

# Imagine our community **healthy!**



**Community Health Needs Assessment  
for Muskegon, Oceana and Newaygo Counties 2012**

*Prepared by:*  
**Muskegon Community  
Health Project,  
Mercy Health Partners'  
Community Benefit Office**

 **MERCY HEALTH PARTNERS**

A MEMBER OF THE **NEW** MERCY HEALTH

## **2012 Community Health Needs Assessment (CHNA) Imagine Our Community Healthy! August 2012**

### *Prepared by*

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Mercy VNS & Hospice Services  
Muskegon Area Intermediate School District  
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Muskegon Family Care (Federally Qualified Health Center)  
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Priority Health  
Revel Marketing  
Ross Medical Educational Center  
Senior Resources  
White Lake Community Education Center

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## SECTION I:

# Introduction and Mission Review

*Beginning Reflection:* Let us come together with a variety of ideas and perspectives and talents special to each. Together, however, we blend our creative energies for the success of the healing ministry of Trinity Health. As we gather, let the words we speak and the words we hear be marked by honesty and respect for each other, care for those we serve and our common commitment to the Mission of Trinity Health.

The 2012 *Community Health Needs Assessment (CHNA)* represents a continuation of the 2009 collaborative effort by Mercy Health Partners and other stakeholder groups to identify significant health issues in Muskegon, Oceana and Newaygo Counties. The current CHNA process was initiated in January 2012 and concluded in June 2012. This process is an extension of a previous Needs Assessment, developed and published in 2009.

## The 2012 Community Health Needs Assessment incorporates process requirements detailed in the 2010 Federal Patient Protection and Affordable Care Act.

Partner organizations who participated include the Muskegon Community Health Project Advisory Board, United Way of the Lakeshore, Muskegon County Public Health, District Health Department #10, Lakeshore Health Network, Westshore Pharmacy, Mercy VNS & Harbor Hospice, Community Mental Health Services of Muskegon County, West Michigan Community Mental Health System, Hackley Community Care Center (FQHC), Muskegon Family Care (FQHC), Community Acton Line of the Lakeshore (CALL 2-1-1), Muskegon Area Intermediate School District, Grand Valley State University, United Way of Mason County, Child Abuse Council of Muskegon County, and Padnos Aluminum.

The 2012 *Community Health Needs Assessment* incorporates process requirements detailed in the 2010 Federal Patient Protection and Affordable Care Act. Priority issues that emerged have been ranked and will now be used in the development of a forthcoming implementation plan. This implementation plan will be used to guide Mercy Health Partners's Community Benefit programming and activities for the next three years.

It was the goal of the partners to produce a current profile of health status, wellness, health delivery and public-sourced opinions about health in Muskegon, Oceana and Newaygo Counties. The process used a compilation of the most recent local-, state- and federal-

sourced data, as well as the opinions and concerns articulated by community residents through surveys, community forums, focus groups and focused interviews.

At its most basic level, a community needs assessment of this type is a valuable tool for planning. The information presented here will be used to help Mercy Health Partners, and other health and human service organizations, identify and prioritize problems for developing and implementing action plans. We all can then work from comparable information platforms to strategically align the necessary resources required to improve community health, improve access to care and reduce health disparities. At a time when resources are limited and community need is growing significantly, we are challenged to ensure that we steward our resources so we can provide the greatest benefit to all citizens, in the most cost-effective manner possible. This is in keeping with the Mission of Mercy Health Partners as a member of the Trinity Health System:

*We serve together in Mercy Health Partners,  
in the spirit of the Gospel,  
to heal the body, mind and spirit,  
to improve the health of our communities  
and to steward the resources entrusted to us.*

This report contains both quantitative and qualitative data sources, along with significant stakeholder and public input. This information will not only help us to direct resources to build solutions, but will also help us to benchmark our successes. Data and public opinion can be used in a variety of ways to improve community health, including development of new local programs, collaborative efforts among stakeholders to seek unified solutions, and new services and assistance to funders who must make strategic investment decisions.

In the upcoming months, the health issues and priorities identified in the *CHNA* report will be reviewed and incorporated into a new action plan that will be used by Mercy Health Partners and others to target activities for action during the next three years. Thus, this *Community Health Needs Assessment*

should not be viewed as a static document, but, rather, as a dynamic roadmap that will improve the health and well-being of residents along the West Michigan lakeshore. To comply with the requirements of the Federal Patient Protection and Affordable Care Act and to ensure the vitality of this study, we will be repeating the process again in 2016. Finally, we are deeply indebted and grateful to all who participated in this uniquely inclusive process.

## Mercy Health Partners' Facilities and Assets

Mercy Health Partners is the result of Hackley Health System and Mercy General Health Partners joining forces to better serve the lakeshore communities. The organization was formed on April 2, 2008, in Muskegon. Today, Mercy Health Partners is a teaching hospital and the second largest health care organization in West Michigan. The system is the largest employer in Muskegon County, employing more than 4,000 associates. Mercy Health Partners has five main locations, including four hospitals, with some 21,000 inpatient discharges and 137,000 emergency/urgent care visits annually. Mercy Health Partners is a unified system serving Muskegon and Oceana Counties and portions of Newaygo and North Ottawa Counties. Mercy Health Partners maintains the WellCentive patient registry, which contains medical information for 95% of the patients in Muskegon and Oceana Counties. The organization employs over 400 physicians and offers a number of exclusive specialty physician care services for the region.

- **MERCY CAMPUS**, 1500 E. Sherman Boulevard, Muskegon, MI — a 196-bed, full-service hospital in southeast City of Muskegon. Mercy is one of Mercy Health Partners' four hospitals along the West Michigan Lakeshore.
- **HACKLEY CAMPUS**, 1700 Clinton Street, Muskegon, MI — a 213-bed, full-service hospital in central City of Muskegon.
- **LAKESHORE CAMPUS**, 72 State Street, Shelby, MI — a 24-bed critical care hospital in rural Oceana County.
- **LAKES VILLAGE**, 6401 Prairie Street, Muskegon, MI — an urgent care facility with physician specialty offices, located in City of Norton Shores, in southern Muskegon County.
- **GENERAL CAMPUS**, 1700 Oak Avenue, Muskegon, MI — a 25-bed critical care hospital and urgent care facility in Muskegon Township, in eastern Muskegon County.
- **LAKESHORE MEDICAL CENTER**, 905 E. Colby Street, Whitehall, MI — an urgent care facility in northern Muskegon County.
- **JOHNSON FAMILY CANCER CENTER**, located on the Mercy Campus.

- **NETWORK OF 10 LABORATORIES** — eight locations in the greater Muskegon area of Muskegon County, one in Whitehall and one in Shelby, MI.
- **MERCY VNS & HOSPICE SERVICES** (part of Trinity Home Health Services), 888 Terrace Street, Muskegon, MI.
- **OWNED PHYSICIAN PRACTICES AND OUTPATIENT DEPARTMENTS** — 400 primary care and specialty physicians.
- **WORKPLACE HEALTH MUSKEGON, WHITEHALL, AND GRAND RAPIDS** — provides occupational health services to area employers.

## Mercy Health Partners' Subsidiaries

- Hackley Professional Center, located on the Hackley Campus — a professional office building lease management company.
- Hackley Professional Condos Co-Owners Association — a management company for Hackley Professional Center.
- Lakeshore Health Network, 1560 E. Sherman Boulevard, Muskegon, MI — a physicians' health organization.
- Healthcare Equipment, 1675 Leahy Street, Muskegon, MI — providing home medical equipment with timely response, technical support and quality products.
- Health Management, 1212 E. Sherman Boulevard, Muskegon, MI — a weight loss and nutrition company that sells products and offers medically supervised programs.
- Life Counseling, 125 E. Southern Boulevard, Muskegon, MI — an accredited behavioral and mental health counseling practice.
- Muskegon Community Health Project, 565 W. Western Avenue, Muskegon — a non-profit company that provides community benefit services for Mercy Health Partners.
- Pharmacies — five locations in City of Muskegon, Norton Shores, and Egelston Township.
- Professional Med Team Ambulance, Inc., 965 Fork Street, Muskegon.
- West Shore Professional Building, 1560 E. Sherman Boulevard — a professional office building, located on the Mercy Campus.
- Westshore Condo Association — provides business management services for West Shore Professional Building.
- Workplace Health of Grand Haven, 923 S. Beechtree Street, Grand Haven, MI — an occupational clinic, owned jointly with North Ottawa Community Hospital.

SECTION II:

# Looking Back at the 2009 Community Needs Assessment: A Progress Report

**These issues provided a baseline for the 2012 Community Health Needs Assessment, while also reflecting accomplishments and progress since 2009.**

Key health issues cited in the 2009 *Community Health Needs Assessment* included:

Leading Health Conditions and Concerns	
Alcohol abuse	High blood pressure
Arthritis	High cholesterol
Asthma	Obesity
Depression	Pain
Diabetes	Tobacco use
Other Key Issues	
Lack of health insurance	
Health education and public motivation	
Provider awareness of health care services	
Health disparities of dental and other services	
Use of the Emergency Room (ER) for primary care and addressing medical debt among low-income families	
A unified health care system	

These issues provided a baseline for the 2012 *Community Health Needs Assessment*, while also reflecting accomplishments and progress since 2009.

## Lack of Health Insurance

The Muskegon Community Health Project (MCHP) conducts broad-based outreach activities, together with many agencies and other community partners. A single client intake application, initiated by MCHP and implemented throughout the Mercy Health Partners System for eligibility in a broad range of community



programs, including financial assistance, medical coverage, pharmaceutical assistance, vision and hearing services, and food stamps, as well as a variety of disease management and prevention programs, has improved screening and increased enrollment in the Medicaid, MICHild, Access Health community coverage program, and Muskegon Care coverage for indigent residents. New MCHP pilot programs, the Muskegon Area Pregnancy Pathways and Muskegon Tract, enhance coordination between clinical care and community resources for at-risk and chronic disease patients.

Statistically, the lack of health insurance has increased due to the economy. However, several new programs have emerged to assist. These exemplary programs include Mercy/MCHP initiatives; such as the “Wheels of Mercy” mobile unit that has visited up to 60 locations per season since 2010, reaching those in need with information, referral and enrollment services. Another program is the Pharmaceutical Assistance Program, which enrolls uninsured people in local and employers’ patient assistance programs and provides funding for needed medications during enrollment waiting periods. Access Clinics have been offered by MCHP



since 2011 at various locations in Muskegon and Oceana Counties, offering information, screening and enrollment services. An Oceana County Medical Fund was established and supported by local physicians, grants and donations, available to inpatients and ER patients identified as having need of medical assistance. Mercy's Lakeshore Campus now works with the migrant clinic, Northwest Health Services, now a Federally Qualified Health Center (FQHC), for referral of low-income, uninsured clinic patients for help with pharmaceutical assistance, lab work and medical debt.

### **Leading Health Conditions**

Data on leading health conditions has not improved significantly, relative to other Michigan counties. Indicators show little to no gain in efforts to improve care to people with diabetes. There has been slight improvement in self-reported excessive weight data since 2009; however, all three counties (Muskegon, Newaygo, and Oceana) have seen an alarming rise of over 50% in obesity. Muskegon County has had a slight decrease in self-reported diabetes, but both Oceana and Newaygo have experienced huge increases. Muskegon County reports asthma has dropped slightly, but Oceana and Newaygo rates have increased 20% and 30%, respectively.

High blood pressure, high cholesterol, arthritis, access to dental care, chronic pain and depression continue to be significant health problems reported by 2012 CHNA survey respondents. Mercy established a pain management program in 2011 at the Hackley Pain Center. At the beginning of 2012, a 24/7 inpatient pain consultation service was established. Although the FQHCs have a depression collaborative for their patients, access to mental health services by low-income, uninsured, non-Medicaid/Medicare patients continues to be a community challenge. It is noteworthy that a public-funded, 3-year suicide prevention plan for Oceana and Mason Counties utilizes volunteers who have trained over 400 people on suicide prevention intervention techniques, as well as published public awareness materials.

Lakeshore Health Network and Mercy's Primary Care Network have been engaged in activities aimed at improving the care of people with diabetes. The community-wide patient registry and financial incentives are used to achieve optimal glucose control, blood pressure levels, cholesterol management and screening for kidney and eye complications.

Mercy Health Partners, Lakeshore Health Network, and the two FQHCs have begun deploying health navigators and community health workers in their practices, and subsidiary organizations, to help coordinate clinical health care with community support services and facilitate access to all health-related resources. Transition of care is a Mercy priority for major clinical integration, using the chronic care model, Patient-Centered Medical Home, and Accountable Care Organization concepts to advance the objective. Also implemented was an inpatient program to identify high-risk patients and coordinate effective transitions to medical homes.

### **Health Education and Public Motivation to Address the Greatest Health Concerns**

With the launch of the "1 in 21" group in 2011, many segments of the Muskegon community are working together to address the social and behavioral factors contributing to Muskegon County's poor health status. The goal is to make Muskegon County number one in the County Health Rankings by 2021. Preventive and disease management programs are now tracking clinical outcomes for nearly all patients in Muskegon and Oceana Counties, using Mercy Health Partners' patient registry. In addition, 75% of the primary care providers are now designated as Patient-Centered Medical Homes, which focus on motivation, patient responsibility, self-management and health coaching.

Muskegon County joined the majority of Michigan counties in 2010 in becoming smoke free in all public buildings, bars, and restaurants. Area schools are actively reviewing their dietary offerings and vending machine contents. Area employers are promoting wellness programs to their workers, and health insurance programs are offering healthy living incentives.

### **Provider Awareness of Health Care Services**

A number of initiatives are aimed at improving overall awareness of existing health and human resources among providers, as well as the general public.

The Community Access Line of the Lakeshore *CALL 2-1-1* expanded from 5 counties in 2009 to 14 counties, and has significantly increased in use and referral content. *CALL 2-1-1* has been widely promoted by Mercy Health



Partners, Lakeshore Health Network and United Way of the Lakeshore. In conjunction with *CALL 2-1-1*, Lakeshore Health Network holds an annual “Managed Services Organization Expo,” where the most frequently requested health and human service providers set up informational booths. Health care professionals are asked to visit all providers to learn about the services available to their patients and how to refer them.

In 2010, Lakeshore Health Network convened the Oceana County Healthcare Needs and Outreach Services Committee. This group of about 20 health and human services providers meets monthly to identify and address unmet needs and has been instrumental in developing additional specialty care services—enrolling low-income residents and patients, who have outstanding medical debt, into financial assistance programs; providing transportation for dialysis patients; translating materials for Spanish-speaking patients; providing interpreting services; setting up information awareness events; and promoting of preventive and wellness programs.

### Health Disparities

The merger of the Mercy and Hackley systems has allowed unified action to identify the race, ethnicity and primary language of all admitted patients. By obtaining this data in a reliable way, the health system has been able to identify health disparities. Internally, the hospital system has used grant proceeds to analyze the levels and effectiveness of its language services, as well as to assess the quality of clinical care delivered to minority patients.

With a 2009 grant from the Michigan Department of Community Health, the Muskegon Community Health Project convened the Muskegon-Oceana County Health Disparities Reduction Coalition to examine health and community data for indications of disparity in health care, to raise public awareness of existing disparity, and to recommend strategies to address any disparity. The Coalition launched an informational website; began a public awareness media campaign; and is publishing data indicators of health disparity, a Health Disparity Report Card, and an update of the 2002 report to the community, entitled “Minority Health Matters.”

Lakeshore Health Network collaborated with Grand Valley State University, and health and human service providers, to promote health literacy, which included the creation of a coalition. A conference was held in the spring of 2011 to explore the issue, examine methods for obtaining data and informing the public. A “Clear Communication for Health” collaborative was formed, which has been meeting monthly to promote health literacy in the schools as well as the provider practices.

### Use of Emergency Room (ER) for Primary Care

Despite the development of the Patient-Centered Medical Home program, this remains a serious challenge. However, ER use for primary care seems to have hit a plateau. Currently, Mercy/Muskegon Community Health Project and Lakeshore Health Network are planning to utilize case managers and community health workers to assist ER patients who are using the ER for primary care purposes. A study of ER utilization, including frequent users, is under way to discern peak utilization times, principal primary care diagnoses, what residential areas have the most ER users, insurance status of primary care users, and prominent referral sources. Using this data, an intervention plan will be developed and implemented to reduce inappropriate use of the ER and divert patients to primary care homes.

### Unified Health Care System

The merger of the two hospital systems into Mercy Health Partners has had significant impact on efficient delivery of health care in the three-county service area. Integration of the two physician networks resulted in one physician health organization. Ninety-five percent (95%) of all patients in Muskegon and Oceana Counties are included in Mercy’s patient registry, enabling effective tracking of client health data and outcomes. This is the basis for improved transition of care, disease management, and care coordination programs. The merger also enabled the acquisition by Mercy of the Muskegon Community Health Project to more effectively address health needs and provide community benefit services to the entire service area.

It is a goal of the 2012 CHNA to build on these accomplishments working towards a healthier community. The challenges are significant but the community’s resolve to move forward in a positive fashion is even greater.



SECTION III:

# Summary Observations from the 2012 Community Needs Assessment

## Introductory Remarks

The 2012 *Community Health Needs Assessment* has identified the following health care matters as the chief areas of desired focus for Muskegon, Oceana and Newaygo Counties during the next three years and pursuant to implementation planning. Recognition of these issues reflects a comprehensive assessment process involving data collection, analysis, and consolidation, framed with the support of the public, human service and health care providers. This section is intended to summarize the combined results of the 2012 *Community Health Needs Assessment* by identifying the health care issues receiving the highest level of priority by the stakeholders involved in the assessment. This summary represents areas in which Mercy Health Partners, other collaborating organizations, and the general public can make contributions to reduce health disparities, improve quality of care and promote a healthier community during the next three years. For those involved in the process, they were classified as the leading medical issues and health concerns.

**The 2012 *Community Health Needs Assessment* has identified the following health care matters as the chief areas of desired focus for Muskegon, Oceana and Newaygo Counties during the next three years.**

Similar to the 2009 *Community Health Needs Assessment*, the present effort resulted in ongoing awareness of what the community perceives as the primary health care issues, problems, and concerns impacting and facing the residents of the tri-county area. It is important to note that health care and human service professionals representing most of the health care institutions and service agencies of the tri-county area were an integral part of the process leading up to the development of the current assessment.

## Leading Health Care Issues/Concerns

The leading health care/medical issues identified for the respective communities are listed to the right.

Muskegon County (not prioritized)		
Top-Ranked Issues	Depression	
	Diabetes	
	High blood pressure	
	Obesity	
	STDs and teen pregnancy	
Second-Ranked Issues	Access to dental care	
	Need for health insurance	
	Need for nutrition education and access to healthy foods	
	Need for preventive care	
	Smoking	
Oceana/Newaygo Counties (prioritized)		
Top-Ranked Issues	High blood pressure	
	Diabetes	
	Overuse of Emergency Room	
	Sexually transmitted diseases	
	Obesity	
	Lack of prenatal care	
Second-Ranked Issues	Patient-provider communication	
	Lack of preventive care	
	Access to dental care	
	Alcohol abuse	
	Smoking	
	Teen pregnancy and birth rate	
	Nutrition education and access to healthy food	
	Community care coordination	
	Cancer deaths	
	Cardiovascular disease	
	Lack of health insurance	
	Third-Ranked Issues	Language barriers
		Transportation to medical care
Senior isolation and home care		
Depression		
Native American resource awareness and access to care		

## Additional Concerns

In the identification of the listed issues, a variety of attendant concerns uniformly surfaced throughout the tri-county area as well. These included:

### OTHER HEALTH CARE NEEDS

Though not identified with the same priority as those listed above, a number of additional health care issues surfaced, receiving strong support in their importance to the community and the well-being of its residents. These include alcohol and drug abuse, isolation and availability of homecare for senior residents, need for additional Hospice care, and cancer death rate. Access to mental health services was often cited as a problem for all low-income, uninsured residents.

### HEALTH DISPARITIES

Language barriers impacting access and quality of care received by Hispanic/Latino residents is a significant issue in all three counties. Health data indicate that African Americans and Hispanics are disproportionately affected by diabetes and sexually transmitted diseases when compared to Whites. African Americans and Hispanics also have higher teen pregnancy and birth rates, which often leads to low birth weight babies and other neonatal complications. Lack of prenatal care is a contributing factor. Among the disparities revealed by researching the existing health data is the very lack of epidemiological data for Hispanics/Latinos and Native Americans in Muskegon County, and the lack of data for Hispanics, African Americans and Native Americans in Oceana and Newaygo Counties.

For persons with disabilities, the most consistently identified issues were: (1) lack of community engagement and advocacy; (2) limited job and housing opportunities; (3) inadequate access to health care and insurance; and (4) inadequate transportation and buildings neglecting handicap accessibility regulations.

### LACK OF HEALTH CARE INSURANCE

Though not listed, the lack of health insurance in Oceana and Newaygo Counties did surface as one of the most significant factors associated with the overall health of tri-county residents. Throughout the process of preparing the assessment, health care professionals and others continually voiced concern about the lack of insurance resulting in many people deferring primary health care needs, avoiding treatments, not filling prescriptions, and in the position of not being able to seek the services of needed specialists due to costs.



### HEALTH CARE EDUCATION

Health care education emerged as being one of the most pressing public needs. Of note was the need to implement programs focusing on nutrition, risk behaviors, personal responsibility for care, improving the awareness of health care services available to the uninsured and underinsured, and selection of health insurance coverage. Low levels of health literacy was also cited as an underlying issue experienced among all residents, regardless of income.

### A HEALTHIER COMMUNITY

Two areas identified for advancing the health of the community were improving nutrition and increasing physical activity. It was noted that the pursuit of these goals is readily available to the public and may be initiated without massive expenditures of funds. Strong desire was expressed for the public schools to re-enter the health care arena more fully by improving school lunch menus, re-establishing physical education and health education classes in the curricula. Also receiving strong support was to have in-school health services available to students.

### PROVIDER AWARENESS OF EXISTING HEALTH CARE SERVICES

The shared sessions raised awareness among many health and human service providers about their personal lack of knowledge of the range of health care services and programs currently available to the public in the tri-county area. This lack of knowledge may well result in lost opportunities to better serve patients/clients.

SECTION IV:

# Community Description: Basic County Profiles

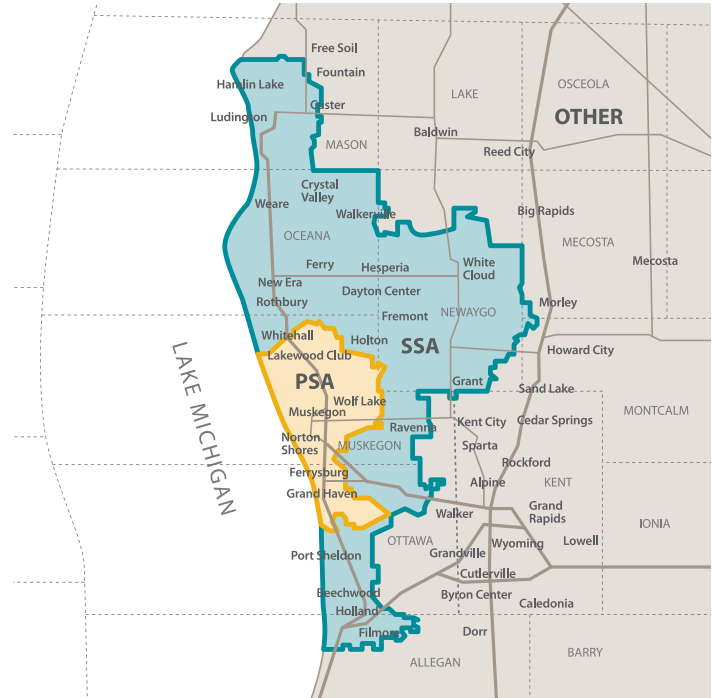
The CHNA covers needs that range from rural agriculture communities to high density urban areas.

## Muskegon County

Muskegon County is a county ranging from rural to urban in character. The county is located on the eastern shoreline of Lake Michigan roughly 35 miles west of Grand Rapids. Muskegon County is known for its agricultural production of fruits and vegetables, as a tourism destination, and industrial center. The county seat is the City of Muskegon, an urban community of almost 40,000 residents. Interstate I-96 and US-31 connect the county with major metropolitan centers to the east and south. Muskegon is home to the county's major hospital system, Mercy Health Partners, which includes the Mercy, General and Hackley Campuses in Muskegon and the Lakeshore Campus in Oceana County. The County has a total area of 1,459 square miles, a population of 172,188 people, and a population density of 334 people per square mile.

Muskegon County was established in the 1830's as a lumber settlement that utilized the extensive river and lake networks to transport timber to the larger communities. Muskegon grew rapidly during the lumber era through the early 1900's, when it began its industrial transition. Over the next 60 years, Muskegon's industrial base continued to grow until the 1970's with the closing of several prominent foundries and other industries. Since the 1970's, the community has continued to diversify in order to cope with an ever-changing economy. As noted, the county is a rural and urban mix that is comprised of 7 cities, 3 villages, and 16 townships.

Based on the level of employment by industrial classification, the county's highest employment categories include manufacturing (25.0%); education, health care, and social services (22.2%); retail trade (12.2%); and, arts, entertainment, recreation, and food services (8.3%).



**About 14% of families and 18% of the population are reported as below the poverty line.**

The composition of the county's population includes 80.2% of the residents classified as White, 14.2% African Americans, 4.6% Hispanics, 0.7% American Indian or Alaska Native, and 0.6% Asian. The median household income is \$40,670 and the median family income is \$51,096. The per capita income is \$19,719. About 14% of families and 18% of the population are reported as below the poverty line. Families with female householders, related children under 18 years, and no husband present, experience poverty rates approaching 49%.

Some areas of the county are designated as Federal Enterprise Communities (cities of Muskegon and Muskegon Heights) and Medically Underserved Population (MUP) area. Within Muskegon County, there

are three Entitlement Communities receiving 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 Clinics located in the city of Muskegon Heights and serving individuals in Muskegon County.

## Oceana County

Oceana County is located in West Central Michigan, on the Lake Michigan coastline. The county grew during Michigan's lumbering era. When the lumber boom came to a halt, farmers found the area an excellent place for orchards. Today, it prospers holding the second largest fruit tree acreage in the state. It is also known as the asparagus capital of the world for its high production of this crop. Tourism also plays a vital part of the county's economy due largely to the attraction of the Lake Michigan coastline and associated dunes. This rural county boasts 2 cities, 2 villages and 16 townships. The county has a total area of 1,307 square miles, a population of 26,570 people, and a population density of roughly 20 people per square mile. Compared to Muskegon County's population density of 334 people per square mile it is easy to understand why Oceana County is generally considered a rural area.

Based on the level of employment by industrial classification, the county's highest employment categories include education, health care, and social services (19.7%); manufacturing (19.0%); agriculture, forestry, fishing, hunting, and mining (12.8%); and, retail trade (10.2%).

**The per capita income is \$18,402.  
19% of the population are reported  
as below the poverty line.**

The composition of the county's population includes 91.9% of the residents classified as White, 0.6% African Americans, 13.0% Hispanics, 0.9% American Indian or Alaska Native, and 0.3% Asian. The median household income is \$39,543 and the median family income is \$47,906. The per capita income is \$18,402. About 12% of families and 19% of the population are reported as below the poverty line. Families with female householders, related children under 18 years, and no husband present, experience poverty rates approaching 50%.

Oceana County has been deemed a Health Professional Shortage Area (HPSA) and Medically Underserved Population (MUP) area by the Federal Government.

## Newaygo County

Newaygo County is located northeast of Muskegon County and north of the Grand Rapids Metropolitan Area. Newaygo County relies on tourism as its main economic support, with agriculture and small manufacturing secondary. The county's proximity to the urban centers of Muskegon and Grand Rapids tend to make it a bedroom community location for those urban centers. A high percentage of the county's residents commute daily to Muskegon and Grand Rapids to take advantage of employment, business, health care, recreational, and social opportunities.

**17% of the population are reported  
as below the poverty line.**

This semi-rural county boasts 2 cities, 3 villages and 24 townships. The county has a total area of 862 square miles, a population of 48,460 people, and a population density of approximately 56 people per square mile. Compared to Muskegon County's density of 334 people per square mile Newaygo County, similar to Oceana County, is generally considered rural in character.

Based on the level of employment by industrial classification, the county's highest employment categories include manufacturing (20.9%); education, health care, and social services (18.6%); retail trade (11.5%); and, construction (7.8%).

