNA were a result of many months of data analysis, robust community conversations with key stakeholders and community members. For additional information on these priority areas we invite you to examine document and the appendix materials which provides the data resources and links to the data as well as documentation on our process.

Understanding the County Health Rankings Model

For this CHNA, Mercy Health Muskegon is using the nationally recognized County Health Rankings model developed by the University of Wisconsin's Population Health Institute. Beginning in 2010, through a partnership with the Robert Wood Johnson Foundation, the County Health Rankings has produced "a population health checkup" for over 3,000 counties in the United States.

The model is unique because the Rankings are based on an approach to community health that emphasizes multiple factors influencing how long and how well people live. The Rankings incorporate more than 35 different individual measures that can help communities understand how healthy their residents are today (Health Outcomes) and what will impact their health in the future (Health Factors). The measures are inclusive of both Social Influencers of Health (SIOH) and individual health behaviors. Both have been shown to



highly influence individual physical health and wellbeing.

Quantitative data contained in this CHNA document is primarily sourced from the County Health Rankings website at <u>Explore Health Rankings</u>. Other data referenced throughout the document will include additional source material and corresponding citation material.

The Mercy Health CHNA will report data in the same order as found in the Rankings framework shown. Our data review begins with <u>Length of Life</u> data and ends with <u>Housing and Transit</u>.

The County Health Rankings measurement process allows us to compare how Muskegon and Oceana Counties rank against all the other counties in Michigan on a 1 (best) - 83 (worst) scale. Throughout this CHNA we will post how Muskegon and Oceana rank. In this way, using a scale of 1 (best) through 83 (worst) our community - organizations and residents - can better understand where significant need exists and where we are making progress.

As noted earlier, quantitative data contained and shared in this report was gathered through the community-wide survey, local discussions, and focus groups. These quotes and measures ensure that we are integrating into the CHNA the unfiltered voice and priorities of our local community. How people experience health – whether behavioral, through medical care, or influenced by social and economic factors and/or policy change presents a level of context that data alone cannot convey. Health in our communities is multi-faceted and challenges us to think differently about sustainable solutions.

Health Outcomes & Health Factors

Mercy Health's CHNA will explore both **Health Outcomes** which measures today's health and **Health Factors** which contribute to tomorrow's
health. From these factors we can monitor baseline
data, plan, and implement or support opportunities
to change the future of the communities we serve.

Health Outcomes Today's Health Health Health Health

County Health Rankings State & Local Reports

The CHNA aligns with the 2021 County Health Rankings. Additional state and local reports and more information about county indicators, resources on multiple subjects, and community based strategies are located on their website at: County Health Rankings & Roadmaps

County Health Rankings & Roadmaps

Building a Culture of Health, County by County

Additional Data Sources for the 2021 CHNA

The County Health Rankings represent data that is derived from national data sets available universally to monitor health outcomes and factors in all counties of the United States of America. While the 2021 Health Rankings information was published recently, the data reflected may be from 2018 or 2019. Where possible, additional data was derived from state, local, and from Mercy Health's aggregate data sets that reflect more recent indicators. Local data sources may also be utilized from the 2019 Mercy Health CHNA, if it was the most recent information collected. No personal health data from partners or Mercy Health is available from individual patients, consumers, or citizens in accordance with HIPPA privacy standards.

In addition to the Health Rankings data was drawn from many sources including, but not limited to the following:

CHNA D	ata Sources
CHIR Livability Lab ⁱⁱ	County Health Rankings
Coalition for a Drug Free Muskegon County	Michigan Automated Prescription Service
HealthWest – Annual Report 2020	MI Department of Education / MI School Data
Gallup	Michigan Profile for Healthy Youth (MiPHY)
Greater Muskegon Economic Development	Michigan Department of Health and Human Services
Lakeshore Chamber of Commerce	Michigan Department of Licensing and Regul. Affairs
Lakeshore Regional Entity	Michigan Department of Technology, Management and
Michigan Cancer Atlas 2017	Budget (milmi.org)
Muskegon Homeless Continuum of Care	Michigan Office Environmental and the Great Lakes
Muskegon Health Disparities Coalition	Michigan Behavioral Risk Factor Survey
Office of the Great Start & Great Start Collaborative	Michigan State Police Crime Statistics
Public Health of Muskegon County	Michigan Substance Use Disorder Data Repository
Talent 2025	The Centers for Disease Control and Prevention
United Way for Allice	The US. Substance Abuse and Mental Health Services
Together Care – EPIC	Administration (SAMHSA)
Trinity Health Data Hub	The U.S. Bureau of Labor Statistics
YMCA of the Lakeshore	The U.S. Census Bureau
Muskegon & Oceana Residents	

HEALTH OUTCOMES

Health Outcomes represent how healthy a county is right now. They reflect the physical and mental well-being of residents within a community through measures representing not only the length of life but quality of life as well.

Health Outcomes are influenced by the many factors that influence health, from the quality of medical care received to the availability of good jobs, clean water, and affordable housing. These health factors are influenced by

2021 Health Outcomes

Muskegon County - 73

Oceana County - 61

programs and policies in place at the local, state, and federal levels. By looking at data related to Health Outcomes, we can get a glimpse at whether health improvement programs in a county are working.

Health Outcome rankings are based upon two primary data sets. The first measure targets the Length of Life. **Length of Life** is measured by looking at the local rate of premature death. Premature death is based on the years of life lost before individuals reach the age of 75.

The second part of this ranking targets the *Quality of Life*. Four individual measures are used to assess quality of life: 1) the percentage of adults who report they are in poor to fair health; 2) the average number of days people report they are having poor physical health; 3) the average number of days people report they are having poor mental health and, 4) the percentage of babies born at a low birthweight.

Based upon a combination of these two measures, the 2021 Rankings place Muskegon County at 73 making it among the least healthy counties in Michigan (0 - 25% percentile); Oceana is ranked 61 placing it in the lower middle range (25% - 50%) of Michigan counties.

Many of the leading causes of death in the Mercy Health service area can be mitigated or forestalled by changing individual behavior, addressing the root cause of disparities and creating environments that support healthy living. According to the State of Michigan's website, in 2018 the ten leading causes of death in Muskegon and Oceana counties are as follows:

Cause of Death	Muskegon County	Oceana County	Michigan
Heart Disease	380	72	25,345
Cancer	418	59	21,025
Chronic Lower Respiratory Disease CLRD	112	17	5,783
Accidents	108	11	5,564
Stroke	108	19	5,180
Alzheimer's	110	13	4,474
Diabetes	63	6	2,824
Kidney Disease	35	6	1,943
Pneumonia/Flu	14	6	1,871
Suicide	32	4	1,547
Total	1,847	260	98,985

The two leading causes of death in the Mercy Health Muskegon region continue to be heart disease and cancer. Cancer rates in Muskegon County, and specifically in the cities of Muskegon and Muskegon Heights, exceed both national and state rates. A recent study estimates that approximately one-third (34%) of cancer deaths in Americans aged 25 to 74 years could be averted with the elimination of socioeconomic disparities. ⁱⁱⁱThis suggests the important potential impact of place-based population health interventions.

2018 is the most recent year of cause of death data posted on Michigan's website. The onset of COVID-19 has had a profound impact on local and state rates of morbidity and mortality with some demographic groups – the elderly, those

with pre-existing medical conditions and communities of color - bearing a disproportionate share of this impact. Where possible we are including additional data that speaks to the pandemic's national, state and local impact.

COVID-19 Related Deaths

Both Muskegon County and Oceana County had experienced several deaths due to the COVID-19 pandemic. As of June 1st, these numbers were reported.

Report Area	Total Population	Total Deaths	Deaths, Rate per 100,000 Population
Muskegon	173,588	362	208.54
Oceana	26,625	60	225.35
Michigan	9,995,915	20,315	203.23
United States	326,262,499	588,131	180.26

Data source: Johns Hopkins University via Trinity Health Data

"Hub https://trinityhealthdatahub.org/covid-19-indicators-report/

Length of Life

Measuring how long people in a community live tells us whether people are dying too early and prompts us to look at what is driving premature deaths. Premature death (YPLL) | County Health Rankings & Roadmaps

Years of potential life lost before age 75 per 100,000 population (age adjusted). (2017 – 2019)

United States	Michigan	Muskegon	Oceana
6,900	7,500	8,500	7,600
Premat	ure death (YPLL) County Heal	th Rankings & Roadmaps	

By measuring premature mortality, the Rankings focuses attention on deaths that could have been prevented. This measure targets the deaths of persons younger than 75 years of life in its assessment of premature mortality. The data covers a three- year period spanning 2017 – 2019 and does not reflect the impact of the COVID-19 pandemic. Based upon this data Muskegon County ranks 67 of Michigan's 83 counties in years of life lost. This puts Muskegon in the lower middle range of Michigan rankings. Oceana, by contrast, is at a mid-point in Michigan with a ranking of 42.

The premature death ranking includes a breakout of data specific to Black and Hispanic populations in Muskegon County. This data was not available for Oceana because of population size. In Muskegon County we find significant disparity in years of life lost across local communities of color and white populations:

Muskegon	Black	Hispanic	White	
County	Residents	Residents	Residents	
8,500	13,100	9,700	7,400	
Premature death (YPLL) County Health Rankings & Roadmaps				

For contrast purposes, the best performing counties in the United States (10th percentile) perform at 5,400 or below.

This data is based on pre-COVID-19 information but can still be helpful in targeting resources and addressing localized factors that create disparities in life. By measuring premature mortality, the Rankings focuses attention on deaths that could have been prevented. This measure targets the deaths of persons younger than 75 years of life in its assessment of premature mortality. The data covers a three- year period spanning 2017 – 2019 and does not reflect the impact of the COVID-19 pandemic. Based upon this data Muskegon County ranks 67 of Michigan's 83 counties in years of life lost. This puts Muskegon in the lower middle range of Michigan rankings. Oceana, by contrast, is at a mid-point in Michigan with a ranking of 42.

Life Expectancy Declines in the U.S.

Using additional preliminary data from the first six months of 2020° (January through June) the CDC has found that the average life expectancy since the onset of COVID-19 has dropped a full year from 78.8 (2019) to 77.8. Life expectancy for men has declined by 1.2 years from 76.3 (2019) to 75.1 (2020) and for women declined to 80.5 years or, a net decrease of 0.9 from 81.4 years in 2019. This provisional measure of life expectancy in the United States is the lowest level measured since 2006. State and local data was not included in this report.

Place Matters: Where We Live Influences Length of Life

Where we live can have a significant influence on our expected length of life. Using a place-based approach that targets zip codes and U. S. census tract data, the Robert Wood Johnson Foundation in partnership with the Centers for Disease Control and Prevention (CDC), has created a remarkable new tool that allows us to better understand and prioritize those places in our local communities where people struggle to thrive. Understanding the influence of community-based factors — the things that influence our physical and emotional wellbeing - is essential to improving local health and livability.

Life Expectancy in Muskegon & Oceana			
Muskegon County	77.01		
Oceana County	78.63		
Michigan	77.70		
U.S.	77.80		
(Vital Statistics Rapid Release, Number 010 (February 2021) (cdc.gov)			

In Muskegon County there is a marked difference in estimated life expectancy between census tracts in the core cities of Muskegon and Muskegon Heights and the more affluent suburban cities of Norton Shores, North Muskegon and the City of Whitehall (see: Projected Length of Life by Census Tract in Muskegon County chart). Most notable is the difference between the cities of Muskegon Heights and Norton Shores which are located immediately adjacent to one another. Examining these two cities, can help us understand how length of life may vary across a small local geographic area. This data is based on pre-COVID-19 information but can still be helpful in targeting resources and addressing localized factors that create disparities in life.

Life Expectancy by Census Tract - Muskegon and Oceana

	LOWEST A	ND HIGHEST COMM	MUNITIES	
City of Muskegon	Life Expectancy		City of Norton Shores	Life Expectancy
Census Tract 3	73		Census Tract 23	80.1
Census Tract 4.01	73.9		Census Tract 24	78.6
Census Tract 4.02	74.7		Census Tract 25	80.5
Census Tract 5	70.8		Census Tract 26.01	75
Census Tract 6.01	72.8		Census Tract 26.02	83.1
City of Muskegon Heights		City of North Mu	l uskegon	
Census Tract 12	72		Census Tract 15	79.5
Census Tract 13	72.7			
Census Tract 14.02	72.2	City of Whitehal	l	
Census Tract 43	72.7		Census Tract 37	78.3
https://www.cdc.gov/nchs/da	ata-visualization/life-		https://www.cdc.gov/nch	ns/data-
expectancy/			visualization/life-expecta	ncy/

Oceana's data on life expectancy does not reflect a significant difference at the census tract level as in Muskegon County. Data indicates that when considering length of life, Oceana County trends better than both the state of Michigan and nation.

PROJECTED LENGTH OF LIFE BY CENSUS TRACTS IN OCEANA COUNTY			
Oceana Community	Census Tract Number	Life Expectancy	
Shelby/Grant /Rothbury/New Era	Census Tract 103	78.9	
Hart	Census Tract 104	75.4	
Elbridge/Colfax	Census Tract 105	77.9	
Hesperia/Ferry	Census tract 106	79.7	
Pentwater/lakeshore	Census tract 108	85	
Silver Lake/lakeshore	Census tract 109+110	78.5	

The census tract data reveals disparities in length of life that existed before COVID-19. When the pandemic hit, many of these same census tracts were initially among the hardest hit.

QUALITY OF LIFE

The Quality of Life category aggregates several important measures to reflect how people physically or mentally feel while they are alive. This measurement helps us to gauge the overall well-being of a community, and track the importance/impact of physical, mental, social and emotional health from birth to adulthood.

The Quality of Life index has four primary measurements: 1) Poor or Fair health as reported by adults; 2) Poor physical health days over the previous 30-day period; 3) Poor mental health days over the previous 30-day period; and 4) the percentage of low birthweight babies. The first three measures are self-reported through a telephone-based survey tool (BRFSS). Since this data comes from a period prior to COVID-19, we can anticipate that it will change significantly in future reports as a result of nationally reported trends relating to the impact of social isolation and the inability to access timely health care because of shutdowns or anxiety of exposure.

The 2021 County Rankings does not disclose specific racial, ethnic, gender or other differences in reporting quality of life measures. However, an earlier analysis conducted by the <u>Centers for Disease Control and Prevention</u> (CDC) found that a higher percentage of women, older persons, minority racial/ethnic groups, those with less education, lower household incomes, unemployed, with a disability or chronic disease and individuals widowed, separated or divorced were more likely to report fair or poor health, physically unhealthy days and mentally unhealthy days than other groups. We can discern individual factors that impact health-related quality of life and create disparities among adults in our communities.

Poor or Fair Health

Percentage of adults reporting fair or poor health (age-adjusted). Data reported is from 2018.

United States	Michigan	Muskegon	Oceana
17%	18%	20%	22%
Poor or fair health County Health Rankings & Roadmaps			

Poor or Fair Health identifies the burden of disability and chronic disease in a population. The data is also self-reported and used to measure a person's quality of life. It is helpful in projecting how long people may or may not live. The top 10th percentile of counties in the United States report that 14% of their residents indicate that they are in fair to poor health. The U.S. averages in 2018 were at 17%. Michigan residents average 18%; while those in Muskegon (20%) and Oceana (22%) trend somewhat higher.

A personal sense of health can tell us a lot about how people experience well-being. In communities where many people report that they do not feel healthy or able to fully enjoy life, researchers find a correlation with negative factors/outcomes including - higher mortality (death) rates, unemployment, poverty, and lower education levels.

Poor Physical Health Days

Average number of physically unhealthy days reported in past 30 days (age-adjusted). Data reported is from 2018.

United States	Michigan	Muskegon	Oceana		
3.7	4.3	5.1	4.9		
P	Poor physical health days County Health Rankings & Roadmaps				

Measuring the number of physically unhealthy days provides a reliable estimate of recent health. This data is gathered from the national Behavioral Risk Factor Surveillance System (BRFSS) and is based upon self—reporting. Studies using this data find a correlation between the number of unhealthy days reported by individuals to higher levels of unemployment, poverty, prevalence of disability as well as lower rates of educational attainment and, higher rates of mortality (death).

In Michigan, the average number of physically unhealthy days reported in a 30-day period (age adjusted) was 4.3. The top 10th percentile of counties in the United States report that their residents have 3.4 poor physical health days per month. In Muskegon the average number of unhealthy days is 5.1 while in Oceana County it is 4.9. Ottawa County, immediately adjacent to Muskegon on the south, reports an average of 3.9 unhealthy days.

The CHNA's community survey of over 1,200 residents in Muskegon and Oceana County asked questions found in the BRFSS survey with the following results:

CHNA 21 Community Survey Data

Physical Health	Muskegon	Oceana
Report that their health is 'poor' or 'fair'	14.5%	15.1%
Report that poor physical health kept them from doing their usual activities on 14+ days in past month	6.8%	5.2%

Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021, See also Appendix.

COVID-19 Cases in Muskegon and Oceana Counties

This indicator reports incidence rate of confirmed COVID-19 cases per 100,000 population as of June 4, 2021.

Report Area	Total Population	Total Confirmed Cases	Confirmed Cases, Rate per 100,000 Population
Muskegon	173,588	16,153	9,305.37
Oceana	26,625	2,756	10,351.17
Michigan	9,995,915	964,965	9,653.59
United States	326,262,499	32,853,866	10,069.76
Data Source: Johns Hopkins University via Trinity Health Data Hub			

The rate of confirmed cases in Oceana County (10,351.17) is higher than the state (9,653.59)

"I'm an extreme extrovert and COVID caused me to go into a major depressive disorder"

CHNA Focus Group Participant

Poor Mental Health Days

Average number of mentally unhealthy days reported in past 30 days (age adjusted) Data is from 2018

United States	Michigan	Muskegon	Oceana	
4.1	4.7	5.2	5.2	
Poor mental health days County Health Rankings & Roadmaps				

Mood disorders are prevalent among U.S. adults and can exacerbate chronic health conditions and dangerous behaviors such as poor nutrition, excessive use of tobacco, drugs and alcohol, obesity and other factors. In 2018, Michigan residents surveyed by the BRFSS reported an average of 4.7 mentally unhealthy days out of 30 days. Both Muskegon and Oceana counties were higher than the state average with both reporting 5.2. While higher, 5.2 does fall within the

margin of error for both counties. A closer examination of 2019 BRFSS data (reported by the Kaiser Family Foundation^{vi}), allows us to compare how Michigan's rates differ from those in the U.S.

The Muskegon Community Survey of 1,257 Muskegon and Oceana County resident also revealed that some residents worried, felt down or hopelessness for long periods of time.

CHNA 21 Community Survey Data

Mental Health	Muskegon	Oceana
Report that poor mental health has kept them from doing their usual activities		
on 14+ days in past month	3.4%	2.0%
In the past 3 months, were 'usually or always' bothered by not being able to stop		
worrying or control worrying.	7.7%	10.7%
In the past 3 months, were 'usually or always' bothered by Feeling down,		
depressed, or hopeless.	6.2%	5.6%

Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021, See also Appendix.

COVID-19 Pandemic

According to the most recent CHNA Community Survey data, over 33% of Muskegon and 31% of Oceana County respondents people felt down, depressed or hopeless as a result of the COVID-19 pandemic. 50% in Muskegon and 45% in Oceana felt nervous, anxious, or on edge as a result of the pandemic.

The Impact of Racial Violence on Mental Health

Using BRFSS data a study published (4/19/21) by the <u>National Academy of Science</u> finds that Black Americans experience a measurable increase in poor mental health days during weeks where there are two or more incidents of anti-Black violence. The study is one of the first to correlate how police killings and other incidents of violence with significant national attention impact the mental health of Black Americans. Data included 217,171 Black and 2,092,683 white participants from the BRFSS. Researchers concurrently tracked 49 public incidents of racial violence with BRFSS response patterns.

Black participants in the BRFSS reported more poor mental health days during the weeks where media attention was focused on anti-Black violence. The study aligns with calls to address racism as a public health crisis. Exposure to racism increases the risk of a range of diseases and mental health problems. http://source.wustl.edu/2021/04how-racial-violence-affects-black-americans-mental-health/

"Family planning is not just birth control; it's making sure you're healthy before you get pregnant...We need to have an environment that can foster the best and the healthiest children in our community."

-Focus group respondent

Low Birthweight

Percentage of live births with low birthweight (<2,500 grams). Based on averages from 2013 – 2018.

United States	Michigan	Muskegon	Oceana	
8%	9%	10%	8%	
Low birthweight County Health Rankings & Roadmaps				

In 2018, Muskegon County had 202 or 10% of babies born at low birthweight. In Oceana County, low birthweight was somewhat better with an average rate of 8% (20 babies) which aligns with the U.S. average for the 2013-2018 time period. Low birth weight can be a predictor of premature mortality and/or morbidity. Long term studies of low birth weight children find a higher risk of cardiovascular disease later in life, higher rates of respiratory conditions, and cognitive problems that can include cerebral palsy, visual, auditory, and intellectual impairments that impact school readiness and success.

Maternal Health

While maternal health data is not included in the Rankings, low birth weight is also an important indicator of <u>maternal health and well-being</u>. Kids Count^{vii} (2020) found that 32.2% of women in Michigan (2019) received less than adequate prenatal care. In Muskegon 864 women or 41.1% and 111 women or 39.5% of those in Oceana County women received less than adequate prenatal care. Rates in Oceana County have dropped by 4.6% from the base year rate (2010) of 41.1% but in Muskegon County rates have increased 48.5% over the base year rate (2010) of 27.7%.

HEALTH FACTORS

There are many things that influence how well and how long we live. Everything from our education to environments impact our health. Health Factors represent those things we can modify to improve the length and quality of life for residents. They are predictors of how healthy our communities can be in the future.

Health Factors Overall Rank Muskegon County - 44 Oceana County - 61

Health Behaviors

Health behaviors are actions individuals take that affect their health. They include actions that lead to improved health, such as eating well and being physically active, and actions that increase one's risk of disease, such as smoking, excessive alcohol intake, and risky sexual behavior.

Tobacco Use

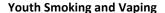
Percentage of Adults who are current smokers (age adjusted). Source: BRFSS data 2018.

United States	Michigan	Muskegon	Oceana	
17%	20%	25%	24%	
Α	Adult smoking in Michigan County Health Rankings & Roadmaps			

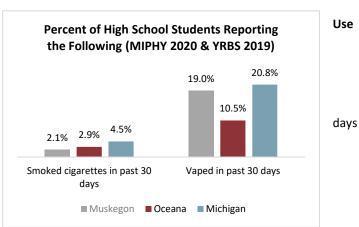
Tobacco use is the leading cause of preventable death in the United States. It affects not only those who choose to use tobacco, but also people who live and work around tobacco. The County Health Rankings for 2021 finds that smoking rates among adults remain higher in Muskegon (25%) and in Oceana (24%) counties than statewide (20%) or nationally (17%). However, both reported rates fall within the margin of error suggesting that rates of smoking, while high, remain relatively steady.

CHNA 2021 Community Survey Adult Tobacco

Of the 1,257 adults who participated in the CHNA survey in April of 2021, 11% of respondents in Muskegon County and 12% in Oceana County reported tobacco use in past 30 days with 2% in Muskegon and 3% in Oceana reporting use on 20+ in past month.



Fewer high school students in Muskegon and Oceana smoke cigarettes than statewide rates. However vaping or electronic tobacco device use



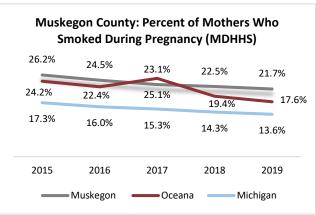
rates have jumped in the past three years Vaping rates in Muskegon is similar high to Michigan's rate, while Oceana remained low.

Tobacco Use among Pregnant Women

Smoking among pregnant women in both counties has been declining but remains higher than statewide.

Mercy Health Patients/Muskegon Oceana Residents

Based upon data from Mercy Health's EPIC medical records system, tobacco use and smoking status for patients who are residents of Muskegon and Oceana counties is as follows:



Tobacco Use and Exposure Muskegon County Oceana County					
	Count	Percentage	occana country	Count	Percentage
Yes- Current Smokers	18,607	19.5%	Yes	2,464	18.39%
Quit	24,031	25.1%	Quit	3,046	21.85%
Never	51,837	54.2%	Never	7,949	57.01%
Passive	1,146	1.2%	Passive	383	2.75%
Total	95,621		Total	13,942	

Tobacco Risk Factorsviii

Sixteen million Americans are living with a disease caused by smoking. Smoking harms nearly every organ in the body. Smoking is correlated with cancer, heart disease, stroke, lung diseases, diabetes and chronic obstructive pulmonary disease (COPD) including emphysema and chronic bronchitis. One in five deaths in the United States can be attributed to smoking.

Forty percent of all cancer diagnoses have been linked to tobacco use. In addition to lung cancer, tobacco use as a cancer factor has been linked to a dozen parts of the body including throat, stomach, pancreas and liver. Between 2009 and 2013, about 660,000 people a year were diagnosed with cancers related to the use of tobacco. In 2016, the CDC reported that half of those cases or 340,000 people subsequently died of those cancers. Cancer is the second leading cause of death in Muskegon and Oceana Counties. Children exposed to secondhand smoke are at risk for sudden infant death syndrome, acute respiratory infections, middle ear disease, severe asthma, and slowed lung growth.

DIET AND EXERCISE FACTORS

Our environment affects our access to healthy food and opportunities for physical activity. Genetic factors and personal choices shape our health and risk of being overweight and obese.

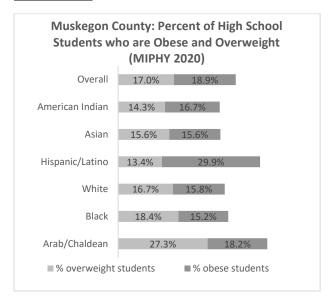
Adult Obesity

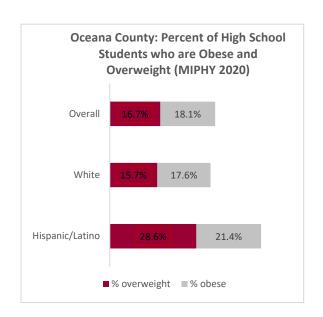
Percentage of the adult population (age 20 and older) reporting a body mass index (BMI) greater than or equal to 30 kg/m Source used is the U.S. Diabetes Surveillance System, 2017

United States	Michigan	Muskegon County	Oceana County	
30%	32%	37%	38%	
Adult obesity County Health Rankings & Roadmaps				

The County Health Rankings and Roadmaps 2021 finds a possible uptick in obesity measures for Muskegon County. In 2018, rankings data reported that 34% of Muskegon County residents classified as obese. The 2021 report finds 37%. Similarly, Oceana's obesity measure in 2018 was 32% and is now reported by rankings as 38%. It is important to note that while this data is shared as part of the 2021 Rankings, the source material is from 2017.

Youth Obesity





"I would like to have more community gardens available."

-Survey Respondent

Among high school students, 1-in-3 high school students are overweight or obese in Muskegon (35.9%) and Oceana (34.8%). Black and Hispanic or Latino students were more likely to be overweight or obese in Muskegon and Hispanic or Latino students were more likely to be overweight or obese in Oceana.

Obesity Rates Climb in Michigan and Worsens Outcomes from COVID-19

More recent data reported by the CDC on September 17, 2020, indicates that adult obesity is increasing nationally and reflects persistent racial and ethnic disparity. The data confirms that obese adults are at heightened risk for severe complications from COVID-19 and that obesity disproportionately affects racial and ethnic minority groups who are additionally at risk of COVID-19. The 2019 Adult Obesity Prevalence Maps finds 12 states with adult obesity prevalence that is at or above 35%. This year, Michigan has been added to this list. Michigan did not appear in previous rankings released in 2018 or 2017. New CDC data finds adult obesity is increasing | CDC

In addition to COVID-19, obesity is also correlated with chronic disease conditions including diabetes, cardiovascular disease, obstructive sleep apnea, certain types of cancer and osteoarthritis. A reciprocal link has been found between obesity and depression, with obesity increasing the risk of clinical depression and also depression leading to a higher chance of developing obesity.

Food Environment Index

Index of factors that contribute to a healthy food environment, from 0 (worst) to 10 (best). Data is sourced from the USDA Food Atlas, Map the Meal Gap from Feeding America; Years of Data used: 2015 and 2018.

United States	Michigan	Muskegon County	Oceana County	
7.8	7.0	6.5	7.8	
Food environment index County Health Rankings & Roadmaps				

The food environment index uses two important measures when determining a ranking: 1) proximity to healthy foods and 2) income. When considering access to food, the measure incorporates the distance an individual life from a grocery store or supermarket as both are locations for healthy food purchases in most communities. Concurrently the measure examines the affordability of fresh foods as cost will present a barrier to access for many people.

Food Insecurity and Related Factors

Food insecurity affects thousands of people in the Mercy Health service area. Based upon county data from Feeding America sourced in 2018, both Muskegon and Oceana counties have about 14% of their respective populations who are food insecure. In Muskegon County, this means that 26,625 people are estimated to be food insecure and in Oceana 3,780. Map Room – CARES HQ

Muskegon's Community Health Innovation Region's 2019 analysis for the Livability Lab process has identified several factors that are barriers to food access. Primary among these barriers is the availability of grocery stores. Grocery stores are defined as supermarkets and smaller stores that primarily retail food products including fresh fruits and vegetables; fresh and prepared meats, fish, poultry and canned/frozen foods.

Muskegon County has fewer Grocery Stores per capita then the state of Michigan as reflected in the graph below.

Report Area	Number of Establishments	Establishments, Rate per 100,000		
Muskegon County	22	12.78 per 100,000		
Michigan	1,833	18.55 per 100,000		
LLHealthyFood.pdf (michirlearning.org)				

"Healthy food is more expensive and rarely on sale."

-Survey Respondent

Based upon Livability Lab's survey of 365 Muskegon residents, residents of Muskegon Heights frequently cited that grocery store access is a significant need. Lack of grocery store access as also referenced in many outlying areas of the county particularly in isolated rural communities. With the assistance of Michigan State University, Livability Lab additionally reported that less than half of families in Muskegon County live in areas with either moderate or high healthy food access. Data for this measure was sourced from the CDC Modified Retail Food Environment Index.

Location	Total Population	% Population in Tracts with No Food Outlet	% Population in Tracts with No Healthy Food Outlet	% Population in Tracts with Low Healthy Food Access	% Population in Tracts with Moderate Healthy Food Access	% Population in Tracts with High Healthy Food Access		
Muskegon County	172,188	3.86%	34.95%	18.44%	40.69%	2.05%		
Michigan	9,883,640	1.9%	25.95%	22.88%	42.39%	7.38%		
	LLHealthyFood.pdf (michirlearning.org)							

While many local retailers accept SNAP (Supplemental Nutrition Assistance Program) benefits, most do not carry fresh food. 134 or 76% of Muskegon's SNAP retailers are convenience stores (gas stations, and liquor stores), pharmacies and dollar stores. In Muskegon, three (3) out of four local Farmer's Markets accept SNAP benefits. Source: U.S. Department of Agriculture – Food and Nutrition Service.

Food Insecurity Among Children

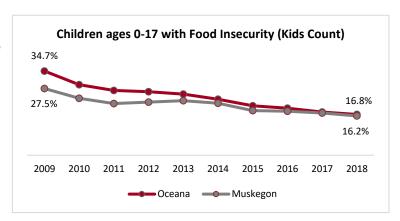
Food insecurity is defined as the state of being without reliable access to a sufficient quantity of affordable, nutritious food. According to the recent Kid's Count, both Muskegon (16.2%) and Oceana (16.8%) County children had slightly higher food insecurity than statewide rate (14.7%) in 2018.

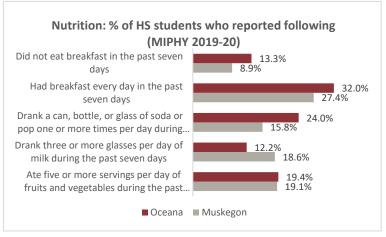
Youth Diet

According to the Michigan Profile for Health Youth questions related to nutrition, 13% of high school students in Oceana and 8.9% in Muskegon report not eating breakfast in the past 30 days. 24% of students in Muskegon and almost 16% reported having pop daily with only 19% having five or more servings per day of fruits and vegetables.

"I want to eat healthy, but my cravings usually win instead."

-Survey Respondent





Adult Healthy Food

Access to healthy food is one of several factors contributing to local rates of obesity. Several questions about barriers eating healthy food were asked in the 2021 CHNA Community Survey with the answers listed below.

CHNA 2021 Community Survey - Food & Healthy Eating

- 64% of respondents in Muskegon County and 61% in Oceana County reported it is not hard to eat healthy and 6% report they do not want to eat healthy.
- 9.4% of respondents in Muskegon County and 7% in Oceana County reported that not having enough money makes it hard to eat healthy.
- 5% of respondents in Muskegon County and 8% in Oceana County reported that it's hard to find healthy food where they live.
- 18% of respondents in Muskegon County and 23% in Oceana County reported that it's hard to eat healthy because there's not enough time to cook.

Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021, See also Appendix.

-Focus Group Respondent

Physical Inactivity

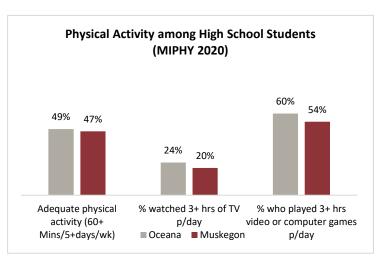
Percentage of adults age 20 and over reporting no leisure-time physical activity. Data is sourced from the United States Diabetes Surveillance System; Years of data used 2017.

United States	Michigan	Muskegon	Oceana County			
23%	23%	25%	24%			
Physical inactivity County Health Rankings & Roadmaps						

According to the Michigan Behavioral Risk Factor Survey, almost 1 in 4 adults in Muskegon County reported no leisure time physical activity, which is like the statewide average of 23%. Previous surveys reveal that 24.7% of adult women and 21.2% of males in Muskegon County report physical inactivity. Adults who report no leisure time for activity are responding to the question, "During the past month, other than your regular job, did you participate in any physical activity."

In Muskegon and Oceana Counties physical inactivity can vary across local communities, gender and age groups. Physical inactivity is measured using the Behavioral Risk Factor Survey and the youth focused MIPHY both of which are based on self-reporting.

In 2020, based upon MIPHY data, less than half of high school students in Muskegon County (46.8%) and Oceana County (48.6%) reported adequate physical activity. This level of activity would require at least 60 minutes on 5 or more days per week.



CHNA 2021 Community Survey - Exercise

- 30% of respondents in Muskegon County and 32% in Oceana County reported being physically active (enough to increase heart rate or breathing) less than 30 minutes per week.
- In both Muskegon and Oceana County, 22% of respondents reported being physically active 2.5 hours or more per week.

Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021, See also Appendix.

Access to Exercise Activities

Access to Exercise Opportunities measures the percentage of individuals in a county who live reasonably close to a location for physical activity. These locations are defined as parks or recreational facilities. Individuals are considered to have access to exercise opportunities if they:

- reside in a census block that is within a half mile of a park, or
- reside in an urban census block that is within one mile of a recreational facility, or
- reside in a rural census block that is within three miles of a recreational facility

Percentage of population with adequate access to locations for physical activity. Data is from ESRI and US Census Tigerline Files, 2010 and 2019.

United States	Michigan	Muskegon County	Oceana County	
84%	85%	77%	89%	
Access to exercise opportunities County Health Rankings & Roadmaps				

"Not in my immediate community, but nearby, there are parks & bike paths to enjoy."

-Survey Respondent

Increased physical activity is associated with lower risks of Type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. The role of the built environment is important for encouraging physical activity. Individuals who live closer to sidewalks, parks, and gyms are more likely to exercise.

ALCOHOL AND DRUG USE

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.

Excessive Drinking

Percentage of adults reporting binge or drinking excessively (age-adjusted). Data is from BRFSS, 2018.

United States	Michigan	Muskegon	Oceana		
19%	21%	20%	20%		
Alcohol and Drug Use County Health Rankings & Roadmaps					

The County Health Rankings reports that 21% of Michigan residents drink excessively. In the Mercy Health Muskegon service area, rates of excessive alcohol use are statistically similar to the state's norm with both Muskegon and Oceana Counties having a rate of 20%. This ranking is based upon the percentage of individuals who report binge drinking (more than 1 (women) or 2 (men) drinks per day on average. The ranking is based only on measurements of adult behavior and not on that of youth.

Based upon patient surveys conducted in 2020, Mercy Health patients from Muskegon and Oceana Counties reported their frequency of alcohol use as follows:

Reported Alcohol Frequency of Use Mercy Health Patients 2020					
	Muskegon Co	Muskegon County		ty	
	Count	Percentage	Count	Percentage	
Less than 24 drinks/week	6,777	98.5	1,150	98.0%	
24 -48 drinks /week	90	1.3%	20	1.7%	
49 – 73 drinks/week	9	0.1%	3	0.3%	
74 drinks/week or more	5	0.1%	1	0.1%	
Total	6,881		1,174		
Data Source: EPIC Electronic Medical Record System					

It has been estimated (pre-COVID-19) that 34,300 or 19% of Muskegon County residents drink excessively based on 2017 Health Rankings.

Excessive Use Impact

The Centers for Disease Control and Prevention (CDC) recently released an analysis which identifies that excessive alcohol consumption is responsible for an average of 93,296 deaths annually. Excessive consumption shortens the lives of people by an average of 29 years or represents 2.7 million years of potential life lost. Michigan is the 8th highest state

in terms of total deaths among all 50 states and 17th highest in age-adjusted alcohol-attributable deaths per 100,000 people. Overall, 71% of these premature deaths are among men; 56% fall within the age brackets of 35-64.

The CDC data also details a steady increase in rates of adult binge drinking. Between years 2011 to 2017 binge drinking increased among those aged 35 - 44 years (26.7%) and 45 - 64 years (23.1%). The largest increases were among those without a high school diploma (45.8%) and those with household incomes less than \$25,000 (23.9%)

Binge drinking has additionally increased since onset of COVID-19. <u>SOM - CDC Findings on Excessive Drinking Cited as Liquor Control Commission Urges Moderation (michigan.gov)</u> Frequent use of alcohol consumption increased by 14% among adults over age 30 during the 2020 COVID-19 shutdown. The increase was 19% among all adults aged 30 – 59, 17% among women, and 10% among non-Hispanic white adults. <u>Alcohol Consumption Rises Sharply During Pandemic</u> Shutdown; Heavy Drinking by Women Rises 41% Rand Corporation, September 20, 2020

Alcohol-Impaired Driving Deaths

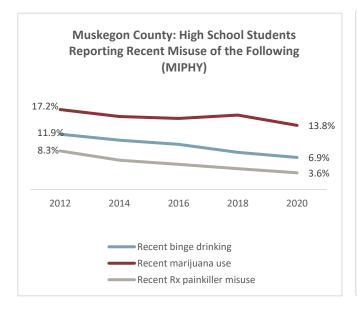
Percentage of driving deaths with alcohol involvement. Fatality Analysis Reporting System; Years of data used: 2015-2019

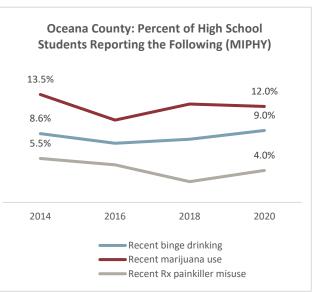
United States	Michigan	Muskegon	Oceana	
27%	29%	17%	40%	
Alcohol-impaired driving deaths County Health Rankings & Roadmaps				

Alcohol-impaired driving deaths measures the relationship between alcohol and motor vehicle crash deaths. Alcohol reduces the function of the brain, impairing thinking, reasoning, and muscle coordination which are essential to operating a vehicle safely. [1] In 2018, approximately 10,500 Americans were killed in alcohol-related motor vehicle crashes. [2] The annual cost of alcohol-related crashes totals more than \$44 billion. Drivers between the ages of 21 and 24 cause 27% of all alcohol-impaired deaths. Underage drinking is a significant public health problem in the U.S. Excessive drinking is responsible for more than 3,500 deaths and 210,000 years of potential life lost among people under age 21 each year. Underage drinking cost the U.S. \$24 billion in 2010. Research has shown that people who use alcohol before age 15 are six times more likely to become alcohol dependent than adults who begin drinking at age 21. Studies point to early use of drugs as having a similar affect.

Alcohol and Substance Use by Muskegon and Oceana High School Students

Muskegon County has been aggressive in its efforts to address adolescent use of alcohol and drugs through the Coalition for a Drug Free Muskegon and has realized significant impact as evidenced by Muskegon County's most recent MIPHY data.





Among High School Students in Muskegon County substance use has been decreasing and is now lower than statewide rates for most substances. In 2019, nearly twice as many Michigan students reported binge drinking (11%) and marijuana use (22%) than in Muskegon County (6.9% and 13.8% *irespectively). In addition, fewer high school students report recent use of heroin, cocaine, steroids or methamphetamine. According to MIPHY, prescription pain killer misuse by youth has dropped locally from 8.3% in 2012 to 3.6% in 2019 reporting. Risk related impact to youth who engage in early drug or alcohol abuse:

- Affect the growth and development of teens, especially brain development.
- Occur more frequently with other risky behaviors, such as unprotected sex and dangerous driving.
- Contribute to the development of health problems, such as heart disease, high blood pressure, and sleep disorders.**ii

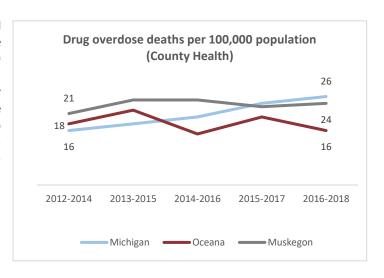
Opioid Use in Muskegon/Oceana

Opioid use spans multiple generations in our communities and many efforts have been taken to reduce prescription drug use and abuse by the Michigan healthcare community since 2015. In Michigan prescribing rates have dropped considerably due to federal and state prescribing policies as well as significant work among health care systems, the physician community, and community treatment and prevention organizations.

Vaan	Opioid Prescriptions Dispensed (2019)				
Year	Muskegon	Oceana	Michigan		
2019	171,209	26,585	7,229,633		
2018	191,528	29,883	7,989,511		
2017	221,877	34,673	9,492,455		
2016	245,789	36,928	10,334,619		
2015	256,819	38,056	10,680,751		
https://mi-suddr.com/					

Opioid Overdose Deaths

The most recent 2020 Muskegon County medical examiner's report showed an increase in the number of annual Opioid Overdoses from 50 reported in 2018, 55 in 2019, and 57 deaths in 2020. Possibly exacerbated by COVID-19 or other external factors such illicit drug supplies, these numbers remain too high. There was a slight drop in Opioid only deaths from 15 to 11 people who died as a result with a large increase in those perishing from mixed combinations of other such as fentanyl.



Marijuana Use and Michigan's Legalization

The Michigan Regulation and Taxation of Marijuana Act took effect on December 6, 2018. Once officials with the Bureau of Marijuana Regulation completed development of rules, the State of Michigan began to accept license applications clearing the way for dispensaries to begin to open in local communities. As of December of 2020, according to

Michigan's Department of Licensing and Regulatory Affairs (LARA), Muskegon County has seven licensed marijuana facilities, with five provisioning centers located in the City of Muskegon, and two grower facilities in Muskegon Township. There is no licensed facility in Oceana County listed.

Marijuana regulation also allows for people to utilize marijuana for medical purposes. According to the 2020 LARA report, the number registered medical marijuana users and registered caregivers are listed below.^{xiii}

County	# of Patients	# of Caregivers
Muskegon	2,922	374
Oceana	1,289	213

The reasons listed for medical marijuana use included Chronic Pain (62%); Arthritis (23%); Muscle Spasms (10%); PTSD (7.6%); Nausea (7.3%); and Cancer (3.4%).

Adult Drug Use

According to the Lakeshore Regional Entity^{xiv}, admissions for methamphetamine use as a primary drug has increased 228% in Muskegon County between 2017 and 2020. Other publicly funded SUD treatment admissions by primary drug between FY 2017 and FY2020 for Muskegon and Oceana Counties are as follows:

Muskegon	Alcohol	Cocaine/Crack	Heroin	Methamphetamine/	Marijuana/	Synthetic &	All
County				Speed	Hashish	Other Opiates	Other
FY17	542	185	709	32	166	333	65
FY18	497	179	606	71	190	175	57
FY19	498	149	483	128	132	244	43
FY20	258	92	339	105	56	121	24
Oceana	Alcohol	Cocaine/Crack	Heroin	Methamphetamine/	Marijuana/	Synthetic &	All
County				Speed	Hashish	Other Opiates	Other
FY17	58	11	18	3	11	20	8
FY18	55	8	38	6	15	24	9
FY19	38	9	29	7	22	17	5
	Lakeshore Regional Entity (Isre.org)						

In Oceana County between 2016 and 2018, there were three overdose deaths that involved an opioid and none that involved a psychostimulant with abuse potential. Among publicly funded substance use disorders (SUD) treatment admissions, those for marijuana have been increasing while admissions for alcohol have been declining.

A business survey^{xv} conducted by the Greater Muskegon Chamber of Commerce found that 28.9% of businesses in Muskegon County with job openings had been unable to fill them because applicants could not pass a drug test. Marijuana use was often cited and, therefore, a potential barrier to employment with recreational use now legalized in the state.

CHNA 2021 Community Survey - Alcohol and Marijuana Use

- 54% of respondents in Muskegon County and 55% in Oceana County reported alcohol use in past month, with 6% in Muskegon and 9% in Oceana reporting use on 20+ days in the past month
- 10% of respondents in Muskegon County and 12% in Oceana County reported marijuana use in the past month, with 4% in Muskegon and 6% in Oceana reporting use on 20+ days in past month

Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021, See also Appendix.

SEXUAL ACTIVITY

Sexually transmitted infections (STI's) and unplanned pregnancies often are the result of risky sexual behavior. This can have long lasting effects on health and well-being – particularly for adolescents.

Sexually Transmitted Infections

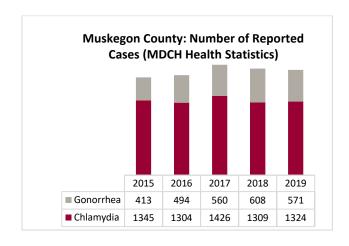
Number of newly diagnosed chlamydia cases per 100,000 population. Years of data used: 2018.