The composition of the county's population includes 93.5% of the residents classified as White, 1.2% African Americans, 5.3% Hispanics, 0.9% American Indian or Alaska Native, and 0.4% Asian. The median household income is \$43,218 and the median family income is \$54,252. The per capita income is \$20,870. About 13.5% of families and 17% of the population are reported as below the poverty line. Families with female householders, related children under 18 years, and no husband present, experience poverty rates approaching 51%.

The county is designated as a Health Professional Shortage Area (HPSA) and Medically Underserved Population (MUP) area.



## SECTION V:

# Information Sources for the 2012 CHNA

**Differences between consumers' and service providers' perceptions and concerns . . . and the discovery of new health issues make it important to collect information from diverse sources.**

## Methodology and Community Input Approaches

The Community Health Needs Assessment (CHNA) process involves the gathering of two types of data sets: quantitative and qualitative. While much of this data will be health specific, it is also important that the data reflect the impact of the *social determinants of health*—income, education, employment, insurance, race, ethnicity, gender, etc. When used together, the qualitative data (demographics, health indicators, etc.) and the qualitative data (consumer surveys, community forums, focus groups, interviews) will help health and human service agencies make many short-term and some long-term decisions about allocation of community human and capital resources. Information collected by informal means can be used to validate scientifically gathered quantitative information.

Differences between consumers' and service providers' perceptions and concerns . . . and the discovery of new health issues make it important to collect information from diverse sources. This approach complies with the letter and spirit of the Patient Protection and Affordable Care Act of 2010, which requires all tax-exempt, non-profit hospitals to conduct such surveys and direct their Community Benefit expenditures to addressing the needs revealed in the CHNA.

Mercy Health Partners' 2012 CHNA includes the following information elements:

- Demographic information, health and environmental data; and data on health disparities
- Consumer survey, administered via paper questionnaires at a variety of community venues and electronic media; responses to the survey included 2,084 surveys
- Four community forums, called “Community Conversations,” in two of the three counties; about 160 people participated in the four Conversations

- Ten focus groups on different topical areas; seventy-five people participated
- Fifty-two one-on-one interviews were conducted with current and former patients of the local health system and human service providers
- Two Native American “Talking Circles”

## Data Deficiencies

In collecting health and environmental data for the three counties, a few problems were encountered. Often, the sample sizes were too small for Oceana and Newaygo Counties to have results in the Michigan Behavior Risk Factor Surveys, as well as other state and national epidemiological and demographic studies. This was especially true for African Americans, Hispanic/Latinos and Native Americans in all three counties. Examples of data unavailable by race and ethnicity included poor mental health days, diabetes, low birth weight, STD rates, teenage mothers, preventable hospital stays, no health coverage, unemployment, household income, poverty, single parent households, and high school graduation rates.

Information on obesity is based on reported body mass index (BMI) data obtained from the MercyWellCentive patient registry, which contains records of about 95% of all patients in Muskegon and Oceana Counties. Although BMI data is reported to the registry by nearly all primary care physicians, formal epidemiological studies providing demographic breakouts for race, age, gender, etc., and geographic breakouts by county could not be found.

Epidemiological data on mental health conditions, such as depression, schizophrenia, attention-deficit/hyperactivity disorder, bipolar disorder, and post traumatic stress disorder were not available. The mental health data published in Appendix 2 was derived from three principal sources: (1) Mercy Health Partners' WellCentive patient registry; (2) patient data from Muskegon and Oceana Counties' Community Mental Health (CMH) agencies; and (3) the 2012 CHNA Consumer Health Issues Survey. The CMH data reflects patients receiving public assistance and seriously mentally ill patients referred by other public agencies.

## Community Data, Health Data and Environment Health Data<sup>1</sup> (Appendices 1, 2, 3 & 4)

The indices contained in Table 1–Community Data (Appendix 1), Table 2–Health Data (Appendix 2) and Table 3–Environmental Health Data (Appendix 3) were selected on specific criteria. Community data indices in Table 1 are those considered standard data sets typically collected by professional planners for master plans, general community descriptions, economic development and other special reports. The Health Data are selected based on local and state epidemiological reporting, data from local county agencies, Mercy Health Partners’ patient registry, and the 2012 Consumer Health Issues Survey. Many of these indices are also included in the “County Health Rankings” and the Leading Health Indicators listed in *Healthy People 2020* by the U.S. Department of Health and Human Services, and used for setting national health goals. The Table 3–Environmental Health indices were selected by the staff of Public Health – Muskegon County and District Health Department #10.

Table 4–Health Disparities Data (Appendix 4) is a compilation of data on health factors, health behaviors and social determinants of health that disproportionately impact African American and Hispanic/Latino populations in Muskegon and Oceana Counties. The data was collected and assembled from available sources by the Muskegon–Oceana Health Disparities Reduction Coalition from 2010–2012. The Coalition selected the key factors and displayed them “dashboard” style as a Health Disparities Report Card, which is intended as a basis for measuring community progress in addressing and reducing health disparities.

### CHNA research was supplemented with information from other state, local, and national sources.

#### *Supplemental Information Sources*

#### University of Wisconsin, “County Health Rankings” (Appendix 5)



The University of Wisconsin Population Health Institute’s “County Health Rankings” and

Roadmaps<sup>2</sup> project was launched in 2010 as an effort to provide information on the health of all counties throughout the nation. The rankings evaluate each county according to measures of health outcomes and health factors. Health outcomes are based on mortality (length of life) and morbidity (quality of life), while health factors are based on social and economic factors, health behaviors, clinical care, and physical environment. Together, these offer a perspective on the overall health of a county.



#### MUSKEGON COUNTY

Muskegon County ranked 63 of 82 Michigan counties in the 2012 rankings.<sup>3</sup> It ranked last regarding “health behaviors” (high rates of smoking, obesity, physical inactivity, drinking, sexually transmitted infections, and teen birth rate) and “physical environment” (high air pollution, limited access to healthy foods, and high amounts of fast food restaurants). Muskegon also ranked poorly in “social and economic characteristics,” with a ranking of 71, due to high rates of unemployment, children in poverty, and single-parent households. It should be noted that Muskegon County ranked well in “clinical care” (13), with a relatively low uninsured population and a low rate of preventable hospital stays.

#### OCEANA COUNTY

Oceana County ranked best among the three counties, with a ranking of 44 of 82 counties, due mainly to low mortality (32) and good physical environment (20). However, Oceana County performed poorly in “health behaviors” and “clinical care” (63), with high obesity, smoking, excessive drinking, teen birth rates, a high rate of uninsured persons under age 65, and a high population to primary care physician rate. “Social and economic factors” were also poor (61), including high rates of unemployment, children in poverty, and those lacking a college education.

#### NEWAYGO COUNTY

Newaygo County ranked 59 of 82 counties—just slightly better than Muskegon County. It fared best in the “morbidity” category in which it was ranked 49, mirroring the state averages. However, these rates were still well above national benchmarks. Newaygo County scored the poorest in health behaviors and physical environment (72 and 79, respectively), with high rates of smoking and obesity, as well as limited access to healthy foods and a large percentage of fast food restaurants. Newaygo ranked 57 in “clinical care.”

## SUMMARY

Each of the three counties performed poorly in all the principal categories. To “move the needle” in the rankings, each county needs to focus efforts on the indicators where they ranked poorly and that were most heavily weighted in the ranking computations. For example, reducing low birth weight babies—a morbidity factor that constitutes 20% of this computation—will help improve Muskegon County’s ranking. Reducing adult smoking, and obesity—health behaviors that comprise 10% and 7.5%, respectively, of the Health Behavior computation—will improve the rankings of all three counties. Increasing the number of primary care physicians and reducing the number of uninsured—“clinical care” measures weighted at 5% each—will improve Oceana and Newaygo Counties’ rankings in this category. To impact poor scores in “social-economic factors,” all three counties will have to reduce unemployment and children in poverty, making up 10% each within this category. All focus group participants were asked to individually select the most important health issues in Muskegon and Oceana Counties. Coincidentally, the top five selections were: (1) adult obesity; (2) adult smoking and uninsured (tied); (3) teen birth rate; (4) sexually transmitted infections; and (5) physical inactivity.

**To “move the needle” in the rankings, each county needs to focus efforts on the indicators where they ranked poorly and that were most heavily weighted in the ranking computations.**

## Community Action Line of the Lakeshore/ CALL 2-1-1 (Appendix 6)



The Community Access Line of the Lakeshore (CALL 2-1-1) information and referral service has been in operation since 2002 and has expanded to serve

18 counties along the West Michigan shore, including Muskegon, Oceana, Ottawa, and Newaygo Counties. Total population of the expanded service area is over 650,000 people. Call volume increased by 46%, from 34,378 calls in 2007 to 50,306 calls in 2011. Reflecting the economic downturn, the first six months of 2012 saw a 3% increase in call volume to 51,664, and year-end volume is projected to reach 54,000 calls. Health ranks third among the top ten service requests, representing 12% of all calls. In 2011, medical care and prescription drug expense assistance were the most frequently unmet service requests in all three counties. Sixty-two percent (62%) of all calls came from Muskegon County, mostly from the 49441, 49442 and

49444 zip codes that include the cities of Muskegon, Norton Shores, Roosevelt Park, Muskegon Heights and Muskegon Township. Eight percent (8%) of the call requests came from Oceana and Newaygo Counties.

A graphic summary of the “Top Health Care and Related Service Requests” from October 2009 to March 2012, and the top “Unmet Requests” for each of the three counties are included as Appendix 6.<sup>4</sup> For this 30-month period, food assistance, prescription drug expense assistance, emergency dental care and medical appointment transportation have been among the most frequently requested services in all three counties. Prescription drug and medical care expenses have been the principal unmet service requests.

## Disability Connections of West Michigan Community Needs Assessment

The Muskegon Community Needs Assessment Disability Survey was conducted in 2011 by the Disability Connection of West Michigan.<sup>5</sup> As part of the process, 130 adult clients of the Disability Connection were asked to complete a 21-question consumer survey to identify and evaluate key problem areas in Muskegon County, for persons with a disability, on environmental and health issues, and the perceived ability of Muskegon County to meet those needs.

The majority of respondents were White/Caucasian (31.6%) and Black/African American (20.3%), while Hispanic/Latino and Asian represented 11.3% and 9.8%, respectively. Other races/ethnicities represented were American Indian/Alaska Native (5.3%), Native Hawaiian/Pacific Islander (5.3%) and those of two or more races (7.5%). The majority of respondents were from zip codes 49441 (38%) and 49444 (16.4%), and mostly represented those with disability due to diabetes, mental health, stroke, and other causes.

The most consistently identified issues were: (1) lack of community engagement/advocacy; (2) issues arising from a climate of poverty; i.e., limited job and housing opportunities, along with inadequate access to health care and insurance; and (3) inadequate environmental access and services; e.g., lack of adequate transportation was a consistent comment, poor street conditions, and buildings neglecting handicap accessibility regulations. Violence, crime, and lack of legal representation were recognized as the principal secondary issues. When asked to identify major strengths in Muskegon County, respondents reported the reliability of faith-based organizations to provide resources and services. They also acknowledged the support found within the disability community itself as being a major strength in Muskegon County.



## 2011–2012 Michigan Profile for Healthy Youth (MiPHY) (Appendix 7)



The Michigan Profile for Healthy Youth (MiPHY) is an online student health survey offered by the Michigan Departments of Education and Community Health every two years to support local and regional needs assessment. The MiPHY provides student results on health risk behaviors, including substance use, violence, physical activity, nutrition, sexual behaviors, and emotional health in grades 7, 9, and 11. The survey also measures risk and protective factors most predictive of alcohol, tobacco, and other drug use and violence. The survey is anonymous and parents have the opportunity to excuse their child from participation. All Muskegon County and Newaygo County schools completed the MiPHY in 2012; two schools in Oceana County completed it. Appendix 7 contains a comprehensive summary of results of the MiPHY. Below are some significant findings relating to key issues raised in the current health needs assessment.

### MUSKEGON COUNTY

Sexual behavior amongst teenagers is alarming. Around 13% of 7th graders and 22% of 9th graders reported using alcohol or drugs before sexual intercourse. The data reflects that students have poor physical activity and nutrition habits, contributing to high percentages of Body Mass Indices (BMI) above the 95th percentile (obese) and between the 85th and 95th percentile (overweight). Perhaps the most alarming issue centers on depression and suicide. An increasing number of students from middle school (23%) to high school (31%) reported being sad or hopeless for two weeks straight or more in the last 12 months. This may contribute to the high percentages of students who have considered (17%), planned (13%), and attempted (8%) suicide in Muskegon County.



### OCEANA COUNTY

Similar to Muskegon, Oceana's students reported poor physical health and nutrition reflecting high rates of obesity and those overweight. Oceana's 11th graders also reported high usage of marijuana (20% used in the past 30 days) and binge drinking (20% in the past 30 days). Almost 20% of 11th graders reported having had sexual intercourse with 4 or more partners, while one quarter used alcohol/drugs before sex during the last 3 months. Especially noteworthy is the fact that just under 19% of Oceana's 11th graders have planned suicide—the highest percentage of the three-county area.

### NEWAYGO COUNTY

On the whole, Newaygo is consistent with the issues raised in the Muskegon and Oceana Counties. Newaygo experienced the highest percentage for all grades smoking 20+ cigarettes in the past month and for those who have smoked in the past 30 days. While those having sexual intercourse with multiple partners were lower than its neighbors, Newaygo reported the highest percentages using drugs or alcohol before sexual intercourse during the last three months. Alarming still is the fact that a third of 9th graders reported being sad or depressed for two weeks or more during the past 12 months and 11% having attempted suicide in the past 12 months.

## Annual Homeless Numbers suggest that the unduplicated count of homelessness in Muskegon has increased steadily since 2007.

### Muskegon Continuum of Care Homeless Data Report Summary, 2007–2012



Reporting on data collected from 2007–2011, using the Homeless Management Information Systems (HMIS)<sup>6</sup>, West Michigan Therapy compiled homeless trend data for Muskegon using two definitions. The first set of data uses “annual homeless numbers,” which is a count of all homeless individuals and families entered into HMIS in a given calendar year. The other uses a “point in time (PIT) count” in order to demonstrate how many families and individuals are homeless on a given day.

Annual Homeless Numbers suggest that the unduplicated count of homelessness in Muskegon has increased steadily since 2007 (888 individuals to 2,654 individuals in 2012), with one anomaly year in 2009. Muskegon County received extraordinary assistance in 2009 with Michigan State Housing Development Authority (MSHDA) housing

initiatives, as well as Tenant Based Rental Assistance (TBRA) and Homeless Assistance Recovery Program (HARP) vouchers. In 2011, Muskegon received additional funds from MSHDA's Homeless Prevention and Rapid-Rehousing Program that curtailed the homeless rate, while other urban neighbors experienced as much as a 50% increase! The increase in all urban communities is most likely due to a migration of rural homeless to urban environments to be closer to more accessible services.

The Point in Time Count suggests that on any given day there are 225 people residing in Emergency Shelters or Transitional Housing in Muskegon County, representing a 51% decrease from 2011, when there were 459. This is directly related to the depletion of TBRA funds in 2012, reflecting that increasing funding results in more capacity to assist people in need of housing.

### **Muskegon County Small Business Survey, Access Health, Inc., 2010–2011**



The Access Health Small Business Survey was a study to survey small businesses in Muskegon County with fewer than 50 employees. The survey covered attitudes and opinions on employer-sponsored health coverage and asked about issues that impact their decision to offer health care coverage to employees in the future. The survey also polled business owners' knowledge about Access Health, interests in alternative health coverage, and the level of premium costs deemed to be affordable. Finally, the survey asked opinions on national health care reform and how the Affordable Care Act would likely impact their business decisions. Access Health contracted with Hope College, Carl Frost Center for Social Science Research, to conduct the phone survey of non-customers, former, current, and new Access Health customers.

Most notable among the key findings of the survey is the fact that nearly 75% of small businesses do not offer health coverage to all of their employees, due to high premiums and the perception that employees are insured elsewhere. Furthermore, most (54%) small business owners have negative opinions on the health care reform and the Affordable Care Act. The participants had two main concerns. The primary concern was that health care reform will endanger small businesses because it will increase coverage costs, since insurance costs are disproportionately higher for small businesses because they do not benefit from large group rates. The second concern was the fear that government involvement will make things worse.

**75% of small businesses do not offer health coverage to all of their employees.**

## **Despite uncertainty surrounding health care reform, 61% of small business employers who currently offer health insurance to their employees plan to make no changes to their coverage in 2012.**

Despite uncertainty surrounding health care reform, 61% of small business employers who currently offer health insurance to their employees plan to make no changes to their coverage in 2012. Of the employers not offering coverage, 42% foresaw the ability to afford health insurance for their employees in the next couple of years. Of this group, two-thirds indicated they could afford monthly costs of at least \$100 per employee.

It should be noted that Access Health, an integrated community-based health coverage and improvement program, discovered a very positive rapport within the small business community. One of the greatest takeaways from this study is the conversion of those who once said they were not interested in an affordable health alternative to expressing interest when they heard a description of the Access Health model. Of the 42% of employers responding who originally were uninterested in affordable health coverage alternatives, 65% stated they were at least "slightly interested" after learning of the Access Health model because it provided improved access and more services for employers and employees.

<sup>1</sup> Table 1 was prepared by Gerald L. Adams, Project Consultant; Table 2 was prepared by Muskegon Community Health Project; Table 3 was prepared by Public Health – Muskegon County and District Health Department #10; Table 4 was prepared by the Health Disparities Reduction Coalition. See Appendices 1, 2, 3 and 4.

<sup>2</sup> University of Wisconsin Population Health Institute. County Health Rankings Model 2010, available at: [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

<sup>3</sup> Keweenaw County in the Upper Peninsula was not ranked due to insufficient data available.

<sup>4</sup> The CALL 2-1-1 top call requests graphic was prepared by Stacey Gomez, Community Action Line of the Lakeshore.

<sup>5</sup> The Disability Connection survey was managed by the Ann Arbor Center for Independent Living, Institute for Community Based Research and Education.

<sup>6</sup> HMIS is a system designed to capture client-level information on the characteristic and service needs of adults and children experiencing homelessness over time.



## SECTION VI:

# Key Findings from the Data Tables: Appendices 1, 2, 3, 4

## Key Community Social and Economic Factors (Appendix 1)

### POPULATION PROJECTIONS

Currently, Muskegon County holds 69.7% (172,188) of the three counties' 247,218 total population, with 19.6% residing in Newaygo County (48,460) and 10.7% living in Oceana County (26,570). Between the 2000 and 2010 Census, Muskegon County and Newaygo County each grew by 1.2%. Oceana County decreased by 1.1%. During the same period, Michigan experienced a 0.6% decline in population. The Michigan Office of the State Demographer projects the three counties will reach a population of 252,500 by 2015 and 257,500 by 2020. Based on the projections through 2020, Newaygo County will experience population growth estimated at 25.9%, while Muskegon and Oceana Counties will decline at slightly less than 1%.

**Median household income is well below the statewide median average of \$48,432 from 2010, with Oceana County ranking the lowest at \$39,543. The median household income for Muskegon County is \$40,670 and Newaygo County is \$43,218.**

### PRIMARY ETHNIC GROUPS

Muskegon County is the only county with a significant census count of African Americans at 14.5%; with Newaygo County registering only 1.0% and Oceana County at only 0.4% of African-Americans. Oceana County has the highest percentage of Hispanic or Latino populations at 13.7%, while Muskegon County has 4.8% and Newaygo County 5.5%.

### UNINSURED ADULTS

The Community Health Needs Assessment Consumer Health Issues Survey revealed that 19.9% of the households in the tri-county area do not possess any type of health coverage. The University of Wisconsin 2012 County Rankings reported 14% uninsured adults in Muskegon County; 18% uninsured in Oceana County; and 16% uninsured in Newaygo County.

### HOUSEHOLD INCOME

Median household income is well below the statewide median average of \$48,432 from 2010, with Oceana County ranking the lowest at \$39,543. The median household income for Muskegon County is \$40,670 and Newaygo County is \$43,218.

### SOCIAL SECURITY INCOME

In Muskegon County, the average Social Security income is \$16,171, with 33.6% of those receiving earnings getting Social Security income, compared to Newaygo County at \$15,555 and 34.3%, and Oceana County at \$15,619 and 37.3% respectively.

### POVERTY

Poverty rates in the tri-county area are higher than the state number of 14.8%. Oceana County is highest at 19.2%, followed by Muskegon County at 18.0%, and Newaygo County closely following at 17.3%.

### FOOD STAMP BENEFITS/SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP)

Food Stamp/SNAP benefits are received by 19.6% of the Muskegon County households, 14.6% of Oceana County households, and 16.1% of the Newaygo County households.

### MARITAL STATUS AND CHILDREN

The percentage of married households in Muskegon County is 50.1%, Oceana County at 56.6%, and Newaygo County is 56.2%. The percentage of widowed residents in Oceana County is 3.2% for males and 11.4% for females; 2.6% for males in Muskegon County and 9.3% for females; and in Newaygo County, the percentages are 3.1% and 10.3% respectively. The percentage of married couples who have divorced in Muskegon County is approximately 13.0%, Newaygo County is approximately 11.0%, and Oceana County is roughly 9.5%. The percentage of households with children under age 18 is 30.4% for Muskegon County, 28.9% for Newaygo County, and 20.1% for Oceana County.

## VEHICLES PER HOUSEHOLD

Muskegon County leads the tri-county area in the percentage of households with no vehicles at 8.2%, followed by Newaygo County at 4.9%, and Oceana County at 4.8%.

## OCCUPATION/EMPLOYMENT

A breakdown of employment by classification for the tri-county area is provided in the following table. The percentages reflect the percentage of the total work force.

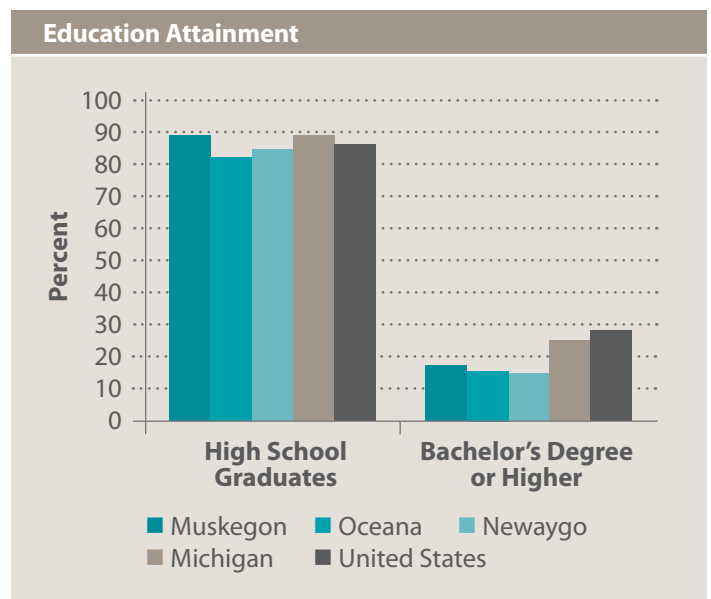
Occupation Classification	Muskegon County	Oceana County	Newaygo County
Agriculture, Forestry, Fishing, Mining	1.5%	12.8%	5.2%
Construction	4.6%	8.2%	7.8%
Manufacturing	25.0%	19.0%	20.9%
Wholesale Trade	2.4%	1.6%	2.2%
Retail Trade	12.2%	10.2%	11.5%
Transportation, Warehouse, Utilities	3.4%	3.6%	5.4%
Information	1.5%	0.5%	1.5%
Finance, Insurance, Real Estate	3.4%	3.0%	5.5%
Professional, Scientific, Management	6.2%	4.0%	5.5%
Education, Health Care, Social Assistance	22.2%	19.7%	18.6%
Arts, Entertainment, Recreation, Food Services	8.3%	9.0%	7.0%
Other Services (Except Public Administration)	5.3%	5.2%	5.6%
Public Administration	4.0%	3.4%	3.2%

## UNEMPLOYMENT

As of May 2012, Muskegon County's unemployment rate was at 8.5%, Oceana County's was at 10.3%, and Newaygo County's at 8.2%.

## EDUCATION

For persons 25 years of age and older, 88.0% of Michigan residents are high school graduates and 25.0% possess a bachelor's degree or higher. This compares to Muskegon County at 87.7% and 16.5%; Oceana County at 82.7% and 14.3%; and Newaygo County at 85.2% and 13.2%.



**As of May 2012, Muskegon County's unemployment rate was at 8.5%, Oceana County's was at 10.3%, and Newaygo County's at 8.2%.**

## LANGUAGE SPOKEN AT HOME

Oceana County has a higher percentage of population that speaks Spanish, at 11.0%, as compared to the statewide average of 8.9%. The percentages for Muskegon and Newaygo Counties are 4.5% and 5.5% respectively.

Housing Character, Occupied Housing Units	Muskegon County	Oceana County	Newaygo County
Lacking complete plumbing facilities	0.5%	0.5%	0.2%
Lacking complete kitchen facilities	0.8%	0.5%	0.5%
No telephone service available	4.5%	5.0%	5.3%

## HOMELESSNESS

Annual Homeless Numbers suggests that the unduplicated count of homelessness in Muskegon has increased steadily since 2007 from 888 individuals to 2,654 individuals in 2012. The Point in Time Count suggests that, on any given day, there are 225 people residing in emergency shelters or transitional housing in Muskegon County. This is a 51% decrease from 2011, which is directly related to the depletion of assistance funding and, therefore, a decrease in available transitional housing beds.

## DISABILITIES

The percentage of the population with various disabilities in all three counties is a serious health-related problem, with numbers reported that are significantly higher than the statewide percentages. The percentage of the population with one type of disability is higher in Newaygo County (8.3%) and Muskegon County (7.7%) than the statewide percentage (7.2%), with Oceana County just below at 7.0%. The percentage with two or more types of disabilities is higher in Oceana County (13.7%), with Muskegon County (12.4%) and Newaygo County (10.1%) higher than the statewide number (9.1%). The percentage with any disability is also higher: Oceana County (20.7%), Muskegon County (20.1%) and Newaygo County (18.3%) being higher than the statewide number (16.3%).

The incidence of disabilities is higher in all three counties than the statewide numbers for people with sensory disabilities, physical disabilities and mental disabilities. There is also a higher number of people in Muskegon County and Oceana County who are in need of assistance with activities of daily living (ADL). Oceana County and Muskegon County are higher than the state for individuals who also face other barriers in the community regarding access to goods and services. Additionally, all three counties are higher than the state average for persons 16 to 62 who face barriers to employment. Clearly, addressing the health-related, transportation, and accessibility issues of people with disabilities is a growing area of concern in all three counties.

## HOUSING DEFICIENCIES/TELEPHONE SERVICES

The following table indicates the percent of occupied housing units lacking complete plumbing and kitchen facilities. The lack of landline telephone service is also provided.

## MEDICARE, MEDICAID, AND SOCIAL SECURITY DISABILITY INCOME

Although enrollment is high in all three counties, perhaps approaching 20%, current information is not available at this time.

## Key Community Health Factors (Appendix 2)



Appendix 2 includes a data table for various health factors relating to Mercy Health Partners' (MHP) tri-county service area of Muskegon, Oceana, and Newaygo Counties. It includes comparative data at the state and national levels where data was available. Most local data was obtained through local health departments, including Public Health – Muskegon County, District Health Department #10, state data from the Michigan Department of Community Health (MDCH), and national data from the Centers for Disease Control and Prevention (CDC). Along with key physical health factors, mental health data was available through various sources, including MHP's WellCentive patient registry, Muskegon County Community Mental Health Services and the West Michigan Community Mental Health System. According to the data found, none of the three counties out-performed national data and generally reported data higher than state averages.

## Muskegon County

### OBESITY

According to the Michigan Behavior Risk Factor Survey (MiBRFS), over one third of surveyed respondents (33.2%) reported being overweight, while just over one third (35.7%) reported being obese. Furthermore, obesity in Muskegon is higher than state and national level (31.7% and 34% respectively) percentages. Obesity has increased by 12.8%

(2007–2010) and reflects a rise in the overall Michigan obesity percentage from 28.4% to 31.7%. While those reporting to be overweight decreased by approximately 7%, one third of the community is still reporting an unhealthy weight, according to their Body Mass Index (BMI)—a measure that evaluates the level of body fat in an individual.

## DIABETES

Diabetes in Muskegon remains relatively unchanged since 2007, with 10.2% of adults reporting they have been told by a doctor they have diabetes. However, Muskegon County continues to have a higher rate than the state (9.5%).

**Over one third of surveyed respondents reported being overweight, while just over one third reported being obese.**

## SEXUALLY TRANSMITTED DISEASES (STDs) AND TEEN PREGNANCY

STD rates in Muskegon are extremely high, with chlamydia increasing from 588.7 to 716 cases per 100,000 population from 2007–2010. Muskegon County's rate is nearly 50% higher than Michigan's rate of 504 cases per 100,000 population, even though the state's rate increased from 370.2 to 504 cases per 100,000 during the same time frame. It is important to note that while chlamydia has steadily increased, gonorrhea has decreased by more than half of what it was in 2007 (360 to 150 cases per 100,000). As positive as this is, the gonorrhea rate still continues to be higher than both State and national rates (139 and 100.8 respectively). It also should be noted that Muskegon County has the highest STD rates in the Mercy tri-county service area.

The teen pregnancy rate in Muskegon (65.1 teen births per 1,000 live births) is significantly higher than Michigan (51.1) and the U.S. (38.0) data. The good news is that it has decreased from 74.1 teen births per 1,000 live births from 2007–2010.

## DEPRESSION/MENTAL HEALTH ISSUES

According to the 2012 Consumer Health Issues Survey, depression and anxiety were identified as the most commonly reported mental illness (28% and 22% respectively). Information from Mercy Health Partners' WellCentive patient registry reflects these findings in that depression is the most commonly diagnosed mental illness in the registry. Moreover, reported depression diagnoses have more than doubled since 2009 (9,523 to 20,872 diagnosed cases). Attention-deficit/hyperactivity disorder (ADHD) diagnoses is also compelling, as ADHD has increased by 250% since 2010 in the registry (1,929 to 5,000 diagnosed cases in 2012). Unfortunately, the

**Depression and anxiety were identified as the most commonly reported mental illness . . . Moreover, reported depression diagnoses have more than doubled since 2009.**

WellCentive patient registry data is not analyzed by county at this time, but data on public assistance patients reported by Muskegon County Community Mental Health Services tends to support these findings.

## SMOKING

The data shows that while still higher than national and State data, the percentage of current smokers has decreased dramatically from 35.4% in 2009 to 22.2% in 2012. Though not as dramatic, the percentage of current smokers has also declined at the State level (21.1% to 19.7%). This may be due in part to the Dr. Ron Davis Smoke Free Air Law which was passed in 2010. The law was passed to protect Michigan residents from the dangers of second-hand smoke in all restaurants, bars, and businesses (including hotels and motels). Muskegon County also declared to be smoke free in 2010 for all public buildings, bars and restaurants.

## ALCOHOL

Alcohol consumption in Muskegon County continues to be high with 20.7% of adults reporting binge drinking in the last month and 7.8% heavily drinking. Both data sets are higher than the Oceana and Newaygo data, as well as Michigan's (16.6% binge drinking; 5.4% heavy drinking). On the up side, Muskegon County binge drinking is lower than national data (27%), which increased by 11.2% from 2007–2010. While alcohol consumption is still comparatively high for Muskegon County, the percentage reporting binge drinking fell by 6.7% from 2007–2010.

**Alcohol consumption in Muskegon County continues to be high with 20.7% of adults reporting binge drinking in the last month and 7.8% heavily drinking.**



According to the Michigan Department of Community Health, 4.8% of all hospitalizations among Muskegon County residents from 2005–2009 had an alcohol condition mentioned (including primary and secondary diagnosis codes).<sup>1</sup>

## CANCER

The cancer data for Muskegon County demonstrates a decline in both cancer mortality rates (194.6 to 179.6 annual deaths per 100,000 population), as well as cancer incidence (543.8 cases per 100,000 population), down to 416.3 cases per 100,000. Cancer mortality in Muskegon is on par with Michigan (185.5 rate per 100,000) and U.S. (178.4 rate per 100,000). Also worth noting is that Muskegon County's cancer incidence rate is lower than that of the Michigan and U.S. rates (489.1 and 473.6 rate per 100,000 respectively).

## UNINTENTIONAL INJURY

Muskegon County leads the tri-county area in unintentional injury deaths with 46 deaths per 100,000 population, although the rate has dropped from 58.8 per 100,000 in 2007. However, Muskegon County's rate is still higher than Michigan's 35.4 per 100,000 population.

<sup>1</sup> MDCH, Division of Environmental Health, July 16, 2012. "Alcohol-attributable hospitalizations" had one of the following conditions listed as primary diagnosis: alcohol psychosis, acute alcoholic intoxication, alcoholic polyneuropathy, alcoholic cardiomyopathy, alcohol gastritis, alcohol liver disease, fetal alcohol syndrome, excessive blood level of alcohol, toxic effect of ethyl alcohol, accidental poisoning by alcoholic beverages.

## **Obesity in Oceana and Newaygo Counties is very high, with 40.5% of adults reporting they were overweight and 38.5% reporting they were obese.**

### *Oceana/Newaygo Counties*

## OBESITY

Obesity in Oceana and Newaygo Counties is very high, with 40.5% of adults reporting they were overweight and 38.5% reporting they were obese according to the Michigan Behavior Risk Factor Survey. In fact, obesity has increased by 13.3% from 2007–2010 in Oceana. Although Newaygo has a high percentage of those reporting obesity (28.7%), it is lower than Oceana, the State (31.7%) and the nation (34%).

## DIABETES

Oceana and Newaygo Counties experienced increases in diabetes from 2007–2010. Oceana rose from 5% to 12.5% reporting being told by a doctor that they have diabetes. Newaygo County increased from 7.7% to 12.2%. It should be noted that these percentages are higher than the state (9.5%) and national (11.3%) percentages.

## SEXUALLY TRANSMITTED DISEASE (STD) AND TEEN PREGNANCY

Rates for gonorrhea and syphilis for Oceana and Newaygo Counties was either not available or too sparse to be reliable. Chlamydia rates, however, demonstrated substantial increases for both counties. The chlamydia rate in Oceana County rose from 126 cases per 100,000 population to 207. Newaygo County rates show an increase from 153 cases per 100,000 population to 192. Both counties are under Michigan (504 cases per 100,000) and U.S. (426 cases per 100,000) rates, but the dramatic increases must be noted.

Oceana County had the highest teen birth rate among the three counties, with 75.2 teen births per 1,000 live births, while Newaygo County had the lowest (61.2 teen births per 1,000 live births). However, the rates for both counties are still higher than the Michigan (51.1) and double the U.S. rate (38.2 teen births per 1,000 live births).

## DEPRESSION/MENTAL HEALTH ISSUES

According to the 2012 Consumer Health Issues Survey, depression and anxiety were identified as the most commonly reported mental illness in Oceana and Newaygo Counties (43% and 29% respectively), while bi-polar disorder (12%) and ADHD (10%) were also significant. Information from Mercy Health Partners' WellCentive patient registry reflects these findings, in that depression is the commonly diagnosed mental illness reported by physicians to the registry. Although the registry data has not been analyzed by county, this finding is reflected in public assistance patient data reported by the West Michigan Community Mental Health System. Noteworthy is that the number of diagnoses reported in the registry has more than doubled since 2009 (from 9,523 to 20,872 diagnosed cases in 2012). The 250% increase in diagnoses of attention-deficit/hyperactivity disorder (ADHD) reported to the registry as of 2012 is also compellingly noteworthy (1,929 to 5,000 diagnosed cases in 2012).

## SMOKING

Tobacco use in Oceana County has declined by 10.1% since 2007, moving from 29% (nearly a third of the adult population!) to 18.8%, which is just under the state percentage (19.7%). Newaygo County remained relatively unchanged at around 23%.

## **Tobacco use in Oceana County has declined by 10.1% since 2007, moving from 29% (nearly a third of the adult population!) to 18.8%.**

## 45% of Muskegon County African Americans and 27% of Hispanics have income below the poverty level.

### ALCOHOL

Adults reporting heavy drinking was unavailable for Oceana and Newaygo Counties, but was available for District Health Department (DHD) #10, which includes both counties. This suggests that sample sizes for these counties were too small to be reported by the Michigan Behavior Risk Factor Survey. The DHD #10 data indicates that heavy drinking in West Michigan's rural counties at 6.2% is near Muskegon County's 7.8% level. However, binge drinking was reported at 19.4% of adults in Oceana County and 18.6% in Newaygo County.

These percentages are relatively unchanged from 2007, although Oceana County dropped by about 2%. Both counties are higher than Michigan (16.6%), but lower than the U.S. (27%). In Oceana County, 4.3% of hospitalizations were alcohol-attributed. In Newaygo County, 5.1% of all hospitalizations involved alcohol-attributable conditions.

### CANCER

While Oceana had the lowest cancer mortality rate (164.3 annual deaths per 100,000 population) and incidence rate (397.4 incidences per 100,000) among the three counties, Newaygo County had the highest in both categories with 196.6 annual deaths per 100,000 population and 460.3 incidences per 100,000. Oceana's mortality rate is below Michigan (185.5) and the U.S. (178.4). Oceana's incidence rate was also lower than Michigan (498.1) and the U.S. (473.6), while Newaygo County was higher in both categories.

### ASTHMA

Prevalence rates of asthma in Oceana County increased 21% from 2009 to 2012 (7.8% reporting they currently suffer from asthma in 2009 to 21% in 2012), according to data published in the 2010 Michigan Behavior Risk Factor Survey. In Newaygo County, the rate increased 30% during this period from 10.6% reporting they have asthma in 2009 to 13.8% in 2012.

### UNINTENTIONAL INJURY

Both Oceana and Newaygo Counties had a decline in deaths from unintentional injuries from 2007–2010 (Oceana: 52.4 to 43.5 deaths per 100,000; Newaygo 44.1 to 41.1 per 100,000). Both were higher than Michigan (35.4 deaths per 100,000) and lower than the U.S. (59.2 per 100,000).

### CARDIOVASCULAR DISEASE

Oceana County reported the highest percentage of those who were informed by a physician they experienced a heart attack (9.3%) and coronary heart disease (7.7%). These are higher than both Michigan (4.6% and 4.8%) and the U.S. (2.7% and 2.8%) percentages.

### Key Environmental Factors (Appendix 3)

Appendix 3 displays various environmental health data for Muskegon, Oceana, and Newaygo Counties. State and national data are also included, although the specific environmental data was less available. The majority of these data sets is available through local health departments, including Public Health – Muskegon County, as well as District Health Department #10 (representing Oceana and Newaygo Counties). A large amount of data was also available through the Michigan Department of Community Health (MDCH) reports.

#### *Muskegon County*

### LEAD HAZARD — HIGH RISK HOMES

Most notable in the data is the large percentage of houses in all three counties identified as “Lead-High Risk Homes.” Nearly a third (29.8%) of all Muskegon homes was identified as such, showing very little decline since 2006. While these figures are similar to the state percentage (27%), the risk for poisoning is still high considering the risk that lead poses to children.

### FATAL INJURY

Fatal injuries were fairly similar for all three counties—around 40 deaths per 100,000 population, but were still higher than the state rate of 35.4 deaths per 100,000 population. Muskegon saw a drastic reduction in fatal injury rates from 2006 to 2010 (93 to 45 deaths per 100,000), suicides (17 to 10.5 deaths per 100,000), motor vehicle accident deaths (23 to 10.3 deaths per 100,000) and other unintended fatal injuries (53 to 14.4 deaths per 100,000).

### NATURAL ENVIRONMENTAL HAZARDS

Additional environment threats, according to the Muskegon County Health Profile 2012 (Public Health – Muskegon County), are as follows:

- A 15% decrease in cropland since 1987.
- An increasing incidence of Lyme disease (due to people relocating to more rural areas. No data available. Threat is only observational.)
- Lawn fertilizer, poorly maintained septic tanks, improper household hazardous waste dumping, and wetland depletion are a threat to clean drinking water (although little data is given for this).



## *Oceana/Newaygo Counties*

### **FATAL INJURY**

Oceana County saw an increase in fatal injuries from 2006 to 2010, increasing from 15 deaths per 100,000 to 43.5 deaths per 100,000. Oceana also had the highest motor vehicle accident rate (21.8 deaths per 100,000 compared to 10.0 deaths per 100,000 for the state). Along with Newaygo County, Oceana County had the highest incidence of unintentional fatal injuries (nearly 60% above the state). Newaygo County experienced a significant increase in other unintended injury deaths, increasing from 19 deaths per 100,000 in 2006 to 41.1 deaths per 100,000 in 2010.

### **Health Disparities Data Indicators: Health Disparities Report Card (Appendix 4)**

The Health Disparities Reduction Coalition (HDRC) has spent much of 2011 and 2012 acquiring data from community, state, and national sources to help identify key health disparities in Muskegon and Oceana Counties by race and ethnicity (White, African American and Hispanic/Latino) and language. Specific health indicators were selected as showing significant disparity: low birth weight, poor mental health days, diabetes, STDs, and teenage mothers. Also included were several “social determinants of health:” lack of health care coverage, unemployment, low income, poverty, single parent households, and high school graduation rates. Sources included the 2010 Census; Michigan Department of Community Health reports, including the Behavioral Risk Factor Survey from 2008–2010; and the 2012 University of Wisconsin County Health Rankings. Appendix 4 contains a complete set of the collected and a “Health Disparities Report Card,” containing the top eleven indicators of health disparity relating to race, ethnicity and language in Muskegon and Oceana Counties.

**The Michigan graduation rate for African Americans is 57%, which is well below the State’s 78% graduation rate. Muskegon County’s overall graduation rate is 71%.**

### *Muskegon County*

#### **ECONOMIC FACTORS, ALSO KNOWN AS “SOCIAL DETERMINANTS OF HEALTH”**

A total of 45% of Muskegon County African Americans and 27% of Hispanics have income below the poverty level compared to 14% of White residents and 16% state average. Median income for African American households is over \$22,000 less than for Whites, while Hispanics are closer at \$3,300 less than Whites. Overall, Muskegon County lags

behind the State by about \$5,000. The unemployment rate for African Americans is more than twice that of Whites; Hispanic unemployment is about two points higher than Whites. The data indicate that 21% of Hispanics do not have health insurance, which is about twice the level of both African Americans and Whites. The high school graduation rate for African Americans is unavailable. However, the Michigan graduation rate for African Americans is 57%, which is well below the State’s 78% graduation rate. Muskegon County’s overall graduation rate is 71%.

#### **HEALTH FACTORS**

The number of births to teenage mothers for African Americans is twice that of Whites in Muskegon County and two-and-a-half times the Michigan average. The rate of low birth weight babies for African Americans is 150% higher than for county Whites and 138% higher than the Michigan rate. Muskegon County African Americans also have ten times more cases of STD/chlamydia than county Whites and four times the Michigan average. Also markedly higher than Muskegon County Whites’ and the Michigan’s rates are the reported prevalence of diabetes (12.4% for African Americans vs. 9% for Whites) and poor mental health days (19% for African Americans vs. 13% for Whites).

**50% of Oceana County Hispanics have income below the poverty level . . . Median income for county Hispanic households is \$18,000 less than for Whites.**

### *Oceana County*

#### **ECONOMIC FACTORS, ALSO KNOWN AS “SOCIAL DETERMINANTS OF HEALTH”**

A total of 50% of Oceana County Hispanics have income below the poverty level compared to 14% of Oceana County White residents and 16% state average. Median income for county Hispanic households is \$18,000 less than for county Whites. Overall, Oceana County lags behind the state by about \$7,500. The data indicate that 36% of Oceana Hispanics do not have health insurance, which is about twice the level of Whites. The unemployment rate for Oceana County’s Hispanic population is unavailable, although Oceana’s overall unemployment rate is well below both Michigan’s and Muskegon’s. Likewise, the high school graduation rate for Hispanics is unavailable. Although the county’s graduation rate of 85% is above the Michigan’s, the Michigan graduation rate for Hispanics is 63%, which is well below the state’s overall graduation rate of 78%.

## HEALTH FACTORS

The number of births to teenage mothers for Hispanics in Oceana County is unavailable, but Oceana County's overall teen birth rate is 20% higher than Michigan's. Although the STD/chlamydia rate for Oceana County Hispanics is unavailable, Oceana's overall rate is above the Michigan's. Unfortunately, data for the Oceana County Hispanic population is also unavailable for low birth weight babies, diabetes and poor mental health days, due to low sample sizes in Michigan studies and/or lack of epidemiological research altogether.

Among the disparities, revealed by researching the existing health data, is the lack of epidemiological data for Hispanics/Latinos and Native Americans in Muskegon County, along with the lack of data for Hispanics, African Americans and Native Americans in Oceana and Newaygo Counties.

**“Without data, you’re just another person with an opinion.” Thus, policy analysts and policymakers tend to think that if there is no data, there is no problem!**

This is largely due to (1) sample sizes that are too small to be reliably reported by state and national surveys, and (2) the high cost of conducting local epidemiological studies. Nonetheless, the members of the Coalition consider this lack of epidemiological information on small, but important minority populations as a form of health disparity itself. Muskegon County's epidemiologist has often said, “Without data, you’re just another person with an opinion.” Thus, policy analysts and policymakers tend to think that if there is no data, there is no problem!

## SECTION VII:

# Key Findings from the Community Input Process

## Community Participation and Input

A series of activities and corresponding steps were taken to achieve broad public participation in identifying the health care issues and needs of the community. These included the execution of a detailed consumer health survey; one-on-one interviews with health care recipients; input of Native Americans, generated through locally arranged talking circles; and facilitation of a sequence of community conversations and focus groups. The findings are summarized below.

## Steps were taken to achieve broad public participation in identifying the health care issues and needs of the communities.

### Consumer Health Issues Survey

A consumer health survey was prepared incorporating a range of questions focusing on the demographic characteristics and personal well-being of respondents and their household members. The instrument sought feedback on a variety of issues relating to one's ability to access health care services and the quality of care

received. The survey incorporated a number of health care questions included on a similar survey conducted for the 2009 *Community Health Needs Assessment*. This provided an opportunity to gauge possible changes in the health status of the service area.

Survey methodologies included the circulation of hand-distributed paper questionnaires and online survey with the use of *SurveyMonkey*. Paper questionnaires were distributed at 32 locations throughout Muskegon and Oceana Counties by volunteers from the District #10 offices of the Michigan Department of Community Health, Ross Medical School, Whitehall High School National Honor Society, Muskegon Family Care Staff, Oceana County Council on Aging, AgeWell Services, Andre Bosse Center, Muskegon County Child Abuse Council, West Michigan Community Mental Health Services, Priority Health, Muskegon County Service League, Oceana County and Muskegon County Senior Resources, Mercy Health Partners, Herman Miller Corporation, and the Muskegon Community Health Project. A total of 2,084 completed survey forms were received, including 1,288 paper copies and 796 electronic.

As detailed by the following tables, the demographics of survey participants sufficiently reflected the population of the service area. Survey responses revealed input by all age ranges, ethnicities, income groups, employment status sectors, residency types, and household sizes found within the study area. That fact, combined with the quantity of completed surveys, resulted in a relatively high level of confidence that the survey data accurately reflected the community at large. This was subsequently borne out through the input received via the other community feedback procedures. The source for this data is the Consumer Health Issues Survey, Community Health Needs Assessment, Muskegon Community Health Project, 2012.



Survey Response by Age Range (2012)	
Age Range	Percent of Surveys
18–24	11.80%
25–34	17.90%
35–44	17.30%
45–54	21.00%
55–64	21.00%
65–74	6.30%
75 or Above	4.70%

Survey Response by Race/Ethnicity (2012)	
Race/Ethnicity	Percent of Surveys
Caucasian	77.50%
African American	11.90%
Hispanic	5.00%
Native American	2.70%
Asian	0.30%
Other	2.60%

Survey Response by Employment Status (2012)	
Employment Status	Percent of Surveys
Employed Full Time	42.10%
Employed Part Time	12.90%
Laid-Off	3.00%
Unemployed	20.70%
Retired	15.50%
Student	5.80%

Survey Response by Annual Household Income (2012)	
Income	Percent of Surveys
Less than \$25,000	45.40%
\$25,000–\$50,000	24.10%
\$51,000–\$75,000	14.10%
Over \$75,000	16.30%

Survey Response by Type of Residency (2012)	
Residency Status	Percent of Surveys
Own or Buying Home	59.40%
Rent Home or Apartment	22.90%
Live with Family/Friends	13.50%
Other	4.20%

Survey Response by Household Size (2012)	
People per Household	Percent of Surveys
1	15.90%
2	29.00%
3–4	37.60%
5–6	13.80%
More than 6	3.80%

## Summary Observations from the Consumer Health Issues Survey

Survey results provided quantitative information on matters of access to health care services and personal wellness for the population at-large and various demographic groups. Survey findings were compared for purposes of identifying the frequency of responses, commonalities among respondents, and variations among demographics. The analyses resulted in the identification of a range of health care issues and themes. The following represents a brief overview of significant findings. In some instances, reference to the health care findings of the 2009 *Community Health Needs Assessment* is made for purposes of comparison and recognition of change.

**The lack of health care insurance or inadequate insurance to cover basic needs was identified as a leading factor in the public's inability to access the services of professional health care providers.**

### UNINSURED AND UNDERINSURED HOUSEHOLDS

Survey results indicate that approximately 20% of all households lack health care insurance of any type and that approximately 14% of households with some level of coverage do not possess prescription drug insurance. These percentages closely mirror conditions detailed in the 2009 Needs Assessment. While the effected households are primarily low-to-moderate income, they are not exclusively so. The lack of health care insurance or inadequate insurance to cover basic needs was identified as a leading factor in the public's inability to access the services of professional health care providers.



**53% experience debt exceeding \$500. The percentage of those with medical debt is slightly up from the 2009 Needs Assessment. Approximately 8% of the households report debt in excess of \$4,000.**

### DIFFICULTY IN OBTAINING HEALTH CARE SERVICES

Over 15% of respondents indicated difficulty with accessing health care services for themselves or members of their household. This was primarily due to a lack of health care insurance or coverage classified by participants as inadequate due to high patient participation costs. Of particular note was the lack of access to dental services and vision services.

### COST-RELATED MISSED MEDICAL CARE

The survey revealed high percentages of households failing to obtain medical services within the past 12 months due to costs:

- Approximately 30% indicated they, or a member of their household, failed to access needed medical care due to costs.
- Approximately 20% indicated they, or a member of their household, failed to seek needed professional services for mental health issues due to cost.
- Roughly 37% indicated they, or a member of their household, failed to seek needed dental services due to costs.
- 27% failed to fill a prescription due to costs.

### MEDICAL DEBT

Roughly 47% of households have existing medical debt of \$500 or less and 53% experience debt exceeding \$500. The percentage of those with medical debt is slightly up from the 2009 Needs Assessment. Approximately 8% of the households report debt in excess of \$4,000. In 2009, the percentage exceeding \$4,000 topped out at 7%. Demographic groups reporting the highest levels of medical debt include low-income and non-insured households.

### PERSONAL HEALTH

In spite of a number of identified health care issues, the majority of respondents rated their personal health as good (38%). Overall, approximately 78% rated their health as good to excellent. This represents a marked increase over 2009 levels during which 66% reported their health as good to excellent.

## LEADING HEALTH PROBLEMS

The leading health problems, reported by 10% or more of survey respondents, included high blood pressure, high cholesterol, excess weight and vision problems. These were followed by diabetes, arthritis, asthma, chronic pain and dental problems.

## MENTAL HEALTH

Similar to the 2009 findings, depression was again identified as the most prevalent mental health issue, representing almost 34% of the respondents indicating receipt of a mental health diagnosis by a physician or other health professional. Other significant mental health issues included anxiety, attention deficit and hyperactivity disorders.

## LACK OF DENTAL CARE

Similar to the 2009 findings, a lack of accessing dental services was commonly referenced by survey participants, with over one-third indicating they had not visited a dentist within the past twelve months due to cost.

## LEADING SOURCE OF CARE

Approximately 83% of all respondents reported a private physician's office or clinic as the leading or primary source of care when seeking medical attention. This is unchanged from levels reported in 2009. Approximately 6% reported use of hospital emergency rooms as their primary source of care. This is up from 2% as reported in 2009.

**A majority of the neighborhood areas reported lacking a good source of fresh fruits and vegetables in inner-city settings and rural areas.**

## NUTRITION

Forty-three percent (43%) of respondents stated their daily diet included fresh fruits and vegetables. Conversely, approximately 14% indicated these foods were either never a part of their diet or consumed only once per week. Regarding the availability of fresh fruits and vegetables, roughly 22% of respondents indicated their neighborhoods (general areas of residence) lacked a good source of these foods. A review of the data revealed that a majority of the neighborhood areas reported lacking a good source of fresh fruits and vegetables in inner-city settings and rural areas.



**39% indicated they never exercise or do so only one day per week.**

## EXERCISE

Approximately 36% of respondents stated they partake in a physical activity, such as walking or running for at least 30 minutes, 4 to 7 days per week. Thirty-nine percent (39%) indicated they never exercise or do so only one day per week.

## OBESITY

Eighty-two percent (82%) of respondents stated they, and/or at least one household member, are seriously overweight.

## SOURCES OF HEALTH CARE INFORMATION

Respondents were asked about information used in making personal health care decisions. Fifty-nine percent (59%) stated their health care provider served as the primary informational source. Other sources include the Internet (15%), friends and relatives (9%), and television (7%).

## MAKING THE COMMUNITY HEALTHIER

When asked about upgrading the health of tri-county residents, respondents identified the following as the most important areas of need: improving nutrition and eating habits, increasing participation in physical activities/exercise programs, improving access to care services, and public education on related issues. These same issues were identified in the 2009 report.

**82% of respondents stated they, and/or at least one household member, are seriously overweight.**



## Community Conversations and Focus Groups: Introduction

Community Conversations are generally described as discussions which take place in communal settings, with audience members speaking as equals. Community conversations frequently resemble “town hall” events where participants come together for a period of two to three hours to discuss topics of interest. The conversations are comprised of approximately 20 to 60 people brought together, with a facilitator. For this project, the basic goal of the conversation was to give participants a chance to voice their opinions and provide input on local health care issues and concerns focusing on unmet needs, barriers, and problems associated with access to health care and quality of care. Topics and questions used during the conversations were largely developed based on the community survey data previously discussed.

Four community conversations were held as part of the project—two in Muskegon County and two in Oceana County. Participants included representatives of local health care providers, schools, local governments, civic and faith-based organizations, pharmaceutical companies, human services agencies, business and industry, and the general public.

Focus groups refer to small groups of people selected from a wider population and sampled, via open discussion, for participants’ opinions about a particular subject or area. Focus groups are commonly comprised of 8 to 12 people, also convened with a facilitator. The group participants often represent a target audience demographic. A set series of questions or topics is used by a facilitator as he/she solicits group preferences and opinions.

Focus groups produce qualitative data (preferences and beliefs) that may or may not be representative of the general population. However, after conducting a series of focus groups and using a range of demographics, if the data shows marked similarity in content, one may likely draw the conclusion it holds a close resemblance to the basic opinions of the area’s general population base. This was the case with the focus groups participating in the project.

In working with the community conversation and focus group participants, several key factors were followed by program facilitators to help ensure the validity of the findings. These factors included:

- Facilitators remained neutral throughout the process—neither supporting nor challenging comments.
- Caution was exercised by facilitators to avoid giving the impression a particular message was being sought.
- Facilitators employed interactive discussion techniques to make certain all participants were engaged in the process.
- Significant caution was exercised when analyzing and reporting the information, taking care not to overstate the sentiments expressed, leaving out important themes, reporting comments out of context, rewriting information to make the terminology fit a particular audience likely to review the findings, or draw premature conclusions.
- The information and opinions of all groups were considered to be of equal importance. No weighting was applied to the responses of a particular group.

## Community Conversations: Summary of Findings

The Community Conversations generated significant feedback on a range of health care issues and concerns that fell into one or more of the following 17 categories. Accompanying each category are the key findings expressed for the particular topic. The following are grouped based on the conversations held in Muskegon County and those of Oceana-Newaygo Counties. It is important to note that the range of topics discussed at the Muskegon County conversations did not necessarily match those of Oceana and Newaygo Counties. Topical discussion themes were based on the information generated by the public survey and other input techniques. The findings of these processes commonly demonstrated areas of special or unique concern to the respective geographic areas.