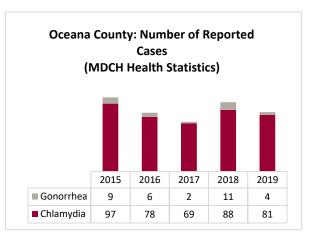
United States	Michigan	Muskegon	Oceana		
539.9	507.8	743.8	329		
Sexually transmitted infections County Health Rankings & Roadmaps					

According to the Michigan Annual STD Summary Report for 2019, chlamydia cases in Michigan had remained level, with the number of cases each year approximately 45,000 – 50,000. In 2017, cases rose significantly by 8% to 51,000. Most of this increase was outside the city of Detroit. In 2019, Muskegon County was reported to have 1,324 cases of chlamydia and has the tenth highest number of cases.^{xvi} Muskegon's rate (743.8) is well above the overall state rate of 507.8. Conversely, Oceana's rate of 329 is well below.

"Kids are teaching kids. We need more programs. We don't need kids teaching kids how to do it."

-Focus Group Respondent





In 2019, Muskegon County was reported to have 571 cases of Gonorrhea while Oceana County was reported 4 cases. Sexually Transmitted Diseases (michigan.gov)

Chronic Hepatitis C rates in Muskegon County (152.1) exceed the state rate (121.5). Oceana, by contrast, is below the state rate at 115.3 according to data from Michigan Cancer Atlas 2017.

Teen Births

Teen births in Muskegon County declined 14% during the period spanning 2014-2016 (158 total births). Oceana County's has declined 10% (29 births). Overall, teen birth rates have fallen by 50% since 2000. Despite this trend, local teen birth rates in the Mercy Health service area still exceed the overall state rate of 18. Number of births per 1,000 female population by race, ages 15 – 19 by race. Years of Data used: 2013 - 2019

Number of births per 1,000 female population ages 15 - 19. Years of data used: 2013 - 2019

United States	Michigan	Muskegon	Oceana		
21	18	31	32		
Teen births County Health Rankings & Roadmaps					

Teen Birth Risks

Pregnant teens face serious health risks, as do their babies. Teen moms are more likely than older women to receive late or no prenatal care, experience eclampsia, puerperal endometritis, systemic infections, low birthweight, preterm

delivery, and severe neonatal conditions. Pre-term delivery and low birthweight babies have increased risk of child developmental delay, illness, and mortality. There are strong links between teen birth and poor socioeconomic, behavioral, and mental health outcomes.^{xviii} Teenage women who bear a child are much less likely to achieve an education level at or beyond high school, are much more likely to be overweight/obese in adulthood, and more likely to experience depression and psychological distress. Teen births | County Health Rankings & Roadmaps

Declining Birth Rates

On May 5, 2021, the Centers for Disease Control and Prevention issued a <u>Vital Statistics Rapid Release Report</u> with new provisional data on U.S. birth rates. The report contains 99.87% of all 2020 birth records received by the National Center for Health Statistics. It reports a <u>continuing decline</u> in US birth rates, further extending a six year trend and representing the lowest point since the nation began keeping records over 100 years ago.

While a decline in birth rates suggests problems for future US workforce replacement, there is good news about teen births. In 2020 the provisional birth rate for young women aged 15-19, fell 8% from 2019 (16.7 to 15.3). This represents a record low for this age group. The report notes that the rate of teen births has declined 63% since 2007 (41.5). On average, rates have declined 7% annually from 2007 – 2020. The provisional birth rate for younger females aged 10-14 remains at 0.2 births per 1,000 in 2020 and is unchanged since 2015.

CLINICAL CARE

Access to affordable, quality, and timely health care can help prevent diseases and detect issues sooner, enabling individuals to live longer, and healthier lives. Looking at clinical care helps to understand why some communities can be healthier than others.

ACCESS TO CARE

Having access to care allows individuals to enter the health care system, find care easily and locally, pay for care and get their health needs met.

Uninsured Rates

Percentage of population under age 65 without health insurance. Years of data used: 2018

United States	Michigan	Muskegon	Oceana	
10%	7%	6%	11%	
<u>Uninsured County Health Rankings & Roadmaps</u>				

The level of local uninsured residents is shown as the percentage of the population under 65 without health insurance coverage. A person is considered uninsured if they are not currently covered by insurance through a current/former employer or union, purchased from an insurance company, Medicare, Medicaid, Medical Assistance, any kind of government-assistance plan for those with low incomes or disability, TRICARE or other military health care, Indian Health Services, VA, or any other health insurance or health coverage.

Oceana's rate of uninsurance (11%) exceeds that of the state of Michigan and of Muskegon County. Lack of insurance is a significant barrier to seeking timely care. In a 2019 survey conducted by the Kaiser Family Foundation, uninsured people were found to be less likely to visit a doctor or other health professional or clinic within the prior year. They are also less likely to seek recommended preventative care such as tests to detect cancer or other serious diseases. As a rural county, residents of Oceana may experience other barriers to seeking care beyond insurance coverage. For instance, low income people, those with inadequate transportation or mobility issues are also often unable to receive timely care.

Medical Debt

Medical Debt by State and County			
State of Michigan	% Medical Debt in Collections	15%	
Medical Debt	Median Amount of Medical Debt in Collections	\$492	

	% uninsured	8%
Muskegon County	% Medical Debt in collections	20%
Medical Debt	Median Amount Medical Debt in Collections	\$459
	% uninsured	6%
Oceana County	% Medical Debt in collections	16%
Medical Debt	Median Amount Medical Debt in Collections	\$552
	% uninsured	15%
	Debt in America: An Interactive Map (urban.org)	

Individuals without medical coverage or who have inadequate coverage risk medical debt when they access the health care system. 15% of Oceana's population is Hispanic and in 2019, 17% of Hispanics were uninsured. Nationally, Hispanics have the highest rate of uninsurance. With the onset of COVID-19, this trend continued with nearly half of those who lost employer-sponsored insurance being Hispanic according to recent studies. XVIIII Additionally, federal policies designed to curb immigration, attempted to place restrictions on access to government-sponsored programs such as Medicaid and suggested that individuals using government-sourced programs would no longer be eligible for citizenship in the United States.

2021 CHNA Community Survey - Affordability of Care

Respondent Snapshot	Muskegon	Oceana
Dental Care	21.4%	20.3%
Vision Care	12.2%	8.5%
Medical Care	12.0%	12.3%
Mental Health Care	10.9%	6.8%
Prescription Medication	9.1%	7.2%
Hearing Services	5.2%	2.5%
Flu Shot	1.3%	0.8%
Substance Use Disorder Treatment	0.8%	0.8%

Primary Care Physicians, Dentists and Mental Health Providers

For this measure, County Health Rankings examines the ratio of provider to local population. Three sectors are examined: primary care, dental care and mental health. The ratio of provider to population is one way to measure access beyond just looking at the lack of or, limitations of health insurance. This information helps us identify medical shortage areas. In short, are there enough providers?

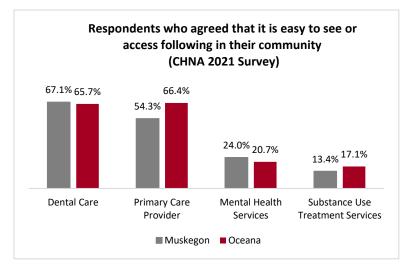
Data for Primary Care ratios is from 2018; for Dentists 2019; and for Mental Health providers 2020.

•	•			
Ratio of Population to primary care physicians	United States	Michigan	Muskegon	Oceana
Quality of Care County Health Rankings & Roadmaps	1,320:1	1,270:1	1,690:1	1,900:1
Ratio of population to the number of dentists				
Dentists County Health Rankings & Roadmaps	1,400:1	1,310:1	1,460:1	2,940:1
Ratio of population to mental health providers				
Mental health providers County Health Rankings & Roadmaps	380:1	360:1	450:1	2,940:1

Health Professional Shortage Areas

According to a 2018 U.S. Department of Health and Human Services, Health Resources and Services Administration report, Muskegon and Oceana Counties have 29 designated Health Professional Shortage areas, meaning they have shortages of primary medical care, dental or mental health providers. A shortage of health professionals contributes

to access and health status issues. This information is consistent with the 2021 CHNA Consumer Survey that shows responses on ease of access for dental care, primary care, mental and substance abuse treatment.



"Counseling isn't accessible to our Hispanic community. That's why people come to the church. They can't go to counseling, some because of their legal status. Others can't afford \$100-\$200 for a 1-hour session. They're completely inaccessible in this county."

Oceana County focus group respondent

CHNA 2021 Community Survey - Access To Care Among Pregnant Women

Reasons which made it hard to access care among pregnant women		
Respondent snapshot	Muskegon	
Unable to get an appointment when they wanted one	8.1%	
Not having someone to take care of their children	5.4%	
They didn't have enough money or insurance to pay for visits made it hard to access care	2.7%	
They were too busy	2.7%	
They didn't know where to go for prenatal care	2.7%	
Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021, See also Appendix.		

Mental (Behavioral) Health Care Access

According to the 2020 Annual report from HealthWest, Muskegon's County Mental Health Department, they served 6,687 patients in 2020, down 14% from 2019. Their services include

Mental Health impact of COVID-19

While the number of individuals HealthWest served dipped in FY2020, the ongoing pandemic created a growing demand for services. Since reaching a low point in April 2020, the number of individuals assessed for services each month has climbed steadily (in March 2021 alone, 261 initial assessments were completed, which exceeds pre-pandemic levels from March 2020). As the pandemic has continued, admissions for inpatient services (SUD residential detox, crisis residential, and psychiatric inpatient hospitalization) increased through the end of FY20. Those trends have continued into FY21, especially for crisis residential with HealthWest reporting they had three times the number of admissions in February 2021 compared to February 2020. The number of people per month receiving a pre-admission screening (for inpatient psychiatric inpatient admission) reached a low of 63 pre-admission screenings in May 2020. By February 2021, the number had more than doubled to 134 pre-admission screenings.

HealthWest, like many other health care organizations had to deliver 90% of services via telehealth, shifting service delivery methods. While telehealth remains a safe and viable option for some consumers, in-person services are optimal for many behavioral health services. Most recent data indicate that 47% of direct-run services were delivered in-person, while 23% were delivered via audio-only telehealth and 30% were delivered via audio-and-video telehealth.^{xix}

CHNA 2021 Community Survey - Access to Care

- 55% of respondents in Muskegon County and 65% in Oceana County reported they have choices in where they go for care.
- 65% pf respondents in Muskegon County and 68% in Oceana County reported that cost did not prevent them from accessing care in the past year.
- 34% of respondents in Muskegon County and 32% in Oceana County reported that cost prevented them from getting at least one form of care (Medical care, Dental care, Mental Health Care, Prescription Medication and Vision Care) in the past year.

Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021. See also Appendix.

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 can help protect and improve health and reduce the likelihood of receiving unnecessary or inappropriate care.

Preventable Hospital Stays

Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees. Data is from 2018.

United States	Michigan	Muskegon	Oceana	
4,236	4,789	3,057	2,550	
Preventable hospital stays County Health Rankings & Roadmaps				

Preventable hospital stays are another way to measure access to care in a community. This measure is based upon medical conditions where hospital admission could have been prevented through use of primary care, pharmaceutical adherence, or a healthy lifestyle. Availability of timely primary care in a medical shortage area can also be a factor in hospital utilization rates for ambulatory-care sensitive conditions. Top U.S. performers (10th percentile) measure at 2.565 or below. The range in Michigan minimum to maximum is 1,931 – 7,064 indicating that both Muskegon and Oceana rates are respectively mid to lower range.

Examples of chronic diseases or infections that can lead to hospitalization but could with earlier intervention or adherence be avoided include diabetes, chronic obstructive pulmonary disease (COPD), hypertension, asthma, urinary tract infections (UTI) among others. People who do not have health insurance will avoid seeking care because of cost concerns and this delay can result in more serious complications leading to emergency room use and hospitalization.

Mammography Screening

Percentage of female Medicare enrollees ages 65 – 74 that have received an annual mammography screening. Rankings data is based on 2018 reporting and is from the Medicare Disparities Tool.

United States	Michigan	Muskegon	Oceana	
42%	44%	47%	49%	
Mammography screening County Health Rankings & Roadmaps				

It is recommended that women ages 45-54 get mammograms every year, and women 55 and older every 2 years. While Muskegon and Oceana mammography screening rates exceed that of Michigan and nationally, it is important to understand that the data used by Rankings includes only Medicare fee-for-service (FFS) participants. This means that large numbers of individuals are not included in this data point. Additional aggregated data on mammography screening that is regionalized does find that the percentage of West Michigan women 40 and older who have had a mammogram within the past 2 years to be 76.7%. This is somewhat higher than the overall state percentage of 75% breast cancer screenings helps us to measure access to care as usually a referral for a mammogram must be initiated by a physician.

Black women and White women have similar rates of breast cancer, yet Black women are 40% more likely to die of the disease than their White counterparts, particularly if they are over 50 years of age. Disparities also exist for Hispanic

and for lesbian women. There are many root cause factors that affect disparities between different groups of people. However, individuals who are low income, those who must travel far to get to screening sites, the uninsured, those with unreliable transportation are more likely to be diagnosed with late-stage cancer with more limited treatment options.

Certain health behaviors also to contribute breast cancer rates including obesity, use of alcohol and lack of physical activity after menopause. https://www.cancer.gov/about-cancer/understanding/disparities

Flu Vaccinations

Percentage of fee-for-service (FFS) Medicare enrollees that had an annual flu vaccine. This data is from 2018. This is identified as a relatively new measurement for the County Rankings process (2019).

United States	Michigan	Muskegon	Oceana	
48%	47%	52%	34%	
Flu vaccinations County Health Rankings & Roadmaps				

Influenza (flu) is a contagious respiratory disease that can lead to severe illness resulting in hospitalization and even death. Children under the age of 18 and adults over the age of 65 are at highest risk. The best way to prevent flu is to receive the annual flu vaccination. This data only reports on a segment of the population – Medicare participants in feefor-service plans.

When local Medicare data is disaggregated by race and ethnicity, we find that rates for people of color lag that of White residents. In Muskegon County, Black vaccination percentages (again Medicare FFS only) are 39%; Native American 44%, Hispanic 47% and White 53%. Oceana County percentages show that only 18% of Hispanic Medicare recipients are vaccinated and 35% of White. Oceana County's level of vaccination not only lags national and state percentages but, according to the County Rankings process is getting worse.

Flu vaccinations reported by the Michigan Department of Health and Human Services (MDHHS) captures vaccination rates of children below the age of 18.

Source: MDHHS (2020)

Rates of Vaccination: Children					
	Flu Vaccination Complete (6 months – 8 years)	1 or more Flu Vaccinations 6 months – 17 years)			
State of Michigan	32.9%	31.2%			
Oceana County	25.9%	23.7%			
Muskegon County	32.1%	32.2%			

COVID-19 Vaccinations

According to the State of Michigan's COVID-19 Vaccination website, just over 60% of Michigan's residents have had their first vaccination for COVID-19. Muskegon vaccination rate is 53.5% with 78,915 doses administered and Oceana County Rate is 52.21% with 11,853 doses administered.

SOCIAL AND ECONOMIC FACTORS

Social and economic factors, such as income, education, employment, community safety, and social supports can significantly affect how well and how long we live. These factors affect our ability to make healthy choices, afford medical care and housing, and manage stress.

National attention is increasingly focused on where good health begins. Data now tells us that the places where people live, work, and play greatly influences their lifelong ability to thrive. We know that 80% of what defines health – behavior, environment, policy and other factors – happens external to the health system.

Social Determinants (Influencers) of Health

Healthy People 2030 defines a health disparity as a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who systematically experienced greater obstacles to their health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location or other characteristics historically linked to discrimination or exclusion.

Local Social Influencers of Health Data (SIoH)

Beginning in November of 2017, Mercy Health Muskegon implemented a social influencers of health (SIoH) survey tool for use with patients at intake that is now utilized during screening through the Together Care EPIC electronic medical record.

The SIoH survey incorporates 14 key questions that can help local providers and human service entities identify individuals who experience social influencers of health (SIoH) barriers to managing their personal health and wellbeing. The following charts represents approximately 27,000 individuals of Muskegon County and 6,000 individuals of Oceana County who were screened across ambulatory sites within the time frame Jan 2020 to March 2021.

Where necessary and with appropriate patient approval, referrals are made to local community agencies and resource sites to ensure a patient's access to timely assistance. The process is designed as bidirectional, which ensures that individuals needing assistance from community agencies and resources not only receive help, but that the referral source (provider, community) also receives feedback on problem resolution.

Based upon patient responses entered into the EPIC system, the most significant need identified in Muskegon was <u>education</u>, which drew 15% of all responses. based on frequency. This social determinant/influencer was followed by <u>social isolation</u> (6.2%), <u>food access</u> (5.5%) and household expenses/ financial risk (4.2%).

Similar to Muskegon, the most frequently

identified social determinant/influencer by Oceana County patients was education (18.1%). Education was followed by food access (5.4%), household expenses/financial risk (4.8%) and social isolation (3.8%).

Social Needs/SIoH		Risk Score (I	Percentage)		
(Muskegon County Patients)	High Risk	Medium Risk	Low Risk		
Education	15.0%	-	85.0%		
Social Isolation	6.2%	14.6%	79.3%		
Food Access	5.5%	-	94.5%		
Financial Risk	4.2%	8.9%	86.9%		
Health Literacy	2.6%	3.8%	93.6%		
Transportation	2.3%	-	97.7%		
Housing instability	1.9%	-	98.1%		
Environmental Safety	1.0%	-	99.0%		
Dependent Care	1.0%	-	99.0%		
Food Insecurity	0.9%	4.9%	94.2%		
Personal Safety	0.5%	-	99.5%		
Access to healthcare	0.1%	1.2%	98.7%		
Total number of screened patients is 26,973, with unknown or refused excluded.					

Source: Mercy Health Muskegon/Together Care EPIC system

Social Needs / SIoH	Ris	Risk Score (Percentage)			
(Oceana County Patients)	High Risk	Medium Risk	Low Risk		
Education	18.1%	-	81.9%		
Food access/nutrition	5.4%	-	94.6%		
Financial Risk	4.8%	8.3%	87.0%		
Social Isolation	3.8%	9.5%	86.7%		
Health Literacy	3.2%	4.1%	92.7%		
Transportation	2.8%	-	97.2%		
Housing instability	2.1%	-	97.9%		
Food Insecurity	0.7%	4.8%	94.6%		
Dependent Care	0.6%	-	99.4%		
Environmental Safety	0.5%	-	99.5%		
Personal Safety	0.4%	-	99.6%		
Access to healthcare 0.1% 1.1% 98.8%					
Total number of screened patients is 6,746, with unknown responses or refused excluded from data.					
Source: Mercy Health Muskegon/Together Care EPIC system					

-Focus Group Respondent

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.

High School Completion

Percentage of adults ages 25 and over with a high school diploma or equivalent. Rankings used data from the ACS 5-year estimates 2015 – 2019 for this measure.

United States	Michigan	Muskegon	Oceana	
88%	91%	91%	87%	
High school completion County Health Rankings & Roadmaps				

High school completion or equivalency correlates with improved health outcomes, better quality of life and overall life expectancy. Educational success is also associated with a variety of improved health behaviors such as the rate of smoking, exercise, overall physical health and lower rates of some chronic diseases such as diabetes.

According to the American Community Survey (2019) the overall rate of educational attainment in Muskegon County indicates that 8.7% of the population does not have a high school diploma; 71.5% are high school graduates but have less than a Bachelor's degree and 19.7% have achieved a Bachelor's degree or higher. This is far less than the statewide Michigan average at 29.1%.

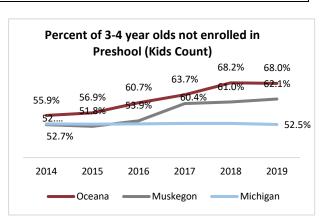
In Oceana County (2019) 7.9% of the population aged 25 and over do not have a high school diploma and 4.9% or 879 have less than a 9th grade education. 76.5% are high school graduates with additional education but less than a bachelor's degree and 17.7% have a bachelor's degree or higher. There is also significant educational variance across race and ethnic origin in Muskegon County. Similar data was not available for Oceana County.

Demographic –	No High School Diploma	High School Graduate but	Bachelor's degree or
Muskegon County	add	Less than a bachelor's	Higher
		degree	
Overall Population	8.7%	71.5%	19.7%
White, Non-Hispanic	6.5%	71,7%	21.8%
American Indian/Alaska	13.1%	75.6%	11.3%
Native			
Multi-Racial	13.7%	65.4%	20.9%
Asian	14.5%	52.7%	32.8%
Black	18.0%	72.7%	9.3%
Hispanic or Latino	21.1%	71.3%	7.6%
Source: American Communit	y Survey, 2019		

Preschool

According to Kids Count, 62.1% of children age 3-4 in Muskegon County and 68.0% in Oceana County are not enrolled in preschool. This has been worsening in both counties and is higher than state-wide (52.5%).

In Muskegon ISD, 38.6% of students at 3rd grade scored 'proficient' in English and 40.0% in math. 54.5% of students at 8th grade scored 'proficient' in English and 33.6% in math. The appendix to this CHNA contains English and math proficiency by economic status,



disability status and demographic breakdowns. <u>Grades 3-8 State Testing (Includes PSAT Data) Proficiency</u> (mischooldata.org)

In Oceana County, 39.1% of students at 3rd grade scored 'proficient' in Reading and 30.3% of students at 8th grade scored 'proficient' in Math. (M-STEP 2019 Statewide Assessment)

Head Start

Head Start is a program designed to help children from birth to age five who come from families at or below poverty level. The program's goal is to help children become ready for kindergarten while also providing the needed requirements to thrive, including health care and food support.**

Report Area	Children Under Age 5	Total Head Start Programs	Head Start Programs, Rate (Per 10,000 Children)	
Muskegon	11,315	12	10.61	
Oceana	1,782	8	44.89	
Michigan	596,286	875	14.67	
Source: US Department of Health & Human Services, Administration for Children and Families. 2019 via				

The rate of Head Start Programs in Oceana (44.89) is significantly higher than statewide rate (14.67) while it is lower in Muskegon (10.61) compared to statewide.

School Based Data

By examining data by individual school system, we are better able to understand variations in local graduation rates, college applications, economically disadvantaged students, teacher to student ratios, and expenditures per student. This can help us gauge how well we are doing in preparing children for future opportunity.