**The Community Conversations generated significant feedback on a range of health care issues.**

*Muskegon County*

**1. Health Care Issues by Age Classification (non-prioritized)**

<b>Infants</b>
Lack of immunizations
Lack of prenatal care
Low birth weight
<b>Teens</b>
Obesity/poor diet/lack of physical activity
Teen pregnancy
Alcohol, smoking and substance abuse
Sexually transmitted diseases
<b>Adults</b>
Unemployment/lack of insurance/poverty
Obesity/lack of physical activity
Alcohol and substance abuse
Chronic illness
Mental health issues/lack of access to mental health resources
Lack of transportation to access needed health services
Cancer/renal disease
<b>Seniors</b>
Low income/lack of insurance (prescription coverage and dental)
Lack of health care advocates/need for improved care management
Lack of affordable homecare
Isolation (living alone/poor socialization)
Lack of transportation to access needed health services
Dementia
Mental health issues/depression



**2. Pursuant to communicating to the public on health care matters, what media venues, organizations or other means has the greatest potential for reaching audiences?**

- a. Schools, faith-based organizations and employers
- b. Primary care practices
- c. Call 2-1-1
- d. Internet

**3. What is the role of public schools on matters of health education?**

- a. Teaching basic health skills for nutrition, personal care, and lifestyle practices
- b. Helping reduce obesity through the institution of physical exercise programs, provision of nutritional meals and health education

**4. What are the community's most significant mental health issues or concerns?**

- a. Over-diagnosis of depression and the prescribing of medicines for its treatment
- b. Given the wide range of parties called upon to deal with mental health issues, many of whom may not have the qualifications, there is a strong potential for improper diagnosis and treatment of mental health illnesses
- c. Mental health problems, such as depression, often stem from other conditions common to the area, such as the lack of employment, lack of health care insurance, obesity and chronic illness; until these issues are resolved, it will be difficult to overcome mental health problems like depression
- d. Young people (teens) have poor stress-coping abilities

**5. Why is dental care such a significant issue? What can be done to help reduce the problem?**

- a. Lack of dental insurance/high deductibles
- b. For many families, problems are not addressed until they are urgent
- d. People disconnect dental care as being a part of the overall health component
- e. Primary care physicians need to connect more closely with dentists for purposes of referring patients for dental services

**6. What are the local obstacles to good nutrition?**

- a. Urban centers (such as downtown Muskegon) lack full-service grocery stores
- b. People have easy access to inexpensive convenience (fast) foods
- c. People do not have the time to prepare healthy meals
- d. Lack of nutrition education and education on the purchase and preparation of nutritious meals

**7. Obesity has been a community problem for a rather extended period of time. Why does it remain such a problem?**

- a. People have become addicted to foods with simple sugars, carbohydrates and salts
- b. Fast foods are readily available and inexpensive
- c. Many insurance programs do not provide incentives for promoting improved health
- d. Physicians are not assertive with patients on obesity

**8. Why do people avoid preventive care measures, such as flu shots?**

- a. People lack the knowledge of why preventive measures are important
- b. Fear that prevention may lead to undesired side effects
- c. Perception that preventive care measures are unnecessary

**9. What are the issues experienced by people with mental and physical challenges when accessing health care services and in the quality of care received?**

- a. Many transportation services and patient rooms are not equipped for those with special needs, such as patients with mobility challenges
- b. When needing to refer patients, primary care physicians commonly lack knowledge of specialists capable of accommodating (willing to accommodate) the needs of mentally and physically challenged patients

**10. Pursuant to ethnic or other groups, are you aware of any disparities in the ability of parties to access health care services or in the quality of care received?**

- a. Hispanic residents experience language barriers when accessing care

**11. Environmental issues of concern?**

- a. Lead poisoning
- b. Pesticides used for agricultural production
- c. High rate of smoking

**12. What can/should our local hospitals and clinics be doing to improve the health of residents?**

- a. Expand the hours of operation of urgent care facilities and improve the perception of these facilities as capable of handling patient needs
- b. Increase the levels by which local hospitals educate the public on health care matters, such as health literacy, and on availability of community health care resources
- c. Expand the levels of coordination between the hospitals and local schools, businesses, and industries on matters of health education

**13. Other areas of need or concern?**

- a. Lack of specialty care for the uninsured
- b. Area (nation) not prepared for the aging population
- c. Health care system remains disjointed

*Oceana/Newaygo Counties*

**1. Health Care Issues by Age Classification (Non-Prioritized)**

<b>Infants</b>
Lack of specialists (neonatal, allergists and pediatricians)
Poor nutrition
<b>Teens</b>
Obesity/poor diet/lack of physical activity
Teen pregnancy
Poor nutrition
<b>Adults/Seniors</b>
Unemployment/lack of insurance/poverty
Transportation
Diabetes

**2. What services are lacking or inadequate pursuant to the range and quality of health care?**

- a. Family health care physicians
- b. Many people lack health care insurance
- c. People are unfamiliar with available services
- d. There are very few health care specialists of any type

**3. How are people informed of health care services?**

- a. Call 2-1-1 program
- b. Local food pantries
- c. Health Department
- d. Faith-based organizations

**4. What attributes to the high rate of depression?**

- a. Unemployment
- b. Depression is often misdiagnosed; the area lacks mental health specialists

**5. Identify the dental care issues affecting the area.**

- a. Lack of dental insurance/low reimbursement by Medicaid
- b. Excessive appointment timeframes for the receipt of service
- c. Lack of specialists (orthodontists)



**6. Although identified as an agricultural area, why is the access to and use of fresh fruits and vegetables limited?**

- a. Lack of transportation to markets
- b. People do not know how to prepare foods
- c. Difficult to compete with snack foods
- d. People are not educated on the value of nutrition

**7. Do migrant workers experience any issues with accessing health care services?**

- a. Lack of transportation
- b. Limited evening hours of operation for many health care providers
- c. Cultural issues
- d. Concerns regarding employment loss if taking time off for health care

**8. What measures should the local hospitals take to improve the health care of residents?**

- a. Develop medi-centers for after hours and weekend services
- b. Offer medical tests at health fairs and workshops
- c. Improve the continuation of patient care through discharge planners

**9. Are there other health care issues of significance?**

- a. High prescription drug costs
- b. Substance abuse
- c. Need for an Alzheimer’s unit at the hospital (Oceana Medical Care)

**Community Focus Groups: Summary of Findings**

Based on the responses gained from the community conversations and information collected from the health care surveys and other informational sources, focus groups were assembled in Muskegon County and Oceana/Newaygo Counties to react to key health care issues of community concern and to provide input and direction on each.

The Muskegon County Focus groups included:

- Vulnerable Populations Health Issues and Health Disparities Focus Group
- Mental Health Focus Group
- Health Education/Literacy, Resource Awareness and Communication Focus Group
- Seniors and Persons with Disabilities Health Issues Focus Group
- Nutrition, Weight Management and Lifestyle (Changes) Focus Group

**Focus groups were assembled to react to key health care issues of community concern.**

The Oceana/Newaygo Focus Groups included:

- Oceana County Healthcare Needs and Outreach Leadership Group
- WIC
- Wisewoman
- Tencon

A physician focus group representing the Lakeshore Health Network of physicians was also convened.

With the exception of the physicians’ focus group, the leading findings of the focus groups were combined and listed below. Input received from the physicians’ focus group is provided as an individual section.

**Muskegon County Focus Groups: Identified Health Care Issues**

The input provided by the focus groups identified the following health care issues of significance to Muskegon County (non-prioritized):

Alcohol abuse
Cancer deaths
Cardiovascular disease
Community care coordination
Dental care
Depression
Diabetes
High blood pressure
Lack of medical insurance
Lack of prenatal care
Lack of preventive care
Lack of transportation
Language barriers
Native American health care services
Need for improved patient/provider communication
Nutrition education
Obesity
Overuse of the emergency room for primary care services
Senior isolation/home care
Sexually transmitted diseases
Smoking
Teen pregnancy/teen birth rate

## Oceana/Newaygo County Focus Groups: Identified Health Care Issues

The input provided by the focus groups identified the following health care issues of significance to Oceana and Newaygo Counties (non-prioritized):

Alcohol abuse
Cardiovascular disease
Community care coordination
Dental care
Depression
Diabetes
Health agency communication
High blood pressure
Lack of primary care physicians
Need for urgent care facilities with evening hours
Nutrition education/healthy foods
Obesity
Patient/provider communication
Preventive care
Specialty care and testing
Teen pregnancy/teen birth rate
Transportation

### Physicians' Focus Group

A physicians' focus group, representing the Lakeshore Health Network of physicians, was questioned on a range of topics as detailed below:

#### COMMUNICATION

Physicians agreed that the “Patient-Centered Medical Home” concept must ensure patients have a clear understanding of their condition, treatment plan, and the purpose and proper use of medications. Pilot studies involving the “Teach Back” approach to health literacy are under way in Mercy practices and look promising. Physicians also endorsed a three-year study of using care coordinators in practices, working directly with patients on follow-up education about treatment therapies. However, expense to the practices is a barrier. Physicians believe that insurance companies should be covering the cost.

**A physicians' focus group was questioned on a range of topics.**

Doctors are challenged since the prevailing model for health delivery is that they are in charge of everything, while Centers for Medicaid and Medicare Studies (CMS) is pushing for a team approach to health care—but not providing funding. Mercy is working on a CMS demonstration project with health plans participating, aimed at revising billing codes to standardize billing for care coordinators. The physicians recommended that hospital practices include mid-level providers, mental health social workers and care coordinators using the same model of current Federally Qualified Health Centers (FQHCs) and Rural Health Centers.

**Mental health providers often do not accept insurance, requiring significant out-of-pocket expense to the patient. Uninsured and under-insured patients typically cannot afford the cost of mental health treatment.**

#### MENTAL AND BEHAVIORAL HEALTH

When asked if they were trained well enough to recognize and diagnose mental/behavioral health problems and prescribe effective treatment, the doctors felt competent to diagnose some entry-level mental health disorders. However, often these disorders; e.g., depression and anxiety, are masked by a disease-related complaint. Moreover, when they discern mental health illnesses, patients tend to expect a “quick fix,” rather than be responsive to long-term treatment recommendations. This dilemma is compounded by a lack of referral sources for mental health issues. Even insured patients generally do not have adequate mental health benefits to cover costs. Further, mental health providers often do not accept insurance, requiring significant out-of-pocket expense to the patient. Uninsured and under-insured patients typically cannot afford the cost of mental health treatment.

In addition to the time and expense of mental health treatment, the physicians believe there is still a great deal of denial regarding the prevalence of mental illness and the importance of long-term treatment. Negative attitudes about mental health providers, and the idea that seeking treatment will stigmatize them at home and in the workplace present barriers, specifically in minority cultures and especially among males.

#### RISK BEHAVIORS

Although questions about specific risk behaviors are routinely asked on medical history questionnaires and updated yearly, the physicians were asked to assess their comfort level when asking patients about tobacco and alcohol use, drug abuse, sexual practices, and domestic violence. As a rule, physicians usually inquire when patients leave questions blank.

However, when offered informational brochures, patients often are unwilling to take home “evidence” of their problem. Generally, patients are aware of the health consequences of risk behaviors, but changing behaviors is beyond what can be expected of physicians. Doctors believe this responsibility belongs with public health and community health centers, again pointing to lack of resources for referrals.

### **OBESITY**

Physicians were in agreement on body mass index (BMI) as the best measure of obesity and routinely report BMI data to the WellCentive patient registry. However, they felt a communication “disconnect” with patients on weight management issues, especially with parents of overweight children. Nutrition and weight management information is available but, typically, patients/parents are not receptive; rather, many are looking for easy fixes, such as bariatric surgery. Other barriers include cost and availability of healthy foods, societal promotion of fast foods and contemporary eating habits. The doctors stressed the need of public health and community groups, such as “1 in 21” to address obesity.

### **HEALTH DISPARITIES**

When asked why minorities distrust the health system, the physicians responded that minorities tend to distrust all institutions—and often for good reason. While some physicians try to understand cultural issues and respect traditional remedies, this is very time consuming. There is also conflict between evidenced-based medicine and culturally-based therapies, a situation that is compounded by the new pay for performance requirements. Health literacy is also a barrier, with a general lack of understanding of risk and benefit for medical options. Lack of health literacy creates a general inability to make informed decisions. Also, physicians are frustrated that governmental regulations put the onus on doctors for health management and positive outcomes, but not on the patient.



### **NEXT THREE YEARS**

To improve access and quality of care, physicians suggested:

- Place mental health workers in hospital practices, while recruiting more psychiatrists and psychologists, making them more accessible for referral from primary care offices.
- Make health coaches/case managers available at time of hospital discharge to ensure follow-up treatment and patient compliance.
- Include an urgent care unit in ERs to save costs and extend hours for all urgent care facilities. Establish billing codes to ensure adequate reimbursement for urgent care visits.
- Reform the payment process.
- Increase hospital discharge planning for uninsured and underinsured patients to ensure primary care medical home and medical coverage.
- Provide a CALL 2-1-1-style resource for physician practices to use for referring patients to health and human services needed to support their treatment plans.
- Create day clinics at Oceana County’s Lakeshore Campus for identified specialty care needed for residents who must drive long distances for access. For example, arrange for five different specialty physicians on each day of the week, for one week per month. Most needed are ENT, internist, orthopedic surgeon, and general surgeon.
- Provide transportation (shuttle) for Oceana patients to Muskegon specialists and lab facilities.

### **One-On-One Focused Interviews**

A series of 52 confidential one-on-one interviews with patients/clients of the offices of the Muskegon Community Mental Health Agency, the Oceana County Migrant Health Clinic, and the Muskegon Community Health Project were conducted for purposes of receiving input on the quality of care received and recommendations for improvement. Of those interviewed, 18 were males and 34 were females. Of these, 17 were African American, 27 Hispanic, 4 Caucasian, and 2 bi-racial. The information generated by interviews was generally consistent with the information provided in the community conversations and focus groups. Primary issues and findings surfacing from those interviewed included:

- Lack of medical and dental insurance
- Use of family and friends for most forms of initial medical referral
- Negative experiences in emergency rooms due to primarily inpatient staff
- Language barriers (Hispanic patients)

- Difficulty in navigating/finding health care resources — lack of patient coordinators or advocates
- Primary care physicians often lack an understanding of the range of mental issues and developmental disabilities
- Need for transportation

### Native American Talking Circles

Following traditional Native American structure and guidelines, the Muskegon–Oceana Health Disparities Coalition hosted two Native American “Talking Circles” to explore health issues relating to the Native Americans residing in Muskegon and Oceana Counties. The events were organized by a member of the Little River Band of Ottawa Indians and facilitated by a member from Manistee, Michigan. Members of other tribes attended, as well, including the Sault Ste. Marie Chippewa Indians.

The most pressing health concerns identified were:

- Diabetes
- Breast cancer
- Cardiovascular disease
- Obesity
- Mental illness
- Substance abuse

Over-arching concerns included availability of medical services in Muskegon County, mistrust of the medical community, better understanding of the health system and help navigating services for which Tribal members are eligible. The principal barriers facing Native Americans to accessing health services were identified as transportation, especially for the elderly; lack of awareness of available services; Tribal health services and health coverage being limited outside the Tribal service area in Manistee; and mistrust of governmental services, in general.

The specific health-related services identified as most needed at this time included:

- Education about available services and assistance navigating the health system
- Health screening for cholesterol, hypertension, heart disease, diabetes, cancer, vision and hearing
- Need for preventive education, stress testing, mammograms and instruction on self-examination, and monitoring medications
- Treatment services specifically mentioned were dental care, specialty care (such as pediatrics, dermatology and endocrinology) and mental health and hospice services
- Transportation to health care services

## SECTION VIII:

# Ranking and Prioritizing the Findings

Data analysis and the community input components yielded 22 health issues of concern in Muskegon County and 17 health issues in Oceana/Newaygo Counties. Ranking sessions were held in Muskegon and Oceana Counties, comprised of representatives from a wide range of local health and human service providers and other stakeholder groups. The groups were given a list of un-prioritized health issues and asked to categorize each issue according to the domain they felt should take the lead role in addressing the particular issue.

**Ranking sessions were held in Muskegon and Oceana Counties, comprised of representatives from a wide range of local health and human service providers and other stakeholder groups.**

The choices were: “Community,” which included schools, Community Mental Health or other governmental agencies, community-based and faith-based organizations; the “Health System,” which included the hospital, physician practices and public clinics; and “Public Health,” which included the local health departments. Once sorted by domain, the groups were then asked to rank the issues under each on a scale of 1 to 5, with 5 meaning “most significant.” The scoring was based on four criteria: *severity*—magnitude or urgency of the health issue; *feasibility*, in terms of resources available and surmountable barriers; *potential impact* on the greatest number of people; and *achievability* within three years.



## Muskegon County Rankings

Held in Muskegon County, 27 individuals participated in two ranking sessions. The issues were ranked as “Top,” “Secondary,” and “Tertiary,” but were not prioritized. Top ranked issues included: high blood pressure, diabetes, overuse of the Emergency Room, sexually transmitted diseases, obesity, and lack of prenatal care. Secondary issues were: patient-provider communication, lack of preventive care, access to dental care, alcohol abuse, smoking, teen pregnancy, nutrition education/access to healthy foods, community care coordination, cancer deaths, cardiovascular disease, and lack of insurance. Tertiary issues were: language barriers, senior isolation and home care, depression, Native American awareness of resources, and access to health care and hospice services.

These results were then submitted to the Muskegon Community Health Project’s Advisory Board of Directors for establishing priorities. The Board members were broken into three groups and each was asked to prioritize what they considered to be the most important issues for the community health of Muskegon County. The results from the three groups were then discussed by the whole. Through a debate and voting process, the top five and secondary five health issues established in ranking order were as follows:

Top Five Issues
Obesity
Diabetes
High blood pressure
STDs and teen pregnancy
Depression
Secondary Five Issues
Access to dental care
Need for preventive care
Need for nutrition education and access to healthy foods
Need for health insurance
Smoking

## Oceana/Newaygo County Rankings

The Oceana County Healthcare and Outreach Services Committee, representing health and human service providers in Oceana County, attended the ranking and prioritizing session. The top ten ranked health issues for the Health System in priority order were:

Top Five Issues
Diabetes and preventive care (tied)
Obesity, community care coordination and high blood pressure (tied)
Patient-provider communication
Transportation
Cardiovascular disease
Secondary Five Issues
Dental care
Teen pregnancy, specialty care and lab testing (tied)
Lack of primary care physicians
After hours urgent care
Depression

**The top ranked health issues by domain for the Health System**, in priority order were: (1) diabetes and preventive care (tied), (2) community care coordination, (3) high blood pressure, (4) patient-provider communication, (5) cardiovascular disease, (6) lack of dental care, (7) specialty care and lab testing, (8) lack of primary care providers, (9) after hours urgent care, and (10) health agency communication.

**Top ranked issues by domain for the Community**, in priority order were: (1) transportation, (2) lack of dental care, (3) teen pregnancy, (4) depression, and (5) alcohol abuse.

**Top ranked issues by domain for Public Health**, in priority order were: (1) preventive care, (2) obesity, (3) dental care, (4) teen pregnancy, (5) nutrition education and access to healthy foods.



## SECTION IX:

# Reflecting on the 2012 Community Health Needs Assessment Process: Lessons Learned About the 2012 Process

## General Thoughts

The 2012 CHNA process was given six months to complete. However, for the expanded content to include more community forums, focus groups and the addition of the ranking/prioritizing process would mean that more time would be needed to complete the process. An additional month or two should be allowed to facilitate the expanded community input process. Broad community involvement and a variety of input techniques are necessary to discover the range of issues that concern all segments of the community. This also means that additional time is needed to analyze the wealth of information received from the expanded process.



## Consumer Health Issues Survey

Using trained volunteers to directly administer the paper version of the consumer surveys proved very fruitful in terms of the number and quality of returned questionnaires. Volunteers were trained to help respondents understand and complete the questions, as well as provide “trusted” interviewers to enhance their confidence in the survey. However, embracing this approach requires two vitally important considerations: (1) a very capable coordinator to recruit and train

volunteers for two to three weeks, as well as to make arrangements for their deployment to multiple locations; and (2) suitable locations and times to access low-income and underserved populations.

The survey questionnaire tended to be too lengthy and needed to be shortened so that it could be administered in ten minutes or less. Care should be taken that questions are not ambiguous and/or beyond the health literacy levels of the typical respondent. Thus, more time should be taken to field-test the survey instrument before it is released. The paper survey was formatted for optical scanning; however, this technique made it difficult to tally questions requiring one response to multiple choices. The scanner generally picks up the first answer marked on the questionnaire if more than one answer is marked.

## Community Forums and Focus Groups

The “Community Conversations” were planned for one-and-a-half hours of dialogue. It would be helpful to add about a half-hour to allow time to reflect on the achievements since the previous Needs Assessment was completed. By highlighting successes, it would help alleviate the feeling that the issues had been heard before and the problems are unchanged.

It is extremely helpful to have the same facilitator(s) conduct all the community forums and all the focus groups, if possible. This will eliminate the difficulty in analyzing information compiled by others and, thus, greatly facilitate the time and effort needed to analyze and synthesize the information.

Focus group questions were based on the information gathered from analyzing data and the input received from the community forums. This year, the focus groups were organized around topical issue areas, rather than specific community interest sectors. Although it takes more time to analyze, this approach helps to better organize the information, avoid redundancy and produce a more effective report.

The ranking and prioritizing process was new to the 2012 CHNA process. Several ranking and prioritization methods were reviewed, ranging from the simple to complex. The method used was the simplest and least time-consuming. This approach served three objectives: (1) it could be used consistently with several different groups, (2) it was suitable for groups of different sizes, and (3) it could be completed within two-hour sessions.

In summary, the value in using a range of techniques to obtain community input is assurance that we are obtaining a broad base of views from all demographic sectors in the service area. Although time-consuming, these tools help add confidence that the voices represented in the CHNA are truly those of the community.

### Considerations for Next Steps

**1. Developing an Implementation Plan** according to the requirement of the Patient Protection and Affordable Care Act of 2010 will require the hospital system to design a structure and process to address the health issues identified in the CHNA. The plan must cite the needs that the hospital system will be addressing with its direct and indirect resources, and provide a rationale for their intentions. The plan must also provide a rationale for why the hospital system is not addressing other identified needs. This will necessitate involvement of other health and human service providers, as well as educators and government agencies. The input from community stakeholder groups in the ranking process will be most helpful in completing the implementation plan.

**2. Continue working with the Public Health Departments** to coordinate, if not integrate, consumer health issues surveying in the future, as well as structuring other community input strategies so that the information is useful for both the Community Health Needs Assessments required of the hospital system and the Health Improvement Plan required of health departments. This will promote consistency in survey techniques, mitigate redundancy and reduce unnecessary expense to both organizations.

**3. Using Graphic Information Systems (GIS)** to map demographic data and data on various social determinants of health will help health and human service planners to identify and describe “hot spots” for directing community resources to the geographic areas and the specific populations where they are most needed. Data sets are being assembled on a variety of health conditions, Emergency Room utilization patterns, hospital system charitable care and bad debt expenses, as well as grocery store, farmers’ market and convenience store locations, fast food restaurants, recreational and fitness facilities, etc. Geo-mapping will be useful for implementation planning and for promoting community-wide problem-solving discussion.

## SECTION X:

# Appendices

The following pages contain supporting documentation on the findings of the Community Health Needs Assessment and provide a useful resource to the community at large.

## APPENDIX 1: COMMUNITY DATA

DATA SETS (a)	MUSKEGON COUNTY	OCEANA COUNTY	NEWAYGO COUNTY	MICHIGAN	UNITED STATES (b)
<b>Population</b>					
2010	172,188	26,570	48,460	9,883,635	308,745,538
2020 Projection (c)	174,199	26,270	49,053	10,454,700	337,084,113
<b>Gender</b>					
Male	49.7%	50.5%	50.4%	49.1%	49.2%
Female	50.3%	49.5%	49.6%	50.9%	50.8%
<b>Median Age (Years)</b>	37.5	41	39.6	38.1	37.2
<b>Age Range by Percent of Population</b>					
Less than 18 Years	25.5%	25.4%	25.9%	24.3%	24.0%
18 Years and Over	74.5%	74.6%	74.1%	75.7%	76.0%
21 Years and Over	70.3%	70.9%	70.3%	71.1%	71.6%
62 Years and Over	16.0%	19.8%	17.8%	16.2%	16.2%
65 Years and Over	13.2%	16.0%	14.6%	13.2%	13.0%
<b>18 Years and Over by Gender</b>					
Male	49.2%	50.1%	49.9%	48.4%	48.5%
Female	50.8%	49.9%	50.1%	51.6%	51.5%
<b>Age Breakdown (Years) Male &amp; Female</b>					
Under 5	6.7%	6.9%	6.4%	6.2%	6.5%
5 to 9	6.8%	6.5%	6.5%	6.6%	6.6%
10 to 14	7.3%	7.0%	7.8%	7.0%	6.7%
15 to 19	7.6%	7.7%	7.8%	7.6%	7.1%
20 to 24	6.3%	5.1%	5.4%	6.7%	7.0%
25 to 34	12.4%	10.0%	10.3%	11.9%	13.3%
35 to 44	13.0%	11.9%	13.0%	13.6%	13.3%
45 to 54	15.2%	15.3%	15.7%	15.3%	14.6%
55 to 59	6.7%	7.1%	6.7%	6.6%	6.4%
60 to 64	5.0%	6.5%	5.8%	5.2%	5.4%
65 to 74	6.8%	9.0%	8.5%	6.9%	7.0%
75 to 84	4.8%	4.8%	4.4%	4.5%	4.2%
85 & Above	1.8%	2.2%	1.8%	1.8%	1.8%
<b>Ethnicity</b>					
White	80.2%	91.9%	93.5%	79.3%	78.1%
Black or African American	14.2%	0.6%	1.2%	14.1%	13.1%
American Indian and Alaskan Native	0.7%	0.9%	0.9%	0.5%	1.2%
Hispanic or Latino	4.6%	13.0%	5.3%	4.3%	16.7%
Asian	0.6%	0.3%	0.4%	2.4%	5.0%
Native Hawaiian and Other Pacific Islander	0.0%	0.0%	0.0%	0.0%	0.2%
Some Other Race	1.5%	4.3%	2.5%	1.5%	6.2%
Two or More Races	2.7%	1.9%	1.5%	2.1%	2.3%
<b>Language Spoken at Home (Population 5 Years and Over)</b>					
English Only	95.9%	89.0%	94.5%	91.1%	80.4%
Language Other Than English	4.5%	11.0%	5.5%	8.9%	19.6%
Spanish	2.8%	9.5%	3.6%	2.9%	12.2%



## APPENDIX 1: COMMUNITY DATA

DATA SETS (a)	MUSKEGON COUNTY	OCEANA COUNTY	NEWAYGO COUNTY	MICHIGAN	UNITED STATES (b)
<b>Households</b>					
Total Households	65,778	9,974	18,952	3,843,997	116,716,292
Family Households	69.0%	70.8%	71.3%	66.4%	66.4%
With Children Under 18 Years	30.4%	27.9%	28.9%	29.8%	21.0%
Married-Couple Family	50.1%	56.6%	56.2%	49.8%	48.4%
With Children Under 18 Years	19.5%	20.1%	20.6%	20.3%	20.2%
Male Householder of Family, No Wife Present	4.7%	4.8%	5.3%	4.2%	5.0%
With Own Children Under 18 Years	2.0%	2.7%	2.9%	2.1%	2.4%
Female Householder of Family, No Husband Present	14.2%	9.4%	9.9%	12.5%	13.1%
With Own Children Under 18 Years	8.9%	5.2%	5.5%	7.4%	7.2%
Nonfamily Households	31.0%	29.2%	28.7%	33.6%	33.6%
Householder Living Alone	26.5%	24.8%	23.4%	28.2%	26.7%
65 Years and Over	9.7%	9.6%	10.2%	9.9%	9.4%
Households With One or More People Under 18 Years	34.0%	31.4%	32.6%	32.6%	33.4%
Households With One or More People 65 Years and Over	24.7%	29.6%	26.6%	24.3%	24.9%
Average Household Size	2.53	2.58	2.54	2.53	2.58
Average Family Size	3.06	3.07	2.96	3.12	3.14
<b>Residence 1 Year Ago (Population 1 Year and Over)</b>					
Same House	84.4%	89.8%	86.9%	85.5%	84.2%
Different House in the United States	15.5%	9.7%	12.9%	14.1%	11.2%
Same County	10.6%	5.1%	6.5%	9.3%	7.7%
Different County	4.9%	4.7%	6.4%	4.8%	2.4%
Different County but Same State	3.4%	2.7%	5.3%	3.6%	2.0%
Different County and Different State	1.6%	2.0%	1.1%	1.3%	0.4%
<b>Place of Birth</b>					
Born in the United States	97.5%	93.6%	97.2%	93.4%	85.8%
Born in Puerto Rico, U.S. Island Areas or Abroad to American Parent(s)	0.4%	0.3%	0.3%	0.6%	1.4%
Foreign Born	2.1%	6.2%	2.5%	5.9%	12.7%
<b>Household Relationships</b>					
Population in Households	166,681	25,738	48,067	9,716,837	300,758,215
Householder	39.5%	38.8%	39.4%	39.6%	38.8%
Spouse	19.8%	22.0%	22.1%	19.7%	18.8%
Child	31.4%	30.0%	29.3%	31.0%	29.5%
Other Relatives	5.0%	4.8%	3.9%	4.9%	2.3%
Nonrelatives - All Nonrelatives	4.3%	4.4%	5.3%	4.8%	6.1%
Nonrelative - Unmarried Partner	2.2%	2.1%	3.0%	2.1%	2.6%
<b>Marital Status – Males 15 Years and Over</b>					
Males 15 Years and Over	67,831	10,807	19,451	3,878,081	119,715,944
Never Married	32.6%	26.8%	26.1%	34.1%	30.3%
Now Married, Except Separated	50.9%	58.8%	57.6%	52.1%	58.0%
Separated	1.6%	0.7%	1.1%	1.2%	2.1%
Widowed	2.8%	3.7%	3.1%	2.7%	2.7%
Divorced	12.2%	10.0%	12.0%	10.0%	9.0%

## APPENDIX 1: COMMUNITY DATA

DATA SETS (a)	MUSKEGON COUNTY	OCEANA COUNTY	NEWAYGO COUNTY	MICHIGAN	UNITED STATES (b)
<b>Marital Status – Females 15 Years and Over</b>					
Females 15 Years and Over	69,558	10,692	19,376	4,107,028	125,439,899
Never Married	26.1%	20.7%	20.9%	28.1%	23.6%
Now Married, Except Separated	49.6%	57.1%	56.8%	48.5%	55.2%
Separated	1.2%	1.2%	1.6%	1.6%	2.7%
Widowed	9.3%	11.4%	10.3%	9.7%	9.7%
Divorced	12.2%	9.5%	10.4%	12.1%	11.6%
<b>Fertility</b>					
Number of Women 15 to 50 Years of Age Who Had a Birth in the Past 12 Months.	2,765	361	674	130,487	3,960,000
Unmarried Women (Never Married, Widowed, and Divorced)	48.9%	51.2%	48.7%	37.1%	35.6%
<b>Grandparents</b>					
Number of Grandparents Living with Own Grandchildren Under 18 Years	3,167	502	889	166,254	7,010,181
Responsible for Grandchildren	50.2%	50.2%	45.3%	42.2%	35.6%
Years Responsible for Grandchildren					
Less than One Year	8.1%	15.1%	14.8%	10.7%	8.7%
1 or 2 Years	9.9%	12.4%	15.9%	10.4%	9.8%
3 or 4 Years	12.9%	4.0%	5.3%	7.1%	6.5%
5 or More Years	19.2%	18.7%	9.3%	14.0%	14.1%
Number of Grandparents Responsible for Own Grandchildren Under 18 Years	1,589	252	403	70,213	4,271,881
Who are Female	67.5%	62.7%	57.6%	62.8%	62.0%
Who are Married	64.2%	62.7%	72.5%	67.5%	66.0%
<b>School Enrollment</b>					
Population 3 Years and Over Enrolled in School	45,266	6,214	12,267	2,756,982	79,855,000
Nursery School/Pre-School	6.1%	6.0%	5.6%	5.5%	6.4%
Kindergarten	6.4%	5.8%	5.5%	4.8%	5.1%
Grades 1-8	43.0%	46.7%	47.6%	39.0%	40.3%
Grades 9-12	23.9%	26.0%	25.8%	22.3%	21.5%
College or Graduate School	20.6%	15.4%	15.5%	28.4%	26.7%
<b>Educational Attainment (25 Years and Over)</b>					
Less than 9 <sup>th</sup> Grade	3.8%	8.5%	4.3%	3.5%	6.3%
9 <sup>th</sup> to 12 <sup>th</sup> Grade, No Diploma	8.6%	8.8%	10.6%	8.4%	8.5%
High School Graduate (Includes Equivalency)	35.9%	37.9%	40.8%	31.5%	28.5%
Some College, No Degree	25.1%	22.6%	23.3%	23.4%	21.4%
Associate's Degree	10.2%	7.9%	7.9%	8.1%	7.5%
Bachelor's Degree	11.0%	8.7%	8.5%	15.5%	17.6%
Graduate or Professional Degree	5.5%	5.6%	4.7%	9.6%	10.3%
Percent High School Graduate or Higher	87.7%	82.7%	85.2%	88.0%	85.3%
Percent Bachelor's Degree or Higher	16.5%	14.3%	13.2%	25.0%	27.9%
<b>Veteran Status</b>					
Civilian Population 18 Years and Over	129,053	20,155	36,278	7,526,082	153,889,000
Civilian Veterans	11.3%	12.7%	1280.0%	9.7%	9.3%
<b>Housing Occupancy</b>					
Total Housing Units	73,527	15,976	25,084	4,529,680	131,704,730
Occupied Housing Units	89.5%	62.4%	75.6%	84.9%	88.6%
Vacant Housing Units	10.5%	37.6%	24.4%	15.1%	11.4%
Homeless Individuals in 2011 (e)	2654	NA	NA	NA	NA

## APPENDIX 1: COMMUNITY DATA

DATA SETS (a)	MUSKEGON COUNTY	OCEANA COUNTY	NEWAYGO COUNTY	MICHIGAN	UNITED STATES (b)
<b>Housing Tenure</b>					
Owner-Occupied	75.7%	83.2%	83.0%	74.2%	65.1%
Renter-Occupied	24.3%	16.8%	17.0%	25.8%	34.9%
<b>Total Housing Units</b>					
	73,527	15,976	25,084	4,529,680	131,704,730
1-Unit Detached	76.5%	74.6%	72.9%	71.7%	61.4%
1-Unit Attached	2.5%	0.6%	0.6%	4.6%	5.8%
2 Units	3.3%	1.4%	1.1%	2.8%	3.8%
3 or 4 Units	1.9%	1.1%	0.9%	2.6%	4.4%
5 to 9 Units	2.4%	1.2%	1.5%	4.2%	4.8%
10 to 19 Units	2.9%	0.4%	1.1%	3.6%	4.5%
20 or More Units	3.8%	0.4%	0.8%	4.8%	8.5%
Mobile Home	6.6%	20.2%	21.1%	5.6%	6.6%
Boat, RV, Van, Etc.	0.0%	0.1%	0.1%	0.0%	0.1%
<b>Housing Value</b>					
Owner-Occupied Units	47,798	8,301	18,952	2,852,374	74,873,372
Median Value	\$112,800	\$115,400	\$115,800	\$144,200	\$188,400
Less than \$50,000	12.5%	13.9%	14.0%	9.7%	8.6%
\$50,000 to \$99,999	29.2%	26.5%	26.0%	19.8%	15.2%
\$100,000 to \$149,999	28.5%	24.3%	27.1%	23.0%	16.0%
\$150,000 to \$199,999	15.2%	16.3%	15.1%	19.2%	15.2%
\$200,000 to \$299,999	9.0%	11.4%	10.8%	16.2%	18.6%
\$300,000 to \$499,000	4.1%	4.9%	5.1%	8.7%	15.9%
\$500,000 to \$999,000	1.1%	2.5%	1.4%	2.6%	8.4%
\$1,000,000 or More	0.3%	0.3%	0.4%	0.7%	2.1%
<b>Gross Rent</b>					
Occupied Units Paying Rent	14,958	1,425	2,756	935,245	37,521,157
Median Rent (Monthly)	\$628	\$618	\$608	\$723	\$855
Less than \$200	3.9%	4.1%	4.2%	3.0%	2.0%
\$200 to \$299	5.7%	8.2%	6.1%	4.0%	3.3%
\$300 to \$499	18.5%	20.9%	17.4%	12.0%	9.1%
\$500 to \$749	41.7%	40.2%	43.7%	34.8%	24.5%
\$750 to \$999	22.0%	22.7%	25.1%	25.7%	24.4%
\$1,000 to \$1,499	7.2%	2.8%	2.5%	16.0%	24.2%
\$1,500 or More	0.9%	1.1%	1.1%	4.4%	12.5%
<b>Selected Housing Characteristics (Occupied Housing Units)</b>					
Occupied Housing Units	65,778	9,974	18,952	3,843,997	114,567,419
Lacking Complete Plumbing Facilities	0.5%	0.5%	0.2%	0.4%	0.6%
Lacking Complete Kitchen Facilities	0.8%	0.5%	0.5%	0.6%	1.0%
No Telephone Service Available	4.5%	5.0%	5.3%	4.5%	2.5%
<b>Vehicles Available (Occupied Housing Units)</b>					
No Vehicles Available	8.2%	4.8%	4.9%	7.2%	9.1%
1 Vehicle	33.9%	30.0%	29.2%	34.2%	33.8%
2 Vehicles	37.3%	40.2%	39.3%	39.5%	37.6%
3 or More Vehicles	20.7%	25.0%	26.6%	19.1%	19.5%

## APPENDIX 1: COMMUNITY DATA

DATA SETS (a)	MUSKEGON COUNTY	OCEANA COUNTY	NEWAYGO COUNTY	MICHIGAN	UNITED STATES (b)
<b>Employment Status (Population 16 Years and Over)</b>					
Population 16 Years and Over	134,508	21,021	37,979	7,826,317	239,711,652
Population 16 Years and Over in Labor Force	82,626	12,597	22,740	4,944,002	150,052,286
Civilian Labor Force	61.4%	59.9%	59.9%	63.0%	65.1%
Employed	51.9%	54.5%	52.0%	55.8%	58.7%
Unemployed	9.4%	5.4%	7.9%	7.3%	6.4%
Not in Labor Force	38.6%	40.1%	40.1%	36.9%	34.9%
Unemployment Rate-May, 2012(d)	8.5%	10.3%	8.2%	8.5%	8.2%
<b>Employment by Industry</b>					
Agriculture, Forestry, Fishing, Hunting and Mining	1.5%	12.8%	5.2%	1.3%	0.6%
Construction	4.6%	8.2%	7.8%	5.3%	4.8%
Manufacturing	25.0%	19.0%	20.9%	17.6%	9.7%
Wholesale Trade	2.4%	1.6%	2.2%	2.8%	5.0%
Retail Trade	12.2%	10.2%	11.5%	11.6%	12.9%
Transportation, Warehousing and Utilities	3.4%	3.6%	5.4%	4.2%	4.2%
Information	1.5%	0.5%	1.5%	1.9%	2.8%
Finance, Insurance and Real Estate	3.4%	3.0%	5.5%	5.7%	7.0%
Professional, Scientific, Management and Administrative	6.2%	4.0%	5.5%	8.9%	17.5%
Educational Services, Health Care and Social Services	22.2%	19.7%	18.6%	23.2%	18.8%
Arts, Entertainment, Recreation and Food Services	8.3%	9.0%	7.0%	9.1%	11.9%
Other Services, Except Public Administration	5.3%	5.2%	5.6%	4.7%	4.6%
Public Administration	4.0%	3.4%	3.2%	3.8%	4.8%
<b>Income</b>					
Median Household Income	\$40,670	\$39,543	\$43,218	\$48,432	\$50,046
Mean Household Income	\$51,096	\$47,906	\$54,252	\$63,692	\$68,259
Per Capita Income	\$19,719	\$18,402	\$20,870	\$25,135	\$27,334
With Social Security Income	33.6%	37.3%	34.3%	29.8%	28.4%
With Retirement Income	19.6%	23.5%	22.4%	22.0%	7.5%
With Food Stamps/SNAP Benefits in the Past 12 Months	19.6%	14.6%	16.1%	12.6%	11.9%
Median Non-Family Income	\$23,124	\$23,708	\$22,868	\$28,344	\$30,440
Mean Non-Family Income	\$31,288	\$29,243	\$32,990	\$36,157	\$43,469
<b>Incomes Below Poverty Level (Past 12 Months)</b>					
All Families	13.8%	11.6%	13.5%	10.6%	13.2%
Married Couple Families	5.5%	7.0%	6.9%	4.7%	6.2%
Families with Female Householder, No Husband Present	41.9%	35.0%	37.7%	31.8%	31.6%
With Related Children Under 18 Years	49.0%	49.8%	51.0%	41.1%	37.1%
All People	18.0%	19.2%	17.3%	14.8%	15.1%

(a) Unless otherwise noted, all information is based on the U.S. Census Bureau Fact Finder 2006-2010 American Community Survey 5-Year Estimates.

(b) United States information based on 2010 U.S. Census Briefs issued by the U.S. Department of Commerce.

(c) Projections: Counties - West MI Shoreline Regional Planning Commission; MI – Michigan State Demographer; U.S. – United States Census Bureau

(d) United States Bureau of Labor Statistics

(e) Data was obtained from the 2011 Muskegon Continuum of Care Homeless Report

In providing demographic data and other counts, the United States Census Bureau commonly employ estimates based on population samples. Estimates are subject to change as additional data is obtained and analyzed.

## APPENDIX 2: HEALTH DATA

INDICATOR	HP 2020 OBJECTIVE	MUSKEGON COUNTY	OCEANA COUNTY	NEWAYGO COUNTY	MICHIGAN	UNITED STATES
<i>*Uppercase letters in data column indicate source info which can be found in key at the end of the appendix</i>						
<b>Diabetes</b>						
Ever told Diabetes		10.2%	12.5%	12.2%	9.5%	11.30%
		<b>A</b>	<b>B</b>	<b>B</b>	<b>A</b>	<b>C</b>
<b>Cardiovascular Disease</b>						
Ever Told Heart Attack	NA	4.6%	9.3%	3.7%	4.6%	2.7%
Ever Told Angina or Coronary Heart Disease		3.2%	7.7%	3.2%	4.8%	2.8%
Ever Told Stroke		2.7%	3.2%	3.0%	2.8%	2.6%
		<b>A</b>	<b>B</b>	<b>B</b>	<b>A</b>	<b>D</b>
<b>Asthma</b>						
Lifetime Asthma Prevalence (Ever told)		13.7%	11.8%	20.1%	15.6%	13%
Current Asthma Prevalence (Still Have)		9.7%	9.4%	13.8%	10.1%	8%
		<b>A</b>	<b>B</b>	<b>B</b>	<b>A</b>	<b>E</b>
<b>Teen Pregnancy</b>						
rate p/1k live births	36.2 (ages 15-17)	65.1	75.2	61.2	51.1	38 (ages 15-19)
		<b>F</b>	<b>G</b>	<b>G</b>	<b>F</b>	<b>H</b>
<b>Low Birthweight</b>						
percentage of low weight babies (5.5 lbs) per 100 live births	8%	8.3%	7.5%	6.9%	8.4%	8.2%
		<b>I</b>	<b>G</b>	<b>G</b>	<b>J</b>	<b>K</b>
<b>Immunizations</b>						
Children 19-35 months receiving all recommended vaccines	80.0%	81.0%	72%	70%	68.0%	44.3%
		<b>L</b>	<b>B</b>	<b>B</b>	<b>L</b>	<b>M</b>
<b>Tobacco Use</b>						
Current smoking		22.2%	18.8%	23.0%	19.7%	19.30%
		<b>A</b>	<b>B</b>	<b>B</b>	<b>A</b>	<b>N</b>
<b>STD</b>						
Gonorrhea: New Cases		261	2	7	13,919	
Rate per 100K	NA	150	N = too small	14	139	100.8
		<b>O</b>	<b>P</b>	<b>Q</b>	<b>R</b>	<b>S</b>
Syphilis: Primary & Secondary: New Cases		7	0	3	225	
Rate per 100K	NA	4	N = too small	N = too small	2	4.5
		<b>T</b>	<b>U</b>	<b>V</b>	<b>W</b>	<b>S</b>
Chlamydia: New Cases	NA	1,248	57	94	50,430	
Rate per 100K		716	207	192	504	426
		<b>X</b>	<b>Y</b>	<b>Z</b>	<b>AA</b>	<b>S</b>
<b>HIV</b>						
Prevalence - HIV & AIDS combined	NA	160 cases	10 cases	16 cases	19,300	1,178,350
Rate per 100K		71	30	33	149	469
		<b>BB</b>	<b>BB</b>	<b>BB</b>	<b>BB</b>	<b>CC</b>
<b>Cancer</b>						
Annual deaths from all cancers/100K population	160.6	179.6	164.3	196.6	185.5	178.4
		<b>DD</b>	<b>G</b>	<b>G</b>	<b>EE</b>	<b>FF</b>
Incidence rate per 100K population age-adjusted	NA	416.3	397.4	460.3	489.1	473.6
		<b>GG</b>	<b>HH</b>	<b>II</b>	<b>JJ</b>	<b>P</b>
<b>Injury</b>						
Deaths from unintentional injuries per 100K		53.3	46	43.5	41.1	35.2
(Note: US figure is for "age adjusted" population)		<b>KK</b>	<b>LL</b>	<b>LL</b>	<b>MM</b>	<b>NN</b>

## APPENDIX 2: HEALTH DATA

Indicator	HP 2010 Objective	Muskegon County	Oceana County	Newaygo County	State	US
<b>Alcohol Use</b>						
Heavy Drinking		7.8%	6.2% (DHD#10)	6.2% (DHD#10)	5.4%	5.2%
Binge Drinking in the past month	24.3%	20.7%	19.4%	18.6%	16.6%	27.0%
		<b>A</b>	<b>A, B</b>	<b>A, B</b>	<b>A</b>	<b>OO</b>
# of alcohol related hospitalizations	NA	NA	63	111	11,909	NA
% of alcohol related hospitalizations	NA	4.8%	4.3%	5.1%	NA	NA
		<b>PP</b>	<b>PP</b>	<b>PP</b>	<b>QQ</b>	
<b>Substance Abuse</b>						
Adults using illicit drugs in the past 30 days	0.071	NA	NA	NA	NA	7.9%
						<b>RR</b>
<b>Obesity</b>						
Obese	31%	35.7%	38.5%	28.7%	31.7%	34%
Overweight		33.2%	40.5%	31.7%	35.1%	NA
		<b>A</b>	<b>B</b>	<b>B</b>	<b>A</b>	<b>SS</b>
<b>Emergency Department visits:</b>						
by Year and Campus	2009 (June)	2010 (June)	2011 (June)	2012 (April)		
Mercy	42,487	42,922	44,577	37,940		
Hackley	60,393	61,048	61,048	49,492		
Lakeshore (Shelby)	10,270	10,118	9,453	8,051		
Consolidated MHP	113,150	114,088	115,076	95,583		
	<b>TT</b>	<b>TT</b>	<b>TT</b>	<b>TT</b>		
<b>Preventable Hospitalizations</b>						
Hospitalization rate for ambulatory-care per 1,000 Medicare enrollees	NA	74	44	69	79	NA
		<b>UU</b>	<b>UU</b>	<b>UU</b>	<b>UU</b>	
<b>MENTAL HEALTH</b>						
<b>2012 Consumer Health Issues Survey:</b>						
Respondants Reporting Mental Health Illness From 2012 Consumer Health Issues Consumer Survey (includes online survey)						
Diagnosis	Muskegon: # of responses (N = 1646)	Muskegon: % of total responses	Oceana: # of responses (N= 438)	Oceana: % of total responses	Total # of responses (N= 2084)	Total % of responses
Schizophrenia	29	2%	13	3%	42	2%
Depression	453	28%	189	43%	642	31%
Bi-Polar Disorder	135	8%	52	12%	187	9%
Mental Retardation	16	1%	10	2%	26	1%
Substance Abuse	84	5%	29	7%	113	5%
Post-traumatic Stress Disorder	82	5%	28	6%	110	5%
Attention Deficite/Hyperactivity Disorder	154	9%	45	10%	199	10%
Anxiety	357	22%	129	29%	486	23%
Autism	23	1%	11	3%	34	2%
Other	38	2%	23	5%	61	3%
<b>MHP, WellCentive Patient Registry</b>						
(Registry covers approximately 95% of patient population in Muskegon and Oceana counties)						
DIAGNOSIS	2010	2011	2012 (May)			
<b>Schizophrenia</b>						
# of diagnosed individuals in MHP's Wellcentive Patient Registry (data includes previous year's count, unduplicated)	141	283	414			
<b>Attention Deficit Hyperactive Disorder</b>						
# of diagnosed individuals in MHP's Wellcentive Patient Registry (data includes previous year's count, unduplicated)	1929	3652	5000			
<b>Depression</b>						
# of diagnosed individuals in MHP's Wellcentive Patient Registry (data includes previous year's count, unduplicated)	15381	20289	20872			
<b>Bipolar</b>						
# of diagnosed individuals in MHP's Wellcentive Patient Registry (data includes previous year's count, unduplicated)	695	1426	2320			

## APPENDIX 2: HEALTH DATA

<b>Community Mental Health Data (Patients treated at CMH on public assistance)</b>			
*Data obtained from Community Mental Health Services of Muskegon County (2008-2011) and West Michigan Community Mental Health System for Oceana County (2009-2011)			
DIAGNOSIS	FY 2008/2009	FY 2009/2010	FY 2010/2011
<b>Schizophrenia</b>			
# of diagnosed patients at Muskegon CMH (Patients on public assistance)	491	473	463
# of diagnosed patients at Muskegon CMH (Patients on Adult Benefit Waivers)	43	20	21
# of Adults at West Michigan Community Mental Health System (Oceana)		58	53
#of Children served at West Michigan Community Mental Health System (Oceana)		0	0
<b>Depression</b>			
# of diagnosed patients at Muskegon CMH (Patients on public assistance)	724	761	716
# of diagnosed patients at Muskegon CMH (Patients on Adult Benefit Waivers)	214	153	221
# of Adults at West Michigan Community Mental Health System (Oceana)		151	127
#of Children served at West Michigan Community Mental Health System (Oceana)		12	8
<b>Bipolar Disorder</b>			
# of diagnosed patients at Muskegon CMH (Patients on public assistance)	770	703	646
# of diagnosed patients at Muskegon CMH (Patients on Adult Benefit Waivers)	207	148	166
# of Adults at West Michigan Community Mental Health System (Oceana)		89	84
#of Children served at West Michigan Community Mental Health System (Oceana)		15	15
<b>Attention Defecit and Disruptive Behavior Disorder</b>			
# of diagnosed patients at Muskegon CMH (Patients on public assistance)	766	821	818
# of diagnosed patients at Muskegon CMH (Patients on Adult Benefit Waivers)	85	68	91
# of Adults at West Michigan Community Mental Health System (Oceana)		12	15
#of Children served at West Michigan Community Mental Health System (Oceana)		36	35
<b>Co-Occur Mental Illness/Sub Abuse</b>			
# of diagnosed patients at Muskegon CMH (Patients on public assistance)	6	8	9
# of diagnosed patients at Muskegon CMH (Patients on Adult Benefit Waivers)	0	0	0

**Source Key**

- A = MDCH MiBRFS (2008-2010)
- B = MDCH MiBRFS (2006-2010)
- C = <http://diabetes.niddk.nih.gov/dm/pubs/statistics/#fast> (2010)
- D = National Health and Nutrition Examination Survey (2007 - 2008)
- E = [http://www.cdc.gov/nchs/data/series/sr\\_10/sr10\\_252.pdf](http://www.cdc.gov/nchs/data/series/sr_10/sr10_252.pdf) (2010)
- F = Muskegon County Health Profile 2012
- G = MDCH Division for Vital Records and health Statistics (2007-2009)
- H = <http://www.thenationalcampaign.org/national-data/NBR-teens-15-19.aspx> (2009)
- I = <http://www.mdch.state.mi.us/pha/osr/chi/births/bxpnc/LWPNC.asp?DxId=1&CoCode=61&CoName=Muskegon> (2010)
- J = <http://www.mdch.state.mi.us/pha/osr/chi/births/frame.html> (2010)
- K = <http://www.cdc.gov/nchs/fastats/birthwt.htm> (2009)
- L = January 2012 MI Care Improvement Registry
- M = [http://www.healthindicators.gov/Indicators/Complete-vaccination-among-children-percent\\_1008/National\\_0/Profile/Data](http://www.healthindicators.gov/Indicators/Complete-vaccination-among-children-percent_1008/National_0/Profile/Data) (2009)
- N = [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6035a5.htm?s\\_cid=%20mm6035a5.htm\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6035a5.htm?s_cid=%20mm6035a5.htm_w) (2005-2010)
- O = [http://www.mdch.state.mi.us/pha/osr/CHI/STD\\_H/ZYT2BL38.ASP](http://www.mdch.state.mi.us/pha/osr/CHI/STD_H/ZYT2BL38.ASP) (2010)
- P = [http://www.mdch.state.mi.us/pha/osr/chi/STD\\_H/TREND2/DISEASE2/Counties/PHT64.html](http://www.mdch.state.mi.us/pha/osr/chi/STD_H/TREND2/DISEASE2/Counties/PHT64.html)
- Q = [http://www.mdch.state.mi.us/pha/osr/CHI/STD\\_H/ZYT2BC62.ASP](http://www.mdch.state.mi.us/pha/osr/CHI/STD_H/ZYT2BC62.ASP) (2010)
- R = [http://www.mdch.state.mi.us/pha/osr/CHI/STD\\_H/ZYT2BL00.ASP](http://www.mdch.state.mi.us/pha/osr/CHI/STD_H/ZYT2BL00.ASP) (2010)
- S = <http://www.cdc.gov/std/stats10/trends2010.pdf> (2010)
- T = [http://www.mdch.state.mi.us/pha/osr/CHI/STD\\_H/ZYT2CL38.ASP](http://www.mdch.state.mi.us/pha/osr/CHI/STD_H/ZYT2CL38.ASP) (2010)
- U = [http://www.mdch.state.mi.us/pha/osr/CHI/STD\\_H/SD10CC2C.ASP](http://www.mdch.state.mi.us/pha/osr/CHI/STD_H/SD10CC2C.ASP) (2010)
- V = [http://www.mdch.state.mi.us/pha/osr/CHI/STD\\_H/SD10CC2C.ASP](http://www.mdch.state.mi.us/pha/osr/CHI/STD_H/SD10CC2C.ASP) (2010)
- W = [http://www.mdch.state.mi.us/pha/osr/CHI/STD\\_H/ZYT2CC00.ASP](http://www.mdch.state.mi.us/pha/osr/CHI/STD_H/ZYT2CC00.ASP) (2010)
- X = [http://www.mdch.state.mi.us/pha/osr/CHI/STD\\_H/ZYT2AC61.ASP](http://www.mdch.state.mi.us/pha/osr/CHI/STD_H/ZYT2AC61.ASP) (2010)
- Y = [http://www.mdch.state.mi.us/pha/osr/CHI/STD\\_H/ZYT2AC64.ASP](http://www.mdch.state.mi.us/pha/osr/CHI/STD_H/ZYT2AC64.ASP) (2010)
- Z = [http://www.mdch.state.mi.us/pha/osr/CHI/STD\\_H/ZYT2AC62.ASP](http://www.mdch.state.mi.us/pha/osr/CHI/STD_H/ZYT2AC62.ASP) (2010)
- AA = [http://www.mdch.state.mi.us/pha/osr/CHI/STD\\_H/ZYT2AC00.ASP](http://www.mdch.state.mi.us/pha/osr/CHI/STD_H/ZYT2AC00.ASP) (2010)
- BB = [http://www.michigan.gov/documents/mdch/Jan\\_2012\\_374579\\_7.pdf](http://www.michigan.gov/documents/mdch/Jan_2012_374579_7.pdf) (2012)
- CC = <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6021a2.htm> (2006-2008)
- DD = <http://www.mdch.state.mi.us/pha/osr/chi/Cancer/Incidence/COINC.asp?DxId=0&CoCode=61&CoName=Muskegon&CoType=1&AgeID=1> (2008)
- EE = <http://www.mdch.state.mi.us/pha/osr/Cancer/stateinc.asp?CDxID=IncTrendsTotal> (2008)
- FF = [http://www.healthindicators.gov/Indicators/Overall-cancer-deaths-per-100000\\_486/National\\_0/Profile/Data](http://www.healthindicators.gov/Indicators/Overall-cancer-deaths-per-100000_486/National_0/Profile/Data) (2007)
- GG = [http://www.healthindicators.gov/Indicators/Overall-cancer-deaths-per-100000\\_486/National\\_0/Profile/Data](http://www.healthindicators.gov/Indicators/Overall-cancer-deaths-per-100000_486/National_0/Profile/Data) (2007)
- HH = <http://www.mdch.state.mi.us/pha/osr/chi/Cancer/Incidence/COINC.asp?DxId=0&CoCode=64&CoName=Oceana&CoType=1&AgeID=1> (2007)
- II = <http://www.mdch.state.mi.us/pha/osr/chi/Cancer/Incidence/COINC.asp?DxId=0&CoCode=62&CoName=Newaygo&CoType=1&AgeID=1>(2007)

## APPENDIX 2: HEALTH DATA

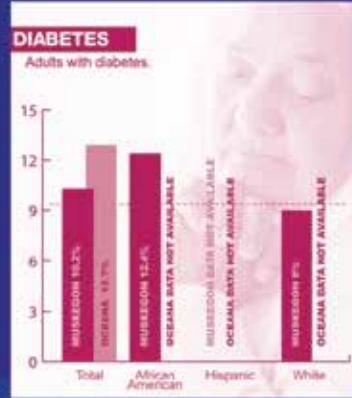
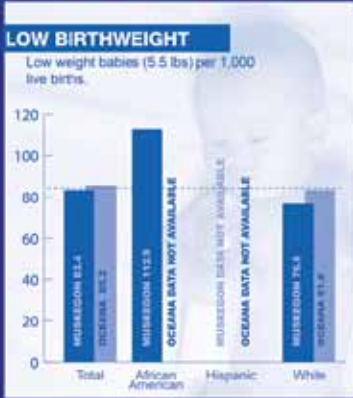
JJ = <http://www.mdch.state.mi.us/pha/osr/chi/Cancer/Incidence/coinc.asp?DxId=0&CoCode=0&CoName=Michigan&CoType=0&AgeID=1> (2007)  
KK = [mdch.state.mi.us/pha/osr/chi/CRI/CriticalInd/CriIhd.asp?TableType=Accident&CoName=Muskegon%20County%20Health%20Department&CoCode=38](http://mdch.state.mi.us/pha/osr/chi/CRI/CriticalInd/CriIhd.asp?TableType=Accident&CoName=Muskegon%20County%20Health%20Department&CoCode=38)  
LL = MDCH Michigan Resident Death Files Development Section: Oceana and Newaygo (2009)  
MM = <http://www.mdch.state.mi.us/pha/osr/deaths/Acciddxs.asp> (2009)  
NN = [http://www.healthindicators.gov/Indicators/Injury-deaths-per-100000\\_1071/National\\_0/Profile/Data](http://www.healthindicators.gov/Indicators/Injury-deaths-per-100000_1071/National_0/Profile/Data) (2007)  
OO = Healthy People 2020 (2008)  
PP = Division of Environmental Health, MDCH, July 16, 2012  
QQ = [http://www.michigan.gov/documents/mdch/MI\\_Hospitalization\\_Charges\\_10-5-2011\\_365461\\_7.pdf](http://www.michigan.gov/documents/mdch/MI_Hospitalization_Charges_10-5-2011_365461_7.pdf) (2009-2010)  
RR = [http://www.healthindicators.gov/Indicators/Adult-recent-use-of-illicit-drugs-percent\\_1434/National\\_0/Profile/Data](http://www.healthindicators.gov/Indicators/Adult-recent-use-of-illicit-drugs-percent_1434/National_0/Profile/Data) (2008)  
SS = [http://www.healthindicators.gov/Indicators/Obesity-in-adults-percent\\_1208/National\\_0/Profile/Data](http://www.healthindicators.gov/Indicators/Obesity-in-adults-percent_1208/National_0/Profile/Data) (2005-2008)  
TT = Mercy Health Partners, WellCentive Patient Registry (2009-2012)  
UU = University of Wisconsin Population Health Institute. County Health Rankings 2012. Accessible at [www.countyhealthrankings.org](http://www.countyhealthrankings.org).