Local School Systems	Graduation Rates 2019-2020	# Enrollment 2020-2021	College Enrolled @ 6 months 2019-2020	% Economically Disadvantaged Students 2020-2021	Teacher to Student Ratios	Instructional Expenditures Per pupil 2019-2020
Muskegon County						
Fruitport Public	88.69	2,536	51.0	51.2	23:1	\$6,891
Holton Public	81.25	828	30.9	70.9	23:1	5,985
Mona Shores Public	94.85	3,755	61.4	45.3	22:1	7,062
Montague Public	84.85	1,398	47.1	58.1	23:1	6,799
Muskegon Covenant	5.33	163	NA	99.4	20:1	3,336
Muskegon Heights	63.64	627	4.5	94.9	21:1	3,881
Muskegon Public	81.94	3,456	34.2	89.0	22:1	6,805
North Muskegon	97.59	969	75.3	27.3	22:1	6,637
Oakridge Public	79.86	1,962	42.2	59.8	22:1	6,583
Orchard View Public	56.77	2,155	40.4	77.9	25:1	7,268
Ravenna Public	90.59	997	50.6	48.7	26:1	5,726
Reeths Puffer Public	89.20	3,494	51.2	54.6	22:1	6,746
Whitehall	83.93	2,017	45.5	55.0	21:1	7,572
Oceana County						
Hart Public	87.50	1,232	54.5	78.3	21:1	6,661
Pentwater	85.71	246	50.0	54.9	15:1	7,942
Shelby	81.32	1,193	38.7	80.2	22:1	7,034
Walkerville	90.0	274	22.2	85.0	19:1	6,438
State of Michigan	76.96	1,398,455	NA	50.9	NA	NA
Source: https://wv	ww.mischooldata.org					

The majority of schools in both Muskegon and Oceana counties have 50% or more disadvantaged students with several – Muskegon Covenant (99.4), Muskegon Heights (94.9), Muskegon (89.0), Shelby (80.2) and Walkerville (85.0) exceeding 80%. Only Mona Shores (45.3), North Muskegon (27.3) and Ravenna (48.7) have fewer than 50% disadvantaged students in their student bodies. Mona Shores (61.4) and North Muskegon (75.3) have the highest percentages of students who are college enrolled.

Note: Economically disadvantaged students include those who have been determined to be eligible for free or reduced-price meals via locally gathered and approved family applications under the National School Lunch program, are in households receiving food (Supplemental Nutrition Assistance Program) or cash (Temporary Assistance to Needy Families) assistance, are homeless, are migrant, are in foster care, or beginning in 2017-18, certain Medicaid eligible children. When any of these conditions are present, a student is considered economically disadvantaged. Source: https://www.mischooldata.org

Some College

Percentage of adults ages 25 -44 with some post-secondary education. Data is from U.S. Census American Community Survey, 5-year estimates 2015-2019.

United States	Michigan	Muskegon	Oceana	
66%	68%	59%	48%	
Some college County Health Rankings & Roadmaps				

"Some College" includes individuals who enrolled in vocational/technical schools, junior (community) college, or 4-year college institutions and is inclusive of those who did not get a degree and those who did. Top performing counties in the United States have 73% of residents or above with some level of additional education or training beyond high school. Counties that achieve 73% or above are considered in the 90th percentile. The post-secondary achievement range within Michigan counties is 36% - 86%.

The relationship between health and education is well understood. This metric also correlates with improved work opportunities and by extension, economic security. Earlier in this document, the patient surveys implemented by Mercy Health found that the <u>topmost identified need</u> was for education and/or additional training (Muskegon County patients: 15.0% and Oceana County patients: 18.1%). Lack of post-secondary educational attainment or job skills also correlates with increased stress.

CHNA 2021 Community Survey- Education

10.3% of respondents in Muskegon County and 11% of respondents in Oceana County reported they need more education or new/better skills to get a job or a job that pays more. For those with High School Education or less, it was higher at 11% in Muskegon County and 21% in Oceana County.

Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021, See also Appendix.

Student Debt as a Barrier to Educational Achievement and Future Economic Stability

An enormous barrier to pursuing post-secondary education and/or training is the escalating cost of a college degree or certification. The U.S. Chamber of Commerce labels student debt as "not just a burden to young Americans but to the American economy as a whole".^{xxi} Nationwide today, based upon 4th Quarter 2020 data, 44.5 million Americans carry \$1.56 trillion in student debt^{xxii}. This debt creates decades-long financial burdens sometimes forcing individuals to choose to delay marriage, starting a family, purchasing a home and even retirement. ^{xxiii} The following table reflects the level of student debt in the Mercy Health service area. Note that the table uses "median" debt which means that half of the local debt amount is over the figure shown and half below. Default levels in Oceana County exceed that of both Muskegon as well as Michigan levels.

Student Loan Debt by County				
State of Michigan	% with Student Loan Debt	18%		
Student Loan Debt	Median Amount of Student Loan Debt	\$20,377		
	% Student Loan Holders in Default	12%		

	Median Amount Student Loan Debt in Default	\$10,464
Muskegon County	% with Student Loan Debt	17%
Student Loan Debt	Median Amount of Student Loan Debt	\$19,743
	% Student Loan Holders in Default	14%
	Median Amount Student Loan Debt in Default	\$8,415
Oceana County	% with Student Loan Debt	13%
Student Debt	Median Amount of Student Loan Debt	\$16,941
	% Student Loan Holders in Default	22%
	Median Amount Student Loan Debt in Default	
Debt in America: An Ir	nteractive Map (urban.org)	

Only 37.5% of individuals with student debt are below the age of 30. The remaining 62.5% are older than 30. Student debt disproportionately affects both women and minority populations. Women represent 56% of undergraduates nationwide but hold almost two-thirds of the debt load (\$900 billion). Women are more likely to use debt for education and, on average the amount they borrow is greater than that of a man. Repayment takes longer because of the gender pay gap where women on average make 26% less than men. While 60% of all students use federal loans to pay for higher education, 77% of black students use this source. While black students tend to assume more debt, black households still earn 23% less than the median for the overall population. This means that repayment is not only extended which increases cost, but also that default levels increase because of financial insecurity.^{xxiv}

EMPLOYMENT

Employment provides income and, benefits that can support healthy lifestyle choices. Unemployment and under employment limit these choices, and negatively affect both the quality of life and health overall. The economic condition of a community and an individual's level of educational attainment both play important roles in shaping employment opportunities. Employment | County Health Rankings & Roadmaps

Employment

West Michigan has a robust economy with a diverse workforce. According the U.S. Census's there is 64.6% Labor Participation Rate in the region, however this participation varies by county. Labor participation rate is defined by the percent of adults who are either working or actively seeking employment divided by the total civilian non-institutional population.

County	Total Pop 18+	Labor Force	Labor Participation Rate			
Muskegon	137,713	81,158	58.9%			
Oceana	Oceana 21,071 11,866 56.3%					
Employment / U.S. Census American Community Survey (2015-19)						

Muskegon County Employment

Muskegon County has a total of 6,346 businesses. In 2019, the leading industries in Muskegon County were Health Care and Social Services, Manufacturing, Retail, and Accommodation and Food Services. There are approximately 17,362 jobs in healthcare services, 10,736 jobs in manufacturing, 9,582 in retail and 6,667 jobs in the food industry. Muskegon has a robust small business sector with 58% of the businesses in Muskegon County employing 1-4 employees, 18% with 5-9 employees.

Greater Muskegon Economic Development (GMED), Website

Oceana County Employment by Industry

Oceana County's two primary economic industries are tourism and agriculture. According to the Right Place economic development organization, cities, villages and townships of Oceana County draw thousands of tourists annually to its well-known attractions. The food processing and agribusiness industries are thriving sectors of Oceana County's

economic makeup. By volume of sales, the top areas of agriculture production are fruits, tree nuts, berries, vegetables, melons, potatoes/sweet potatoes and hogs and pigs. Many agricultural owner operators rely heavily on migrant and seasonal farmworkers. The State of Michigan ranks #9 in the nation for H2-A workers. Almost 45% of the migrant labor workforce housed by growers are H2-A.

"Many of our growers...were forced to hire H2-A workers from other countries...the people already here in our community don't have employment or have lower wages in employment ...so their livelihood has been decimated greatly. This has had a devastating effect on our local Hispanic population."

-Oceana County focus group respondent

Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021. See also Appendix.

CHNA 2021 Community Survey Findings- Employment and Income

- 27% of respondents in Muskegon County and 33% in Oceana County disagreed that there are enough jobs near where they live.
- 44% of respondents in Muskegon County and 49% in Oceana County disagreed that jobs near them pay enough.
- 31% of Black respondents in Muskegon County report having not been hired or promoted because of discrimination.

Unemployment

Percentage of population ages 16 and older unemployed but seeking work. 2021 County Health Rankings used data from 2019 for this measure.

United States	Michigan	Muskegon	Oceana			
3.7%	4.1%	4.3%	5.9%			
Unemployment County Health Rankings & Roadmaps						

Unemployment increases behaviors that impact health including alcohol and tobacco consumption, poor diet, reduced levels of exercise, as well as depression (suicide). Access to care is also more limited as the most common way that people in the United States receive health coverage is through employer sponsored insurance.

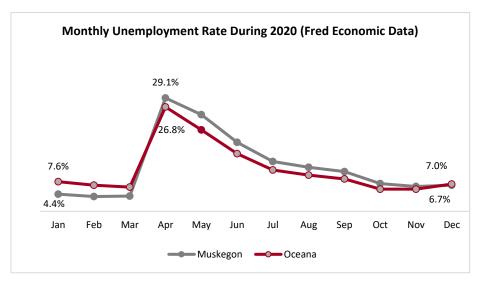
The current rate of unemployment in Muskegon County is 7.5% and Oceana County's is 8.0%. Both have been steadily decreasing in the past 6 months ago when Muskegon's was 17.7% and Oceana's was 14.8%. According to the Michigan Bureau of Labor Statistics (MBLS), Muskegon has a labor force of 74,033 of which 68,474 are employed and 5,550 are not. Oceana County has a labor force of 11,485 with 10,568 employed and 917 unemployed^{xxvi}.

According to ACS, 5-year estimates 2015-2019, unemployment is higher among Black (16.6%) or Multi-racial residents (14.9%) in Muskegon County and Hispanic or Latino residents (7.8%) in Oceana County. The appendix to this CHNA include Unemployment rate breakdown by race/ethnicity, poverty status and educational attainment.

Michigan's recovery affects different segments of the working age population differently. Again, according to the MBLS, the state unemployment rate for individuals with less than a high school education is 13.8%; for high school graduates 11.1%; those with some college education 8.9% and for individuals with a bachelor's degree 4.2%. These percentages underscore how even some post-secondary education has an impact on employment status. A significant part of the Michigan workforce is part-time and at present 17.9% of Michigan's workforce is part-time.

In April 2020, unemployment rates increased significantly to 29.1% in Muskegon County and 26.8% in Oceana County because of COVID-19. It gradually declined to 6.7% in Muskegon County and 7.0% in Oceana County in December of 2020.

A large portion of the part-time workforce, as well as women, have lagged behind re-gaining employment in Michigan. While both men and women



had sharp drops in employment in April 2020 because of COVID-19, men saw a reduction of 23.3 % while female unemployment dropped 26.3. The recovery for women has been much slower than for men. 136,000 women left the labor force (5.8% decline) between February and December 2020. This represents a 5.8% decline. The male labor force has recovered from the early pandemic loss and was up nearly 18,000 during the same period (0.7%). xxvii

Barriers to Employment

"Daycare is expensive, so often one parent stays home to avoid the cost of daycare, since whatever the parent is earning will go just toward childcare, so what's the point in working if it's just going towards the cost of childcare."

-Focus group respondent

Childcare Access and Availability

Safe, affordable and reliable access to childcare is an essential component of supporting all working parents. Childcare availability and dependability are significant factors in providing support for individuals as they move from poverty to economic stability. Access to licensed childcare not only ensures support for parents, but also supports child well-being, socialization and age-appropriate development.

According to the Head Start of Muskegon/Oceana 2017 Community Assessment, access to childcare remains "problematic" in the Mercy Health Muskegon service area. The assessment indicates that more than 8,800 children less than age six in Muskegon County (approximately 71.8%) live in families in which both parents work. Based on 2018 data, twenty-two (22) of Muskegon's 43 census tracts are defined as Childcare Deserts by the Center for American Progress. A childcare desert is any census tract with more than 50 children under the age of 5 who have no childcare providers, or so few options, that there are more than 3 times as many children as there are licensed childcare slots.

Oceana County Child Care Desert

	Childcare deserts by Census Tract: Oceana County (2018)								
Census Tract	Location	Licensed Providers	Family Care Homes	Total Capacity	# Children under 5	#Kids in all parents in workforce	Maternal workforce participation	# of slots per child	
106	Village of Ferry, large track	0	0	0	338	46%	49%	No provider	
109	Stony Lake	1	1	6	84	28%	34%	14	
110	Mears/Silver Lake	1	0	12	62	42%	42%	5.17	
	Cent	er for America	n Progress:	https://child	caredeserts.org	/ (via CHNA 20	19)		

Census Tract	Location	Licensed Providers	Family Care Homes	Total Capacity	# Children under 5	# Kids in household with both parents working	Maternal workforce participation	#Children per each slot
3	City of Muskegon MCEC Area	1	1	12	352	74%	79%	29.33
5	Muskegon/ McLaughlin Neighborhood	5	3	102	495	66%	74%	4.85
6.01	Muskegon/Nelson- Near Hackley Hospital	0	0	0	163	85%	89%	No Provider
8	Muskegon/Nims	0	0	0	385	52%	63%	No Provider
9	Muskegon/Lakeside	3	3	24	226	70%	70%	9.42
12	Musk/Roosevelt	1	1	12	88	70%	84%	7.33
13	Muskegon Heights/ Muskegon E. Hackley	2	2	12	363	72%	74%	30.25
14.02	Muskegon Heights/South Heights Zone	1	0	60	411	70%	73%	6.85
18	Muskegon Township	9	9	66	264	91%	84%	4
20	Muskegon/East Laketon/Evanston Ave.	1	1	12	382	89%	84%	31.83
23	Norton Shores	4	2	73	154	82%	85%	2.11
24	Norton Shores/Roosevelt Park	1	1	6	122	92%	88%	20.33
26.01	Fruitport	4	4	36	292	91%	91%	8.11
26.02	Fruitport/Mall Area	6	5	66	354	53%	76%	5.36
27	Fruitport	10	8	120	421	80%	66%	3.51
30	Moorland/Casanovia	1	1	12	311	65%	64%	25.92
32	Wolf Lake	7	6	62	349	58%	59%	5.63
33	Holton	4	2	111	431	50%	63%	3.88
36	Twin Lake/Lakewood Club	11	11	93	340	59%	52%	3.66
39	Areas North and West of Montague	0	0	0	84	73%	71%	No Providers
40	East of Whitehall- Blue Lake Area	3	3	30	118	60%	61%	3.93
42	Muskegon- Downtown to Jackson Hill	2	2	24	233	79%	72%	9.71

Starting and sustaining a childcare business can be difficult. The average income of a childcare worker in Michigan prior to COVID-19 was \$23,020. This is somewhat higher than the national average income of \$22,290.

A recent childcare provider analysis for Muskegon County found that between 2010 and 2017, there was a significant reduction in the number of available childcare slots.

During this time period the country registered a loss of 1,207 slots or a 15.7% reduction. This loss was across all categories of childcare including both family care and group care. As might be expected, there was a corresponding loss in licensed childcare providers (89 individuals or 27.4% of licensed providers). In 2019 there were 188 licensed providers who will serve infants and toddlers in Muskegon County.

CHNA 2021 Community Survey - Childcare

- 37% of respondents in Muskegon County and 44% in Oceana County disagreed that there are good, affordable options for childcare.
- Among those that needed childcare in past 2 years, 36% of respondents in Muskegon County and 44% in Oceana County report they were never/rarely able to find childcare that worked for them.
- 4% of respondents in Muskegon County and 5% in Oceana County report that COVID-19 resulted in them being unable to work because they didn't have childcare.

Coronavirus Has Made Child Care Deserts Worse

According to the National Association for the Education of Young Children, at the onset of the COVID-19 pandemic, nearly 2/3rds of childcare providers indicated they could not survive a shut-down lasting over a month. The Center for American Progress has estimated that the U.S. may have lost half of its licensed childcare capacity depending on the degree of government intervention and location.

COVID-19 has also underscored significant differences in access to childcare. Unsurprisingly, based on other data that has emerged during the pandemic, communities of color have suffered the greatest toll. Data mapping finds that there is a correlation between low-income communities/neighborhoods and childcare deserts. In general, childcare businesses in higher income neighborhoods have been better able to continue collecting childcare

"It's expensive to be poor."

-Survey Respondent

tuition during the Coronavirus closures and will face fewer obstacles to reopening than childcare businesses that serve predominantly low-income families. The Center for American Progress found that workers who were deemed essential during the pandemic were more likely to live below the federal poverty level and have children at home underscoring the importance of childcare availability and affordability. 6

Income and Poverty

2019 American Community Survey statistics (ACS) for Income and Poverty was released by U.S. Census on September 17, 2020. This data was collected prior to the COVID-19 pandemic and does not reflect the economic changes that began in February 2020. The <u>median poverty rate</u> nationally at the time of this estimate was 13.4% for all counties. Both Muskegon and Oceana Counties fell within the median range nationally.

<u>Median household income</u> is adjusted for inflation to allow income to be compared accurately over time. According to the Census Bureau, median household income was lower than the U.S. median in 30 states including Michigan. Both Muskegon and Oceana Counties have a median income lower than that of both the state and nation.

Median Household Income and Poverty Estimates: Muskegon and Oceana Counties 2019							
Year	Name	Number in Poverty	Percent in Poverty All Ages	Median Household Income			
2019	United States	39,490,096	12.3%	\$65,712			
2019	Michigan	1,264,445	12.9%	\$59,522			
2019	Muskegon County	22,745	13.5%	\$50,730			
2019	Oceana County	3,880	14.8%	\$52,319			

Income Inequality

Ratio of household income at the 80th percentile to income at the 20th percentile. Data is from ACS 2015-2019.

actio of household income at the both percentile to income at the 20th percentile. But a is from Acs 2015 2015.								
United States	Michigan Muskegon		Oceana					
4.9	4.6	4.3	3.8					
https://www.countyhealt	https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-							
	model/heal	th-factor						

Economic insecurity is strongly associated with health disparities, risk behaviors and exposure to adverse environmental factors. A healthy and vibrant community must work to identify local root cause factors that restrain the ability of people to live to their fullest potential. Inequalities in a community can accentuate differences in social class and status and serve as a social stressor. Communities with greater income inequality can experience a loss of social connection, decreases in trust, social support, and a sense of community for all residents. Income inequality in a society has a strong causal connection to health that is independent of the income of individuals.

Children in Poverty

Percentage of people under age 18 in poverty. Data is from Small Area Income and Poverty Estimates 2015-2019.

United States	Michigan	Muskegon	Oceana				
17%	18%	17%	23%				
Children in poverty County Health Rankings & Roadmaps							

Nationally in 2019, the county-level poverty rate for school-age children (ages 5 - 17) was 17%. In Muskegon County 17% of children below the age of 18 are at or below FPL. Oceana County is significantly higher at 23%. A breakdown showing the age range and number of children in poverty by age follows.

	Childhood Poverty Muskegon and Oceana Counties 2019								
Year	Name	Number in Poverty Under Age 18	Percentage in Poverty Under Age 18	Number in Poverty Age 5- 17	Percentage in Poverty Age 5 - 17				
2019	United States	12,000,470	16.8%	8,258,906	15.8%				
2019	Michigan	367,411	17.5%	251,843	16.3				
2019	Muskegon County	6,733	17.3%	4,742	16.7				
2019	Oceana County	1,345	23.4%	898	20.7				

Poverty can create a lasting impact on a child's academic achievement, health, and income that lasts into adulthood. Low-income children have an increased risk of injuries from accidents and physical abuse and are susceptible to more frequent and severe chronic conditions and their complications. Risk areas include asthma, obesity, diabetes, ADHD, behavior disorders, cavities, and anxiety.

ALICE - Asset Limited, Income Constrained, and Employed

While the Mercy Health Muskegon/Lakeshore service area has experienced an improving economic climate, wage growth and pockets of poverty remain a challenge. According to the United Way ALICE (Asset Limited, Income Constrained, and Employed) Point in Time survey data, many area households who earn more than the Federal Poverty Level continue to struggle to cover the cost of basic needs as hourly wages do not meet the local cost of living.

The United Way of the Lakeshore estimates that 31% of households in Muskegon fall within the ALICE demographic with another 12% at FPL; and 31% of households in Oceana County are ALICE along with another 13% at FPL. The state of Michigan ALICE average is 25% so both service area counties exceed that of the state. ALICE data is based upon the minimum cost for individuals and families to live and work in a modern economy. The following household budget is often referenced as a survival budget. Individuals who are ALICE often cycle in and out of poverty as wages fail to keep up with the cost of household essentials.

ALICE Households in <u>Muskegon</u> County - 2019	Single Adult	One Adult, One Child	One Adult, One in Child Care	Two Adults	Two Adults, Two Children	Two Adults Two in Childcare	Single Senior	Two Seniors
Housing	602	602	602	602	602	796	602	602
Child Care	0	184	535	0	367	1,024	0	0
Food	241	419	350	502	840	733	208	429
Transportation	457	606	606	647	929	929	406	545
Health Care	189	403	403	403	569	569	491	981
Technology	55	55	55	75	75	75	55	55
Miscellaneous	182	252	286	258	394	467	205	299
Taxes	273	250	308	348	363	543	283	359
Monthly Total	\$1,999	\$2,771	\$3,145	\$2,835	\$4,333	\$5,136	\$2,250	\$3,290
Annual total	\$23,988	\$33,252	\$37,740	\$34,020	\$51,996	\$61,632	\$27,000	\$39,480
Hourly Wage	\$11.99	\$16.63	\$18.87	\$17.01	\$26.00	\$30.82	\$13.50	\$19.74
	ALICE Threshold 2019: American Community Survey							

ALICE Threshold, 2019; American Community Survey
ALICE Project – Michigan (unitedforalice.org)

In Muskegon County, the core cities of Muskegon and Muskegon Heights have the highest percentage of households that fall below the ALICE Threshold. The percentage represents a combination of both ALICE residents as well as those who fall below the federal poverty level (FPL of \$12,490 for a single adult and \$25,750 for a family of four in 2019. In the city of Muskegon, 65% of the population are either ALICE or FPL. In the city of Muskegon Heights, 70% of residents are either ALICE or FPL.

In Oceana County, three townships have populations where over 50% of the residents are below the ALICE threshold. These Townships are Colfax (52%), Crystal (53%) and Leavitt (54%). The appendix to this CHNA contains a listing of the number of households in each county subdivisions for both Muskegon and Oceana Counties and the percentage of those households that are below the ALICE Threshold.

ALICE Households in <u>Oceana</u> County -2019	Single Adult	One Adult, One Child	One Adult, One in Child Care	Two Adults	Two Adults, Two Children	Two Adults Two in Childcare	Single Senior	Two Seniors
Housing	489	529	529	529	700	700	489	529
Child Care	0	157	441	0	313	859	0	0
Food	282	490	409	587	982	857	243	501
Transportation	457	606	606	647	929	929	406	545
Health Care	189	403	403	403	569	569	469	938
Technology	55	55	55	75	75	75	55	75
Miscellaneous	172	248	272	259	393	449	192	295
Taxes	249	241	277	348	361	498	259	357
Monthly Total	1,893	2,729	2,992	2,848	4,322	4,936	2,113	3,240
Annual total	22,716	32,748	35,904	34,176	51,864	59,232	25,356	38,880
Hourly Wage	11.36	16.37	17.95	17.09	25.93	29.62	12.68	19.44

ALICE Threshold, 2019; American Community Survey

ALICE Project – Michigan (unitedforalice.org)

Consumer Debt

ALICE data is silent on the extent to which these households also carry consumer debt. In other parts of this document, we have examined rates of medical and educational debt. The following chart extrapolates consumer debt burden along with the extent to which debt is in collection along with the median amount of debt for households with debt.