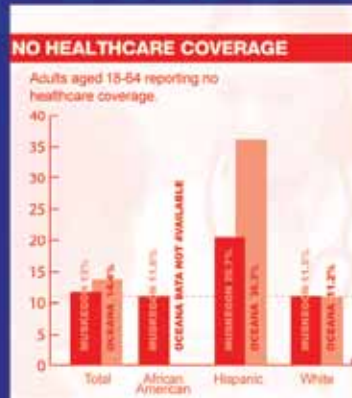
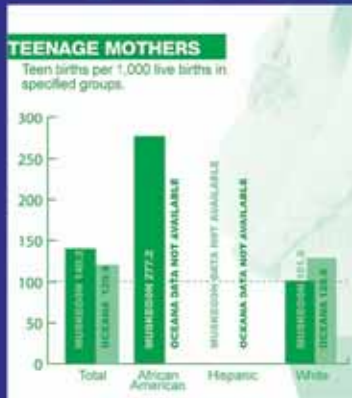
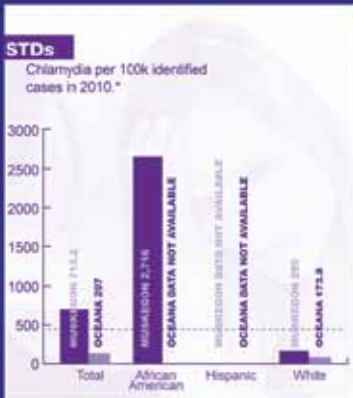
### APPENDIX 3: ENVIRONMENTAL HEALTH DATA

DATA SETS	MUSKEGON COUNTY	OCEANA COUNTY	NEWAYGO COUNTY	MICHIGAN
<b>Food/Water/Vector-borne Diseases diagnosed 2012</b>	51 Campylobacter, Cyptosporidiosis, e. coli, Giardiasis, Salmonellosis, Shigellosis, Malaria, Hepatitis A, B, and C (2011)	Food - 9 Water - 1 Vector - 6	Food - 21 Water - 5 Vector - 3	5154 Giardiasis, Cryptosporidiosis, Campylobacter, Salmonellosis, Hepatitis A and B, Histoplasmosis, Rocky Mountain Spotted Fever (2011)
*Local Data: Local Health Departments (PHMC, and District 10)				
<b>Animal Bites/Exposures (2011)</b>	339	71	74	NA
*Local Data: Local Health Departments (PHMC, and District 10)				
<b>Animal Positive-Rabies w/exposure occurring (2011)</b>	0	1 (bat)	0	65
*MDCH, 2011				
<b>Toxic Chemical Releases- TRI On-site and Off-site reported disposed of or otherwise released (in pounds), fo facilities in all industries, for all chemicals in pounds (2010)</b>	1,807,337	NA	1	76,445,890
*US EPA-TRI Explorer				
<b>Air Pollutants (Primary Standards) 2009 in Tons- Annual pollutant total</b>				
Carbon Monoxide (9ppm-8hr)	815.83	NA	NA	69,621.16
Lead (.15 ug/m3 rolling 3-month average)	0.37	NA	NA	8.64
Nitrogen Dioxide (.053 ppm- Annual Arithmetic Mean)	2,822.67	NA	NA	144,312.00
Particulate Matter PM10 (150 ug/m3- Annual Arithmetic Mean)	834.69	NA	NA	3,570.01
Particulate Matter PM2.5 (15.0 ug/m3- Annual Arithmetic Mean)	4.12	NA	NA	1,640.44
Ozone (.08ppm 1997 standard- 0.075ppm 2008 standard)	In Attainment	NA	NA	NA
Sulfur Dioxide (.03ppm- Annual Arithmetic Mean)	9,660.67	NA	NA	310,010.60
*Michigan Department of Environmental Air Quality Air Emissions Program				
<b>Lead Poison Cases/Levels in Children less than 6 years (Confirmatory) (2010)</b>				
Levels 0-9	261	NA	NA	8,223
Levels 10-19	27	NA	NA	984
Levels 20+	8	NA	NA	242
*Stellar System				
<b>Failed Septic Systems (Reported to Health Department) Failed Existing/Replacement (2011)</b>	32	26	62	NA
*Local Data: Local Health Departments (PHMC, and District 10)				
<b>Fatal Injuries per 100K</b>	45.0	43.5	41.1	35.4
Suicide	10.5	NA	13.8	11.3
Motor Vehicle Accidents (all transport fatal injuries)	10.3	21.8	NA	10.0
Other Unintended (falls, drowning, fire, poisonings)	32.0	26.0	62.0	Na
*MDCH, 2009				

# APPENDIX 4: HEALTH DISPARITIES REPORT CARD

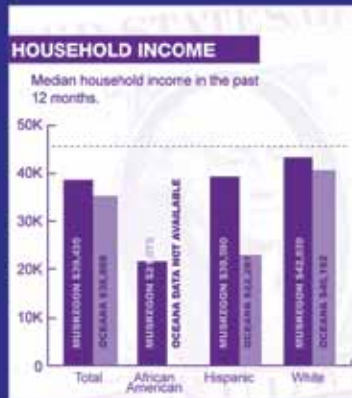
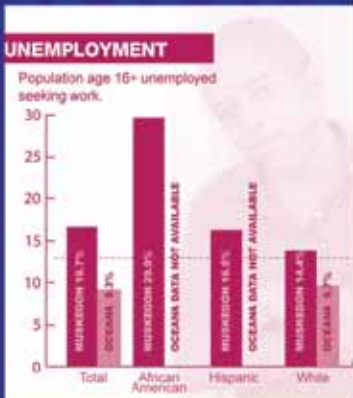


Dotted line represents MI averages

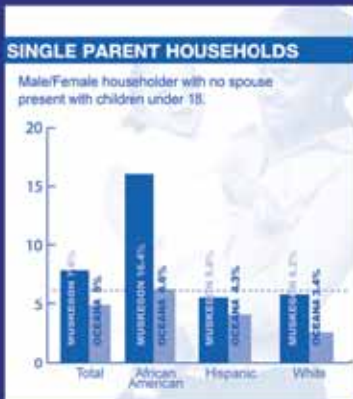


\*STD data represents mostly Public Health reports to MCOH. Reporting by private providers to MCOH is inconsistent.

Dotted line represents MI averages



Dotted line represents MI averages



- ### KEY
- Dotted lines indicate Michigan averages.
  - Empty bar graphs indicate no data available or survey sample sizes for that population or location were too small to provide a reliable statistic.
  - Percentages shown are of the total population segments indicated. Total, African American, Hispanic, White.
  - Complete data and source information available on: [www.equalhealthforall.com](http://www.equalhealthforall.com)
  - Data based on most recently published data available including 2010 Census and MI BRFSS.
  - Race represented by definitions on U.S. Census.

**APPENDIX 4: HEALTH DISPARITIES INDICATORS FOR MUSKEGON AND OCEANA COUNTIES <sup>(1)</sup>**

Indicators	Michigan Total	Muskegon County Total	African American <sup>(2)</sup>	Hispanic <sup>(2)</sup>	White <sup>(2)</sup>	Source
<b>Muskegon</b>						
Population	9,888,640	172,188	24,967	8,265	133,101	2010 Census
<b>Health Indicators</b>						
Premature Death: years of potential life lost before age 75 per 100,000 population (age adjusted)	7,273	7,356	NA by race/ethnicity	NA by race/ethnicity	NA by race/ethnicity	2012 UW County Health Rankings
Infant Mortality: ratio of infant deaths per 1,000 live births in specified group	7.5	6.6	N= too small	N= too small	5.9	MDCH, '07-'09
Low Birthweight <sup>(3)</sup> : ratio of low weight babies (5.5 lbs) per 1000 live births	84.4 (08-10)	83.4 (08-10)	112.9 (07-09)	Data NA	76.6 (07-09)	MDCH
Poor Mental Health Days: % poor mental health days on at least 14 days in the past month	10.70%	12.60%	19%	N= too small	13.40%	MIBRFS, '08-'10
Poor Physical Health Days: % reporting poor physical health on at least 14 days in the past month	10.8%	12.3%	15.7%	N= too small	12.7%	MIBRFS, '08-'10
Diabetes: proportion of adults with diabetes	9.5%	10.20%	12.40%	N= too small	9.00%	MIBRFS, '08-'10
STD <sup>(3,4,5)</sup> : # of reported cases of Chlamydia in 2010	Data NA	1,228	729	Data NA	406	MDCH, 2012
STD <sup>(3,4,5)</sup> : rate p/100K Identified cases of Chlamydia in 2010	457 <sup>(6)</sup>	713.2	2716.0	Data NA	285	MDCH, 2012
Preventable Hospital Stays: rate for ambulatory-care conditions p/1000 Medicare enrollees	74	44	NA by race/ethnicity	NA by race/ethnicity	NA by race/ethnicity	2012 UW County Health Rankings
Teenage Mothers <sup>(7)</sup> : Teen birth ratio per 1000 live births in specified groups	100.9	140.2	277.2	121.2	101.9	MDCH, '07-'09
Adults and Children Served at CMH: number of patients served at CMH	NA	4,692	1,232	114	2,981	CMH, 2010
<b>Social Determinates of Health</b>						
No Health Care Coverage: Percent report no healthcare coverage among those aged 18-64	11.7%	12%	11.6%	20.7	11.5%	ACS <sup>(8)</sup> , 2008-2010
Unemployment: % of population age 16+ unemployment seeking work	13%	16.7%	29.9%	16.5%	14.4%	ACS, 2008-2010
Household Income: Median Household Income in the past 12 months	\$46,861	\$39,311	\$20,832	\$37,102	\$43,249	ACS, 2008-2010
Poverty <sup>(7)</sup> : % of households whose income in the past 12 Months below poverty level	15.7%	19.7%	45.5%	26.9%	14.1%	ACS, 2008-2010
Single Parent Households <sup>(7)</sup> : % of male/female householder with no spouse present and children under 18	6.5%	7.6%	16.4%	5.8%	6.2%	ACS, 2008-2010
Michigan High School Graduation Rate <sup>(8)</sup> : High School Graduates for all public schools in the state of Michigan	74%	71% <sup>(9)</sup>	57%	63%	80%	See Footnote #8
Household Receipt of Food Stamps: with cash public assistance or food stamps/SNAP	550,975	14,356	4141	509	8955	ACS, 2008-2010

Indicators	Michigan Total	County Total	African American <sup>(2)</sup>	Hispanic <sup>(2)</sup>	White <sup>(2)</sup>	Source
<b>Oceana</b>						
Population	9,888,640	26,570	106	3,629	22,327	2010 Census
<b>Health Indicators</b>						
Premature Death: years of potential life lost before age 75 per 100,000 population (age adjusted)	7,273	8182	NA by race/ethnicity	NA by race/ethnicity	NA by race/ethnicity	2012 UW County Health Rankings
Infant Mortality: ratio of infant deaths per 1,00 live births in specified group	7.5	5.2	NA by race	NA by race	4.9	MDCH, 2009
Low Birthweight: ratio of low weight babies (5.5 lbs) per 1000 live births	84.4 (2010)	85.2 (2010)	N= too small	N= too small	81.8 (2009)	MDCH
Poor Mental Health Days: % poor mental health days on at least 14 days in the past month	10.70%	12.30%	NA by race/ethnicity	NA by race/ethnicity	NA by race/ethnicity	MIBRFS, 2010
Poor Physical Health Days: % reporting poor physical health on at least 14 days in the past month	10.8%	14.3%	NA by race/ethnicity	NA by race/ethnicity	NA by race/ethnicity	MIBRFS, 2010
Diabetes: proportion of adults with diabetes	9.5%	12.70%	NA by race/ethnicity	NA by race/ethnicity	NA by race/ethnicity	MIBRFS, 2010
STD <sup>(3,5)</sup> : # of reported cases of Chlamydia in 2010	NA	55	N = too small	N = too small	45	MDCH, 2012
STD <sup>(3,5)</sup> : rate p/100K Identified cases of Chlamydia in 2010	457 <sup>(6)</sup>	207	N = too small	N = too small	173.8	MDCH, 2012
Preventable Hospital Stays: rate for ambulatory-care conditions p/1000 Medicare enrollees	74	69	NA by race	NA by race	NA by race	2012 UW County Health Rankings
Teenage Mothers: Teen birth ratio per 1000 live births in specified groups	100.9	120.9	N= too small	N= too small	128.9	MDCH, 2010
Adults and Children Served at CMH: number of patients served at CMH	NA	2300	85	91	2006	CMH, 2010
<b>Social Determinates of Health</b>						
No Health Care Coverage: Percent report no healthcare coverage among those aged 18-64	11.7%	14.4%	N= too small	36.3%	11.2%	ACS <sup>(8)</sup> , 2008-2010
Unemployment: % of population age 16+ unemployment seeking work	13%	9.3%	N= too small	N= too small	9.7%	ACS, 2008-2010
Household Income: Median Household Income in the past 12 months	\$46,861	\$39,043	N= too small	\$27,031	\$39,346	ACS, 2008-2010
Poverty <sup>(7)</sup> : % of households whose income in the past 12 Months below poverty level	15.7%	19%	N= too small	50.5%	14.2%	ACS, 2008-2010
Single Parent Households <sup>(7)</sup> : % of male/female householder with no spouse present and children under 18	6.5% (08-10)	5% (08-10)	6.6% (07-09)	4.3% (07-09)	3.4% (08-10)	ACS, 2008-2010
Michigan High School Graduation Rate <sup>(8)</sup> : High School Graduate for all public schools in the state of Michigan	74%	85% <sup>(9)</sup>	57%	63%	80%	See footnote #8
Household Receipt of Food Stamps: with cash public assistance or food stamps/SNAP	550,975	1409	N= too small	N = too small	1,264	ACS, 2008-2010

<sup>(1)</sup> Data Based on most recently published data available including 2010 Census (ACS, 3 year moving average) and BRFS (including MDCH Reports using 3 year moving averages) unless otherwise noted)

<sup>(2)</sup> Muskegon and Ocean race represented by definitions on U.S. Census

<sup>(3)</sup> Data not available by ethnicity. Hispanics are included as "other" classification

<sup>(4)</sup> Michigan Disease Surveillance System, MDCH, Data retrieved 5/25/12

<sup>(5)</sup> STD reporting more consistent in public health sector. Data may not accurately represent disparity as private providers may not be reporting to MDCH

<sup>(6)</sup> ACS means American Community Survey

<sup>(7)</sup> Percent of Population Segment

<sup>(8)</sup> Center for Educational Performance and Information, Fall '05 - Fall '11. Local rates not available by race/ethnicity

<sup>(9)</sup> 2012 UW County Health Rankings

## APPENDIX 5

### 2012 UNIVERSITY OF WISCONSIN COUNTY HEALTH RANKINGS



**County Health  
Rankings & Roadmaps**  
A Healthier Nation, County by County

	Muskegon County	Error Margin	National Benchmark*	Michigan	Rank (of 82)
<b>Health Outcomes</b>					<b>63</b>
<b>Mortality</b>					<b>45</b>
Premature death	7,356	6,921-7,790	5,466	7,273	
<b>Morbidity</b>					<b>74</b>
Poor or fair health	16%	14-19%	10%	14%	
Poor physical health days	4.1	3.5-4.6	2.6	3.5	
Poor mental health days	4.6	3.8-5.4	2.3	3.7	
Low birthweight	8.5%	8.1-9.0%	6.0%	8.3%	
<b>Health Factors</b>					<b>73</b>
<b>Health Behaviors</b>					<b>82</b>
Adult smoking	26%	23-30%	14%	21%	
Adult obesity	35%	31-39%	25%	32%	
Physical inactivity	26%	23-30%	21%	25%	
Excessive drinking	22%	18-25%	8%	18%	
Motor vehicle crash death rate	14	12-16	12	13	
Sexually transmitted infections	769		84	457	
Teen birth rate	52	50-54	22	34	
<b>Clinical Care</b>					<b>13</b>
Uninsured	14%	13-15%	11%	14%	
Primary care physicians	1,188:1		631:1	874:1	
Preventable hospital stays	44	40-47	49	74	
Diabetic screening	90%	86-94%	89%	84%	
Mammography screening	75%	70-81%	74%	68%	
<b>Social &amp; Economic Factors</b>					<b>71</b>
High school graduation	71%			76%	
Some college	55%	53-58%	68%	63%	
Unemployment	13.4%		5.4%	12.5%	
Children in poverty	29%	24-34%	13%	23%	
Inadequate social support	23%	20-27%	14%	20%	
Children in single-parent households	35%	32-38%	20%	32%	
Violent crime rate	459		73	518	
<b>Physical Environment</b>					<b>82</b>
Air pollution-particulate matter days	4		0	5	
Air pollution-ozone days	12		0	3	
Access to recreational facilities	9		16	9	
Limited access to healthy foods	18%		0%	6%	
Fast food restaurants	50%		25%	48%	

\* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

**2012**

University of Wisconsin Population Health Institute. *County Health Rankings* 2011. Accessible at [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

## APPENDIX 5

# 2012 UNIVERSITY OF WISCONSIN COUNTY HEALTH RANKINGS



**County Health  
Rankings & Roadmaps**  
A Healthier Nation, County by County

	Oceana County	Error Margin	National Benchmark*	Michigan	Rank (of 82)
<b>Health Outcomes</b>					<b>44</b>
<b>Mortality</b>					<b>32</b>
Premature death	6,770	5,725-7,814	5,466	7,273	
<b>Morbidity</b>					<b>58</b>
Poor or fair health	18%	13-24%	10%	14%	
Poor physical health days	5.2	3.6-6.7	2.6	3.5	
Poor mental health days	3.8	2.4-5.2	2.3	3.7	
Low birthweight	6.3%	5.3-7.2%	6.0%	8.3%	
<b>Health Factors</b>					<b>61</b>
<b>Health Behaviors</b>					<b>63</b>
Adult smoking	20%	13-29%	14%	21%	
Adult obesity	35%	29-42%	25%	32%	
Physical inactivity	26%	20-33%	21%	25%	
Excessive drinking	19%	11-29%	8%	18%	
Motor vehicle crash death rate	24	17-31	12	13	
Sexually transmitted infections	149		84	457	
Teen birth rate	52	47-57	22	34	
<b>Clinical Care</b>					<b>62</b>
Uninsured	18%	17-20%	11%	14%	
Primary care physicians	1,984:1		631:1	874:1	
Preventable hospital stays	69	60-78	49	74	
Diabetic screening	87%	77-96%	89%	84%	
Mammography screening	72%	61-81%	74%	68%	
<b>Social &amp; Economic Factors</b>					<b>61</b>
High school graduation	85%			76%	
Some college	46%	42-50%	68%	63%	
Unemployment	15.0%		5.4%	12.5%	
Children in poverty	33%	25-41%	13%	23%	
Inadequate social support	16%	11-23%	14%	20%	
Children in single-parent households	28%	24-33%	20%	32%	
Violent crime rate	183		73	518	
<b>Physical Environment</b>					<b>20</b>
Air pollution-particulate matter days	1		0	5	
Air pollution-ozone days	4		0	3	
Access to recreational facilities	7		16	9	
Limited access to healthy foods	1%		0%	6%	
Fast food restaurants	22%		25%	48%	

\* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

**2012**

University of Wisconsin Population Health Institute. *County Health Rankings* 2011. Accessible at [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

## APPENDIX 5

# 2012 UNIVERSITY OF WISCONSIN COUNTY HEALTH RANKINGS



**County Health  
Rankings & Roadmaps**  
A Healthier Nation, County by County

	Newaygo County	Error Margin	National Benchmark*	Michigan	Rank (of 82)
<b>Health Outcomes</b>					<b>59</b>
<b>Mortality</b>					<b>60</b>
Premature death	8,182	7,265-9,100	5,466	7,273	
<b>Morbidity</b>					<b>49</b>
Poor or fair health	15%	11-20%	10%	14%	
Poor physical health days	4.0	3.0-5.1	2.6	3.5	
Poor mental health days	4.6	3.5-5.8	2.3	3.7	
Low birthweight	6.6%	5.8-7.3%	6.0%	8.3%	
<b>Health Factors</b>					<b>72</b>
<b>Health Behaviors</b>					<b>72</b>
Adult smoking	26%	20-33%	14%	21%	
Adult obesity	35%	29-41%	25%	32%	
Physical inactivity	26%	21-32%	21%	25%	
Excessive drinking	19%	14-26%	8%	18%	
Motor vehicle crash death rate	23	18-28	12	13	
Sexually transmitted infections	188		84	457	
Teen birth rate	45	41-48	22	34	
<b>Clinical Care</b>					<b>57</b>
Uninsured	16%	14-17%	11%	14%	
Primary care physicians	1,291:1		631:1	874:1	
Preventable hospital stays	79	70-88	49	74	
Diabetic screening	89%	81-97%	89%	84%	
Mammography screening	63%	54-72%	74%	68%	
<b>Social &amp; Economic Factors</b>					<b>57</b>
High school graduation	77%			76%	
Some college	48%	44-51%	68%	63%	
Unemployment	12.7%		5.4%	12.5%	
Children in poverty	29%	23-34%	13%	23%	
Inadequate social support	22%	17-29%	14%	20%	
Children in single-parent households	26%	22-30%	20%	32%	
Violent crime rate	262		73	518	
<b>Physical Environment</b>					<b>79</b>
Air pollution-particulate matter days	2		0	5	
Air pollution-ozone days	3		0	3	
Access to recreational facilities	4		16	9	
Limited access to healthy foods	26%		0%	6%	
Fast food restaurants	48%		25%	48%	

\* 90th percentile, i.e., only 10% are better

Note: Blank values reflect unreliable or missing data

**2012**

University of Wisconsin Population Health Institute. *County Health Rankings* 2011. Accessible at [www.countyhealthrankings.org](http://www.countyhealthrankings.org).

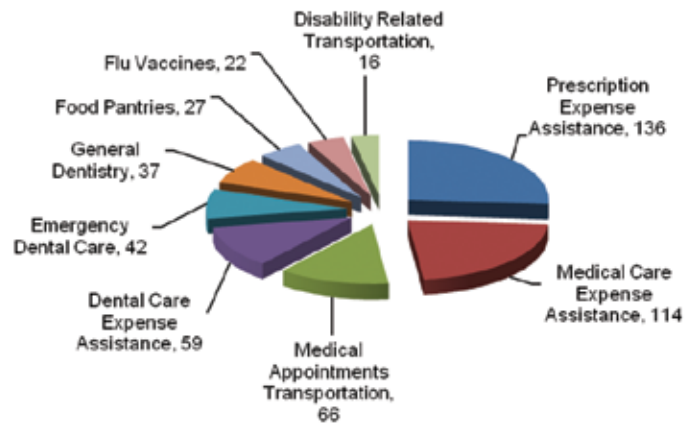
# APPENDIX 6 CALL 2-1-1 TOP HEALTH CARE AND RELATED SERVICES REQUESTS & UNMET NEEDS

## Muskegon County October 2009 - March 2012

### Top Health Care Service Requests

Food Lines (mobile food distributions)	4,477
Food Pantries/Emergency Food Clearinghouses	4,448
Prescription Expense Assistance	1,394
Emergency Dental Care	721
Medical Appointments Transportation	660
Prescription Drug Patient Assistance Programs	603
General Dentistry	547
Community Clinics	488
H1N1 Information	436
Glasses/Contact Lenses	427
Medical Care Expense Assistance	387
Medicare Information/Counseling	363
Food Stamps	328
Physician Referrals	285
Flu Vaccines	267
General Counseling Services	249
Disability Related Transportation	215
Occasional Medical Equipment/Supplies	213
Central Intake/Assessment for Substance Abuse	151
Mental Health Hotlines	148

### Top Health Care Unmet Requests



For questions related to 2-1-1 data please contact Stacey Gomez at 231-733-8605.

## APPENDIX 6

### CALL 2-1-1 TOP HEALTH CARE AND RELATED SERVICES REQUESTS & UNMET NEEDS

## Oceana County

### October 2009 - March 2012

#### Top Health Care Service Requests

Food Pantries	205
Food Lines (mobile food distributions)	50
General Dentistry	39
Prescription Drug Patient Assistance Programs	27
Prescription Expense Assistance	25
Food Stamps	21
Medicare Information/Counseling	20
Community Clinics	19
Medical Appointments Transportation	19
Glasses/Contact Lenses	17
Medical Care Expense Assistance	15
Emergency Dental Care	14
Prescription Drug Discount Cards	14

#### Top Health Care Unmet Requests



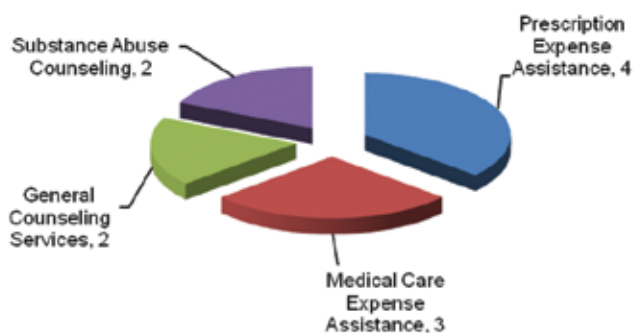
## Newaygo County

### October 2011 - March 2012

#### Top Health Care Service Requests

Food Pantries	18
Prescription Drug Expense Assistance	9
Prescription Drug Patient Assistance Programs	8
General Dentistry	5
Community Clinics	4
Medical Care Expense Assistance	4
Emergency Dental Care	3
Glasses/Contact Lenses	3
Hearing Aids	3
Disability Related Transportation	2

#### Top Health Care Unmet Requests



For questions related to 2-1-1 data please contact Stacey Gomez at 231-733-8605.



**APPENDIX 7**  
**2012 MICHIGAN PROFILE FOR HEALTHY YOUTH DATA**  
**MUSKEGON COUNTY**

Survey Questions		7th Grade				High School				
Category	Behavior	Musk. Co.	Male	Female	Mi YRBS	Musk. Co.	9th	11th	Male	Female
Perceived Safety	Felt safe/very safe at school	95.2%	95.3%	95.5%	na	96.0%	95.3%	96.8%	96.6%	97.3%
	Felt safe/very safe in neighborhood	95.2%	94.0%	96.5%	na	95.5%	95.6%	95.2%	96.7%	96.2%
Parent and Peer Interactions	Can ask mom/dad for help with personal problems	86.4%	87.5%	85.2%	na	76.0%	76.4%	75.6%	79.0%	73.7%
	Have best friend who made drug free commitment in yr.	76.1%	73.1%	79.4%	na	72.0%	73.6%	70.1%	69.0%	74.6%
School Commitment	Tried to do their best work at school	95.1%	93.2%	96.1%	na	91.9%	91.9%	91.9%	91.7%	93.7%
	Think learning in school is important in later life	89.7%	89.9%	89.3%	na	78.1%	81.5%	74.2%	77.9%	78.9%
Unintentional Injury	Bicycle helmet – never/rarely worn	81.0%	84.3%	77.7%	88.1%	93.7%	92.6%	95.1%	93.8%	93.8%
	Seat belt – never/rarely worn	7.2%	8.4%	5.8%	7.8%	9.3%	8.3%	10.3%	9.9%	8.6%
	Passenger with DUI driver (last 30 days)	23.3%	21.9%	25.0%	27.5%	21.4%	19.4%	23.8%	20.6%	22.4%
	Driving DUI (last 30 days)	na	na	na	8.4%	4.9%	2.7%	7.6%	4.7%	5.1%
Violence	Carried a weapon (last 30 days)	39.5%	56.4%	21.1%	16.6%	16.8%	16.6%	17.1%	25.1%	9.5%
	Carried a gun (last 30 days)	na	na	na	5.8%	7.5%	6.2%	9.1%	12.6%	3.1%
	Bullied on school property (last 12 mos)	34.5%	33.2%	36.2%	na	20.6%	24.6%	15.8%	18.5%	22.6%
	No school – felt unsafe (last 30 days)	9.8%	9.2%	10.2%	7.4%	5.5%	6.6%	4.2%	4.4%	6.7%
	Fighting – HS - 1 or more times (last 12 mos) / MS - ever	49.8%	64.6%	33.5%	31.6%	23.4%	25.4%	20.9%	27.7%	19.5%
	Injured in fight, treated (last 12 mos)	3.6%	4.2%	2.9%	4.5%	2.4%	2.3%	2.4%	14.7%	8.6%
	Relationship violence (last 12 mos)	na	na	na	15.2%	6.6%	5.3%	8.3%	6.9%	6.4%
Forced to have sex – ever	na	na	na	10.4%	5.7%	4.9%	6.6%	2.6%	8.5%	
Depression and Suicide	Sad or hopeless for 2 weeks (last 12 mos)	22.5%	17.5%	27.8%	27.4%	30.1%	29.7%	30.5%	20.0%	38.5%
	Considered suicide attempt (last 12 mos)	18.9%	13.4%	24.5%	16.0%	17.3%	17.7%	16.8%	13.6%	20.5%
	Planned suicide (last 12 mos)	12.4%	10.0%	15.0%	14.6%	12.8%	12.8%	12.8%	9.7%	15.5%
	Attempted suicide (last 12 mos)	6.2%	4.4%	8.0%	9.3%	8.4%	9.1%	7.6%	6.9%	9.6%
	Injured in attempt, treated (last 12 mos)	3.2%	2.6%	3.8%	3.0%	3.3%	3.8%	2.8%	3.1%	3.5%
Alcohol	Ever drank alcohol	11.1%	11.8%	10.3%	68.8%	44.0%	32.2%	58.3%	40.1%	47.7%
	First drink before age 13 (HS) / 11 (MS)	7.3%	8.2%	6.4%	18.8%	12.5%	13.9%	10.9%	14.4%	10.9%
	At least one drink (last 30 days)	4.2%	4.3%	4.2%	37.0%	21.6%	15.7%	28.8%	18.3%	24.8%
	Binge drinking (last 30 days)	2.0%	2.3%	1.8%	23.2%	11.9%	7.7%	16.9%	9.9%	13.7%
	Purchased alcohol at store (last 30 days)	0.0%	0.0%	0.0%	6.0%	2.4%	1.8%	2.7%	3.6%	1.5%
Tobacco	Ever tried a cigarette	6.0%	6.0%	6.0%	46.0%	22.9%	18.1%	28.6%	20.8%	24.6%
	Smoked cigarette before age 13 (HS) / 11 (MS)	3.2%	3.2%	3.2%	11.1%	8.9%	9.3%	8.5%	9.1%	8.7%
	Smoked cigarettes (last 30 days)	2.3%	1.9%	2.9%	18.8%	11.1%	8.7%	13.9%	9.3%	12.6%
	Smoked cigarettes 20+ days (last 30 days)	0.4%	0.3%	0.5%	7.8%	4.1%	2.2%	6.4%	3.7%	4.5%
	>age 18 purchase (last 30 days)	20.0%	29.4%	13.0%	25.0%	25.5%	17.5%	31.3%	24.3%	26.2%
	Current smoker, tried to quit (last 12 mos)	na	na	na	53.6%	52.9%	49.3%	55.7%	48.7%	50.6%
	Used chewing tobacco, snuff or dip (last 30 days)	0.1%	0.2%	0.0%	10.6%	3.3%	2.0%	4.8%	6.2%	0.7%
	Smoked cigars, cigarillos or little cigars (last 30 days)	0.9%	0.9%	1.0%	14.7%	5.3%	4.0%	6.9%	5.8%	5.0%
Used any tobacco (last 30 days)	2.6%	2.1%	3.2%	25.2%	13.4%	10.0%	17.4%	13.4%	13.4%	
Other Drugs	Ever used Marijuana	3.8%	4.2%	3.3%	36.5%	30.4%	21.6%	41.0%	29.4%	31.2%
	Tried Marijuana before age 13 (HS) / 11 (MS)	1.6%	1.6%	1.4%	7.9%	5.9%	6.5%	5.1%	7.5%	4.5%
	Used Marijuana in last 30 days	2.8%	3.6%	1.8%	20.7%	17.2%	12.2%	23.1%	16.8%	17.5%
	Ever used Cocaine	5.1%	6.0%	4.2%	2.9%	0.8%	0.8%	0.9%	0.9%	0.8%
	Ever used Inhalants – glue, aerosol, etc.	5.3%	4.9%	5.8%	N/A	2.8%	3.6%	1.9%	1.7%	3.9%
	Ever illegally used painkillers	11.1%	11.9%	10.4%	N/A	8.3%	8.3%	8.2%	6.7%	9.8%
	Ever illegally used prescription drug	7.0%	8.0%	6.0%	N/A	5.2%	4.3%	6.4%	4.0%	6.3%
Illegal drug exchange (last 12 mos)	4.5%	4.5%	5.0%	29.5%	18.9%	18.0%	19.9%	21.7%	16.5%	
Sexual Behavior	Ever had sexual intercourse	5.5%	7.7%	3.2%	45.6%	35.0%	21.8%	49.7%	36.2%	34.2%
	Sexual intercourse before age 13 (HS) / 11 (MS)	1.8%	3.0%	0.6%	5.1%	3.7%	5.0%	2.3%	5.9%	2.1%
	Sexual intercourse with 4+ partners (HS)/3+ partners (MS)	1.6%	2.7%	0.6%	13.6%	8.3%	4.4%	12.7%	10.3%	6.8%
	Sexual intercourse in last 3 months	na	na	na	34.1%	25.5%	14.5%	37.8%	26.3%	25.1%
	Had sex during last 3 mths: used alc/drugs before sex*	13.3%	9.3%	23.5%	24.7%	20.4%	25.8%	18.1%	26.3%	15.2%
	Had sex during last 3 mths: used condom*	55.4%	53.8%	58.8%	61.4%	59.6%	61.3%	58.8%	65.7%	54.4%
	Had sex during last 3 mths: used birth control pills	na	na	na	21.4%	23.7%	12.9%	28.2%	20.4%	26.1%
Ever had HIV/AIDS instruction	48.8%	48.5%	48.9%	88.9%	86.9%	84.1%	90.0%	87.8%	86.2%	

**APPENDIX 7**  
**2012 MICHIGAN PROFILE FOR HEALTHY YOUTH DATA**  
**MUSKEGON COUNTY**

Survey Questions		7th Grade			High School					
Category	Behavior	Musk. Co.	Male	Female	Mi YRBS	Musk. Co.	9th	11th	Male	Female
<b>Perception Toward Risk Behaviors</b>	Easy/very easy to get cigarettes	27.7%	28.8%	26.6%	na	60.3%	50.9%	71.5%	61.8%	58.7%
	Parent disapproval of smoking	97.7%	97.7%	97.4%	na	93.5%	95.6%	91.0%	93.4%	93.5%
	Easy/very easy to get alcohol	32.0%	32.5%	31.4%	na	65.0%	56.5%	74.9%	65.0%	65.0%
	Parent disapproval of drinking alcohol	96.3%	96.4%	96.2%	na	88.0%	91.4%	83.9%	87.5%	88.3%
	Easy/very easy to get marijuana	13.2%	15.7%	10.7%	na	53.9%	43.1%	66.7%	55.6%	52.3%
	Parent disapproval of marijuana	98.1%	98.0%	98.2%	na	92.2%	93.8%	90.2%	92.4%	91.9%
	Moderate/great risk to regular cigarette smoking	75.8%	74.3%	77.7%	na	84.6%	82.8%	86.7%	82.5%	86.6%
	Moderate/great risk to marijuana use	68.6%	66.4%	71.1%	na	63.9%	67.1%	60.0%	58.4%	69.1%
	Moderate/great risk to methamphetamine use	49.7%	52.8%	46.0%	na	64.2%	60.1%	68.9%	65.0%	63.3%
<b>Physical Health and Nutrition</b>	Students physically active at least 60 minutes per day on five or more of the past 7 days	53.1%	60.6%	44.8%	46.8%	52.1%	56.0%	47.4%	62.7%	42.7%
	Students who watched 3 or more hours of tv per day on an average school day	38.3%	44.1%	31.9%	29.6%	31.8%	34.9%	28.3%	33.4%	30.7%
	Students who are obese	17.0%	18.1%	15.7%	11.9%	16.2%	16.3%	16.1%	17.7%	14.8%
	Students who are overweight	17.7%	18.0%	17.4%	14.2%	17.6%	17.4%	17.8%	17.2%	17.9%
	Students who ate 5 or more servings of fruits or vegetables during the past 7 days	39.0%	39.3%	38.5%	19.6%	30.6%	32.5%	28.4%	31.9%	29.4%
	Students who drank pop or soda one or more times per day in the past 7 days	33.0%	36.6%	29.4%	27.6%	35.8%	37.2%	34.2%	40.9%	31.3%
	Students who ate breakfast everyday in the past 7 days	47.3%	52.6%	41.5%	na	35.8%	36.7%	34.7%	41.6%	30.7%

Charts are highlights of data; for complete survey results, visit [cccmuskegoncounty.org](http://cccmuskegoncounty.org) or <https://mdoe.state.mi.us/MIPHYADMIN/reports/CountyReport.aspx>

\* Based on raw data from MIPHY survey

**APPENDIX 7**  
**2012 MICHIGAN PROFILE FOR HEALTHY YOUTH DATA**  
**OCEANA COUNTY**

Survey Questions		7th Grade			High School					
Category	Behavior	Oceana Co.	Male	Female	Mi YRBS	Oceana Co.	9th	11th	Male	Female
Perceived Safety	Felt safe/very safe at school	72.3%	74.5%	69.8%	na	88.0%	86.4%	90.4%	84.5%	91.9%
	Felt safe/very safe in neighborhood	na	na	na	na	na	na	na	na	na
Parent and Peer Interactions	Can ask mom/dad for help with personal problems	76.8%	72.5%	81.8%	na	79.7%	79.1%	80.6%	77.3%	81.9%
	Have best friend who made drug free commitment in yr.	68.8%	62.0%	76.7%	na	76.3%	78.7%	72.5%	71.4%	82.1%
School Commitment	Tried to do their best work at school	na	na	na	na	na	na	na	na	na
	Think learning in school is important in later life	na	na	na	na	na	na	na	na	na
Unintentional Injury	Bicycle helmet – never/rarely worn	89.0%	88.6%	89.5%	88.1%	94.3%	95.1%	92.7%	93.0%	96.0%
	Seat belt – never/rarely worn	13.7%	21.6%	4.5%	7.8%	12.8%	12.1%	14.1%	15.2%	10.5%
	Passenger with DUI driver (last 30 days)	30.2%	29.8%	30.6%	27.5%	15.6%	15.6%	15.6%	18.5%	12.4%
	Driving DUI (last 30 days)	na	na	na	8.4%	6.0%	2.5%	11.7%	7.4%	4.5%
Violence	Carried a weapon (last 30 days)	60.4%	68.4%	51.0%	16.6%	21.4%	20.8%	22.4%	33.0%	6.8%
	Carried a gun (last 30 days)	na	na	na	5.8%	10.2%	11.7%	7.9%	15.1%	4.5%
	Bullied on school property (last 12 mos)	46.2%	42.9%	50.0%	na	25.6%	32.0%	15.6%	28.7%	21.3%
	No school – felt unsafe (last 30 days)	10.3%	10.3%	10.2%	7.4%	4.1%	5.0%	2.6%	4.7%	3.4%
	Fighting – HS - 1 or more times (last 12 mos) / MS - ever	45.3%	56.1%	32.7%	31.6%	18.3%	18.2%	18.4%	24.5%	11.2%
	Injured in fight, treated (last 12 mos)	2.8%	3.5%	2.0%	4.5%	8.8%	8.4%	9.3%	12.4%	4.6%
	Relationship violence (last 12 mos)	na	na	na	15.2%	5.6%	2.5%	10.4%	10.3%	0.0%
Depression and Suicide	Forced to have sex – ever	na	na	na	10.4%	4.0%	2.5%	6.5%	0.9%	7.9%
	Sad or hopeless for 2 weeks (last 12 mos)	25.6%	20.9%	31.4%	27.4%	30.4%	27.6%	34.3%	24.7%	37.7%
	Considered suicide attempt (last 12 mos)	23.1%	16.3%	31.4%	16.0%	11.9%	11.2%	12.9%	10.2%	14.1%
	Planned suicide (last 12 mos)	16.0%	21.4%	9.1%	14.6%	14.3%	11.2%	18.6%	12.2%	17.1%
	Attempted suicide (last 12 mos)	5.3%	7.0%	3.0%	9.3%	5.9%	4.5%	7.7%	4.9%	7.1%
Alcohol	Injured in attempt, treated (last 12 mos)	2.6%	0.0%	5.7%	3.0%	3.0%	2.1%	4.3%	3.4%	2.7%
	Ever drank alcohol	9.3%	4.5%	14.3%	68.8%	37.0%	26.3%	54.3%	39.6%	33.7%
	First drink before age 13 (HS) / 11 (MS)	2.3%	2.3%	2.4%	18.8%	14.7%	14.0%	15.7%	19.8%	9.3%
	At least one drink (last 30 days)	3.3%	0.0%	7.0%	37.0%	19.1%	13.2%	29.0%	20.8%	17.6%
	Binge drinking (last 30 days)	2.2%	0.0%	4.7%	23.2%	12.7%	9.7%	17.6%	12.8%	12.9%
Tobacco	Purchased alcohol at store (last 30 days)	na	na	na	6.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Ever tried a cigarette	8.2%	5.9%	10.9%	46.0%	19.0%	14.0%	27.1%	24.7%	12.9%
	Smoked cigarette before age 13 (HS) / 11 (MS)	2.1%	3.9%	0.0%	11.1%	10.3%	9.6%	11.4%	15.5%	4.7%
	Smoked cigarettes (last 30 days)	2.0%	1.9%	2.2%	18.8%	10.2%	8.8%	12.5%	12.1%	8.2%
	Smoked cigarettes 20+ days (last 30 days)	0.0%	0.0%	0.0%	7.8%	4.3%	3.5%	5.6%	6.1%	2.4%
	>age 18 purchase (last 30 days)	na	na	na	8.0%	11.1%	10.0%	na	18.2%	na
	Current smoker, tried to quit (last 12 mos)	na	na	na	53.6%	63.2%	60.0%	na	66.7%	na
	Used chewing tobacco, snuff or dip (last 30 days)	1.0%	0.0%	2.2%	10.6%	4.9%	3.6%	6.9%	8.2%	1.2%
	Smoked cigars, cigarillos or little cigars (last 30 days)	1.0%	1.9%	0.0%	14.7%	6.1%	4.5%	8.6%	9.1%	2.5%
Used any tobacco (last 30 days)	2.1%	1.9%	2.2%	25.2%	11.7%	8.3%	17.1%	13.4%	9.9%	
Other Drugs	Ever used Marijuana	6.1%	7.5%	4.3%	36.5%	25.1%	15.0%	41.3%	29.8%	19.1%
	Tried Marijuana before age 13 (HS) / 11 (MS)	0.0%	0.0%	0.0%	7.9%	8.7%	6.7%	12.0%	10.6%	6.7%
	Used Marijuana in last 30 days	6.0%	7.4%	4.3%	20.7%	13.8%	9.9%	20.3%	19.0%	8.0%
	Ever used Cocaine	3.0%	1.9%	4.3%	2.9%	2.0%	0.8%	4.0%	1.9%	2.2%
	Ever used Inhalants – glue, aerosol, etc.	6.1%	1.9%	10.9%	N/A	1.0%	1.7%	0.0%	1.0%	1.1%
	Ever illegally used painkillers	14.1%	11.3%	17.4%	N/A	7.2%	6.7%	8.0%	6.7%	7.9%
	Ever illegally used prescription drug	5.1%	3.7%	6.7%	N/A	3.1%	2.5%	4.0%	4.8%	1.1%
	Illegal drug exchange (last 12 mos)	11.5%	8.9%	14.3%	29.5%	23.7%	21.4%	27.0%	28.6%	18.6%
Sexual Behavior	Ever had sexual intercourse	4.8%	6.5%	3.1%	45.6%	30.8%	20.7%	45.3%	35.9%	26.3%
	Sexual intercourse before age 13 (HS) / 11 (MS)	0.0%	0.0%	0.0%	5.1%	3.9%	3.3%	4.8%	5.1%	2.7%
	Sexual intercourse with 4+ partners (HS)/3+ partners (MS)	0.0%	0.0%	0.0%	13.6%	10.5%	4.4%	19.4%	14.1%	6.8%
	Sexual intercourse in last 3 months	na	na	na	34.1%	24.8%	15.7%	37.5%	30.3%	20.0%
	Had sex during last 3 mths: used alc/drugs before sex*	na	na	na	24.7%	18.4%	7.1%	25.0%	26.1%	6.7%
	Had sex during last 3 mths: used condom*	na	na	na	61.4%	68.4%	78.6%	62.5%	60.9%	80.0%
	Had sex during last 3 mths: used birth control pills	na	na	na	21.4%	16.7%	15.4%	17.4%	13.6%	21.4%
Ever had HIV/AIDS instruction	59.0%	48.8%	71.4%	88.9%	92.0%	93.8%	89.4%	95.3%	88.2%	

**APPENDIX 7**  
**2012 MICHIGAN PROFILE FOR HEALTHY YOUTH DATA**  
**OCEANA COUNTY**

Survey Questions		7th Grade			High School					
Category	Behavior	Oceana Co.	Male	Female	Mi YRBS	Oceana Co.	9th	11th	Male	Female
<b>Perception Toward Risk Behaviors</b>	Easy/very easy to get cigarettes	26.5%	26.4%	26.7%	na	59.5%	52.1%	71.1%	64.5%	53.5%
	Parent disapproval of smoking	100.0%	100.0%	100.0%	na	91.4%	95.9%	84.2%	91.5%	91.0%
	Easy/very easy to get alcohol	31.6%	31.5%	31.8%	na	66.2%	59.7%	76.3%	68.2%	62.8%
	Parent disapproval of drinking alcohol	95.9%	98.1%	93.3%	na	85.8%	94.2%	72.7%	82.2%	89.8%
	Easy/very easy to get marijuana	21.6%	21.2%	22.2%	na	52.1%	42.4%	67.1%	61.0%	40.2%
	Parent disapproval of marijuana	97.9%	98.1%	97.7%	na	90.9%	95.0%	84.2%	87.7%	94.4%
	Moderate/great risk to regular cigarette smoking	75.5%	69.8%	82.2%	na	88.9%	89.3%	88.3%	86.1%	92.1%
	Moderate/great risk to marijuana use	70.7%	64.8%	77.8%	na	69.2%	78.5%	54.5%	57.9%	82.0%
	Moderate/great risk to methamphetamine use	50.5%	48.1%	53.3%	na	69.8%	68.9%	71.4%	67.6%	71.9%
<b>Physical Health and Nutrition</b>	Students physically active at least 60 minutes per day on five or more of the past 7 days	66.0%	69.8%	61.4%	46.8%	62.8%	60.8%	65.8%	74.8%	47.1%
	Students who watched 3 or more hours of tv per day on an average school day	38.1%	35.8%	40.9%	29.6%	29.1%	31.7%	25.0%	26.2%	32.2%
	Students who are obese	14.6%	17.0%	11.6%	11.9%	21.3%	19.8%	23.3%	27.3%	13.3%
	Students who are overweight	20.8%	18.9%	23.3%	14.2%	20.7%	23.8%	16.4%	16.2%	26.7%
	Students who ate 5 or more servings of fruits or vegetables during the past 7 days	46.2%	50.0%	41.5%	19.6%	35.3%	33.3%	38.4%	40.0%	27.7%
	Students who drank pop or soda one or more times per day in the past 7 days	40.2%	52.8%	25.0%	27.6%	32.3%	33.6%	30.3%	36.4%	27.0%
	Students who ate breakfast everyday in the past 7 days	56.7%	66.0%	45.5%	na	37.4%	34.4%	42.1%	43.9%	29.2%

Charts are highlights of data; for complete survey results, visit <https://mdoe.state.mi.us/MIPHYADMIN/reports/CountyReport.aspx>

\* Based on raw data from MIPHY survey

**APPENDIX 7**  
**2012 MICHIGAN PROFILE FOR HEALTHY YOUTH DATA**  
**NEWAYGO COUNTY**

Survey Questions		7th Grade			High School					
Category	Behavior	Newaygo Co.	Male	Female	Mi YRBS	Newaygo Co.	9th	11th	Male	Female
Perceived Safety	Felt safe/very safe at school	76.4%	75.2%	77.2%	na	83.0%	78.1%	89.4%	83.0%	83.1%
	Felt safe/very safe in neighborhood	na	na	na	na	na	na	na	na	na
Parent and Peer Interactions	Can ask mom/dad for help with personal problems	73.6%	74.5%	72.6%	na	75.9%	74.1%	78.3%	76.8%	75.3%
	Have best friend who made drug free commitment in yr.	76.3%	69.9%	81.5%	na	71.4%	74.9%	66.8%	66.5%	76.3%
School Commitment	Tried to do their best work at school	na	na	na	na	na	na	na	na	na
	Think learning in school is important in later life	na	na	na	na	na	na	na	na	na
Unintentional Injury	Bicycle helmet – never/rarely worn	85.9%	87.2%	84.8%	88.1%	93.0%	95.1%	89.9%	93.3%	92.6%
	Seat belt – never/rarely worn	11.0%	12.0%	10.2%	7.8%	9.8%	10.7%	8.5%	11.3%	8.4%
	Passenger with DUI driver (last 30 days)	30.7%	34.1%	27.6%	27.5%	19.3%	20.1%	18.2%	18.1%	20.3%
	Driving DUI (last 30 days)	na	na	na	8.4%	4.7%	3.8%	6.0%	4.7%	4.8%
Violence	Carried a weapon (last 30 days)	na	na	na	16.6%	25.7%	26.6%	24.6%	40.0%	11.6%
	Carried a gun (last 30 days)	na	na	na	5.8%	12.1%	13.4%	10.5%	19.2%	5.4%
	Bullied on school property (last 12 mos)	46.4%	41.3%	52.1%	na	25.0%	30.2%	18.0%	23.1%	26.7%
	No school – felt unsafe (last 30 days)	11.7%	11.5%	11.6%	7.4%	4.0%	5.0%	2.8%	2.8%	5.4%
	Fighting – HS - 1 or more times (last 12 mos) / MS - ever	27.7%	42.1%	14.8%	31.6%	18.6%	21.6%	14.7%	24.0%	13.1%
	Injured in fight, treated (last 12 mos)	4.5%	8.5%	0.9%	4.5%	9.5%	11.5%	6.8%	12.2%	6.8%
	Relationship violence (last 12 mos)	na	na	na	15.2%	5.9%	5.7%	6.2%	5.5%	6.5%
Forced to have sex – ever	na	na	na	10.4%	4.9%	4.0%	6.1%	1.8%	8.1%	
Depression and Suicide	Sad or hopeless for 2 weeks (last 12 mos)	31.1%	20.6%	40.5%	27.4%	30.8%	33.9%	27.6%	22.3%	39.8%
	Considered suicide attempt (last 12 mos)	20.4%	16.8%	24.0%	16.0%	16.9%	16.1%	17.7%	13.0%	21.1%
	Planned suicide (last 12 mos)	15.1%	12.4%	17.6%	14.6%	14.9%	16.2%	13.5%	12.1%	17.9%
	Attempted suicide (last 12 mos)	7.6%	8.7%	6.8%	9.3%	9.8%	11.4%	8.0%	8.3%	11.4%
	Injured in attempt, treated (last 12 mos)	4.0%	5.3%	290.0%	3.0%	4.6%	5.8%	3.4%	3.8%	5.4%
Alcohol	Ever drank alcohol	17.1%	19.1%	15.6%	68.8%	49.1%	42.9%	57.2%	47.5%	50.0%
	First drink before age 13 (HS) / 11 (MS)	10.1%	11.9%	8.8%	18.8%	16.7%	18.3%	14.6%	18.5%	14.8%
	At least one drink (last 30 days)	8.2%	5.5%	10.8%	37.0%	21.2%	17.2%	26.5%	19.7%	22.6%
	Binge drinking (last 30 days)	4.0%	3.5%	4.5%	23.2%	13.5%	9.2%	19.1%	13.4%	13.4%
	Purchased alcohol at store (last 30 days)	2.9%	9.1%	0.0%	6.0%	0.5%	1.1%	0.0%	1.1%	0.0%
Tobacco	Ever tried a cigarette	6.9%	8.1%	5.9%	46.0%	28.4%	26.0%	31.6%	26.4%	30.3%
	Smoked cigarette before age 13 (HS) / 11 (MS)	4.1%	4.3%	4.1%	11.1%	12.6%	14.5%	10.0%	12.4%	12.3%
	Smoked cigarettes (last 30 days)	2.5%	1.4%	3.5%	18.8%	11.3%	10.4%	12.5%	10.8%	12.0%
	Smoked cigarettes 20+ days (last 30 days)	0.4%	0.0%	0.9%	7.8%	4.3%	4.5%	4.2%	4.4%	4.3%
	>age 18 purchase (last 30 days)	0.0%	0.0%	0.0%	25.0%	3.8%	0.0%	8.0%	6.0%	1.8%
	Current smoker, tried to quit (last 12 mos)	na	na	na	53.6%	60.0%	61.8%	58.0%	56.9%	63.0%
	Used chewing tobacco, snuff or dip (last 30 days)	0.2%	0.5%	0.0%	10.6%	5.3%	3.2%	8.1%	9.1%	1.5%
	Smoked cigars, cigarillos or little cigars (last 30 days)	2.0%	1.9%	2.2%	14.7%	7.0%	5.2%	9.4%	9.4%	4.8%
Used any tobacco (last 30 days)	3.0%	2.9%	3.1%	25.2%	15.5%	12.3%	19.7%	17.6%	13.6%	
Other Drugs	Ever used Marijuana	5.1%	6.9%	3.5%	36.5%	28.6%	26.1%	31.8%	28.5%	28.7%
	Tried Marijuana before age 13 (HS) / 11 (MS)	1.6%	2.3%	0.9%	7.9%	7.1%	7.8%	6.1%	8.2%	5.8%
	Used Marijuana in last 30 days	2.9%	2.8%	3.0%	20.7%	14.4%	12.3%	17.3%	14.9%	14.0%
	Ever used Cocaine	6.3%	7.2%	5.1%	2.9%	0.9%	1.0%	0.7%	1.0%	0.8%
	Ever used Inhalants – glue, aerosol, etc.(in last 30 days)	8.5%	5.9%	11.1%	N/A	2.0%	3.0%	0.7%	1.0%	3.1%
	Ever illegally used painkillers	14.9%	12.7%	16.3%	N/A	7.8%	8.3%	7.2%	6.6%	9.3%
	Ever illegally used prescription drug	6.8%	6.8%	6.0%	N/A	3.8%	3.8%	3.7%	3.8%	3.9%
	Illegal drug exchange (last 12 mos)	6.4%	7.9%	5.1%	29.5%	14.8%	17.7%	10.8%	14.4%	15.3%
Sexual Behavior	Ever had sexual intercourse	3.1%	4.0%	2.5%	45.6%	43.2%	31.2%	55.8%	41.2%	45.3%
	Sexual intercourse before age 13 (HS) / 11 (MS)	1.0%	1.6%	0.6%	5.1%	3.3%	4.1%	2.5%	4.9%	1.8%
	Sexual intercourse with 4+ partners (HS)/3+ partners (MS)	1.0%	2.4%	0.0%	13.6%	9.9%	6.4%	13.6%	12.7%	7.1%
	Sexual intercourse in last 3 months	na	na	na	34.1%	34.3%	23.5%	45.7%	35.0%	33.9%
	Had sex during last 3 mths: used alc/drugs before sex*	na	na	na	24.7%	20.2%	27.5%	16.2%	21.1%	19.3%
	Had sex during last 3 mths: used condom*	na	na	na	61.4%	73.7%	80.0%	70.3%	78.9%	68.4%
	Had sex during last 3 mths: used birth control pills	na	na	na	21.4%	21.1%	15.0%	24.3%	21.1%	21.1%
	Ever had HIV/AIDS instruction	65.8%	64.9%	65.9%	88.9%	84.8%	77.8%	92.2%	85.1%	84.9%