County Level Debt as an Economic Burden						
Michigan	Share of population with any Debt in Collections	28%				
	Median Amount of Debt	1,505				
Muskegon County	Share of population with any Debt in Collections	35%				
	Median Amount of Debt	\$1,379				
Oceana County	Share of population with any Debt in Collections	29%				
	Median Amount	\$980				

"It's hard being a single parent, trying to do better with only 24 hours in a day."
-Survey Respondent

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. Family and Social Support | County Health Rankings & Roadmaps

Children in Single-Parent Homes

Percentage of children that live in a household headed by single parent. This measure is based upon the American Community Survey using a 5-year estimate (2015-2019)

United States	Michigan	Muskegon	Oceana
26%	26%	30%	19%
Children in single-parent households County Health Rankings & Roadmaps			

Over 470,000 Michigan households are led by women without a spouse present. This represents about 12% of all MI households and according to <u>Women in the Michigan Workforce</u>, is more than double the number of male-led households without a spouse (201,200 5%). In Muskegon County the number of children in a single parent home is 11,943 or 30% exceeds the state percentile of 26%. Oceana County has 1,173 in single parent homes or, 19%. Nationally, the top percentile in the nation is 14%. The county range in Michigan is 13 – 39%.

Evidence suggests that adults and children living in single-parent households are at higher risk of poor health outcomes including significant behavioral health impact (substance use disorders, anxiety, depression). Adults and children in single-parent households are additionally at risk for unhealthy behaviors including smoking, poor nutrition, and economic stress (food and housing insecurity). Within the city of Muskegon in 2017, 26.7% of all births did not identify paternity. 2017 is the last year reporting this data in Kids Count. Births with No Paternity Established | KIDS COUNT Data Center

Social Associations

Number of membership associations per 10,000 population. The 2021 Health Ranking used data from 2018 for this measure.

United States	Michigan	Muskegon	Oceana
9.3	9.8	10.5	9.0
Social associations County Health Rankings & Roadmaps			

For this measurement, the Rankings focused in on the number of membership associations in counties per 10,000 population. In this measurement, Muskegon County exceeds both state and national performance. Oceana County, a more rural area falls somewhat below state levels.

Social isolation and lack of engagement with community have been correlated with levels of increased morbidity and early mortality. Research suggests that the risk associated with social isolation is similar to that of cigarette smoking. Furthermore, social support networks have been identified as powerful predictors of health behaviors, suggesting that individuals without a strong social network are less likely to make healthy lifestyle choices than individuals with a strong network.

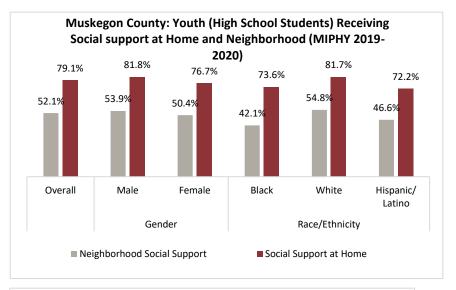
"This (Senior Resources) is my social group. I don't know what I would do with them."

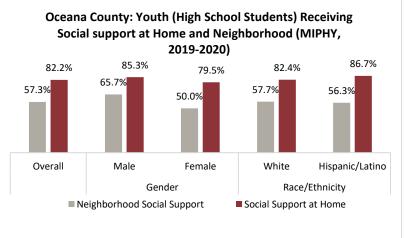
-Focus Group Participant

Youth Social Support

In Muskegon County, 79.1% of High School students indicated they could ask their mom or dad for help with personal problems and 52.1% reported they know adults in the neighborhood they could talk to about something important. While parents in all demographic areas generally are perceived to be supportive, there is considerable disconnection to the neighborhood, notably among black youth in Muskegon.

In Oceana County, 82.2% of High School students indicated they could ask their mom or dad for help with personal problems and 57.3% reported they know adults in the neighborhood they could talk to about something important. Oceana youth also report lower rates of neighborhood connection and support.





Senior Citizen Isolation

According to the National Institute on Aging (NIA), social isolation combined with loneliness has been linked to both physical and mental conditions including high blood pressure, heart disease, obesity, anxiety, weakened immune system, depression, cognitive decline, substance abuse and even Alzheimer's disease and death. Those who have unexpectedly lost a loved one to death, or who are separated from friends or family, retirement, mobility restrictions or loss of transportation are especially at risk. XXIX Conversely, people with more social support, less isolation and greater interpersonal trust live longer and healthier lives than those who are socially isolated. NIA notes that neighborhoods rich in social capital provide residents with greater access to support and resources.

CHNA 2021 Community Survey- Family/Social Support

- 8% of respondents in Muskegon County and 12% in Oceana County reported they need help caring for themselves or their home, and of those individuals 16% in Muskegon and 29% in Oceana reported that no one helps them.
- 42% of respondents in Muskegon County and 39% in Oceana County reported that in the past year COVID-19 has resulted in feeling lonely or isolated.

Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021. See also Appendix.

"I've seen the community come together in a lot of ways to provide support."

-Focus Group Participant

COMMUNITY SAFETY

Injuries through accidents or violence are the third leading cause of death in the United States, and the leading cause for those between the ages of one and 44. Accidents and violence affect health and quality of life in the short and long-term, for those both directly and indirectly affected, and living in unsafe neighborhoods can impact health in a multitude of ways.

Violent Crime

Number of reported violent crime offenses per 100,000 population. The 2021 County Health Rankings used data from 2014 & 2016 for this measure

United States	Michigan	Muskegon	Oceana
386	443	440	469
Community Safety County Health Rankings & Roadmaps			

The 2018 rates of violent crime in Michigan were published on October 3, 2019. Michigan had a total of 44,918 violent crimes in 2018. This included 551 homicides (down 3.2%); 7,690 rapes (an increase of 8.2%) 5,656 armed robberies (down 13%) and 31,021 cases of felonious assault representing an increase over the previous year of 1.1%. The rate of homicides in Michigan in 2018 is now lower than it was in 1967.

Violent crime is reported on a per capita basis in Michigan and of the 137 Michigan communities with at least 10,000 residents and police departments across Michigan, 5 from the Mercy Health service area were extrapolated and ranked according to their rate of violent crime. In 2018, Muskegon Heights was ranked as having the highest level of violent crime in Michigan. Other communities placed into the ranking are included in the chart below.

Rank based upon 137 MI communities with at least 10,000 residents	Community	Population	# Violent Crime Reported	Rate per 1,000 residents
1	Muskegon Heights	10,720	240	22.4
27	Muskegon	38,125	245	6.4
68	Muskegon Township	17,879	40	2.2
88	Norton Shores	24,578	37	1.5
101	Fruitport Township	14,168	15	1.1

Gun Violence in Muskegon County

Gun violence continues to be an issue that is persistent in Muskegon County. In 2020, according to patient records in Mercy Health's EPIC system, 99 individuals from Muskegon County were treated for gunshot injuries. The following table indicates the race/ethnicity of the victims.

According to an article in the December 2019th Journal of American Medical Surgeons, *Long-term Functional, Psychological, Emotional,*

Gun Shot Wound by Race/ Ethnicity in 2020		
Race and Ethnicity	#	
White	13	
Black	78	
Hispanic/Latino	4	
Unknown/ Refused	4	

and Social Outcomes in Survivors of Firearm Injuries, years after being shot, a large proportion of gun victims continue to suffer from increased unemployment, alcohol and drug abuse, and post-traumatic stress disorder, a new study shows, and the effects persist even when the injuries were minor.***

"I'm very concerned about gun violence, mental health access, and disparities that exist between our people of color both black and brown"

-Survey Respondent

Injury Deaths (Fatal Injuries)

Measure as the number of deaths due to injury per 100,000 people. Data from NCHS Mortality Files from 2015-2019 are used for this measure.

United States	Michigan	Muskegon	Oceana
72	78	88	84
Community Safety County Health Rankings & Roadmaps			

Many injuries are predictable and preventable, yet about 30 million Americans receive medical treatment for injuries each year and more than 243,000 died from these injuries in 2017. Michigan's Vital Statistics reports this data as "Fatal Injuries" and provides a breakout of cause of death either aggregated or by specific accident/injury. Michigan's data covers a period beginning in 2000 through 2018, the last updated material. Fatal Injuries by County (state.mi.us)

During this period, Michigan has experienced a slow but consistent increase in fatal injuries reporting 5,885 in 2000 and 8,217 in 2018. Muskegon County has had a similar slow but obvious increase in this measure reporting 112 fatal injuries in 2000 and 166 in 2018. Oceana by contrast, reports relatively flat data with 19 fatal injuries in 2000 and 16 in 2018.

Michigan aggregates Fatal Injuries into three major categories: (All) Accidents, Suicides, and Homicides. The Accident category includes deaths due to poisoning, falls, transport and suffocation. The Suicide category encompasses both gun and suffocation suicides; and, the Homicide category which separately identifies where use of a gun was a factor. In 2018, Muskegon County had 108 deaths due to accidents including 26 that were fall related and 25 involving transportation. Muskegon also reported 32 deaths due to suicides and 17 Homicides of which 12 involved the use of a gun. Oceana County reported 11 Accidental deaths with nearly half of these (5) identified as fall related. There were 2 Suicide deaths in 2018 and 1 Homicide that did involve the use of a gun.

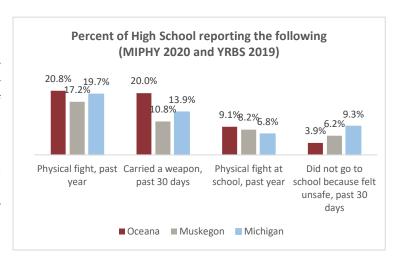
CHNA 2021 Community Survey- Community Safety

 86% of respondents in Muskegon County and 87% in Oceana County reported they feel safe in their neighborhood.

Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021. See also Appendix.

Youth Safety

Among High School (HS) Students, 17.2% in Muskegon County and 20.8% in Oceana County reported they were in physical fight one or more times during the past 12 months. 20% of HS students in Oceana County carried a weapon in the past 30 days, which is higher than Michigan's rate (13.9%). In Muskegon County, 10.4% of HS students reported they were physically hurt on purpose and 9.4% reported they were forced to do sexual things by someone they were



"Our neighbors are well-informed, are supportive, and kind. Feeling comfortable as one of the very few minorities in our sub-division"

-Survey Respondent

Racism & Discrimination

According the CDC, racism consists of structures, policies, practices, and norms that assigns value and determines opportunity based on the way people look or the color of their skin. This results in conditions that unfairly advantage some and disadvantage others throughout society. Racism both structural and interpersonal negatively affects the mental and physical health of millions of people, preventing them from attaining their highest level of health, and consequently, affecting the health of our nation.

A growing body of research shows that centuries of racism in this country has had a profound and negative impact on communities of color. The impact is pervasive and deeply embedded in our society affecting where one lives, learns, works, worships and plays and creating inequities in access to a range of social and economic benefits—such as housing, education, wealth, and employment.xxxi

Discrimination is defined as the unjust or prejudicial treatment of different categories of people, especially on the grounds of ethnicity, age, sex, or disability.xxxii Although there is not currently a national data source on racism and discrimination, residents in Muskegon and Oceana County answered several questions about discrimination based on race, ethnicity, or sexual orientation.

CHNA 2021 Community Survey - Discrimination

- 18% of respondents in Muskegon County and 11% in Oceana County reported they often/always hear about discrimination in their community.
- 36% of respondents in Muskegon County and 26% in Oceana County reported experiencing at least one type of discrimination.
- In Muskegon County, 60% reported they primarily hear about discrimination based on race or ethnicity, followed by sexual orientation (24%).
- In Muskegon County, 43% of Black respondents reported they would receive better care if they were a different race or ethnicity, compared to 3% of white-only respondents. Also, 11% Black respondents reported having been denied medical care or receiving poorer care because of discrimination.

Based on a survey of Muskegon & Oceana residents, April 1 - May 10, 2021. See also Appendix.

"There's a need for more opportunities for people to get know trans-people and get to know we are just people."

-Focus Group Respondent

PHYSICAL ENVIRONMENT

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

Air and Water Quality

Average daily density of fine particulate matter in micrograms per cubic meter. (P.M. 2.5Air Pollution). Data is from 2016.

United States	Michigan	Muskegon	Oceana
7.2	7.1	8.3	7.3
Air pollution-particulate matter County Health Rankings & Roadmaps			

Almost 65,000 premature US deaths were related to adverse effects of outdoor fine particulate matter. Minority populations and those living in poverty are more likely to be exposed. Ground-level ozone and airborne particles pose the greatest threat to human health in our country. Ozone irritates the respiratory system causing coughing, throat irritation and sometimes a burning sensation in the airways. When lung function is reduced, people experience feelings of chest tightness, wheezing or shortness of breath. Ozone aggravates asthma and can trigger attacks. Those at greatest risk of lung diseases are older adults and children who are active outdoors.

Particle pollution or particulate matter is comprised of microscopic solids or liquid droplets that can get deep into the lungs and cause serious health problems. Symptoms can include irritation of the eyes, nose and throat; coughing; chest tightness; shortness of breath. At greatest risk are people with heart or lung disease, older adults and children.

Drinking Water Violations

United States	Michigan	Muskegon	Oceana
Not Available	Not Available	No	No
<u>Drinking water violations County Health Rankings & Roadmaps</u>			

This measure tracks local drinking water violations. A "yes" denotes the presence of a violation; "NO" indicates no violation. Neither Muskegon nor Oceana County had water violations during this tracking period.

Water Quality in Muskegon and Oceana

Water is essential for health. A water supply that is safe is important for public health and safe drinking water is made possible by local, state, and federal drinking water protection programs. More than 90 biological and chemical contaminants have water quality standards and monitoring requirements. Approximately 75% of people in Michigan get their water supply from public water systems that are monitored under guidelines established by the federal or state government. Another 25% get their water from local wells, with local public health departments charged with monitoring the wells. XXXIIV

Lead in Water

After the Flint water crisis illuminated the amount of lead levels in water supplies in Michigan, several opportunities were made available in the State of Michigan to track public water supplies including possible lead in water lines leading to homes. The State of Michigan also began an extensive public health effort to replace lines that may have led in them and public health education efforts on lead mitigation while consumers waited to have lines replaced. Michigan also began testing children for possible exposure to lead and provided additional care management for children identified with elevated lead levels. Additional information will need to be gathered to extrapolate this information pertaining to Muskegon and Oceana Counties.

PFAS in West Michigan

In 2017, several communities in West Michigan became aware of potential dangers of PFAS in Michigan Drinking Water. Several hot spots in Michigan were identified and the state began testing in phases.

According to the Michigan Department of Environment, Great Lakes and Energy (EGLE) PFAS Statewide Sampling Initiative for Public Water Supplies (Phase I - 2018), PFAS was found in Muskegon and Oceana water supplies. Of the

38 samples in Muskegon, 25 samples had no detection of PFAS in 12 samples indicated PFAS in a water supply. Of those detected, some were Oceana County had similar and small amounts of PFAS detected. In Phase II, EGLE again tested several sites and identifying several areas of resolution. There are currently 10 PFAS Sites in Muskegon and none in Oceana County listed by the State of Michigan.xxxv

CHNA 2021 Community Survey- Water Quality

• 53% of respondents in Muskegon County and 58% in Oceana County reported that tap water is safe to drink in their neighborhood.

Based on a survey of Muskegon & Oceana residents, April 1 - May 10, 2021. See also Appendix.

"I need better mental health care. Also, we need more subsidized housing for people on government assistance."

-Survey Respondent

HOUSING AND TRANSIT

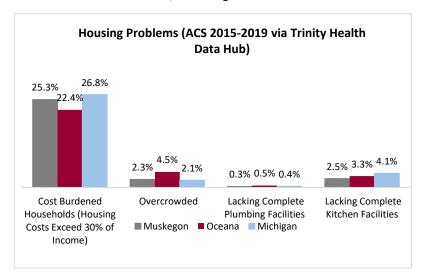
Severe Housing Problems

United States	Michigan	Muskegon	Oceana	
18%	15%	14%	15%	
https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-				
model/healt	model/health-factors/physical-environment/housing-transit/severe-housing-problems			

This ranking is based upon the percentage of households with at least 1 of 4 housing problems: overcrowding, high housing cost, lack of kitchen facilities or a lack of plumbing facilities.

Muskegon County has 63,052 occupied housing units, of which 40,970 were built prior to 1970. Twenty-six percent of homes in the county were built between 1940 and 1959, and 18% were built in 1939 or earlier. The median value of a house in Muskegon County is \$98,600 and median mortgage is \$1,076 per month. Six percent of homes in Muskegon County are classified as mobile homes – higher than the state of Michigan as a whole (5%). The number of vacant homes in Muskegon County grew by 41.7% between 2000 and 2010, according to the U.S. Census Bureau.

According to the 2017 Muskegon County Consolidated Plan for **Housing and Community** Development, lower income residents face challenges in finding affordable housing. This is primarily because Muskegon County rent costs and home pricing are increasing faster than local wage rates. Low income households are heavily dependent on affordable rental housing. Affordable housing is scarce in Muskegon County and low-income residents often pay more than 30% of their household income for housing.



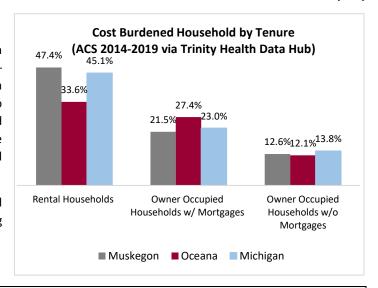
I have personally been told that there are streets that I shouldn't drive down because I am white. I refuse to accept this and will deal with consequences of driving anywhere I need to go.

-Survey Respondent

Cost Burden by Household Tenure

The "housing burden" was the most common housing problem identified among both low-income renters and homeowners in Muskegon County. This trend is expected to continue, given market trends and increased economic revitalization in the area. The current estimated number of overburdened households in Muskegon County is 55%.

In both Muskegon and Oceana County, Rental Households are most impacted by housing cost burden.



CHNA 2021 Community Survey- Housing

• 4% of respondents in Muskegon County and 1.3% in Oceana County reported being somewhat/very worried that they won't have stable housing in the next 2 months. In both Muskegon and Oceana County, 6% of respondents reported they live with family and friends

Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021. See also Appendix.

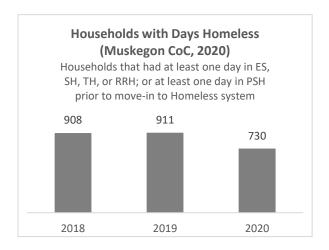
Residential Segregation

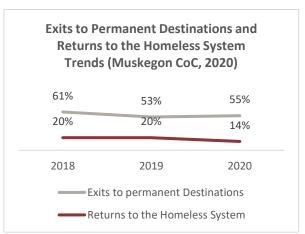
According to the County Health Rankings, residential segregation is an index of where higher values reflect a greater level of segregation between black and white residents. The residential segregation index is ranked between 0 (complete integration) and 100 (complete segregation). The ranking is only used in those counties with a black population of 100 individuals or more. This measure applies to approximately 65 % of all U.S. Counties. The segregation index data is drawn from 5-year estimates (2012-2016) published by the American Community Survey of the U.S. Census.

Residential segregation is considered a fundamental cause of health disparities in the U.S. and has been linked to poor health outcomes; including mortality, poor quality housing and increased exposure to environmental toxins, neighborhood violence, and reduced educational and employment opportunities.

In the State of Michigan, the minimum – maximum range of the segregation index is 44 - 80. Of the counties in the Mercy Health Muskegon service area, only Muskegon has a designated segregation index. Oceana does not meet the population threshold. In all, 43 of Michigan's 83 counties have a designated segregation index. 8 of these counties fall within the 70 - 80 segregation range. Of urban population centers, Muskegon's ranking is 73.

Homelessness





According Muskegon's Continuum of Care, the number of homeless households in Muskegon County have been consistently in the area of 900-915 for the years of 2018 and 2019. While the number of households listed in the Point in Time Count (PIT) was 730 in 2020, that may not truly reflect that number of households homeless in 2020 as the PIT Count was lower than in prior years as physical connection to homeless citizens was made difficult due to COVID-19 social distancing requirements. Eviction restrictions and enhanced supportive funding resulting from COVID-19 federal policies may also have been an extenuating circumstance on the drop in the PIT for Muskegon County.

COVID-19 Impacts on Homelessness

The number of people able to enter the shelters was limited due to the need for social distancing during the pandemic. People trying to get into housing in 2020 found it more difficult due to the lack of affordable housing in the community; and the indicators for people existing homelessness to positive outcome indicated that it was more difficult to do so given the lack of affordable housing and other pandemic related issues.

Environment - Broadband Access

As COVID-19, changed the way people accessed their jobs, schools, colleges, families, and doctors the internet played an increasingly vital part This indicator reports the percentage of population with access to high-speed internet. Data are based on the reported service area of providers offering download speeds of 25 MBPS or more and upload speeds of 3 MBPS

Report Area	Total Population (2019)	Access to DL Speeds > 25MBPS (2020)
Mercy Health Muskegon	280,249	96.09%
Muskegon County, MI	173,566	97.10%
Oceana County, MI	26,467	75.62%
Michigan	9,986,180	96.01%
United States	331,403,256	96.26%
Trinity Health Data Hub, 20	021	

or more. This data represents both wireline and terrestrial wireless internet providers. Cellular internet providers are not included.

Driving alone to Work

United States	Michigan	Muskegon	Oceana
76%	82%	84%	79%
Driving alone to work County Health Rankings & Roadmaps			

According to the County Health Rankings for 2018, most people in Muskegon County rely upon personal transportation to get to and from work. While 82% of people in Michigan drive alone to work, in Muskegon, this percentage is 84%.

Oceana is somewhat lower at 79%. Rankings indicate that top performing communities across the nation come in at 72% for this ranking.

Long Commute – Driving Alone

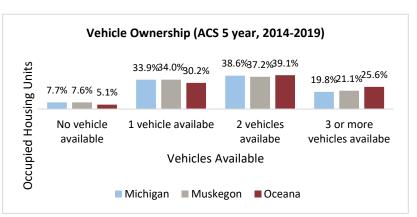
This metric is based upon the percentage of the workforce that drives alone to work.

United States	Michigan	Muskegon	Oceana
37%	34%	23%	29%
Driving alone to work in Michigan County Health Rankings & Roadmaps			

Transportation emerged as an issue for hiring and retaining qualified employees in the Chamber of Commerce 2018 Survey of Businesses. In that survey, 24% of respondents indicated that transportation was a barrier issue to employment.xxxvi

"I have to rely on family and friends to take me to the lab, doctor appointments, and other places I could previously go on the bus and be independent. We need a bus service in the northern part of Muskegon County..."

Survey Respondent



CHNA 2021 Community Survey- Transportation

- In both Muskegon and Oceana County, 91% of respondents reported they often/always have a way to get where they need to go.
- 34% of respondents in Muskegon County and 6% of respondents in Oceana County reported that public transportation is available in their community.
- 15% of respondents in Muskegon County and 3% of respondents in Oceana County reported that their community has a good public transportation system.

Based on a survey of Muskegon & Oceana residents, April 1 – May 10, 2021. See also Appendix.

CHNA SUMMATION

How Information Will Be Shared

Mercy Health Muskegon will share this CNHA on Mercy Health's website and on the community benefit website, www.mchp.org. Mercy Health also intends to develop a series of informational white papers based on many of the major themes from this CHNA. This material will be distributed across the service area to partners and the community. Local libraries will also be advised of the CHNA publication. As in the past, an Executive Summary piece will be developed, with targeted distribution. Local media will be used to inform the community of priorities and solicit feedback on the document itself. As part of this targeting, local media will be used to target directly into the minority community, with social media also being engaged.

Acknowledgements

The 2021 Mercy Health Community Health Needs Assessment was made possible by the contributions of many leaders, colleagues, experts, and volunteers of the Health Project and Mercy Health, key stakeholders of our communities and the many people we serve who kindly participated in our focus groups or community survey.

Executive Leadership

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Mercy Health Marketing Team

Community Partners & Members

2021 CHNA Advisory Committee

Focus Group Participants & Host Organizations

Muskegon & Oceana County Stakeholders

Muskegon & Oceana County Survey Participants

Trinity Health Community Health & Well Being Staff

APPENDIX A - 2019 CHNA & Mercy Health Response

In June of 2019, Mercy Health published For Good Measure, 2019 Community Health Needs Assessment for Muskegon, Oceana, and Newaygo Counties selecting its top rankings in both Muskegon and Oceana Counties. Mercy Health Muskegon solicited and did not receive any written comments from the 2019 CHNA.

In 2019, Mercy Health recognized that Muskegon and Oceana Counties were the primary service areas and the where planning, resources and implementation would be focused. Where possible, Mercy Health and the Health Project would collaborate with Spectrum Health with issues pertaining to Newaygo County residents.

In August of 2019, the CHNA Advisory Committee began working on implementation planning from the three top rankings selected by the community through a prioritized process and affirmed by the Mercy Health Board of Directors. The top three prioritized areas for Muskegon and Oceana Counties are included below.

2019 Community Health Needs Assessment Priority Areas						
Muskegon	Oceana					
Child Care Availability & Affordability	Housing – Where to get help					
Substance Use – Opioid Education	Childcare Affordability					
Employment	Nutrition – Cost of Healthy Food					

Mercy Health Implementation Plan (2019-2022)

The fourteen member CHNA Advisory committee met to ensure that the implementation plan included a process by which Mercy Health will 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 recommendation for action items and recognize other community organizations. working on issues and groups emerging from the federally funded Community Health Improvement Region (CHIR) should be recognized and potentially supported in the three priority areas. The priorities also include Social Determinants (Influencers) of Health, some of which were already being addressed by initiatives in Muskegon County.

The committee also recognized that some additional planning needed to be done to further understand the root causes of an issue selected for both counties. The implementation plan was adopted by Mercy Health's Board of Directors in November 2019 with the following goals, strategies, and measures.

Child Care Availability & Affordability

Muskegon is fortunate to have many organizations who are collaborative partners on several big picture issues. As Mercy Health did in the 2019 CHNA, several other organizations including the Community Health Improvement Region (CHIR), Community Foundation for West Michigan, United Way of the Lakeshore and Goodwill West Michigan, the Lakeshore Chamber of Commerce and their affiliate economic development partners zeroed in on child care access and availability as one of the most significant barriers to sustained employment and economic growth for the region. Mercy Health is an exceptionally proud partner in improving community childcare availability and affordably in Muskegon County with significant volunteer leadership, financial, and staffing support.

Goal: Increase availability of licensed childcare in census tracts designated as childcare desert.

Strategy 1: Assess parent concerns and barriers related to childcare availability, including concerns specific to shift workers, grandparents raising grandchildren, single parents, and parents of children with special needs.

Strategy 2: Assess licensed childcare provider support needed and barriers to expansion, including needs specific to home-based and center-based providers.

Strategy 3: Assess what local employers currently do to support their employees' needs related to childcare.

Measures: Information from at least 30% of the daycare provider community in Muskegon and Oceana Counties. Information will have collected input from at least 100 working parents on childcare issues and will have collected input from at least 10% of their member businesses on childcare issues

After implementation planning was completed, Mercy Health reached out to the United Way of the Lakeshore to inquire about their long time Childcare Action Team (CAT) on how to collaborate on additional assessment activities. The CAT confirmed that they had been doing both a childcare provider and parent assessment with data readily available. Additionally, the United Way of the Lakeshore recognized that this team could be enhanced through the CHIR's Livability Lab process with new energy, membership and action agendas.

Strategy 4: Convene stakeholders and provide a forum to enhance coordination and establish partnerships as necessary to expand efforts to improve access to quality childcare.

Strategy 5: Support continuation, and expansion of initiatives prioritized during the Livability Lab 100 Day Challenge by work teams targeting childcare access

Measures: Increase collaboration around childcare initiatives to increase the number of day care slots and to enhance provider supports

Mercy Health Muskegon, through the Health Project currently serves as the fiduciary and backbone support organization of the Community Health Innovation Region (CHIR). This data driven collaborative initiative with multiple health care and community organizations collected significant data on day care deserts, employer needs and provided a data report and recruited membership at their 100 Day Challenge kickoff event in September 2019. Almost 300 people attended the meeting to share in the "One Audacious Vison to Think Big" in Muskegon with a four-hour session to report data, create teams around Social Influencers of Health issues, and to rapidly work on projects for 100 days. Each team had trained project coaches who were to hold members accountable, set up meetings, and to provide ongoing communications on rapidly developing issues.

The Child Care Action team added 15 members to the team including local businesses, state legislative staff, area nonprofits and set out to identify critical needs, to align with other groups, hire a permanent Child Care Coordinator to drive the ongoing work, and learn more about the regulatory process, financial constraints, and needs of the community. This catalyst event set up multiple opportunities to fully realize collective impact. Several subgroups were established including childcare peer support, a Shared Services Hub model team, a legislative and regulatory sub-group, as well as a childcare center development team.

Child Care Advocacy & Appropriation

Members of the team quickly learned about the regulatory issues and barriers to childcare access, financing, and improvements to enhance quality day care seeking out subject matter experts from state

and nonprofit organizations supporting early learning and childcare. They also advocated successfully for an expansion of income eligibility for subsidized day care for lower income citizens.

After the Livability Lab process in 2019, legislative staff from the Muskegon area and State Representative Greg VanWorkeom began working with the local action team, local businesses and organization to design a new Tri-Share Child Care concept. The idea is to support ALICE specific family's access and afford day care while working for participant businesses. Day care costs would be split in three ways by the employee parent, employer business, and the government. This innovative concept rapidly progressed through the Michigan legislature and Representative VanWorkeom with support of other members from the West Michigan delegation, were able to secure an appropriation for three pilot Tri-Share Child Care Programs. GoodWill West Michigan was selected as the Muskegon pilot, hiring a project coordinator and working with area businesses to set up the program.

Strategy 6: Provide funding from the HP Advisory Board of Directors Community Benefit Board Initiatives grant program and Sister Simone Courtade fund.

In FY 2021, Mercy Health through the Health Project's Community Benefit Board Initiative invested funding in two projects, to provide ongoing support to the Child Care Action Team for United Way of the Lakeshore and to invest in planning for to GoodWill to plan and expand child care access in West Michigan. GoodWill ultimately was identified as both the Tri Share Hub as well as exploring a childcare administrative hub.

Y Learning Center

As a result of Mercy Health funding for planning, GoodWill partnered with the YMCA of the Lakeshore to plan and start developing a childcare center. YMCA leadership quickly found a location, program director, and began renovations on the new childcare center co-located at the Covenant Academy in downtown Muskegon. In June of 2021, the YMCA Learning Center opened its doors adding to childcare and early learning capacity within Muskegon County.



Y Learning Center Staff reading to new enrollee in June 2021.

Outcomes: Mercy Health contributed significantly to the childcare access and availability in Muskegon County through funding of planning for a new childcare center and enhanced collaboration, providing leadership on teams, and advocacy support for childcare issues. Direct impact includes Muskegon County parents may now access 72 additional day care slots within one year of funding; over \$300,000 dollars in direct appropriated investment (to date), and an enhanced collaborative effort that will be sustained enthusiastically in the future.

Substance Use - Opioid Education

Goal: Reduce Opioid Deaths in Muskegon County

Strategy 1: Support ongoing work of the opioid task forces from counties within the service area which include, preventing youth misuse, community education, increasing access and availability of treatment services, & support medication disposal opportunities and promotion.

Measures: Decrease by 10% the high school students reporting recent misuse of a prescription painkiller in Muskegon and Oceana Counties by 2022

Capacity & Partnerships to Act: The Health Project facilitates the Coalition for A Drug Free Muskegon County which serves an organizing body for over 65 community organizations such as schools, healthcare, law enforcement, business, government, leaders, and youth who make up the 100 plus volunteers. Working through multiple subcommittees, the DFMC coalition initiatives have a larger impact than any one organization would be able to achieve independently. Three community-based coalitions were identified to help on prevention activities specifically on opioid abuse including the Muskegon Area Medication Disposal Program, the Muskegon Opiate Task Force, and the TalkSooner regional marketing collaborative.

Muskegon Area Medication Disposal Program

Several area partners are actively engaged in the Muskegon Area Medication Disposal Program (MAMDP) which is a community takeback and education initiative facilitated by Mercy Health's Health Project staff. Founded in December of 2010 the collaborative members include multiple law enforcement agencies, volunteers, and Public Health of Muskegon County, and Mercy Health Pharmacy staff.

In addition to permanent locations at all local police stations and multiple Mercy Health and community pharmacies, MAMDP hosts two annual community take back events per year at



Mercy Health Pharmacy staff at the April 2021 MAMDP event.

local fire stations. Volunteers and enforcement partners collect unused medications from participants in a drive through style event. Participants are offered a consumer survey, needle disposal container, and a medication lock box. Pharmacy staff sort and classify the medications it collects to provide information to physicians on unused materials for source reduction education and to reduce waste. This project has engaged over 220 volunteers and collected over 44,000 pounds of material and provided locked containers, which reduces the number of drugs in the community that can potentially be misused.

Muskegon Opiate Task Force

The DFC Coalition also supports the work of the Opioid Task Force which is facilitated by Public Health Muskegon County. Mercy Health physicians and colleagues actively participate on this task force reporting aggregate opiate overdose information, emerging drug trends seen in the Emergency Room and give updates on Mercy Health patient education, prescribing policies and reductions as well as new efforts in pain management. The Opioid Task Force has held two Muskegon Opioid Summits, one in 2019 with over 200 attendees and one in 2020 which was held virtually due to the pandemic.

TalkSooner

Throughout 2019 and 2020, Mercy Health and Mercy Health Physician Partners collaborated with the Lakeshore Regional Entity and several other health care organizations to promote the parent education program Talksooner. This multi-tiered marketing campaign provided education materials for patients in all physician offices geared toward parent and caregivers about having the drug talk with their teens. It also features a mobile app and website support for parents on additional tips about discussing drugs, has alerts on emerging drugs, and signs that children may be using drugs.



Outcomes: According the Michigan Profile for Healthy Youth survey administered in all Muskegon high schools in 2018, the misuse of prescription drugs among Muskegon high school youth was 6% reportedly taking drugs without a prescription in the past 30 days, compared to only 4.7% of students reporting this in 2020. Similar drops in prescription pain medication use were also recorded among high school youth from 4.5% in 2018 to 3.6% in 2020 (Michigan Profile for Health Youth 2018; 2020).

Opioid Strategy 2: Continue efforts to strengthen Mercy Health policies and practices to ensure safe opioid prescribing; including patient education regarding risks of prescription opioids.

Measures:

Decrease in Muskegon and Oceana Counties' residents reporting they are unaware of the risks of prescription opioids by 2022.

Increase admissions to publicly funded substance use disorder treatment, with opioids as the primary drug in Muskegon and Oceana Counties, by 10% by 2022.

Mercy Health leadership and physicians have been actively engaged in the Trinity Health Opioid Utilization Reduction (OUR) initiative, designed for system readiness and expansion around opiate source reduction and to prepare patients for changes to opioid prescribing. Mercy Health and Mercy Health Physician Partners (MHPP) formally adopted new protocols, patient attestations, and developed patient education materials that have reduced opiate prescribing by 23% since 2017. Mercy Health Muskegon also added six recovery coaches across the entire service area to work with patients in ongoing support with motivational interviewing.

The Health Project's Community Health Workers (CHW) engaged in ongoing virtual training of Project ECHO (Extension for Community Healthcare Outcomes) at the University of New Mexico Health Sciences Center training through its Opioid Addiction Treatment ECHO for CHWs & MAs Program. The goal of the program is to expand access and improve outcomes of treatment for addiction by training and mentoring paraprofessionals such as medical assistants, community health workers, health educators, and peer support specialists to provide clinical and social support, health education, and appropriate referrals for patients in recovery or seeking treatment for addictions, with a focus on opioid use disorder. This program helped the local Health Project Hub CHWs to identify and make referrals.

Impact: Mercy Health professionals and physicians enhanced their opioid reduction efforts with an increase in patient education conversation, gradual reductions in patient doses (titration), the increase in utilization in Medication Assisted Therapy (MAT), innovations in pain management pre and postsurgical procedures, and ongoing care management. Some of this ongoing innovation was interrupted with the implementation of new electronic medical record in January of 2020, and the COVID-19 pandemic experienced by Mercy Health throughout 2020. While additional efforts resulted in increases in patient education and a 23% reduction in prescribing since 2017, the 2020 Muskegon County medical examiner's report showed an increase in the number of annual Opioid Overdoses from 50 reported in 2018, 55 in 2019, and 57 deaths in 2020 which remains too high. Possibly exacerbated by the COVID-19 pandemic or other external factors such as illicit drug supplies. There was a slight drop in opioid-only deaths between 2019 (15 people) and 2020 (11 people), with a large increase in those dying from mixed combinations of other drugs such as fentanyl.

Employment

Goal: Increase the percent of employed residents who earn enough to afford basic household needs.

Strategies 1: By the end of January 2020, the Livability Lab Workforce Development group will have collected input of at least 50 people in Muskegon and Oceana Counties.

Strategy 2: By the end of March 2020, the Livability Lab Workforce Development group will have identified up to four opportunities to expand or replicate successful workforce development initiatives.

Measures: Increase community collaboration on workforce development issues and further identification of collective impact measurement.

In collaboration with the Community Health Improvement Region (CHIR), Mercy Health and several community partners participated in the CHIR's Livability Lab 100 Day Challenge which was launched in September 2019. The CHIR's process identified several teams that collaborated for 100 days to use data to identify and possibly implement activities. Goals that were identified by teams related to workforce development included:

- Strengthening Childcare Opportunities to create a cross sector community team to address the community wide challenges of affordable childcare in Muskegon County & to develop a business plan for a new childcare center.
- Understand and Address Local Workforce Development Gaps that identified gaps an assessment of current workforce development programs.
- Create Affordable Transit with Wheels to Work program which launched their ride program.
- Increase Employment Opportunities Via Expungement to work on record expungement for previous drug related and nonviolent crimes.
- **Identify, Promote and Support Minority Owned Businesses** to identify connect, and support minority owned businesses throughout Muskegon County.

These teams were able to develop, and in most cases, sustain the momentum surrounding workforce development in the Muskegon area. Mercy Health continues to support actively engaged teams in their continued efforts with staff time and leadership talent.

Other Mercy Health Efforts on Employment & Training

As the largest employer in Muskegon County, Mercy Health began expanding their educational program to allow and engage student interns in specific job classifications to conduct educational requirements on campus allowing for more youth to be exposed to health professions.

Diversity and Inclusion

Mercy Health's Talent Acquisition and Human Resource Team is nationally recognized for their outstanding collaboration within West Michigan for the strong achievements in approaching equity in the workforce in its Evidence Based Selections Process (EBSP) recruitment, as well as, enhanced supports for barriers to continued employment, education, and advancement among its employees. The EBSP program reworked job classifications include those with potential career pathways into the health care profession for underserved populations.

In 2020, Trinity Health announced that they would establish a \$15 minimum wage and made corresponding adjustments to wages for existing colleagues eligible for adjustments.

Mercy Health further established a Diversity and Inclusion Council as part of Trinity Health's 2022 Diversity & Inclusion (D&I) Strategic Plan, Mercy Health's D&I Council will focus on the following areas: Diversity in Governance, Diversity in Talent, Inclusive & Culturally Welcoming Environment, Supplier Diversity and Elimination of Health Disparities. Mercy Health is committed to creating an environment throughout its Ministry Organizations that incorporates diversity and inclusion.

Community Training on Unconscious Bias and Racism

The Health Project has facilitated the Muskegon Health Disparities Coalition (MHDC) for several years to collect data, offer trainings, and to encourage community members to advocate for their health care needs. Since 2017, MHDC has supported master trainers in Coming Together for Racial Understanding (CTRU) and offered multiple workshops on Unconscious Bias, Racism, as well as presenting movies to community free of charge on multiple issues. Over 200 community members have taken advantage of the MHDC trainings since 2018. Mercy Health staff and Mission Leaders are actively engaged in initiative ensuring alignment and partnership opportunities with the Diversity & Inclusion team.

Hackley Campus Redesign & Muskegon Public Schools

Mercy Health's Hackley Campus located in Mercy Health Muskegon began planning for the reutilization of the Hackley Campus which was scheduled to close in the fall or 2019. Mercy Health leadership established a Hackley Campus Redesign subcommittee in the fall of 2018, engaging a land planning consultant to develop a directional land plan for the Hackley Campus.

Health Project staff assisted with the six-month process that included community outreach, planning, and hosting of 14 community meetings with over 185 stakeholders. These included neighbors, and hospital employees that result in a plan to divest the portions of the site that would respect and enhance the fabric of the surrounding neighborhood as well as providing any reuse or redevelopment was compatible and consistent with Mercy's interest in the community.

The plan focused on broad scale anchor institution and leadership offered the land to Muskegon Public Schools as they began planning for site improvements and possible new construction. In March of 2020 Mercy Health formally announced that several acres of the property would be given to Muskegon Public

Schools in order to build a new middle school. Included in the design is the development of the early career technology exploration center for grades 6th through 8th with career pathways leading to continued education through the Muskegon Career Tech Center, Muskegon Community College and Baker College.

Impact of Employment and Workforce Development: Mercy Health's impact on employment, training, and workforce development has been realized with support of additional collaboration within community as well as system level changes that increased wages, hired a more diverse workforce, provide training on unconscious bias, as well as supported and retained colleagues. Additional impact will be realized with the education and training resulting from the donation of land and collaboration with Muskegon Public schools and expanding educational opportunities with our local colleges.

While the measurable outcomes of employment were disrupted by the COVID-19 pandemic, the current unemployment rate of 7.8% of the Muskegon and 8% in Oceana are within a few points of pre-pandemic conditions.

Nutrition - Cost and Availability of Healthy Food (Oceana Specific Priority)

Since the release of the 2019 Mercy Health CHNA, great efforts to provide healthy food opportunities has spiraled in Oceana County. Oceana Health Bound, a Health Project lead coalition, and its subgroup-Healthy Lifestyles have led and participated in several community-wide health fairs. Staff from Mercy Health Lakeshore, Health Project and community partners like MSU-Extension continue to offer the Stanford University Diabetes Self-Management Program (DSMP) and other nutrition-related courses. In 2020, Mercy Health Lakeshore was awarded a sub-award in the amount of \$15,000 per year for implementation of the Prescription for Health program which comes directly from the Michigan Health Endowment Fund grant. Area farmer's markets have also received grants to offer opportunities for fresh fruits and vegetables to children and seniors.

Mercy Health has been a proud partner with Trinity Health and the YMCA of the Lakeshore hosting the nationally accredited Diabetes Prevention Program (DPP). To date, 635 participants have enrolled in the program with over 4,818 pounds lost with an average of 4.53% body weight loss and significant increase in reported exercise. This program was expanded to Oceana County in 2020.

Mercy Health also made significant financial investments in FY2020 through two grant programs designed to work in response to the CHNA, investing in Whitehall Schools and Montague Area Public Schools - Real Food SEED Access to healthy foods and obesity program which has now been replicated in two additional schools, Whitehall Public Schools and Holton Public Schools.

AgeWell Services of West Michigan continues to receive funding from Mercy Health to increase access to healthy foods, with meals delivered by Meals on Wheels to seniors living in Oceana and Muskegon Counties, as was the Kids' Food Basket Sack Supper Program which is in the third year of direct investment.

Mercy Health's new investments also included funding for the Coalition for Community Development for their Heights Garden to Family Table Initiative supporting youth education and access to fresh vegetables found in urban community settings.

Impact: Mercy Health has measured impact with several of its programs related to its support of food and nutrition programs. Direct funding was distributed through the Sister Simone Courtade or Community Benefit Board Initiatives for the following local programs:

- Funding through the Sister Simone Courtade fund to AgeWell Services supported the delivery of meals to 27 additional Oceana Clients with 277 meals.
- The Coalition for Community Development to expand opportunities for youth to engage in gardening and gain access to food offered gardening experience to over 730 children with 214 pounds of food produced, prior to the COVID-19 pandemic shutting the program for the year.
- Support of the 1st Congregational Church's Saturday Breakfast program helped support 14,707 meals who served 6,764 adults and 1,908 children in Muskegon County.
- Support of Catholic Charities Pantry which provided food to 4,291 families in Muskegon County
- In 2020, the YMCA's DPP program was expanded into in Oceana County which was stalled due to the COVID-19 impact.

Additional Support of CHNA Issues

Mercy Health Muskegon acknowledges the wide range of priority health issues that emerged from the CHNA process and determined that it could effectively focus on only those health needs it deemed most pressing, under-addressed, and within its ability to influence. Mercy Health Muskegon continued to support other efforts in the following categories listed below.

Housing & Homelessness

The Health Project is the fiduciary and provides staffing to Muskegon County Homeless Continuum of Care Network (MCHCCN) In addition to facilitating the Point in Time (PIT) bi-annual homelessness count in Muskegon County, the Health Project also has contracts with the local Housing Assessment and Resource Agency (HARA) in Muskegon to place community health workers onsite in their location.

The dynamic program has four CHW staff certified to help with applications through its Secured Supplemental Income /Social Security Disability Outreach, Access, and Recovery (SOAR) program that secures income and insurance for homeless individuals through Social Security. SOAR is designed to increase access to SSI/SSDI for eligible adults and children who are experiencing, or are at risk of, homelessness and have a serious mental illness, medical impairment, and/or a co-occurring substance use disorder. The Muskegon Community Health Project, the community benefit department of Mercy Health Muskegon, has colleagues working with the Oceana Home Partnership, identified as the West Michigan Housing Network that services Oceana County.

Advance Care Planning & Charted Coalition

Mercy Health Muskegon currently supports the promotion of advance directives by supporting community initiatives, as well as promoting the use of advance directives within primary care settings. In 2020, Mercy Health funded Harbor Hospice to continue to facilitate the Charted health care planning collaborative, for training, materials, and education events and the hire of a non-Mercy Health coordinator to continue to coordinate this work across the service region.

Sexually Transmitted Infections/Diseases: Mercy Health Muskegon maintain extensive support of sexually transmitted disease through its McClees clinic and the UpFront coalition.

Mercy Health, the Health Project and our community partners will continue to work on many of these priorities established by the 2019 CHNA.

APPENDIX B – Mercy Health Community Survey Results & Survey

Mercy Health Muskegon and Oceana Counties, Community Survey to Inform Community Health Needs Assessment, Summary of Results, May 2021

Notes: Total includes entire service region, including Newaygo and Ottawa Counties even when the results for these counties has been suppressed due to small sample size. County calculated based on school districts.