**APPENDIX 7**  
**2012 MICHIGAN PROFILE FOR HEALTHY YOUTH DATA**  
**NEWAYGO COUNTY**

Survey Questions		7th Grade			High School					
Category	Behavior	Newaygo Co.	Male	Female	Mi YRBS	Newaygo Co.	9th	11th	Male	Female
<b>Perception Toward Risk Behaviors</b>	Easy/very easy to get cigarettes	32.5%	30.7%	34.2%	na	62.9%	56.9%	70.9%	64.0%	61.5%
	Parent disapproval of smoking	96.4%	96.3%	96.6%	na	93.0%	94.2%	91.4%	91.0%	95.1%
	Easy/very easy to get alcohol	38.7%	38.5%	38.7%	na	67.4%	61.8%	74.7%	69.0%	65.5%
	Parent disapproval of drinking alcohol	93.3%	92.1%	94.4%	na	84.1%	86.9%	80.2%	80.9%	87.2%
	Easy/very easy to get marijuana	17.1%	15.2%	18.8%	na	51.1%	44.8%	59.5%	51.3%	50.9%
	Parent disapproval of marijuana	96.2%	95.3%	97.0%	na	91.6%	92.8%	90.0%	90.4%	92.9%
	Moderate/great risk to regular cigarette smoking	76.4%	73.8%	78.5%	na	86.6%	85.5%	88.0%	84.7%	88.7%
	Moderate/great risk to marijuana use	90.1%	87.2%	92.7%	na	65.1%	69.0%	60.0%	60.5%	70.5%
Moderate/great risk to methamphetamine use	52.1%	52.3%	51.5%	na	70.0%	68.0%	72.6%	70.9%	70.0%	
<b>Physical Health and Nutrition</b>	Students physically active at least 60 minutes perday on five or more of the past 7 days	62.8%	69.5%	56.7%	46.8%	59.0%	60.4%	57.2%	65.9%	51.9%
	Students who watched 3 or more hours of tv per day on an average school day	37.9%	35.1%	40.3%	29.6%	26.1%	27.1%	24.9%	29.1%	22.7%
	Students who are obese	13.3%	16.9%	9.8%	11.9%	18.2%	19.1%	17.1%	20.4%	16.0%
	Students who are overweight	13.7%	13.9%	13.6%	14.2%	15.9%	16.9%	14.5%	14.7%	17.1%
	Students who ate 5 or more servings of fruits or vegetables during the past 7 days	34.3%	37.8%	31.7%	19.6%	30.6%	31.1%	29.9%	32.8%	28.3%
	Students who drank pop or soda one or more times per day in the past 7 days	35.2%	37.7%	32.3%	27.6%	34.7%	33.9%	35.9%	39.0%	30.2%
	Students who ate breakfast everyday in the past 7 days	39.3%	43.1%	35.5%	na	41.7%	39.9%	44.1%	46.6%	36.6%

Charts are highlights of data; for complete survey results, visit <https://mdoe.state.mi.us/MIPHYADMIN/reports/CountyReport.aspx>

\* Based on raw data from MiPHY survey

## APPENDIX 8

# CONSUMER HEALTH ISSUES SURVEY QUESTIONNAIRE

All of your information will be anonymous. You must be 18 years old to complete this survey.

1. Do you have any kind of healthcare coverage, including health insurance or plans such as Medicaid or Medicare?.....  Y  N
2. If you said "yes" to Question 1, please check all that apply to you.
- |                                                    |                                                  |                                          |
|----------------------------------------------------|--------------------------------------------------|------------------------------------------|
| <input type="checkbox"/> from my/spouse's employer | <input type="checkbox"/> bought privately        | <input type="checkbox"/> Medicaid        |
| <input type="checkbox"/> Medicare                  | <input type="checkbox"/> Medical Savings Account | <input type="checkbox"/> Other (specify) |
3. Are you having trouble getting healthcare services for you or your family? .....  Y  N
4. Do you have coverage for prescription drugs?.....  Y  N
5. Does your insurance cover office visits?.....  Y  N
6. If you are having trouble, what are the biggest problems you are having in getting healthcare services for you or your family? (check all that apply)
- |                                                              |                                                          |
|--------------------------------------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> Cost of healthcare, in general      | <input type="checkbox"/> Prescription costs              |
| <input type="checkbox"/> Dental care                         | <input type="checkbox"/> Finding a doctor                |
| <input type="checkbox"/> Cost of insurance                   | <input type="checkbox"/> Insurance limited in coverage   |
| <input type="checkbox"/> No insurance                        | <input type="checkbox"/> High deductible                 |
| <input type="checkbox"/> Too busy to get to the doctor       | <input type="checkbox"/> Hospital costs                  |
| <input type="checkbox"/> ER waiting time                     | <input type="checkbox"/> Transportation                  |
| <input type="checkbox"/> Doctor not accepting new patients   | <input type="checkbox"/> High co-pay for office visits   |
| <input type="checkbox"/> Medication not covered by insurance | <input type="checkbox"/> Getting specialist care         |
| <input type="checkbox"/> No vision insurance                 | <input type="checkbox"/> Dropped for missed appointments |
7. In general, how would you say your health is? (check only one)
- Excellent     Very good     Good     OK     Not good
8. Where do you usually go when you have a health problem? (check only one)
- |                                                         |                                                             |
|---------------------------------------------------------|-------------------------------------------------------------|
| <input type="checkbox"/> Private doctor's office/clinic | <input type="checkbox"/> Muskegon Family Care               |
| <input type="checkbox"/> Hackley Community Care Center  | <input type="checkbox"/> Urgent Care or walk-in Medi-Center |
| <input type="checkbox"/> Emergency Room                 | <input type="checkbox"/> Community Mental Health            |
| <input type="checkbox"/> Family Health Care             | <input type="checkbox"/> Northwest Michigan Health Services |
| <input type="checkbox"/> Other (specify)                |                                                             |
9. Was there a time within the past year you needed to see a doctor, but could not because of the cost?
- Yes     No     Don't know/not sure
10. Was there a time within the past year you skipped a follow-up visit, medical test or treatment because of the cost?
- Yes     No     Don't know/not sure
11. Was there a time within the past year you did not fill a prescription because of the cost?
- Yes     No     Don't know/not sure
12. Was there a time within the past year you needed dental care, but did not see a dentist because of the cost?
- Yes     No     Don't know/not sure

(Continue on reverse side.)  
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## APPENDIX 8

# CONSUMER HEALTH ISSUES SURVEY QUESTIONNAIRE

10. Have you or any member of your immediate family ever been told by a doctor or other health professional that you have any of the following? (check all that apply)

- |                                                 |                                                        |
|-------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> High blood pressure    | <input type="checkbox"/> High cholesterol              |
| <input type="checkbox"/> Diabetes               | <input type="checkbox"/> Overweight                    |
| <input type="checkbox"/> Cancer                 | <input type="checkbox"/> Chronic pain                  |
| <input type="checkbox"/> Arthritis              | <input type="checkbox"/> Heart disease/heart attack    |
| <input type="checkbox"/> Stroke                 | <input type="checkbox"/> Lung disease/COPD             |
| <input type="checkbox"/> Asthma                 | <input type="checkbox"/> Vision problems               |
| <input type="checkbox"/> Hearing problems       | <input type="checkbox"/> Alcoholism or other addiction |
| <input type="checkbox"/> Dental health problems |                                                        |

Other (specify):

11. Have you or any member of your *immediate* family ever been told by a doctor or other health professional that you have any of the following? (check all that apply)

- |                                                                   |                                                         |
|-------------------------------------------------------------------|---------------------------------------------------------|
| <input type="checkbox"/> Schizophrenia                            | <input type="checkbox"/> Depression                     |
| <input type="checkbox"/> Bi-polar disorder                        | <input type="checkbox"/> Mental retardation             |
| <input type="checkbox"/> Substance abuse                          | <input type="checkbox"/> Post-traumatic stress disorder |
| <input type="checkbox"/> Attention deficit/Hyperactivity disorder | <input type="checkbox"/> Anxiety                        |
| <input type="checkbox"/> Autism                                   | <input type="checkbox"/> Other mental health disorder   |

12. Where do you and/or members of your *immediate* family usually go when you have a medical health problem? (check only one)

- |                                                             |                                                             |
|-------------------------------------------------------------|-------------------------------------------------------------|
| <input type="checkbox"/> Private doctor's office/clinic     | <input type="checkbox"/> Muskegon Family Care               |
| <input type="checkbox"/> Northwest Michigan Health Services | <input type="checkbox"/> Emergency Room                     |
| <input type="checkbox"/> Muskegon County Health Department  | <input type="checkbox"/> Lakeshore Hospital in Shelby       |
| <input type="checkbox"/> Hackley Community Care Center      | <input type="checkbox"/> Urgent Care or walk-in Medi-Center |
| <input type="checkbox"/> District Health Department #10     | <input type="checkbox"/> Other                              |

- |                                                                                                                                                             |                          |                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|
|                                                                                                                                                             | Y                        | N                        |
| 13. Was there a time in the past 12 months when you or a member of your <i>immediate</i> family needed to see a doctor, but could not because of cost?..... | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. Have you or any member of your <i>immediate</i> family ever had a mental health issue, but did not see a doctor or counselor because of cost?.....      | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. Have you received your seasonal "flu shot" within the last 12 months? If your response is "Yes," skip to Question 17. ....                              | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. If you said "No" to the above question, was it because of cost? .....                                                                                   | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. In the past 12 months, have you skipped a follow-up medical visit, test or treatment because of cost? .....                                             | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. In the past 12 months, have you needed DENTAL CARE, but did not see a dentist because of cost?.....                                                     | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. Do you have children under the age of 18? If your response is "No," skip to Question 21. ....                                                           | <input type="checkbox"/> | <input type="checkbox"/> |
| 20. If you said "Yes" to the above question, do they receive annual medical checkups? .....                                                                 | <input type="checkbox"/> | <input type="checkbox"/> |
| 21. Do you have difficulty filling out medical or insurance forms and other paperwork?.....                                                                 | <input type="checkbox"/> | <input type="checkbox"/> |

(Please continue to Page 3)



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## APPENDIX 8

### CONSUMER HEALTH ISSUES SURVEY QUESTIONNAIRE

22. Does your doctor or other health professional adequately explain your health condition in terms you can understand? .....  Y  N
23. Do you or any member of your *immediate* family regularly take prescription drugs for a health condition? .....
24. In the past 12 months, did you NOT fill a prescription because of cost? .....
25. Does your doctor, other health professional or pharmacist explain the purpose of your medications to you and the instructions for taking them in terms you understand? .....
26. Has the language you speak been a problem in communicating with your doctors or other health professionals? If your response is "No," skip to Question 28. ....
27. If your answer was "yes" to the above question, have interpreter services ever been offered and/or provided to you? .....
28. Do you think your ability to get health care and health choices are limited because of--- (check all that apply)
- where you live?  where you work?
- your education?  your income?
- your race or ethnic background?
29. How often do you do moderate physical activities for at least 30 minutes each day; such as running, walking, bicycling, golf, working out in a gym/health club or other exercise?
- Every day  More than 3 times per week  2-3 times per week
- Once per week  Not at all
30. How often do you include fresh fruits and vegetables in your diet?
- Every day  More than 3 times per week  2-3 times per week
- Once per week  Not at all
31. Do you have a good source of quality, affordable fruits and vegetables in your neighborhood? .....  Y  N
32. Do you consider yourself and/or any member of your *immediate* family seriously overweight? (check all that apply)
- Yourself  Your spouse  A child  Other
33. If you have unpaid medical bills, indicate how much *medical debt* you have at this time:
- No medical debt  Less than \$1,500  \$1,500 - \$4,000  Over \$4,000
- Unsure
34. Where do you get the *most* information from to help you make decisions about your health? (check only one)
- Television  Newspapers or magazines
- Your healthcare provider (doctor)  Relative, friend or co-worker
- Internet  Radio
- Other

(Please continue to Page 4)



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## APPENDIX 8

### CONSUMER HEALTH ISSUES SURVEY QUESTIONNAIRE

35. Please choose only the **TWO** areas you think are the most important to making the residents of your community healthier?

- Improve access to healthcare
- Educate residents regarding healthcare issues
- Improve nutrition and eating habits
- Increase participation in physical activities and exercise programs
- Improve environmental quality, including air and water

Other (specify):

36. What is your age?

- 18 - 24       25 - 34       35 - 44       45 - 54       55 - 64
- 65 - 74       75 or over

37. What is your Race/Ethnicity? (check only one)

- Caucasian       African American       Hispanic       Native American
- Asian       Other

38. What is your current employment status? (check only one)

- Employed full time       Employed part time       Unemployed
- Laid Off       Retired       Student

39. Your ZIP CODE is: .....

--	--	--	--	--

40. As far as your residence, do you (check only one)--

- Rent your home or apartment?       Own or are buying your home?
- Live with family/friends?       Other

41. Including yourself, how many people live in your household? (check only one)

- 1       2       3 - 4       5 - 6       More than 6

42. Is your annual income (check only one) --

- Less than \$25,000       \$25,000 - \$50,000       \$51,000 - \$75,000       Over \$75,000

43. Are you--

- Male       Female

**THANK YOU!**

**In the coming months, we will be conducting discussion groups on healthcare.  
If you would like to participate in a discussion group, please provide the  
interviewer with your contact information.**



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## **APPENDIX 9**

### **COMMUNITY PARTICIPANTS IN FOCUS GROUPS**

#### Health Education/Health Literacy, Resource Awareness and Communication

Jackie Balcom, Public Health - Muskegon County  
Darma Canter, Community Mental Health Services of Muskegon County  
Elisa Downs, Harbor Hospice  
Lisa Fleury, American Red Cross of West Michigan  
Jackie Langlois, LPN, Access Health  
Claudia Leiras-Laubach, College of Health Professions (CHP), Grand Valley State University  
Eva Pena, Mercy Health Partners  
Cheryl Schneider, Access Health, Inc.  
Joyce Starr, RN, Mercy Health Partners  
Sharon Zajac, Muskegon Area Intermediate School District

#### Mental Health and Behavioral Health

Kris Collee, Child Abuse Council  
Laura Ecker, Mercy VNS and Hospice Services  
Joel Engel, Behavioral Health Services  
Margaret O'Toole, The Arc Muskegon  
Amanda Riddle, Muskegon Rescue Mission  
Greg Scott, Pioneer Resources  
Teri Smith, Community Mental Health Services of Muskegon County  
John Snider, County Commissioner

#### Vulnerable Populations' Health Issues/Health Disparities

Dormeka Bates, Muskegon Family Care Dental  
Barbara Bell, Muskegon Family Care  
Amy Forward, Access Health, Inc.  
Faith Groesbeck, Public Health - Muskegon County  
Susan Johnson, Every Woman's Place  
Vickie Kaiser, Mercy Health Partners, McClees Clinic  
Nicole Knights, Muskegon Ottawa Kent Allegan (MOKA)  
Connie Navarro, Latinos Working for the Future  
Hilary Newton, Muskegon Rescue Mission  
Lynn Smith, Community Engagement Coordinator, Mercy VNS and Hospice Services  
Jennifer Stewart, West Michigan Therapy  
Cindy Timmerman, Big Brothers/Big Sisters

#### Senior and Persons with Disabilities Health Issues

Kim Bailey, Senior Resources  
Shyenenne Cole, Senior Resources  
Darma Canter, Community Mental Health Services of Muskegon County  
Susan Cloutier-Myers, Disability Connection  
Pam Curtis, Senior Resources  
Mark Evans, American Red Cross of West Michigan

Mary Anne Gorman, Harbor Hospice  
Luke Reynolds, LifeCircles Program of All-Inclusive Care for the Elderly (PACE)  
Sharon TerHaar, AgeWell Services  
Amy Williams, LifeCircles Program of All-inclusive Care for the Elderly (PACE)

Nutrition/Weight Management and Lifestyle

Nan Andrews, Catholic Charities West Michigan  
Jennifer Brennan, Catholic Charities West Michigan  
Jackie Langlois, LPN, Access Health, Inc.  
Carlos Ramos, Muskegon First Free Methodist Church  
Sarah Rinsema-Sybenga, Community enCompass  
Sharon TerHaar, AgeWell Services

Physicians

Michael Banka, MD - Westshore Family Medicine  
Paul M. Chovaz, MD - Lakeshore Anesthesia Services, PC  
Katherine G. Keller, DO - Westshore Family Medicine  
Timothy E. Kval, DO - Lakeshore Family Care  
Charles M. O'Brien, MD - Mercy Health Partners, Mercy H.E.A.R.T. Center  
G. Scott Renton, DO - West Michigan Internal Medicine, PC  
Stephen N. Zonca, MD - Muskegon Surgical Associates, PLC

**Oceana County Focus Group Participants**

Women Infants and Children (WIC) and Wise-Women

Alica Kolenda  
Sharon Nile  
Beverly Roberts  
Diana Seeley  
Connie VanderZanden

Tencon Health Plan and Uninsured

Joanne Bush  
Helayne Helms  
Virginia Renna  
Tony Revilla

Leadership and Key Informants

Dale Barker, MD  
Ann Blocktop, Hart Family Medical Center  
Tammy Carey, Community Foundation for Oceana County  
Lance Corey, Oceana County Emergency Medical Services  
Doug Fris, Shelby Board of Education  
Colleen Johnson, Mercy Health Partners, Lakeshore Campus  
Evelyn Kolbe, Oceana County Commission  
Brad Lambrix, Probate Court  
Steven Lessens, MD, Mercy Health Partners, Lakeshore Campus

Phil Monroy, Michigan Community Dental Clinic  
Rhonda Schiller, Mason-Lake Intermediate School District  
Larry Van Sickle, Oceana County Commission  
Warren Walborn, Hawken Energy  
Rich Vandenheuvel, West Michigan Community Mental Health System

### **Ranking Session Participants**

#### Session #1: Oceana

Jennifer Brennan, Catholic Charities West Michigan  
Liz Chala-Hidalgo, Muskegon Community Health Project  
Jay Bryan, Mercy Health Partners, Lakeshore Campus  
Lance Corey, Oceana County Emergency Medical Services  
Lori Goudie, Lakeshore Health Network  
Janelle Johnson, Muskegon Community Health Project Oceana  
Steven R. Lessens, MD, Mercy Health Partners - Lakeshore Campus  
Barb Pranger, Mercy Health Partner, Lakeshore Campus  
Stevi Riel, Muskegon Community Health Project

#### Session #2: Community Health Needs Assessment Steering Committee

Kelly Bricker, Mercy VNS and Hospice Services  
Jay Bryan, Mercy Health Partners, Lakeshore Campus  
Kris Collee, Child Abuse Council  
Mary Anne Gorman, Harbor Hospice  
Paula Kelson, Community Mental Health Services of Muskegon County  
Ken Kraus, Public Health – Muskegon County  
Joseph O’Meara, Mercy Health Partners, Missions Services  
Judy Novak, Lakes Village Urgent Care  
Ron Rademacher, Mercy Health Partners, Westshore Professional Pharmacies  
F. Remington Sprague, MD, Mercy Health Partners

#### Session #3: United Way of the Lakeshore/Directors

Chris Burnaw, Community Coordinating Council  
Laura Fitzpatrick, Muskegon Community Health Project  
Amy Florea, Senior Resources  
Amy Forward, Access Health, Inc.  
Jane Hart, Michigan State University Extension  
Cynthia Hines, Mercy Health Partners, Employment and Diversity  
Susan Howell, Community Action Lines of the Lakeshore (CALL 2-1-1)  
Tim Lipan, American Red Cross  
Joel Jarvis, MD  
Connie Navarro, Latinos Working for the Future  
Tom Powers  
Jeanette Riley, Muskegon-Oceana Community Action Partnership (MOCAP)  
Christine Robere, United Way of the Lakeshore  
Kate Kesteloot Scarborough, Mediation & Restorative Services  
John Snider, County Commissioner

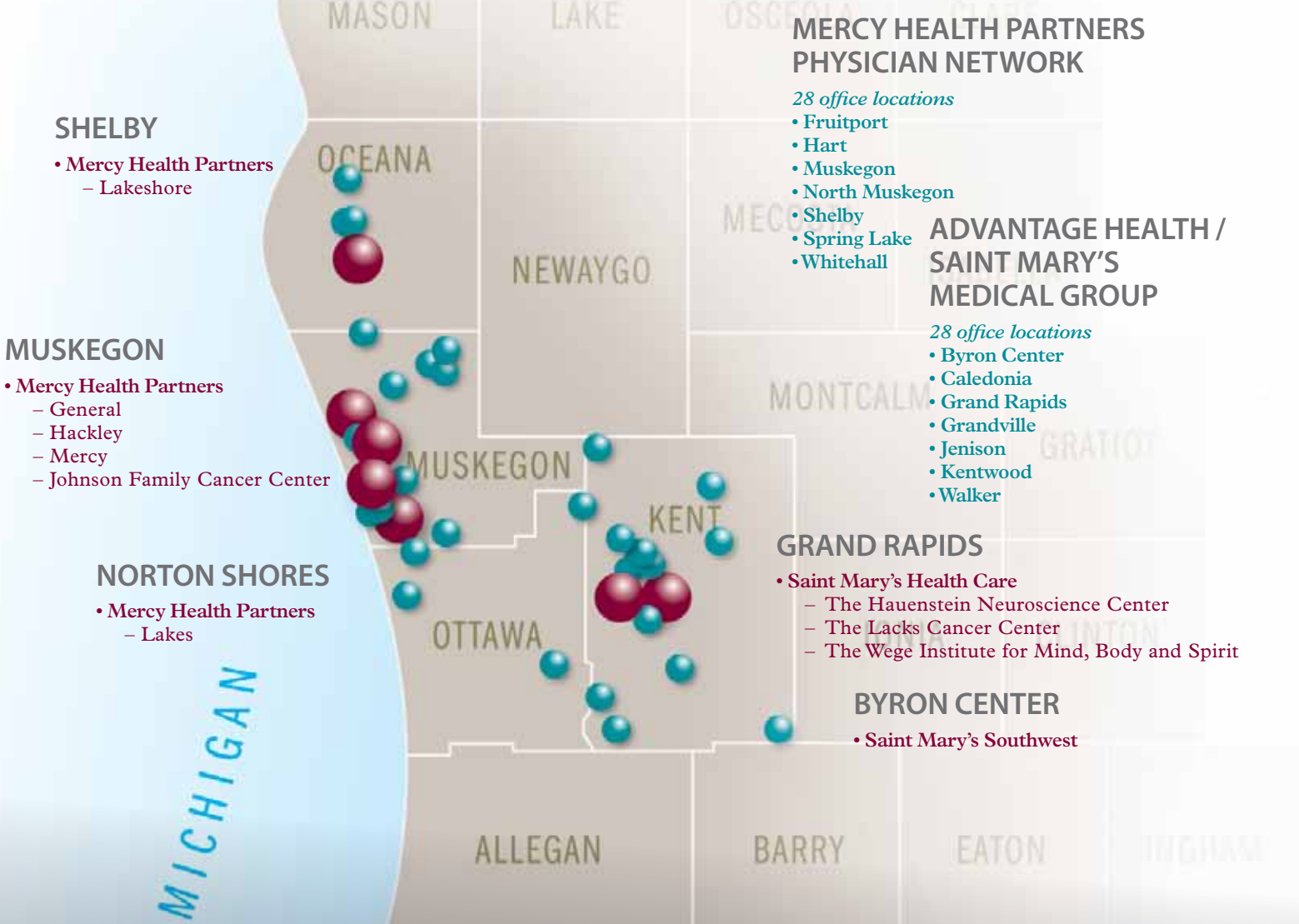
Kim Suarez, Priority Health  
Marlene Tejchma, Professional Med Team, Inc. (ProMed)  
Lisa Tyler, United Way of the Lakeshore  
Doug Wood, Orchard View Community Education Center

Session #4: MCHP Advisory Board

Linda Bailey, Lakeshore Health Network  
Brent Gillette, American Federation of Labor and Congress of Industrial Organizations (AFL-CIO)  
Jim Fisher, Padnos Aluminum  
Mary Anne Gorman, Harbor Hospice  
Amy Heisser, Aluminum Company of America (ALCOA)  
Cindy Larsen, Lakeshore Chamber of Commerce  
Phil McPherson, Benson Drug  
Robert Mills, LifeCircles Program of All-inclusive Care for the Elderly (PACE)  
Ron Rademacher, Mercy Health Partners, Westshore Professional Pharmacy  
Shaun Raleigh, Blue Cross Blue Shield of Michigan  
Ken Shelton, Muskegon-Oceana Community Action Partnership (MOCAP)  
F. Remington Sprague, MD, Mercy Health Partners  
Vondie Woodbury, Muskegon Community Health Project



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**Byron Center**

- Saint Mary's Southwest

**Grand Rapids**

- Saint Mary's Health Care
  - The Hauenstein Neuroscience Center
  - The Lacks Cancer Center
  - The Wege Institute for Mind, Body and Spirit

**Muskegon**

- Mercy Health Partners
  - General
  - Hackley
  - Mercy
  - Johnson Family Cancer Center

**Norton Shores**

- Mercy Health Partners
  - Lakes

**Shelby**

- Mercy Health Partners
  - Lakeshore

**Physician Networks**

- Advantage Health/ Saint Mary's Medical Group
- Mercy Health Partners Physician Network

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