County	Total Respondents	Margin of Error
Muskegon County	980	±3.1%
Oceana County	277	±5.9%
Newaygo and Ottawa Counties	53	±13.5
Service Area Total	1,310	±2.7%

Physical Health	Musk	cegon	Oceana		Ottawa/ Newaygo		Service Area Total		
Report that their health is 'poor' or 'fair'	14.5%	132	15.1%	38	8.6%	4	14.4%	174	
Report that poor physical health kept									
them from doing their usual activities on	6.8%	61	5.2%	13	6.7%	3	6.5%	77	
14+ days in past month									
In the past year Covid-19 has resulted in									
ongoing health problems for them or	13.2%	109	8.2%	19	13.3%	6	12.1%	134	
someone int their household									
Mental Health	Muskegon		Oceana		Ottawa/ Newaygo		Service Area Total		
Report that poor mental health has kept									
them from doing their usual activities on	3.4%	30	2.0%	5	0%	0	3.0%	35	
14+ days in past month									
In the past 3 months, were 'usually or									
always' bothered by not being able to	7.7%	70	10.7%	27	10.6%	5	8.5%	102	
stop worrying or control worrying.									
In the past 3 months, were 'usually or									
always' bothered by Feeling afraid	4.9%	44	6.0%	15	0%	0	4.9%	59	
something awful might happen.									
In the past 3 months, were 'usually or									
always' bothered by Feeling down,	6.2%	56	5.6%	14	4.3%	2	6.0%	72	
depressed, or hopeless.									
In the past year has Covid-19 affected				_					
you, or your household in the following	33.5%	277	31.2%	72	44.4%	20	33.5%	369	
ways? Felt down, depressed or hopeless									
In the past year has Covid-19 affected	E0 40/		45.00/	404	4.4.40/	20	40.00/	500	
you, or your household in the following	50.1%	414	45.0%	104	44.4%	20	48.8%	538	
ways? Felt nervous, anxious, or on edge					044-	/	Come		
Alcohol, Tobacco and Other Drug Use	Muskegon		Oceana		Ottawa/ Newaygo		Service Area Total		
Alcohol use in past 30 days	53.5%	483	54.5%	138	48.9%	23	53.6%	644	
Frequent alcohol use in past 30 days	6 334		0.701		4.00/	_	6.001	60	
(drank on 20+ days)	6.4%	58	8.7%	22	4.3%	2	6.8%	82	
Marijuana use in past 30 days	9.7%	87	12.3%	31	4.3%	2	10.0%	120	
Francisco de la constanta de l	1					-			
Frequent marijuana use in past 30 days (used on 20+ days)	3.8%	34	6.3%	16	0%	0	4.2%	50	
Tobacco use in past 30 days	10.7%	97	11.5%	29	17.0%	8	11.1%	134	

Frequent tobacco use in past 30 days	2.2%	20	2.8%	7	8.5%	4	2.6%	31
(drank on 20+ days) Vaped in past 30 days	4.0%	36	4.0%	10	8.5%	4	4.2%	50
	4.0%		4.0%			4	4.270	30
Frequent vaping in past 30 days (20+days)	2.2%	20	2.8%	7	8.5%	4	2.6%	31
Diet	Muskegon		Oceana		Ottawa/ Newaygo		Service Area Total	
Report it is not hard to eat healthy	63.9%	570	61.3%	152	64.4%	29	63.4%	751
Report they do not want to eat healthy	5.5%	49	4.4%	11	4.4%	2	5.2%	62
Report that 'Not enough money for food' makes it hard to eat healthy	9.4%	84	6.5%	16	2.2%	1	8.5%	101
Report that 'Hard to find healthy food where I live' makes it hard to eat healthy	4.6%	41	7.7%	19	2.2%	1	5.1%	61
Report that 'Don't know how to make healthy food' makes it hard to eat healthy	6.1%	54	6.0%	15	6.7%	3	6.1%	72
Report that 'I mostly rely on microwave or ready to eat food' makes it hard to eat healthy	7.2%	64	8.9%	22	8.9%	4	7.6%	90
Report that 'Not enough time to cook' makes it hard to eat healthy	17.6%	157	22.6%	56	20.0%	9	18.7%	222
Exercise	Muskegon Ocea		Ocea	Oceana Ottawa/ Newaygo		•	Service Area Total	
Report they are active enough to increase				1	INCW	l sygo	1	Cai
their heart rate and breathing less than 30 minutes per week	29.9%	270	31.5%	79	31.9%	15	30.3%	364
Report they are active enough to increase their heart rate and breathing 2.5 hours or more per week	21.7%	196	21.5%	54	10.6%	5	21.2%	255
Report that in their community 'It is easy to walk, bike, or exercise in my neighborhood'	72.0%	609	70.0%	163	80.4%	37	71.9%	809
Report that in their community 'We have a park or outdoor space that is safe'	55.7%	471	57.1%	133	73.9%	34	56.7%	638
Report that in their community 'I feel safe going outside to exercise'	73.5%	622	75.5%	176	82.6%	38	74.3%	836
Report that in their community 'My kids can play outside without my worrying about their safety'	37.7%	319	45.5%	106	54.3%	25	40.0%	450
Access to Care	Muskegon		Oceana		Ottawa/ Newaygo		Service Area Total	
Usually go to doctor's office or private	89.5%	794	93.1%	231	93.5%	43	90.4%	1068
clinic when sick or need health care Usually go to community health center or other public clinic when sick or need health care	4.1%	36	2.0%	5	0%	0	3.5%	41
Usually go to hospital outpatient department when sick or need health care	1.6%	14	.4%	1	0%	0	1.3%	15
	2.20/	20	2.0%	5	0%	0	2.1%	25
Usually go to hospital emergency room	2.3%	20						
when sick or need health care If you have any kind of health care			Ocea	ına	Otta			ce Area
when sick or need health care If you have any kind of health care coverage, what kind do you have?		kegon		ina I	Otta Newa			ce Area otal
when sick or need health care If you have any kind of health care				13				

Report they have Medicare	25.1%	223	23.7%	58	21.7%	10	24.7%	291
Report they have Private insurance with a high deductible plan	30.4%	270	26.5%	65	37.0%	17	29.9%	352
Report they have private insurance with a low deductible plan	28.1%	249	29.0%	71	34.8%	16	28.5%	336
Report that cost prevented them from getting medical care in the past year	12.0%	103	12.3%	29	9.3%	4	12.0%	136
Report that cost prevented them from getting dental care in the past year	21.4%	184	20.3%	48	18.6%	8	21.1%	240
Report that cost prevented them from getting a flu shot in the past year	1.3%	11	.8%	2	2.3%	1	1.2%	14
Report that cost prevented them from getting hearing services in the past year	5.2%	45	2.5%	6	4.7%	2	4.7%	53
Report that cost prevented them from getting mental health care in the past year	10.9%	94	6.8%	16	0%	0	9.7%	110
Report that cost prevented them from getting prescription medication in the past year	9.1%	78	7.2%	17	9.3%	4	8.7%	99
Report that cost prevented them from getting substance use disorder treatment in the past year	.8%	7	.8%	2	0%	0	.8%	9
Report that cost prevented them from getting vision care in the past year	12.2%	105	8.5%	20	14.0%	6	11.5%	131
Report that cost did not prevent them from accessing care in the past year	65.3%	561	67.8%	160	60.5%	26	65.6%	747
Agree that in their community 'I have choices in where I go for healthcare'	55.3%	462	64.9%	161	71.1%	32	58.0%	655
Agree that in their community 'It is easy to see a primary care provider'	54.3%	452	66.4%	164	52.3%	23	56.9%	639
Agree that in their community 'It is easy to access mental health services'	24.0%	195	20.7%	50	46.5%	20	24.2%	265
Agree that in their community 'It is easy to access substance use disorder treatment services'	13.4%	107	17.1%	41	26.2%	11	14.7%	159
Agree that in their community 'It is easy to access dental care'	67.1%	551	65.7%	163	75.0%	33	67.1%	747
Among respondents who were pregnant or whose partner was pregnant in past year		kegon :37)	Ocea (N=		Ottawa/ Newaygo (N=2)			ce Area (N=47)
Received care from a provider by the 16th week of pregnancy	92.0%	23					93.5%	29
Went to at least half of their appointments	91.7%	22					93.3%	28
Smoked during the last 3 months of pregnancy	4.3%	1					3.4%	1
Report it was not hard to get prenatal care	59.5%	22					57.4%	27
Report that not being able to get an appointment when they wanted one made it hard to access care	8.1%	3					6.4%	3
Report that not having someone to take care of their children made it hard to access care	5.4%	2					4.3%	2
Report that they were too busy made it hard to access care	2.7%	1					2.1%	1

Report that they didn't know where to go for prenatal care made it hard to access care.	2.7%	1					2.1%	1
Report that they didn't have enough money or insurance to pay for visits made it hard to access care.	2.7%	1					2.1%	1
Report that they had problems getting through to make an appointment which made it hard to access care.	0%	0					0%	0
Report that they had no way to get to the clinic or doctor's office which made it hard to access care.	0%	0					0%	0
Report that they couldn't take time off from work which made it hard to access care	0%	0					0%	0
Report that they didn't want anyone to know they were pregnant made it hard to access care	0%	0			1		0%	0
Quality of Care	Musk	cegon	Ocea	ına	Otta Newa			e Area otal
Have one person they think of as their personal doctor or health care provider	92.0%	815	91.1%	226	88.9%	40	91.7%	1081
Report that they have choices in where they go for healthcare.	55.3%	462	64.9%	161	71.1%	32	58.0%	655
Report that they can get good medical care when they need it.	61.7%	513	69.1%	172	80.0%	36	64.0%	721
Report that it is easy to see a primary care provider.	54.3%	452	66.4%	164	52.3%	23	56.9%	639
Report that they would receive better care if they were a different race or ethnicity.	8.8%	72	7.1%	17	9.5%	4	8.4%	93
Black respondents who report they would receive better care if they were a different race or ethnicity.	43.0%	34	0%	0	41.0%	34	43.0%	34
Hispanic or Latino respondents who report they would receive better care if they were a different race or ethnicity.	22.7%	5	2.9%	1	10.5%	6	22.7%	5
White-only respondents who report they would receive better care if they were a different race or ethnicity.	3.1%	19	6.8%	12	4.0%	33	3.1%	19
Report that they receive better care if the provider is the same gender as me.	15.0%	124	7.4%	18	9.1%	4	13.1%	146
Report having been denied medical care or received poor medical care because of race, ethnicity, gender, religious beliefs, a disability, or your sexual orientation.	5.5%	45	1.3%	3	4.5%	2	4.6%	50
Black respondents that report having been denied medical care or received poor medical care because of race, ethnicity, gender, religious beliefs, a disability, or your sexual orientation.	11.0%	13					10.6%	13
Hispanic/Latino respondents that report having been denied medical care or received poor medical care because of race, ethnicity, gender, religious beliefs, a disability, or your sexual orientation.			5.7%	2			10.0%	6
White-only respondents that report having been denied medical care or received poor medical care because of	3.8%	24	.5%	1			3.1%	26

race, ethnicity, gender, religious beliefs, a disability, or your sexual orientation.								
Water Quality	Muskegon		Oceana		Ottawa/ Newaygo		Service Area Total	
Agree that in their neighborhood 'our tap water is safe to drink'	52.5%	444	57.9%	135	67.4%	31	54.2%	610
Transportation	Musl	egon	Ocea	ına	Otta Newa	•	Service Area Total	
Report they 'often or always' have a reliable way to get where you need to go	91.3%	764	90.8%	208	93.3%	42	91.3%	1014
Report that in their neighborhood 'Our community has a good public transit system.'	14.8%	125	2.6%	6	23.9%	11	12.6%	142
Agrees that in their community 'public transportation is available.'	34.2%	288	6.3%	15	22.2%	10	27.8%	313
Reports that not having reliable transportation keeps them from getting a job or getting a job that pays more	2.4%	20	3.0%	7	0%	0	2.4%	27
Housing	Musl	egon	Oceana		Ottawa/ Newaygo		Service Area Total	
Report they are 'somewhat' or 'very worried' they won't have stable housing in next 2 months	3.7%	31	1.3%	3	2.2%	1	3.1%	35
Report they own their home	82.8%	699	82.8%	192	73.9%	34	82.4%	925
Report they rent their home	10.2%	86	11.2%	26	19.6%	9	10.8%	121
Report their housing is provided by their employer	.5%	4	0%	0	0%	0	.4%	4
Report they live with family / friends	6.4%	54	6.0%	14	6.5%	3	6.3%	71
Report staying in a shelter or not having a place to stay	0%	0	0%	0	0%	0	0%	0

EDUCATION								
Report that the following keep them from getting a job or a job that pays more:	Muske	gon	Ocea	na	Ottav Newa	•	Service Tota	
I need more education or new/better skills	10.3%	88	10.5%	25	13.3%	6	10.5%	119
I have a hard time reading or writing	.2%	2	.4%	1	0%	0	.3%	3
Thinking of your community, how much do you agree with the following	Muskegon		Oceana		Ottawa/ Newaygo		Service Area Total	
Agree that there are opportunities for jobs skills training	42.2%	354	30.3%	72	46.7%	21	39.9%	447
Employment Thinking about your community, how much do you agree with the following?	Muskegon		Oceana		Ottawa/ Newaygo		Service Area Total	
Disagreed that 'there are enough jobs near where I live'	27.1%	229	33.1%	80	24.4%	11	28.3%	320
Disagreed that 'jobs near me pay enough to meet my needs'	44.0%	370	48.8%	117	33.3%	15	44.6%	502
Disagreed that 'there are opportunities for job skills training'	20.9%	175	31.5%	75	20.0%	9	23.1%	259
Disagreed that 'there are good, affordable options for childcare near me'	36.7%	305	44.4%	106	40.9%	18	38.50	429
Disagreed that 'public transportation is available'	39.9%	336	76.6%	183	53.3%	24	48.2%	543
Report that the following keep them from getting a job or getting a job that pays more:	Muske	gon	Oceana		Ottawa/ Newaygo		Service Area Total	
I need more education or new/better skills	10.3%	88	10.5%	25	13.3%	6	10.5%	119
Among those with HS or less, % that report 'I need more education or new/better skills'	11.0%	11	20.5%	9	.0%	0	11.0%	11
I need dependable childcare	4.0%	34	5.9%	14	2.2%	1	4.3%	49
I don't want to lose my state benefits (i.e., Health Coverage, Food Asst, etc.)	2.6%	22	3.4%	8	0%	0	2.6%	30
I don't have reliable transportation Yes	2.4%	20	3.0%	7	0%	0	2.4%	27
I have a medical condition that limits what I can do	8.2%	70	6.3%	15	6.7%	3	7.8%	88
I am responsible for another adult's care	2.1%	18	1.7%	4	2.2%	1	2.0%	23
I have a child whose need for care limits my ability to work.	2.4%	20	3.8%	9	2.2%	1	2.6%	30
I have a hard time reading and/or writing)	.2%	2	.4%	1	0%	0	.3%	3
I have past legal convictions.	1.2%	10	.8%	2	0%	0	1.1%	12
Report having not been hired or promoted because of discrimination.	13.9%	113	4.4%	10	13.6%	6	11.9%	129
% of Black respondents who report having not been hired or promoted because of discrimination.	30.5%	36			31.7%	39	30.5%	36
Among families that needed childcare in the past 2 years, the % reporting they were 'never' or 'rarely' able to find childcare that worked for them.	35.6%	53	44.4%	16	14.3%	1	36.5%	70

In the past year Covid-19 has resulted in loss of a job for them or someone in their household	15.1%	125	8.7%	20	13.3%	6	13.7%	151
In the past year Covid-19 has resulted in them or someone in their household not being able to work because didn't have childcare	4.1%	34	4.8%	11	2.2%	1	4.2%	46
Family and Social Support	Muskegon		Oceana		Ottawa/ Newaygo		Service Area Total	
Report that they 'usually or always' feel lonely or isolated from those around them	8.1%	70	5.5%	13	6.5%	3	7.5%	86
Among respondents age 65+, report they 'usually or always' feel lonely or isolated from those around them.	4.4%	10	1.8%	1	7.1%	1	4.1%	12
Report they need help caring for themselves or their home	16.0%	137	11.8%	28	10.9%	5	14.9%	170
Among those who need help caring for themselves or their home, the % who report no one helps them	28.5%	39	28.6%	8			28.2%	48
In the past year has Covid-19 has resulted in them or someone in their household feeling lonely or isolated	42.3%	350	39.0%	90	48.9%	22	41.9%	462
In the past year Covid-19 has resulted in someone they, or someone in their household, cares about dying	27.2%	225	27.3%	63	24.4%	11	27.1%	299
Community Safety	Muske	gon	Oceana		Ottawa/ Newaygo		Service Area Total	
Report that 'I feel safe in my neighborhood'	85.8%	726	87.1%	203	91.3%	42	86.3%	971
Report that in their neighborhood 'If								
there is a problem in my neighborhood the people who live here can get it solved'	30.3%	256	31.8%	74	45.7%	21	31.2%	351
the people who live here can get it solved' Report that in their neighborhood 'I	30.3% 44.6%	256 377	31.8% 49.8%	74 116	45.7% 56.5%	21	31.2% 46.1%	351 519
the people who live here can get it solved'								
the people who live here can get it solved' Report that in their neighborhood 'I feel safe talking with police officers' Report that in their neighborhood 'Our	44.6%	377	49.8%	116	56.5%	26	46.1%	519
the people who live here can get it solved' Report that in their neighborhood 'I feel safe talking with police officers' Report that in their neighborhood 'Our streets need better lighting' Report that in their neighborhood 'We	44.6% 37.8%	377 320	49.8%	116 65	56.5%	26 12	46.1% 35.3%	519 397
the people who live here can get it solved' Report that in their neighborhood 'I feel safe talking with police officers' Report that in their neighborhood 'Our streets need better lighting' Report that in their neighborhood 'We need better sidewalks' Report that in their neighborhood 'We have a park or outdoor space that is	44.6% 37.8% 32.7%	377 320 277	49.8% 27.9% 30.5%	116 65 71	56.5% 26.1% 30.4%	26 12 14	46.1% 35.3% 32.2%	519 397 362
the people who live here can get it solved' Report that in their neighborhood 'I feel safe talking with police officers' Report that in their neighborhood 'Our streets need better lighting' Report that in their neighborhood 'We need better sidewalks' Report that in their neighborhood 'We have a park or outdoor space that is safe' Report that in their neighborhood 'I	44.6% 37.8% 32.7% 55.7%	377 320 277 471	49.8% 27.9% 30.5% 57.1%	116 65 71 133	56.5% 26.1% 30.4% 73.9%	26 12 14 34	46.1% 35.3% 32.2% 56.7%	519 397 362 638
the people who live here can get it solved' Report that in their neighborhood 'I feel safe talking with police officers' Report that in their neighborhood 'Our streets need better lighting' Report that in their neighborhood 'We need better sidewalks' Report that in their neighborhood 'We have a park or outdoor space that is safe' Report that in their neighborhood 'I feel safe going outside to exercise' Report that in their neighborhood 'My kids can play outside without my	44.6% 37.8% 32.7% 55.7% 73.5%	377 320 277 471 622 319	49.8% 27.9% 30.5% 57.1%	116 65 71 133 176 106	56.5% 26.1% 30.4% 73.9% 82.6% 54.3%	26 12 14 34 38 25	46.1% 35.3% 32.2% 56.7% 74.3% 40.0%	519 397 362 638 836
the people who live here can get it solved' Report that in their neighborhood 'I feel safe talking with police officers' Report that in their neighborhood 'Our streets need better lighting' Report that in their neighborhood 'We need better sidewalks' Report that in their neighborhood 'We have a park or outdoor space that is safe' Report that in their neighborhood 'I feel safe going outside to exercise' Report that in their neighborhood 'My kids can play outside without my worrying about their safety'	44.6% 37.8% 32.7% 55.7% 73.5%	377 320 277 471 622 319	49.8% 27.9% 30.5% 57.1% 75.5%	116 65 71 133 176 106	56.5% 26.1% 30.4% 73.9% 82.6% 54.3%	26 12 14 34 38 25	46.1% 35.3% 32.2% 56.7% 74.3% 40.0%	519 397 362 638 836 450

If you hear about discrimination in your community what is it usually based on? (select all)	Muskegon		Oceana		Ottawa/ Newaygo		Service Area Total	
Race or ethnicity	60.0%	478	58.1%	132	56.8%	25	59.5%	635
Sexual Orientation	24.2%	193	21.6%	49	31.8%	14	24.0%	256
Gender	14.9%	119	8.8%	20	15.9%	7	13.7%	146
A disability	12.4%	99	6.2%	14	13.6%	6	11.1%	119
Report having experienced the following because of their race, ethnicity, gender, religious beliefs, a disability, or their sexual orientation	Muskegon		Oceana		Ottawa/ Newaygo		Service Area Total	
Not been hired or promoted	13.9%	113	4.4%	10	13.6%	6	11.9%	129
Been hassled by police	5.2%	42	4.4%	10	6.8%	3	5.1%	55
Been denied medical care or received poor medical care	5.5%	45	1.3%	3	4.5%	2	4.6%	50
Treated with less courtesy than other people	22.4%	182	17.0%	39	27.3%	12	21.4%	233
Received poorer service than other people at restaurants or stores	11.5%	94	6.1%	14	6.8%	3	10.2%	111
Had people act as if they think you are not as good as they are	19.2%	156	11.8%	27	13.6%	6	17.4%	189
Been threatened or harassed	10.9%	89	2.6%	6	11.4%	5	9.2%	100
None of these	63.3%	515	73.4%	168	63.6%	28	65.4%	711

Survey Participant Demographics

Gender and Sexual Orientation	Musk	egon	Oceana		Ottawa/Newaygo			ervice Area Total	
Identify as female	80.0%	649	78.4%	178	84.1%	37	79.9%	864	
Identify as male	18.5%	150	19.8%	45	15.9%	7	18.7%	202	
Identify as transgender or other	1.5%	12	1.8%	4	0%	0	1.5%	16	
Identify as heterosexual or straight	94.8%	745	95.9%	213	100%	43	95.2%	1001	
Identify as gay or lesbian	1.0%	8	.9%	2	0%	0	1.0%	10	
Identify as bisexual	2.4%	19	2.3%	5	0%	0	2.3%	24	
Highest Level of School completed	Musk	egon	Oceana		Ottawa/Newaygo		Service Area Total		
Less than a high school diploma	1.0%	8	2.2%	5	4.5%	2	1.4%	15	
High school degree or equivalent (GED)	11.8%	96	17.0%	39	6.8%	3	12.7%	138	
Some college, no degree	20.2%	165	27.1%	62	18.2%	8	21.6%	235	
Associate degree	19.8%	161	19.2%	44	18.2%	8	19.6%	213	
Bachelor's Degree	29.4%	240	19.7%	45	25.0%	11	27.2%	296	
Postgraduate Degree	17.8%	145	14.8%	34	27.3%	12	17.6%	191	

Military Service	Service Muske		Ocea	na	Ottawa/	Newaygo	Service Tota	
Ever served in the military	5.7%	46	3.9%	9	9.1%	4	5.4%	59
What is the highest level of school you have completed?	Musk	egon	Ocea	na		iwa/ aygo	Service Area Total	
Less than a high school diploma	1.0%	8	2.2%	5	4.5%	2	1.4%	15
High school degree or equivalent (GED)	11.8%	96	17.0%	39	6.8%	3	12.7%	138
Some college, no degree	20.2%	165	27.1%	62	18.2%	8	21.6%	235
Associate's Degree	19.8%	161	19.2%	44	18.2%	8	19.6%	213
Bachelor's Degree	29.4%	240	19.7%	45	25.0%	11	27.2%	296
Postgraduate Degree	17.8%	145	14.8%	34	27.3%	12	17.6%	191
Do you have a disability or impairment? (select all)	Musk	egon	Ocea	na		iwa/ aygo	Service Area Total	
Report at least one disability or impairment	26.3%	211	16.6%	37	22.7%	10	24.1%	258
Sensory Impairment	7.1%	57	2.2%	5	2.3%	1	5.9%	63
Mobility Impairment	8.0%	64	6.3%	14	13.6%	6	7.9%	84
Learning Disability	4.2%	34	2.2%	5	6.8%	3	3.9%	42
Mental Health Disorder	6.6%	53	4.0%	9	4.5%	2	6.0%	64
Other Disability	8.6%	69	5.8%	13	2.3%	1	7.8%	83
Race or Ethnicity (select all)	Musk	egon	Oceana		Ottawa/		Service Area	
American Indian or Alaska Native	1.2%	10	2.6%	6	0%	aygo 0	1.5%	16
Asian or Asian American	.6%	5	0%	0	2.5%	1	.6%	6
Black or African American	15.0%	121	.4%	1	10.0%	4	11.7%	126
Hispanic/Latino	3.0%	24	15.4%	35	2.5%	1	5.6%	60
Middle Eastern or North African	.2%	2	0%	0	0%	0	.2%	2
Native Hawaiian or Pacific Islander	0%	0	0%	0	0%	0	0%	0
White or Caucasian	80.1%	646	85.5%	194	87.5%	35	81.5%	875
Multi-Racial*	3.7%	30	5.3%	12	5.0%	2	4.1%	44
White or Caucasian Only*	78.2%	630	81.1%	184	80.0%	32	78.8%	846

Survey Responses by Zip Code & School District

r	
Zip Code	Responses
49441	294
49442	162
49445	152
49444	138
49420	133
49461	56
49455	55
49437	52
49457	43
49415	28
49449	25
49446	24
49459	19
49417	16
49436	16
49440	16
49421	15
49456	15
49451	14
49452	11
49425	9
Other	53

Muskegon County						
School District	Responses					
Fruitport	93					
Holton	19					
Mona Shores	166					
Montague	67					
Muskegon	241					
Muskegon Heights	59					
North Muskegon	24					
Oakridge	34					
Orchard View	50					
Ravenna	13					
Reeths-Puffer	142					
Whitehall	72					

Oceana County						
School District	Responses					
Hart	153					
Pentwater	27					
Shelby	82					
Walkerville	15					

Newaygo and Ottawa Counties					
School District	Responses				
Newaygo	2				
Hesperia	15				
Fremont	5				
Grand Haven	Grant				
White Cloud	1				

Due to COVID 19 restrictions, the 2021 CHNA Community Survey was conducted utilizing online & mobile platforms, as well as paper-based surveys from April 1 - May 10, 2021. This survey was also developed in Spanish. Survey development & data analysis was completed by KWB Strategies.



Community Needs Assessment Community Survey

Every three years, Mercy Health conducts a community health needs assessment (CHNA). The CHNA helps communities, organizations, and local health systems identify issues that impact health in the community. This process will guide efforts to improve health for the next three years.

We need to hear from you! Your input will help us learn about our communities, their strengths, and the things that need to improve. Results will be published in the 2021 CHNA report and will be posted on the Health Project website at www.mchp.org.

This survey asks about you, your opinions, and where you live. The survey will take about 15 minutes to complete. You do not have to take this survey. You may skip any question you do not want to answer. No one will know how you answer these questions.

questions.						
Thank you very much for your help!						
These questions ask about where you	live.					
In which school district do you live	?		2. What is your zi	p code?		
These questions ask about your healt	h.					
2. In general, would you say your hea	lth is: O Exce	ellent O Very g	good O Good	O Fair O	Poor	
During the past month, on h following keep you from doing work, school or a hobby)			0 days	1-7 days	8-13 days	14+ days
Poor physical health			0	0	0	0
Poor mental health			0	0	0	0
In the past three months, ho bothered by the following?	ow often have	you been	Never or rare	У	Someti mes	Usually or always
Not being able to stop wor	rying or contr	ol worrying.		0	1	0
Feeling afraid something a	wful might ha	open.		0	1	0
Feeling down, depressed, o	or hopeless.			0	ı	0
5. If it is hard for you to eat healthy, v	why is it hard?	(check all that a	ipply)			
\Box It is not hard for m	e to eat healt	hy	☐ Don't know l	now to make	healthy food	
☐ I don't want to eat	healthy				e or ready to e	at food
\square Not enough mone	y for food		☐ Not enough	time to cook	•	
\Box Hard to find health	ny food where	I live				
Other (please specify)						
This questions ask about physical acti	vity.					
6. How many minutes per week are y	ou active eno	ugh to increase y	our heart rate and	I breathing?		
O Less than 30 minutes		O More	than 90 minutes bu	ut less than 2.	.5 hours	
O 30-90 minutes		O 2.5 ho	urs or more			
This question asks about alcohol, tob	acco, and mar	ijuana.				
7. During the past 30 days, on	how many		1-2	3-9	10-19	20-30
days did you?		None	days	days	days	days
Drink alcohol?		0	0	0	0	0

Use marijuana?	0	0	0	О	0
Use tobacco products such as cigarettes, smokeless tobacco, or cigarillos?	О	0	0	0	0
Vape?	0	0	0	0	0

These questions ask about healthcare.

8. Where	do you usually go when you are sick or need health care. O Doctor's office or private clinic O Community health center or other public clinic O Some other place (please specify)	O Hospi O Hospi	tal outpatient departme tal emergency room		
9. Do you	have one person you think of as your personal doctor or O Yes O No	health care	provider?		
10 If you h	nave any kind of health care coverage, what kind do you h	nave?			
	O I do not have health care coverageO MedicaidO MedicareO Private insurance -high deductible plan	O Pr O Inc	ivate insurance - low de dian Health Service eteran's Affairs Coverage		
	please specify)				
11. In the p	past year has cost prevented you from getting any of the	-			
	 Medical care Dental Flu shot Hearing Mental health (for example, counseling) 	□ s	Prescription medication Substance use disorder to Vision None of the above	reatment	
Other (please specify)				
12. 7	Thinking about healthcare in your community, how much ee with the following statements?	do you	Agree	Neither Agree nor Disagree	Disagree
	I have choices in where I go for healthcare.		0	0	0
	I can get good medical care when I need it.		0	0	0
	It is easy to see a primary care provider.		0	0	0
	It is easy to access mental health services.		0	0	0
	It is easy to access substance use disorder treatme services.	nt	0	0	0
	It is easy to access dental care.		0	0	0
	I would receive better care if I were a different rac ethnicity.		0	0	0
	I receive better care if the provider is the same general.	nder as	0	0	0
13. Have y	ou or your partner been pregnant during the last year?		I		
O No (ski	p to question 17)				
O Yes					
O Not app	olicable (skip to question 17)				

These questions are about visits to a health care provider to get checkups and advice about your pregnancy. If neither you or your partner have been pregnant in the past year you may skip these questions by going to the bottom of this page and clicking 'Next'

14. If you answered 'yes' to the previous question, did you or your			Don't	
partner	Yes	No	Know	NA
Receive care from a provider by the 16th week of pregnancy?	0	0	0	0
Go to at least half of your appointments?	0	0	0	0
Smoke during the last 3 months of pregnancy?	0	0	0	О

15.	If accessing prenatal care was hard, why was it hard? (Check all that apply)
	NA - No pregnancy in the past year.
	It was not hard to get prenatal care.
	I couldn't get an appointment when I wanted one.
	I didn't have enough money or insurance to pay for my visits.
	I had problems getting through to make an appointment.
	I had no way to get to the clinic or doctor's office.
	I couldn't take time off from work.
	I didn't know where to go for prenatal care.
	I had no one to take care of my children.
	I was too busy.
	I didn't want anyone to know I was pregnant.
	Other (please specify)

These questions ask about education and training.

16. muc	Thinking about your community, how th do you agree with the following?	Agree	Neither Agree nor Disagree	Disagree
	There are enough jobs near where I live.	О	0	0
	Jobs near me pay enough to meet my needs.	О	0	0
	There are opportunities for job skills training.	О	0	0
	There are good, affordable options for childcare near me.	0	0	0
	Public transportation is available.	О	0	0
	There are enough jobs near where I live.	О	0	0

	Table transportation to available.		· ·	
	There are enough jobs near where I live.	0	0	
17. Do	any of the following keep you from getting a job or getting a	job that pays more	? (check all that appl	ly)
□ Ian	n not looking for a job/ higher paying job.			
□ Ine	ed more education or new/better skills I need dependable c	hildcare		
□ I do	n't want to lose my state benefits (i.e., Health Coverage, Foo	od Assistance, etc.).		
□ I do	n't have reliable transportation			
□ Iha	ve a medical condition that limits what I can do			
□ Ian	n responsible for another adult's care			
	ve a child whose need for care limits my ability to work I havel/or writing I have past legal convictions	e a hard time readi	ng	
☐ Nor	ne of these			

18. If your family has needed childcare in t	the past 2 years, how	often could you find childo	care that worked for you?
O NA – I don't need childcare	O Never or rarely	O Sometimes	O Usually or always
These questions ask about people in your	life that help or supp	oort you.	
19. Overall, how often do you feel lonely o	or isolated from those	around you?	
O Never or rarely	O Sometimes	O Usi	ually or always
20. Do you participate in local community groups)	groups or clubs? (i.e.,	Kiwanis, book clubs, gard	ening groups, or other social
O Never or rarely	O Sometimes	O Usu	ually or always
 21. If you need help caring for yourself or (i.e. helping with housework, helping you O I don't need help caring for my self or O Yes, I need help and someone helps mo O I need help but no one helps me 	ou dress, cooking meal my home		c.)
These questions ask about where you live	and what it is like to	live in your neighborhoo	d.
22. What is your housing situation? O I own my home O I rent my home O I have housing provide O I live with family / fried		O I live in a nursin O I live in adult fo O I stay in a shelte O I don't have a p	er
23. How worried are you that you may no	t have stable housing	in the next two months?	
	O A little bit worried	O Somewhat worried	O Very Worried
24. Thinking about your neighborhood, where I feel safe in my neighborhood. If there is a problem in my neighborhood. I feel safe talking with police officers. Our streets need better lighting. We need better sidewalks. There are lots of empty buildings or about a community has good public transicular lit is easy to walk, bike, or exercise in more well where a park or outdoor space that I feel safe going outside to exercise. My kids can play outside without my well there were the safe questions ask about discriminations.	od the people who live andoned lots. It service. It neighborhood. It is safe. Vorrying about their safe.	e here can get it solved.	
25. How often do you hear about people in gender, disability, or sexual orientation?	n your community exp	periencing discrimination b	pecause of their race, ethnicity,
O Never or rarely	O Sometimes	O Often or always	
26. If you hear about discrimination in you	ır community, what is	it usually based on? (Chec	ck all that apply)

	O Race or Ethnicity	O Gender	O I have not heard of discrimination in
	O Sexual orientation	O A disability	my community
	O Other (please specify)		
	Which of the following have you experual orientation? (check all that apply)	ienced because of your ra	ace, ethnicity, gender, religious beliefs, a disability, or your
	Not been hired for a job or not promot	ed.	
	Hassled by police.		
	Denied medical care or received poor r	medical care.	
	Treated with less courtesy than other p	people.	
	Receive poorer service than other peop	ole at restaurants or store	es.
	People act as if they think you are not a	as good as they are.	
	Been threatened or harassed.		
	None of these		
	Other (please specify)		
The	se questions ask about transportation	and Covid-19.	
28. I	How often do you have a reliable way t	to get where you need to	go?
	O Never or rarely	O Sometimes	O Often or always
29. 1	n the past year has Covid-19 affected of Loss of a job Couldn't work because I did Felt lonely or isolated Felt down, depressed, or ho	ln't have childcare	the following ways? (check all that apply) Felt nervous, anxious, or on edge Someone we cared about died Ongoing health problems None of the above
	Other (please specify)		
The	se questions ask about you and will or	nly be used to describe w	rho took this survey.
30. \	our age:		
31. l	How many adults age 18 or older live in	n your home?	
32. I	How many children under the age of 18	8 live in your home?	
33. [Do you have children? (check all that a	pply)	
	No		
	es, less than 5 years old		
	es, between ages 5 and 12		
	es, between ages 13 and 17		
	es, age 18 or older		
	Which of the following racial/ethnic ca American Indian or Alaska N Asian or Asian American Black or African American Hispanic/Latino Middle Eastern or North Africation	Native	ou? (check all that apply.) Middle Eastern or North African Multiracial Native Hawaiian or Pacific Islander White or Caucasian
	35. How do you identify?		
		O Transgender Male	

	O Male	O Transge	nder Female			
	O Other (please	specify)				
(O you consider yourseld Heterosexual or str	raight	O Gay or le		O Bisexua	I
(Different iden	tify (please specif	y)			
37. Ar	e you?					
0	Single (never ma	rried)	_	parated		
0	Married		_	orced		
O	In a domestic pa	rtnership	O Wid	owed		
0	Other (please	specify)				
38. W	hat is the highest leve	el of school you ha	ve completed	1?		
	O Less than a high s	chool diploma		O Asso	ciate's Degree	
	O High school degree		GED)	O Bach	elor's Degree	
	O Some college, no	degree		O Post	graduate Degre	e
39. Ar	e you currently?					
	O Employed part tir	me		0	A Homemaker	
	O Employed full tim	ie		0	A Student	
	O Unemployed and			_	Retired	
	O Unemployed and	not looking for w	ork	O	Unable to work	(
	O Self-employed					
40. Ha	ive you ever served w	ith the military?	O Yes O	No		
41. W	hat is your annual hou	usehold income?				
	O Less than \$10,00	000		O \$35,00	0 to less than \$	50,000
	O \$10,000 to less t	than \$15,000		_	0 to less than \$	
	O \$15,000 to less t			_	0 to less than \$	100,000
	O \$20,000 to less t			O \$100,0	00 or more	
	O \$25,000 to less t	than \$35,000				
	you have a disability	or impairment? (check all that	apply)		
□ No)					
☐ Ye	s, a sensory impairme	ent (vision or hear	ing)			
☐ Ye	s, a mobility impairm	ent				
☐ Ye	s, a learning disability	(e.g., ADHD, dysl	exia, etc.)			
☐ Ye	s, a mental health dis	order				
☐ Ye	s, a disability or impa	irment not listed a	above (please	describe)		
43. Is	there anything else y	ou'd like us to kno	w?			

Thank you for taking the time to provide this feedback!

APPENDIX C - County Health Rankings Measures & Data Sources

County Health Rankings & Roadmaps

Building a Culture of Health, County by Count

2021 Ranked Measures & Data Sources

	Measure	Weight	Source	Years of Data
HEALTH OUTCOMES				
Length of Life	Premature death	50%	National Center for Health Statistics - Mortality Files	2017-2019
Quality of Life	Poor or fair health	10%	Behavioral Risk Factor Surveillance System	2018
	Poor physical health days	10%	Behavioral Risk Factor Surveillance System	2018
	Poor mental health days	10%	Behavioral Risk Factor Surveillance System	2018
	Low birthweight	20%	National Center for Health Statistics - Natality files	2013-2019
HEALTH FACTORS				
HEALTH BEHAVIORS				
Tobacco Use	Adult smoking	10%	Behavioral Risk Factor Surveillance System	2018
Diet and Exercise	Adult obesity	5%	United States Diabetes Surveillance System	2017
	Food environment index	2%	USDA Food Environment Atlas, Map the Meal Gap from	2015 & 2018
			Feeding America	
	Physical inactivity	2%	United States Diabetes Surveillance System	2017
	Access to exercise opportunities	196	Business Analyst, Deforme map data, ESRI, & US Census Tigerline Files	2010 & 2019
Alcohol and Drug Use	Excessive drinking	2.5%	Behavioral Risk Factor Surveillance System	2018
	Alcohol-impaired driving deaths	2.5%	Fatality Analysis Reporting System	2015-2019
Sexual Activity	Sexually transmitted infections	2.5%	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB	2018
	Teen births	2.5%	Prevention National Center for Health Statistics - Natality files	2013-2019
CLINICAL CARE	1	21030	,	
Access to Care	Uninsured	5%	Small Area Health Insurance Estimates	2018
	Primary care physicians	3%	Area Health Resource File/American Medical Association	2018
	Dentists	196	Area Health Resource File/National Provider Identification file	2019
	Mental health providers	196	CMS. National Provider Identification	2020
Quality of Care	Preventable hospital stays	5%	Mapping Medicare Disparities Tool	2018
Square, or care	Mammography screening	2.5%	Mapping Medicare Disparities Tool	2018
	Flu vaccinations	2.5%	Mapping Medicare Disparities Tool	2018
SOCIAL & ECONOMIC FACT		2.376	mapping medicare outpanded root	2021
Education	High school completion	5%	American Community Survey, 5-year estimates	2015-2019
Ludcation	Some college	5%	American Community Survey, 5-year estimates	2015-2019
Employment	Unemployment	10%	Bureau of Labor Statistics	2015-2015
Income	Children in poverty	7.5%	Small Area Income and Poverty Estimates	2015
income	Income inequality	2.5%		2015-2019
Combined Codal Connect		2.5%	American Community Survey, 5-year estimates	2015-2019
Family and Social Support	Children in single-parent households		American Community Survey, 5-year estimates	
	Social associations	2.5%	County Business Patterns	2018
Community Safety	Violent crime	2.5%	Uniform Crime Reporting - FBI	201482016
PHYSICAL ENVIRONMENT	Injury deaths	2.5%	National Center for Health Statistics - Mortality Files	2015-2019
Air and Water Quality	Air pollution - particulate matter	2.5%	Environmental Public Health Tracking Network	2016
	Drinking water violations	2.5%	Safe Drinking Water Information System	2019
Housing and Transit	Severe housing problems	2%	Comprehensive Housing Affordability Strategy (CHAS) data	2013-2017
	Driving alone to work	2%	American Community Survey, 5-year estimates	2015-2019
	Long commute - driving alone	1%	American Community Survey, 5-year estimates	2015-2019

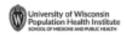




2021 County Health Rankings – Additional Measures

	Measure	Source	Years of Data
HEALTH OUTCOMES			
Length of Life	Life expectancy*	National Center for Health Statistics - Mortality Files	2017-2019
	Premature age-adjusted mortality*	National Center for Health Statistics - Mortality Files	2017-2019
	Child mortality*	National Center for Health Statistics - Mortality Files	2016-2019
	Infant mortality*	National Center for Health Statistics - Mortality Files	2013-2019
Quality of Life	Frequent physical distress	Behavioral Risk Factor Surveillance System	2018
	Frequent mental distress	Behavioral Risk Factor Surveillance System	2018
	Diabetes prevalence	United States Diabetes Surveillance System	2017
	HIV prevalence	National Center for HIV/AIDS, Viral Hepatitis, STD,	2018
		and TB Prevention	
HEALTH FACTORS			
HEALTH BEHAVIORS			
Diet and Exercise	Food insecurity	Map the Meal Gap	2018
	Limited access to healthy foods	USDA Food Environment Atlas	2015
Alcohol and Drug Use	Drug overdose deaths*	National Center for Health Statistics - Mortality Files	2017-2019
	Motor vehicle crash deaths*	National Center for Health Statistics - Mortality Files	2013-2019
Other Health Behaviors	Insufficient sleep	Behavioral Risk Factor Surveillance System	2018
CLINICAL CARE			
Access to Care	Uninsured adults	Small Area Health Insurance Estimates	2018
	Uninsured children	Small Area Health Insurance Estimates	2018
	Other primary care providers	CMS, National Provider Identification	2020
SOCIAL & ECONOMIC FACT	ORS		
Education	High school graduation	EDFacts	2017-2018
	Disconnected youth	American Community Survey, 5-year estimates	2015-2019
	Reading scores*	Stanford Education Data Archive	2018
	Math scores*	Stanford Education Data Archive	2018
Income	Median household income*	Small Area Income and Poverty Estimates	2019
	Children eligible for free or reduced price lunch	National Center for Education Statistics	2018-2019
Family and Social Support	Residential segregation - Black/White	American Community Survey, 5-year estimates	2015-2019
	Residential segregation - non-White/White	American Community Survey, 5-year estimates	2015-2019
Community Safety	Homicides*	National Center for Health Statistics - Mortality Files	2013-2019
	Suicides*	National Center for Health Statistics - Mortality Files	2015-2019
	Firearm fatalities*	National Center for Health Statistics - Mortality Files	2015-2019
	Juvenile arrests	Easy Access to State and County Juvenile Court Case Counts	2018
PHYSICAL ENVIRONMENT		- Control	
Housing and Transit	Traffic volume	EJSCREEN: Environmental Justice Screening and Mapping Tool	2019
	Homeownership	American Community Survey, 5-year estimates	2015-2019
	Severe housing cost burden	American Community Survey, 5-year estimates	2015-2019

^{*}Indicates subgroup data by race and ethnicity is available.



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APPENDIX D: ENDNOTES & REFERENCES

- ⁱ Secondary markets include Newaygo County (Fremont Spectrum Hospital), Ottawa County (North Ottawa Hospital/Holland Hospital and Mason County (Ludington Spectrum Hospital).
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- iii Siegel RL, Jemal A, Wender RC, Gansler T, Ma J, Brawley OW. An assessment of progress in cancer control. *CA Cancer J Clin*. 2018; **68:329**-339.
- iv Hub https://trinityhealthdatahub.org/covid-19-indicators-report/
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- viii Health Effects of Cigarette Smoking | CDC
- "Smoking declines dramatically but linked to 40% of Cancer cases", Laurie McGinley, <u>The Washington Post</u>, November 10, 2016.
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- xi YRBS, 2019
- xii https://www.cdc.gov/ncbddd/fasd/features/teen-substance-use.html
- xiii Michigan Department of Licensing and Regulatory Affairs
- xiv Lakeshore Regional Entity is one of 10 Michigan public behavioral health plans serving people with mental illness, developmental disability, and substance use disorders. LRE serves people in both Muskegon and Oceana Counties.
- xv Source, Greater Muskegon Chamber of Commerce
- xvi Michigan Annual STD Summary Report, Calendar Year 2017; www.michigangov/hivstd
- xvii County Health Rankings and Roadmaps, Health Factors Teen Births, 2018
- ^{xviii} <u>The Nation's Health</u>, "Rising Rates of Uninsurance May Foretell US Public Health Crisis", Warnick, Aaron; November/December 2020, 50 (9) 1-14
- xix 2020 HealthWest Annual Report, https://healthwest.net/wp-content/uploads/2021/04/HealthWest-2020-Annual-Report-FINAL.pdf
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- xxi Source: https://www.chamberofcommerce.org/student-loan-statistics/
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- xxiii Student Debt: Lives on Hold Consumer Reports
- xxiv https://www.chamberofcommerce.org/student-loan-statistics/
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Prepared by:



