MERCY HEALTH PARTNERS

COMMUNITY HEALTH NEEDS ASSESSMENT (CHNA) FOR MUSKEGON, OCEANA, AND NEWAYGO COUNTIES

IMAGINE OUR COMMUNITY HEALTHY!

JUNE 2009

Prepared by:

Muskegon Community Health Project
Mercy Health Partners' Community Benefit Program

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Mercy Health Partners Community Benefit Program
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Muskegon Community College
Muskegon Family Care
Muskegon/Oceana County Michigan Works!

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I. INTRODUCTION AND MISSION REVIEW STATEMENT

This Community Health Needs Assessment (CHNA) represents a year-long collaborative effort by Mercy Health Partners and other stakeholder groups to review and measure health in our community. This process began in December 2008 and concluded in June 2009. Partner organizations included the United Way of the Lakeshore, the Muskegon County Health Department, Community Mental Health of Muskegon County, and Lakeshore Health Network.

The goal of the partners was 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, focus groups and other community forums. The report that follows is to be understood as a summary of the findings and observations from all sources. Section III compiles observations from the overall assessment. Section VI contains a summary of the community, health and environmental data collected. See Section VII for summaries of the community input activities. Section VIII offers reflections on the process and next steps.

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 action. Everyone can then work from comparable information platforms to strategically align the necessary resources required to improve community health, improve access to care and reduce 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 that we 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 Trinity Health, 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.

We believe that this report embraces a fundamentally different approach from the more traditional assessment style of data inventory and analysis. It contains both quantitative and qualitative data sources, but has its genesis with the perceptions, opinions and suggestions of key stakeholders, community organizations and grass roots citizens. This information will not only help us to develop 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 the development of new local programs, collaborative efforts among stakeholders to seek unified solutions, new services and assistance to funders who must make strategic investment decisions.

In the upcoming year, the health issues identified in the report will be reviewed, prioritized and incorporated into a new strategic action plan that will be used by Mercy Health Partners and others to target activities for investment and action during the next three to five years. Thus, this community needs assessment should not be viewed as a static document, but rather as a dynamic road map that will improve the health and well-being of residents along the West Michigan lakeshore. To ensure the vitality and utility of this study, we will be repeating the process again in about three years. We wish to express our deepest gratitude and indebtedness to all who participated in this uniquely inclusive process.

II. A RETROSPECTIVE: 2005 COMMUNITY NEEDS ASSESSMENT

Key findings of the 2005 Community Needs Assessment (pp. 6-12) included issues pertaining to health disparities, care coordination and navigating the delivery system, the need for preventive health education and service gaps that impact quality of care. Disparities that appeared in access to health coverage, access to care and cultural competency were said to be reflected in mortality rates and behavior risk survey results and "were divided along social, economic, gender, racial and ethnic lines."

Health Disparities was #1 in 2005. Several of the health disparities cited in 2005 have persisted, as evidenced by mortality rates for several critical diseases, such as diabetes, stroke, and infant mortality (2007 rates per Muskegon County Public Health). Health and Human Services' (HHS) Secretary Sebelius' report, A Case for Closing the Gap, (June 9, 2009) indicated that the chronic disease rate for African-Americans is almost 10% higher than the general population. Further, the diabetes rates for African-Americans and Hispanics are nearly twice that of Whites.

At the July 14, 2009 "Equity in Care Community Breakfast," the Trinity Health Office of Diversity and Inclusion reported leading health disparities to be in the areas of cardiovascular disease, cancer, diabetes, HIV/AIDS, infant mortality, asthma and mental health. Dr. Jon Hinderer reported significant disparity in outcomes for Cardiovascular Disease in research conducted for the West Michigan Alliance for Health's Robert Wood Johnson Foundation "Aligning Forces for Quality" project, called Healthy Vision 2020. Efforts to identify and isolate specific instances of inequities within the Trinity Health System are being undertaken as part of the Equity in Care initiative. Specific examples include: falls, time to administer pain medication in emergency rooms, and pneumonia readmissions. Other "core measures" where disparities have been discovered in reference to African-American patients are: pneumonia and influenza vaccinations offered less often, and initial antibiotics given within four hours less often.

For the last two years, the Health Project's Pharmaceutical Access Program and Mission for Area People's Medical Assistance Fund have provided emergency assistance to low-income, uninsured residents of Muskegon County.

HHS Secretary Sebelius also reported that 40% of low-income Americans do not have health insurance. The former Mercy Health Partners' (MHP) Community Benefit Director felt that lack of medical coverage among increasing numbers of residents is the major disparity problem in the tri-county area. He pointed to Access Health, a community-based "3-share" coverage program, as a local step forward by allowing employers to provide good health insurance for low-wage workers. He also noted that the consolidation of three area hospitals and the existence of two Federally Qualified Health Centers (FQHCs) have improved access to care for the poor. Nevertheless, the outreach work of local community organizations, such as the Health Project, healthCARE, Mission for Area People, and various faith-based organizations is challenging the FQHC's ability to meet service needs subsequent to the resulting increase in numbers of uninsured seeking care. The Mercy/Hackley collaboration created the Low-Income Pharmacy, which supplies low-cost medications for diabetes and hypertensive patients. For the last two years, the Health Project's Pharmaceutical Access Program and Mission for Area People's Medical Assistance Fund have provided emergency assistance to low-income, uninsured residents of Muskegon County. Both Mercy Health Partners and Hackley Hospital (HH) reported increasing amounts of charity care, averaging about $24 million per year. Former HH employees have commented that the hospital's inner-city location makes it very accessible to low-income residents.

Coordination of Care and Health Education. Care coordination was cited as the second most pressing issue in the community. This included coordination of both clinical care and health support services. Singled out were the needs for patient assistance in "navigating the complex health delivery system" and improving health literacy in preventive health behaviors and disease self-management. The merger of the two hospital systems into Mercy Health Partners holds promise for better communication and delivery of health education to the community, reduced competition and duplication, as well as more sound health-related economics.

Significant strides have been made in the areas of coordination of care and health education. HH's active outreach program includes partnerships with community- and faith-based organizations to deliver health screenings and health education, particularly for diabetes. MHP's recent involvement with the Health Project has helped to ensure the continued community outreach, public awareness, patient education and enrollment and the referral work that has been done so well since 1994. Over a dozen Health Project community coalitions are actively involved in education and prevention activities for several critical health areas. They include African-American health, diabetes, HIV/AIDS, dental care, tobacco use, substance abuse, asthma, lead hazard control, child obesity and eating disorders, inappropriate antibiotic use, pharmaceutical assistance and end-of-life issues. MHP is currently in the final stages of completing the formal acquisition of the Health Project.

The Muskegon Area Intermediate School District has revitalized the Head Start program and inaugurated the Great Start program in 2006. A broad community spectrum of public and private interests has coalesced under the leadership of Senior Resources to establish the multi-county CALL 2-1-1 services, based in Muskegon. MHP and the Health Project are currently collaborating on projects to increase enrollment of eligible patients for a variety of health coverage programs, as well as providing "health navigation" services to low-income persons. Still, there seems to be a persistent need for improved modes of communication to the general public, to specific populations, especially the Spanish-speaking segment, and to rural areas in general. For example, in "A Case for Closing the Gap," HHS Secretary Sebelius reported that Hispanics are one-third less likely to be counseled on obesity than are Whites, and African-Americans are 15% more likely to be obese than Whites. MHP is currently working on developing a broad program to improve cultural competencies among providers and other personnel at all three hospital locations, including discharge instructions and health education materials. The system-wide program, called "Equity in Care", will also include qualified medical translation services for non-English speaking patients.

Significant Service Gaps. Either non-existent services or limited availability were identified in specific service areas, including prenatal care for Medicaid patients; dental care for low-income adults; elder care; palliative care and hospice; community outreach to bridge traditional access barriers; substance abuse treatment and detoxification facilities; and mental health assessment and treatment for children. Comments were solicited from the former Community Benefit Director for Mercy Health Partners (MHP), as well as two former community coordinators for Hackley Hospital (HH) to gain a perspective on the community's progress in meeting these key needs.

Progress has been made in addressing some of the service gaps identified in 2005. Prenatal care for Medicaid recipients for high-risk pregnancies has been supported by HH, as well as the OB/Midwifery program at Hackley Community Care Center. Both programs continue. Dental care has been vastly improved with the establishment of dental clinics at Muskegon Family Care and Hackley Community Care Center. Oral surgery has been provided by the Hackley Dental Clinic to Medicaid children from a 12-county area. However, access to timely dental care for adults, especially oral surgery for both children and adults, remains a critical community health issue. Elder care has been significantly enhanced with expanded visiting nurses and hospice services in the Muskegon County. The recently opened "Tanglewood" senior facility and PACE clinic for elderly residents provide one-stop clinical, social, information and referral services. Not much progress has been made in substance abuse in-patient treatment and detoxification areas. No in-patient facilities are available in the tri-county area. However, Hackley's Life Counseling program and West Michigan Therapy have provided expanded out-patient counseling, program and support services to substance abuse patients. The Health Project's four-year old Drug Free Muskegon Community Coalition and Tobacco Reduction Coalition have made significant advances in public awareness and collaborative community activities to reduce drug abuse, and the use of alcohol and tobacco among youth. Mental health assessment and treatment for young children is still a gaping hole, community-wide.

III. SUMMARY OBSERVATIONS: 2009 COMMUNITY HEALTH NEEDS ASSESSMENT

Introductory Remarks

These observations emerged as the principal findings consolidated from all the data collected and information received in the community input process. This section is intended to: (1) summarize the combined results of the 2009 Community Health Needs Assessment; and, (2) identify significant areas in which Mercy Health Partners and other collaborating organizations can make contributions to reduce health disparities, improve quality of care and promote a healthier community during the next three to five years. It is also aimed at identifying opportune target populations and effective messages to produce the greatest impact on health outcomes.

Community Perceptions. The project resulted in greater awareness of what the community perceives as the primary healthcare issues, problems, and concerns impacting and facing the residents of the tri-county area. Some healthcare professionals and others may question whether the perceptions are factually accurate or whether they truly reflect pressing problems that deserve swift attention by the healthcare community as a whole. At a minimum, the community perceptions offer benchmark information that can be highly beneficial to future work on healthcare matters and the implementation of related services.

Establishing Community Benchmarks. How do we determine the success of our healthcare programs? What benchmarks should the healthcare industry use to classify people as healthy or unhealthy? Should everyone be entitled to unlimited healthcare coverage regardless of the willingness to maintain a healthy lifestyle? What is a healthy lifestyle? Expressed by program participants, these questions reveal the complexities of trying to deal with the issue of healthcare. It was noted that, unlike other disciplines possessing benchmarks for measuring one's status or level of success, many of the factors associated with healthcare are left to subjective thought and/or political correctness.

There appears to be a new "bubble" of uninsured ages 41-49 who may well be the newly unemployed, secondary to the serious downturn in the local economy.

The following are the principal health issues and themes that have emerged from the 2009 Community Health Needs Assessment process, viewed in its entirety:

1. Lack of Health Insurance. As might be expected, the uninsured in the tri-county area are low income—the unemployed and the under-employed. There appears to be a new "bubble" of uninsured ages 41-49 who may well be the newly unemployed, secondary to the serious downturn in the local economy. Oceana County has the highest percentage of uninsured (28%), followed by Muskegon (24%) and Newaygo (13%). Important for marketing is that these low-income residents tend to be located in the more urban areas (zip codes 49441, 49442 and 49444). They also identified renters/non-homeowners aged 18-29 years and 41-49 years, and women less than 50 years of age. These same demographics also noted that residents defer healthcare, skip treatments and do not fill prescriptions because of cost. They also report being of fair to poor health.

2. Leading Health Conditions. The leading health conditions reported were high blood pressure, high cholesterol, arthritis and excessive weight. "Second tier" concerns were diabetes, asthma, pain, depression and lack of dental care, especially for school children. Health data indicate that diabetes and cancer in Muskegon County and asthma in Newaygo County are above the Michigan averages. Although below state average, Newaygo, followed by Oceana County, has the highest rates of COPD. All three counties are above the state average for being overweight. Oceana County has the highest reported incidence of obesity, though all three counties appear to be below the state's average. Muskegon County's reported incidence of diabetes is higher than the state's, and the mortality rate among the African-American population is significantly higher than for Whites.

Although there is little comparative state and national data available, lead hazard in older homes and lead poisoning among young children is cause for concern. Because of the prevalence of lead hazard throughout the local environment, and its concentration within the core city limits of Muskegon, testing is advised on low-to-moderate income households located in the zip codes 49440, 49441, 49442, and 49444.

MDCH recommends that homes built before 1974, and all children under age six within these zip codes, should be tested for lead poisoning.

3. Healthcare Education and Public Motivation. Healthcare education emerged as one of the most pressing public needs. A variety of issues were identified as demanding attention. These included programs that focus on nutrition, risk behaviors, personal responsibility, awareness and selection of health insurance coverage and healthcare services available to the uninsured and underinsured. The information clearly points to significant components of the tri-county residents' behavioral practices that are potentially detrimental to their personal wellness. These include poor nutrition, participating in risk behaviors and failing to exercise. The public discourse and survey results identify the lack of personal motivation as a leading factor in the public's failure to modify these practices.

4. Greatest Health Concerns. Consensus on the greatest health concerns in the tri-county region was obesity, nutrition education and physical exercise. Of course, all of these concerns relate to health life-styles and behaviors. All three counties are above the Michigan average in reported smokers. Muskegon County appears to have made the least progress in smokers who have quit. Likewise, all three counties are above the state average in use of alcohol. An important observation is that a similar demographic to the uninsured (those who defer healthcare and are in the poorest health) also reported very low levels of rigorous exercise, especially the 18 to 29 year olds. Another interesting observation is that these are the same people who reported having significant health problems, difficulty with access, and using the emergency rooms as their primary care provider.

5. A Healthier Community. For added emphasis, the top 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. Given their high priority, potential for immediate implementation and perceived benefits in the near-term, both programs appear worthy of immediate assessment and information sharing by local healthcare providers.

6. Provider Awareness of Healthcare Services. The shared sessions raised awareness among many, and in some instances a majority of the attending health and human service attendees about their personal lack of knowledge with regard to the range of healthcare services and programs currently available to the public in the tri-county area. The lack of knowledge may well

result in lost opportunities for the clients they do or could serve. This was particularly evident among rural providers in Oceana County.

7. Health Disparities. People living in both rural counties have significant issues with access to healthcare, especially Oceana and Newaygo Counties. Specialty care is particularly problematic, specifically Ob/Gyn and pediatric care. Several of the more sophisticated diagnostic tests also require travelling long distances. People are evenly split in having to travel to either Muskegon or Grand Rapids to obtain specialist services. Hence, transportation becomes a barrier issue with regard to access, availability and cost. There is a partial vacuum regarding communication among the rural health providers as to existing health resources available in their areas. Health and human service providers who participated in the community conversations and focus groups expressed the need for improved inter-communication about the availability of local health resources. In a related issue, there appears to be fairly low recognition of some of the region's most important resource information and referral sources. The relatively low public awareness of the Health Project, CALL 2-1-1 and Access Health tends to support the issue of lack of adequate public and provider awareness and inter-communication of existing health resources in the area.

Significant medical debt (over $3,000) was reported by about 44% of the respondents to the Randomly Distributed Survey, with nearly 7% of them reporting debt over $5,000.

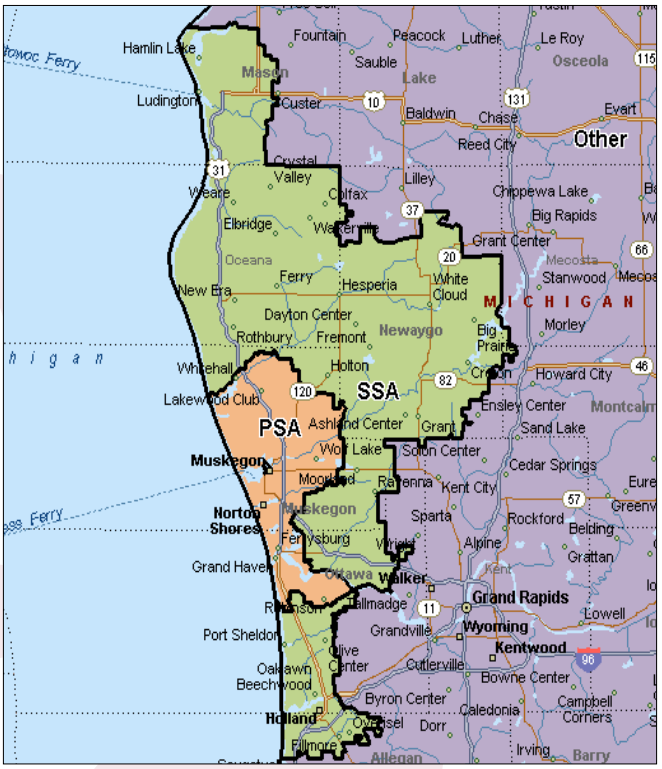
8. Use of the Emergency Room for Primary Care. About 3% of all survey respondents reported using the Emergency Room for their primary care health needs. These ER users tend to be those who are renters/non-homeowners, uninsured and have not seen a doctor for a checkup within the last two years.

9. Medical Debt Among the Poor. Significant medical debt (over $3,000) was reported by about 44% of the respondents to the Randomly Distributed Survey, with nearly 7% of them reporting debt over $5,000. In contrast, 14% of the Controlled Phone Survey respondents reported debt over $3,000 and 2% of them over $5,000. The demographic for significant, unpaid medical debt addresses those who are low income, uninsured, in poor health and have not had a medical checkup in the last two years. They tend to be women under 50 years of age.

10. Unified Healthcare System. A "unified healthcare system" (UHS), the term used for the recent merger of the Mercy and Hackley systems, was commonly identified as the most appropriate and best organized for compiling and disseminating information on the range of healthcare services and programs to the residents in the tri-county area.

It was noted that a UHS might function as a healthcare ombudsman agency, providing information and assistance on available services, provider assistance and other programs, as well as how to access a healthcare provider or facility for care.

IV. COMMUNITY DESCRIPTION



Mercy Health Partners Primary and Secondary Service Areas

County Profiles

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, tourism destination, and industrial center. The county seat is Muskegon, an urban community of over 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 recently merged with Hackley Hospital and now comprises 4 campuses, including Lakeshore Hospital in Oceana County.

About 9% of families and 11% of the population were below the poverty line, including 16% of those under age 18 and 8% of those ages 65 or over.

Based on the 2000 Census, there were 170,200 people, 63,330 households, and 44,267 families residing in the county. The population density was 334 people per square mile, indicative of an urban location. The racial makeup was approximately 81% Whites, 14% Black or African-American, and less than 1% each for Native American, Asian, and Pacific Islander. Slightly over 1% was classified as other races and 2% from two or more races. The Census Bureau estimates the 2008 county population at 174,344. The average household size was 2.59 and the average family size was 3.10 in 2000.

The median household income was $38,008, and the median income for a family was $45,710. Males had a median income of $35,952 versus $25,430 for females. The per capita income for the county was $17,967. About 9% of families and 11% of the population were below the poverty line, including 16% of those under age 18 and 8% of those ages 65 or over.

Oceana County. Oceana County is a rural county located along the eastern shoreline of Lake Michigan. The county is known for its agricultural production of fruits and vegetables. The county seat of Hart is located roughly 41 miles north of Muskegon and 75 miles northwest of Grand Rapids. Interstate US-31 runs through the county, linking to the Muskegon Metro area and to Grand Rapids via Interstate I-96.

Based on the 2000 Census, there were 26,873 people, 9,778 households, and 7,265 families residing in the county. The population density was 50 people per square mile, reflective of the county's rural character. The racial makeup was 90% Whites, with African-American, Asian, and Pacific Islander each comprising less than 1% of the total population. Six percent were recorded as other races, and slightly less than 2% were two or more races. Roughly 12% of the population was Hispanic or Latino, resulting in the county having the highest percentage of Latinos of any county in Michigan. Recent estimates show the percentage of Latinos and African-Americans to be increasing, while the percentage of non-Hispanic Whites decreasing. The Census Bureau estimates the 2008 county population at 27,598. The average household size was 2.67 and the average family size was 3.09 in 2000. Median income is $35,307.

Newaygo County. Newaygo County is a rural county located northeast of Muskegon and north of Grand Rapids. The county's rural quality and abundance of lakes and streams makes it an ideal tourism destination and location for those wishing to reside in a non-urban location. It is home to Gerber Industries and the Gerber Memorial Hospital located in Fremont. White Cloud is the county seat, located approximately 50 miles north of Grand Rapids and 50 miles northeast of Muskegon. The geographic proximity of the two urban centers results in some county residents traveling to the Muskegon area for healthcare services while others use the services available in Grand Rapids. Based on the 2000 Census, there were 47,874 people, 17,599 households, and 12,935 families residing in the county. The population density was 57 people per square mile, indicative of the county's rural character. The racial makeup was approximately 95% Whites, 1% Black or African-American, and less than 1% each for Native American, Asian, and Pacific Islander. Slightly less than 2% were classified as other races and from two or more races. The Census Bureau estimates the 2008 county population at 48,897. The average household size was 2.68 and the average family size was 3.13 in 2000.

The median household income was $37,130 and the median income for a family was $42,498. Males had a median income of $35,549 versus $22,738 for females. The per capita income for the county was $16,976. About 9% of families and 12% of the population were below the poverty line, including approximately 15% of those under age 18 and 9% of those age 65 or over.

V. DATA COLLECTION - 2009

Methodology and Community Input Approaches

The Community Health Needs Assessment (CHNA) process involved 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 – poverty, education, access to a job, etc. When used together, the quantitative data (demographics, health indicators, etc.) and the qualitative data (public surveys, forums, and focus groups) 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. In addition, differences between public and provider perceptions or concerns are often discovered, as well as new issues, as unmet needs may surface.

The results of Trinity Health System's preliminary health need survey were used in conjunction with the health and community data to conduct: a) a consumer health survey; b) forums in two counties, called "community conversations", and c) a series of four focus groups.

The CHNA includes the following principal elements:

1) Collection of community demographic information and health data.
2) Community input from a health needs consumer survey administered via phone, electronic media and paper questionnaires at a variety of community venues.
3) Community input from large forums, called "Community Conversations", in two of the three counties, consisting of invitees from a wide range of interest sectors. About 100 people participated in the two Conversations.

4) Community input from five smaller focus groups representing specific community sectors: business and labor; government and education; community-based organizations and faith-based organizations; health and human service agencies; and medical providers. Forty-seven people participated in the groups.

28% of tri-county went without filling prescriptions due to cost…17% skipped a medical treatment…17% did not see a doctor when they were ill…31% did not see a dentist because of cost.

Trinity Health System – Preliminary Survey, August 2008.

Trinity commissioned EPIC- MRA in August 2008 to conduct community perception surveys in ten communities, to assess the relationship between health insurance and healthcare, and the barriers to care as a preliminary to the community needs assessments in these communities. The survey was a stratified sample of 300 phone surveys. The MHP tri-county area (Muskegon, Oceana and Newaygo Counties) generally fared worse than the ten-community overall averages. Principal findings common to all ten communities were as follows:

1) Many adults are going without needed healthcare services. 28% of tri-county went without filling prescriptions due to cost (15% overall); 17% skipped a medical treatment (15% overall); 17% did not see a doctor when they were ill (16% overall); 31% did not see a dentist because of cost (23% overall). The rates of going without these services are very much higher among the uninsured and underinsured: from 2 to 3 times higher among the uninsured than the insured, and from 2 to almost 5 times higher among the underinsured than the fully insured.

2) Cost is the main barrier to care. Among the top ten barriers cited, 74% of tri-county respondents indicated several cost-related barriers to care. These included cost in general, drug costs, no dental coverage, high co-pays, cost of insurance, limited coverage, and the lack of dental coverage and health insurance.

3) The diagnosis and treatment of some medical conditions is linked to insurance. The study shows that some medical conditions are more likely to be diagnosed and treated in people who have healthcare insurance than those who do not. These include hypertension, high cholesterol, diabetes and heart disease. Insured people are from 38%-58% more likely to have been diagnosed with and treated for one of these conditions than the uninsured, depending on the condition. The study also shows that some conditions are more likely to have been diagnosed and treated among people without insurance, including asthma, depression, chronic pain, mood disorders and alcoholism. Uninsured people are from 12%-100% more likely to have been diagnosed with one of these conditions than insured people, depending on the condition. There is no clear pattern for diagnosis that include overweight, arthritis, cancer and lung disease.

4) The strongest single predictor of lack of healthcare insurance is income. Lack of insurance is linked to several demographic traits: those with incomes at or below the national median are almost four times as likely to lack healthcare insurance in the ten-study communities as those with incomes above the median. Unmarried people are a little more than twice as likely to lack insurance as married people. Those age 40 or younger are twice as likely to lack insurance as those older than 40. Men are 35% more likely than women to lack insurance. In the tri-county area, 15% reported being uninsured and 34% lacked dental coverage. Forty percent of tri-county respondents reported high blood pressure, 41% were at least 20 pounds overweight, 37% reported high cholesterol, 33% arthritis, 21% depression, 21% chronic pain, 17% reported having diabetes, and 12% asthma.

Tables 1, 2 and 3 – Community, Health and Environment Health Data.

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 that are typically collected by professional planners for master plans, general community descriptions, economic development and other special reports pertaining to a specific community. The Priority 1 Health Data in Table 2 are those considered key data at this time for health planning purposes by the Trinity Health System.

The Priority 2 Health Data are among the Leading Health Indicators listed in Healthy People 2010 (USD HHS, Office of Disease Prevention and Health Promotion, 2000) and used for setting national health goals. The Table 3 environmental health indices were selected by the staff of Muskegon County Public Health.

Other Community Data Sources

2009 Youth Risk Behavior Survey (YRBS). The Muskegon County YRBS is a county-wide, confidential school-based, population-based survey that has been conducted every four years since 1996 by a collaborative of health and human service organizations. The survey report contains findings from the five priority areas:

1) Unintentional and Intentional Injuries
2) Tobacco Use

3) Sexual Behaviors
4) Alcohol and Other Drug Use
5) Nutrition, Physical Activity and Weight

The 2009 YRBS was administered by the Health Project's Drug Free Muskegon Community Coalition (January and February 2009) to 8th-, 10th- and 12th-grade students in all of the 13 county public school districts. A total of 5,142 surveys were administered, representing 75.5% of the total student population of Muskegon County.

Alcohol, Tobacco and Other Drug (ATOD) Use. Youth reporting alcohol, tobacco, and other drug use remains consistent or declining from previous years. However, some consumption patterns have increased, such as binge drinking, prescription drug abuse, and chewing tobacco. Consistent cigarette smoking has generally decreased, while use of chewing tobacco and/or snuff has increased since 2004. While drinking remains relatively consistent with other years, binge drinking (five or more drinks in one sitting) has increased. Alarmingly, the percent of students reporting that they had been offered or given an illegal drug during the last 12 months is 36.6%, an increase from 2004 (31.4%).

Weight, Nutrition, Physical Activity. The YRBS reported that 13.3% of students are overweight (95% of BMI) and 16.6% are at risk of being overweight despite a percentage of students who report an increase in eating vegetables since 2004. The percentage of students attending physical education classes one or more days during a school week (38.9%) declined from a high of 40.4% in 2004. One-third of students (33.3%) report watching TV 3+ hours per school day, with 25.7% of students reporting that they play video or computer games 3+ hours per average school day.

Behaviors Contributing to Unintentional Injuries/Violence. Survey results on student behaviors contributing to unintentional injuries and violence have been consistent as in previous years with regard to drinking and driving (10.4%), carrying weapons (15.7%), and involvement in a physical fight (33%). The survey did show some improvement with regard to depression and suicidal behaviors, with 13.2% of students having considered suicide in the past 12 months as compared to 2000 (16%) and 2004 (15.6%). Actual suicide attempts dropped in 2008 (7.4%) as compared to 2000 (8.3%) and 2004 (8.9%).

Sexual Behavior. Sexual activity among students has increased 5.5%, with 44 % of students reporting ever having sexual intercourse. While condom use has decreased over the past surveys, the use of birth control pills has increased. Over seven percent (7.4%) of students report that they had been forced to have sex, which is consistent with previous reports in 2004. HIV/AIDS instruction in school has decreased from a high of 94.8% in 2000 to 86.5% in 2008. For the complete summary, see Appendix 7. For more information: http://cccmuskegoncounty.org/yrbs.aspx

Community Access Line of the Lakeshore Information and Referral Service. (CALL 2-1-1). The CALL 2-1-1 information and referral service has been in operation since 2002 and serves Muskegon, Oceana, Ottawa, Mason and Manistee Counties. By 2011, CALL 2-1-1 will be adding Lake, Mecosta, Newaygo and Osceola Counties. Total population of the expanded service area will be over 640,000 people. Call volume increased by about 10% from 34,378 calls in 2007 to 40,388 calls in 2008. Reflecting the economic downturn, the first quarter of 2009 saw a 33% increase in call volume to almost 18,000, and yearend volume is projected to reach 48,000 calls. Medical care and health support services rank third among the top ten service requests. They also rank third among the top ten "unmet needs" categories. During the quarter ending December 30, 2008, there were 2,004 calls for medical care and health support services, which was 11% of all calls. During the second and third quarters of FY 2009, the CALL 2-1-1 center answered over 3,700 calls for health-related assistance, representing about 17% of all calls. Most of the requests pertained to prescription drug assistance, need for dental care, accessing health insurance, assistance with medical bills, and finding primary care clinics. Most calls came from the 49441, 49442 and 49444 zip codes that include the cities of Muskegon, Norton Shores, Roosevelt Park, Muskegon Heights and Muskegon Township. A summary of CALL 2-1-1 medical and health service data is attached as Appendix 6.

VI. FINDINGS FROM COMMUNITY AND HEALTH DATA - TABLES 1, 2 AND 3

Key Community Socioeconomic Factors

Population Projections. Based on the population projections through 2020, Newaygo County will experience the greatest

population growth of all three counties at 45%, followed by Oceana County at 29% and Muskegon County at 11%. Currently, Muskegon County holds 69.4% (174,386) of the three counties' 251,357 total population. 19.6% reside in Newaygo County (49,171), with 11.1% living in Oceana County (27,800). With an estimated three-county population increase (300,093 by 2020), Newaygo County will rise to 23.7%, or a 27.5% of the total 2030 population; Oceana County will increase slightly from its current total 11.1% to 12% in 2020, and then to 13.3% by 2030. The percentage of projected total population decline for Muskegon County is 69.4% to 62% by 2020, and then to a stabilized 64.4% in 2030.

Race. Muskegon County is the only county with a significant census count of African- Americans at 13.4% (almost one point under the statewide percentage of 14.3%); Newaygo County registering only 0.8% and Oceana County only 0.3% African-Americans. Oceana County has the highest percentage of Hispanic or Latino population at 11.6%, with 6.1% indicating that they are of some other race. In addition to the 13.4% African-American population in Muskegon County, 4.3% are Hispanic or Latino, with 2.8% indicating they are two or more races. In Newaygo County, 4.9% claim to be Hispanic or Latino, 2.1% some other race, and 1.6% two or more races.

Uninsured Adults. The 2007 estimated number of Muskegon County uninsured adults ages 18 to 64 years is 23.5%. Based on a 2005 to 2007 average of survey data in the other two smaller counties, Oceana County's same age uninsured percentage was surprisingly higher than Muskegon's, at 27.6%. The 2005-2007 average for Newaygo County in that age group was 12.7%.

Since the data was only available for that population between the ages of 18 and 64, it is useful to extrapolate the information and apply it to people age 18 and over, as well as those over age 65, and the total population. These numbers can be compared with other data. When the data is extrapolated, the percentage of uninsured residents age 18 or older in Muskegon County is 19.4%, 22% in Oceana County, and 10.3% in Newaygo County. The percentage of uninsured, when applied to the entire population of each county, is 14.1% for Muskegon County, 15.8% for Oceana County, and 7.4% for Newaygo County.

According to the phone survey conducted in February of 2009, 11% of the 300 adult respondents surveyed in all three counties said they were without health insurance coverage. The highest percentage uninsured was in Newaygo County (13%), followed by that part of Muskegon County excluding the southwest region of the county (12%), Oceana County (10%), and the southwest region of Muskegon County (9%). Some of the key demographic groups measured in the 300 sample survey which showed the highest percentages of uninsured residents included renters (38%); unemployed residents (36%); very low income (35%); adults age 18 to 29 (30%); part-time employees (27%); laid off workers (25%); low income men under age 50 (19% each), age 41 to 49 (18%), age 56 to 64 and under age 50 (17% each); all men (16%); women under age 50 (15%); and men over age 50 (14%).

Household Income Well Below State Average in all Three Counties. Household income is well below the statewide mean average of $62,922 in 2007, with Oceana County earning closest to that average at $51,278, Muskegon County next at $49,884, with Newaygo County last at $46,055. Clearly, the lack of household income is a significant factor in determining whether people have adequate health insurance coverage. Residents of all three counties are well below state income figures.

Marital Status. Both Oceana and Newaygo Counties have a higher percentage of married individuals age 15 or older than the statewide average, while Muskegon County has a lower percentage. A 58.2% majority of Newaygo County residents and 56.7% of Oceana County residents are married, a significant difference from the statewide 49.8% results. Muskegon County is slightly below at 48.2%. The same pattern of marital status exists for both men and women. The percentage of widowed residents in Oceana County, at 8%, is higher than the state's 6.4%. Muskegon County ties the statewide numbers, and Newaygo County is below.

Compared to the statewide (11.1%) residents who are divorced, Muskegon County notes 13.8%, Newaygo County (11.2%) and Oceana County (10.6%). The percentage of female households with no husband present is slightly higher in Muskegon County (13.2%) than the statewide (12.5%) results, and Oceana and Newaygo Counties lower at 11% and 9.7%, respectively.

The percentage of households with members' own children under age 18 is higher in all three counties than state data. Newaygo County has the highest percentage (33.6%), Muskegon follows (32.2%), and Oceana County third (31.9%), but above the statewide results (30.9%).

Vehicles Per Household. Muskegon County is the county with a higher percentage of households with no vehicles in the household, at 8.2%, than the statewide average of 6.8%; pointing to its public transportation service needs, which should be addressed in overall community planning opportunities.

Social Security Income. All three counties have a higher percentage of households with one or more people collecting

social security than statewide results indicate. Muskegon at 31.2%, Newaygo at 31.7%, and Oceana at 32.5%, compared to the statewide results (of 28.4%). The percentage of households is higher and, not surprisingly, the percentage of social security mean income is somewhat lower than the statewide average. While the statewide social security mean income is $15,339, Muskegon County's is $14,827, Oceana's $14,626, and Newaygo's $14,603.

Medicare and Medicaid. All three counties have a higher enrollment in Medicare than Michigan's overall 15%. Muskegon County is the lowest (16.9%), Newaygo County (17.6%), and Oceana County highest (18.7%). In addition, they are all below the statewide Medicaid average of 18%, with Muskegon County at 14.8%, Oceana County at 13.8% and Newaygo County at 12.1%.

Poverty. All three counties have both individual and family level poverty rates. Individual rates are higher than the state number at 14.0%. Oceana County rate is highest at 19.5%, followed by Muskegon County at 15.6% and Newaygo County closely following at 15.4%. The statewide rate for families is 10.1%, with Oceana County at 14.5%, Newaygo 12.6%, and Muskegon last at 11.1%.

The 28,295 homeless persons across the three counties (2007) represent 0.28% of the estimated total for the statewide total population of 10,003,422.

Homelessness. The number of homeless people is much higher in Muskegon County, at 795 individuals in 2006, than the number in Oceana (166) or Newaygo (92). When compared as a percentage of current total population in each county, and not just as a raw number, Muskegon County has 0.45% homeless persons, Newaygo County 0.34%, and Oceana County 0.33%. The 28,295 homeless persons across the three counties (2007) represent 0.28% of the estimated total for the statewide total population of 10,003,422.

Occupation/Employment. Upon examining occupations and employment in these counties, several types of occupations or employment are higher, some much higher, than statewide percentages. While 1.2% of the state is engaged in agriculture, forestry, fishing, hunting or mining, that percentage in Oceana County is much higher at 8.4%, Newaygo County at 4.5% and Muskegon County at 1% agricultural. Oceana County is higher than the statewide average of 5.6% in construction at 9.2%, with Newaygo County at 8.2%, but Muskegon County is somewhat lower at 4.3%. All are higher than the state's 18.8% engaged in manufacturing. Muskegon County has 30%, Oceana County 24.3% and Newaygo County 23.4%. Oceana County's 12.5% is higher than the statewide 11.3% for retail

trade at 12.5% and Newaygo County is equal to state numbers. All three counties are much higher than the statewide number of 16% in production, transportation, and material moving occupations. Muskegon County is highest at 25.5%, Oceana County at 24.9% and Newaygo County at 23.9%. Oceana County at 6% and Newaygo County 2.9% are both higher than the state (0.5%) in farming, fishing and forestry occupations, with Muskegon County tied. All three counties are higher than the state at 8.1% in construction, extraction, maintenance and repair occupations. Newaygo reports 12.4%, Oceana County at 12.1%, and Muskegon County at 8.7%.

Arts, entertainment, recreation, accommodation and food services are higher in Muskegon County at 10.1% than the state at 9.3%, with the other counties lower. Other services, except for public administration services, are higher in Newaygo County at 6.1% than the state at 4.6%, with Muskegon County tied with the state and Oceana County below. Muskegon County at 18.4% is higher than the state (17.5%) in service occupations, with the other two counties below.

Unemployment. Muskegon County had the highest unemployment rate in June 2009 at 16.8%, with Oceana only slightly behind at 16.7% and Newaygo at 15.3%, all of which are higher than the statewide percentage of just over 15%. Unemployment rates have jumped one percentage point for Muskegon and Newaygo Counties from May to June 2009, as the local and state economies continue to decline. Counting those who have given up seeking employment (no longer registered) and those underemployed, the tri-county unemployment rate jumps about 6+ percentage points.

Disabilities. The percentage of the population in all three counties with various disabilities 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%), Muskegon County (12.4%), and Newaygo County (10.1%) 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%) are 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 of people with disabilities is an emergent focus for concern in all three counties.

Education. The three-county region is clearly much less educated than the state as a whole. While 3.5% of the state population has less than a 9th-grade education, 3.6% of Muskegon County, 5.4% of Newaygo County, and 8% of Oceana County have less than a 9th-grade education. High school graduates (including those with equivalency credit) are higher in all three counties than the state (32.4%), with Newaygo County the highest at 41.2%; Oceana County close behind at 40.2%, and Muskegon County at 36.6%.

A less educated population in all three counties helps to explain the significantly lower income numbers in the three counties, and…can have a very direct impact on the level of health insurance coverage and healthcare that people can afford.

The percentage of the population in each county with a college education is significantly lower than the statewide percentage. While 15.2% of the state has a bachelor's degree, 12% of Muskegon County, 9.2% of Newaygo County and 8.1% of Oceana County reached the same level of educational achievement. Moreover, while 9.5% of the state has a graduate or professional degree, only 5.3% of Oceana County, 5.1% of Muskegon County, and 4.4% of Newaygo County achieved the same level of education.

A less educated population in all three counties helps to explain the significantly lower income numbers in the three counties, and lower income and education can have a very direct impact on the level of health insurance coverage and healthcare that people can afford.

Church Attendance. While 51.4% of the state's population is a member of a religious congregation or organization, 43% of Muskegon County, 36.6% of Newaygo County and 35.7% of Oceana County are members of religious congregations. The source of the information, the Association of Religion Data Archives, indicates that their numbers are not complete for areas with large percentages of African-Americans. Therefore, the percentage of the population who are members of churches in Muskegon County is likely understated. Also, it is important to note that these numbers are based on church membership, not attendance. Consequently, the percentage of the population that actually attends church is certainly higher than the membership numbers provided by ARDA.

Language Spoken At Home. Oceana County has a higher percentage at 9.82% of the population that speaks Spanish, than the statewide average of 3.0%; and a higher percentage that speaks English less than well (4.32%), compared to the statewide average of 1.3%.

Priority 1 Health Indicators:

Diabetes. In Muskegon County, 10.5% of the population reported that they have been told that they have diabetes, which is somewhat higher than the statewide average of 9%. Both Oceana (5%) and Newaygo (7.7%) have lower percentages of diabetes than the statewide average, and there is no distinction in the data between Type 2 and the more serious Type 1 diabetes. The diabetes mortality rate for African-Americans (52/100,000 pop) is 62% higher than the rate for Whites (32.1/100,000 pop).

Cardiovascular Disease. Statewide, 4.9% had been told that they had a heart attack, a number which is lower than the percentage of residents in Oceana County (5.3%) who were told the same thing, and somewhat higher than the 4.6% who received the same diagnosis in Muskegon County, or the 3.3% in Newaygo County who were told they have had a heart attack.

The same statewide 4.9% of the population were told that they had angina or coronary heart disease. Newaygo County at 6% was higher than the statewide number, while Oceana County (4.5%) and Muskegon County (1.6%) were lower. Statewide, 2.8% were told that they had a stroke, which is slightly lower than the 3.2% in Oceana County who were informed of the same thing, but slightly higher than the 2.7% in Muskegon County or 2.5% in Newaygo County who received the same diagnosis.

COPD. The only statewide number for COPD was 2007 numbers for ages 45 and older, which were 116.3 deaths for every 100,000 population. There were no statewide numbers for ages

50 to 74 or for ages 75 and over, but there were county numbers for those categories. There were 75.7 deaths in Newaygo County for every 100,000 population ages 50 to 74, with 75.1 deaths registered for Oceana County and 69.9 deaths found for Muskegon County. For ages 75 and over, there were 588.7 deaths for every 100,000 population in Muskegon County, 450.7 in Newaygo County, and 361.6 deaths in Oceana County.

Asthma. While the statewide percentage of lifetime asthma prevalence is 14.7%, Newaygo County is higher than the state at 15.6%, and Muskegon County is lower at 11.2%, with Oceana showing the lowest lifetime asthma prevalence at 9.2%. However, the statewide percentage of current asthma prevalence is 9.5%, and both Newaygo (10.6%) and Muskegon (10%) counties showed higher numbers, while Oceana County was lower at 7.8%.

Teen Pregnancy. Teen pregnancy is significantly higher than the statewide average of 54.1 per 1,000 population of 15- to 17-year-old girls in Muskegon County (74.1 per 1000) and in Oceana County (71.9 per 1,000), while Newaygo County is only somewhat higher (58.9 per 1,000). The high rate of teen pregnancy is a problem that deserves focused attention from the community.

Immunizations. Immunizations for children 19 to 35 months have been provided at a higher percentage in all three counties than it was provided statewide at 72.4%. An 83.2% majority of immunizations were provided in Muskegon County, 78.6% were provided in Newaygo County, and 73.2% were given in Oceana County—just higher than the statewide average.

Smoking. Current smoking is a problem in the region, with significantly higher percentages of the population smoking in Muskegon County (35.4%) and in Newaygo County (29%), than in Oceana County (23%); with all three counties higher than the statewide average percentage (21.1%). Newaygo and Oceana Counties are making significant progress in the battle against smoking, with both counties indicating that they have a higher percentage of former smokers, at 29.2% and 29.7%, respectively, than the statewide percentage (24.9%), while Muskegon County has a lower percentage of former smokers (18.3%) and, therefore, has a lot more work to do to get residents to quit.

Priority 2 Health Indicators:

Sexually Transmitted Diseases. The rate of STDs is high in Muskegon County, with 360 cases of Gonorrhea per 100,000, which is twice as high as the statewide average of 172 cases per 100,000. Oceana and Newaygo counties were below the state numbers per 100,000 with 24 and 26 respectively. The same is true for Chlamydia, with Muskegon reporting 641 cases per 100,000 compared to 409 statewide. 126 per 100,000 were reported in Oceana and 153 per 100,000 in Newaygo.

The incidence of cancer rate among all resident categories is higher in Muskegon County than the statewide results, while lower in Oceana County and Newaygo County.

Incidence of HIV/AIDS. All three counties are well below the statewide prevalence of HIV or AIDS per 100,000, which is 137 per 100,000. Muskegon County has 66, Oceana County is 35, and Newaygo County is 34, all per 100,000.

Incidence of Cancer. The statewide incidence of cancer average (2001-2005) per 100,000 population is 510.7. Male residents number 606.8 and females at 443.9. In Muskegon County, the comparable number among all residents is 553.9; among male residents is 675.8 and among female residents is 470.9. Oceana County's, number among all residents is 457.9, for males only 530.4, and females 395.2. In Newaygo County, the cancer incidence among all residents is 457.1, among males 573.3 and for females 362.3. Therefore, the rate among all resident categories is higher in Muskegon County than the statewide results, while lower in Oceana County and Newaygo County.

Low Birth Weight Rates. The statewide average for low birth weight (2004-2006) is 8.4% of all births. Muskegon County tied with the statewide number at 8.4%, with both of the other counties reporting a lower incidence at 6.4% each.

Injuries. The number of deaths from unintentional injuries per 100,000 population indicates that all three counties are significantly higher than the statewide average of 34.6. Muskegon County is the highest at 58.8, followed by Oceana County at 52.4, and Newaygo County is lowest at 44.1 per 100,000, but still higher than the statewide number. The state number per 10,000 population for injury or poisoning hospitalizations is 98.1, which is higher than all three counties, Newaygo County reported highest at 95.1, Muskegon County at 94.7 and Oceana County at 83.1 per 10,000 population.

Alcohol Use. Oceana County and Newaygo County are at or above the statewide percentages in heavy drinking, but Muskegon and Oceana Counties are above the statewide average for binge drinking. The heavy drinking statewide number is 6.1%. Muskegon County is lower at 5.7%, Newaygo County is slightly higher at 6.3%, and Oceana County is significantly higher at 11.7%. Binge drinking statewide is 18.4%, Newaygo County is 18.3%, and Oceana County is somewhat higher at 21.1%. Muskegon County is significantly higher at 27.4%.

Obesity. All three counties rank below the Michigan average of 28.4% for residents considered to be obese. Oceana County reported the highest incidence at 25.2%, Muskegon County at 22.9% and Newaygo County at 19.1%. While none of the counties are more obese than the statewide numbers, all are more overweight than the state's 36.2%. Oceana County ranks highest at 42.7%, Muskegon County is 40.3%, and Newaygo County is barely above the statewide average at 36.4%.

Environmental Health

While the current economic crisis in Michigan continues, environmental protection and rehabilitation should remain high on the list of priorities for citizens and organizations within the state and especially these regions. The environment influences health in many ways: exposures to physical, chemical and biological risk factors and through the related behavior changes in response to those factors. The World Health Organization estimates that nearly one quarter of all illnesses in the world could be prevented through proper environmental management.

First priorities for our region are: reducing exposure to chemicals; reducing air quality hazards; and protecting drinking water supplies. In communities throughout the Muskegon region, the young and urban populations are often disproportionately exposed to contaminates and, therefore, are particularly at risk.

Lead Hazard. Muskegon County reported high numbers of lead poisoning cases compared to Oceana and Newaygo Counties. Though all three counties reported high percentages of at-risk homes, Muskegon was highest, followed by Oceana (27%) and Newaygo (23%). According to the Michigan Department of Community Health (MDCH), 30% of all housing units in Muskegon County were built before 1950. Department of Community Health lists eleven of the thirteen zip codes in Muskegon County as "high risk" for childhood lead poisoning. These Zip Codes include the cities of Muskegon, Muskegon Heights, Norton Shores, Fruitport, Montague, Whitehall, Ravenna, Twin Lake, Coopersville, Casnovia and Bailey. The Zip Codes reflect communities containing some of Muskegon County's most vulnerable populations, such as minorities, low-income, uninsured and underserved.

VII. FINDINGS FROM COMMUNITY INPUT PROCESS

Consumer Health Surveys

Preface to Using Consumer Health Survey Information Readers of this report need to be advised about the analysis of the survey results. There were three methods used to obtain consumer information. The first was a professionally administered phone survey of 300 residents in Muskegon, Oceana and Newaygo Counties. The 300-sample was stratified so that every county was represented according to its contribution to the total population of the three-county area. On average, the sampling error was 5.7%. This survey is referred to as the "Controlled Survey." In contrast, the second and third methods are collectively referred to as the "Randomly Distributed Survey." A total of 1,405 questionnaires were completed using this approach, about evenly split between online respondents via "Survey Monkey" and hand-distributed paper questionnaires. In aggregate, 1,705 completed questionnaires were analyzed for this report.

Generally, the Controlled Survey is a more accurate reflection of the three-county region: equal responses between males and females; small variances among the frequencies of responses; closer representation of race and more evenly distributed household income. The Controlled Survey respondents were overwhelmingly White (94%) with 4% African-American. It also had older respondents than truly representative of the 3-county region: e.g., 66% were over 50 and another 19% were 41-49. Younger residents were less responsive, which is likely due to time of day calls were made, call screening and the lack of land lines by younger residents.

The Randomly Distributed survey respondents, on the other hand, were overwhelmingly female (77%) and slightly weighted to younger age groups: 46% were under 40 year old, including 16% who were 18 to 24. This is probably due to questionnaires being filled out either online or by hand in a variety of educational, health and human service venues. This group of respondents also had a wider representation of race, perhaps more accurately reflecting the population of the region with 8.4% African-American, 2.3% Hispanic; 1.6% Native American and 84% White. Household income for the Randomly Distributed Survey respondents was somewhat lower than the Controlled Survey group with 39% reporting "very low" income, compared to 30% in the phone survey.

In using the survey data below, the reader should keep in mind that the analysis presented in the report provides findings and observations based on averages or ranges of all 1,705 survey results viewed in aggregate. Thus, there are wide variances in frequency of responses for some questions and an accurate margin of error that cannot be calculated. Furthermore, readers will discover divergence in the findings from the Controlled Survey presented elsewhere in this report.

Summary Observations from the Consumer Health Surveys

The surveys provide quantitative information on matters of access to healthcare services and personal wellness for the population at-large and for a range of demographic groups. Survey results were compared for purposes of identifying the frequency of responses, commonalities among respondents, and variations between demographics. Where applicable, the information was compared to the findings of the community conversations and focus groups. The analyses resulted in the identification of a range of healthcare issues and themes. The following represents a brief overview of some of the most salient findings.

Uninsured and Underinsured Households. A significant percentage of the tri-county population either lack healthcare insurance coverage or has coverage that is inadequate for basic services. Survey results indicate that roughly one in ten households lack healthcare insurance of any type and that approximately 15% to 20% of all households possess coverage without prescription drug insurance. While these households are primarily low-to-moderate income, they are not exclusively so. The lack of healthcare 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 healthcare providers.

It was also noted that many of the area's existing industries are struggling to compete in the global economy by lowering operational costs that include reducing participation in employee benefits, such as health insurance.

Community conversation and focus group participants expressed concern that the high percentage of uninsured households has a strong potential to markedly increase if the rate of industrial employment in the area continues to decline. Participants noted that area industries historically provided high quality health insurance as an employee benefit. As industries go out of business, leave the area or reduce in size, this benefit is often lost or markedly abridged in coverage. It was also noted that many of the area's existing industries are struggling to compete in the global economy by lowering operational costs that include reducing participation in employee benefits, such as health insurance.

Difficulty in Obtaining Healthcare Services. This concern branched into two areas of need. Survey findings indicate difficulty for households to obtain healthcare services due primarily to a lack of healthcare insurance or coverage classified by participants as inadequate due to high patient participation costs (deductibles). While all surveys reported some level of difficulty in obtaining healthcare service, the percentage of households experiencing the problem ranged from 8% of all households, as reported by the controlled survey, to approximately 32% for the random survey.

Community Conversation and focus group participants added a second dimension of concern relative to their needs. Participants noted a lack of medical facilities and certain healthcare personnel, especially Ob/Gyns and pediatricians for the rural sectors of the study area that require patients having to travel to Muskegon or Grand Rapids for care. The distance factor was reported as a deterrent to some access, particularly for the elderly and low-income residents.

Cost-Related Missed Medical Care. While all surveys registered cost as a reason to forego scheduled medical services, the frequency of responses ranged thirty from ten percent for the controlled survey to slightly less than thirty percent for the random surveys. The primary demographic groups reported to skip scheduled medical care due to costs include low-income households, non-insured households, households lacking prescription drug coverage, households reporting trouble obtaining health insurance (renter households were most notable), and non-homeowners (specifically those in the 18 to 29 year age group).

Not filling prescriptions due to cost was also reported by 15% of those in the controlled survey and approximately 30% for those in random surveys. The primary demographic groups failing to fill or refill medical drug prescriptions included the non-insured, those lacking the coverage, women under 50 years of age, people in the 41 to 49 year age range, and others lacking office visit coverage (most notably those ages 18 to 29 years).

Medical Debt. Roughly 50% of households have an existing medical debt of $500 or less and 50% have debt exceeding $500. Households reporting medical debt exceeding $5,000 ranged from 2% to 7%. Demographic groups reporting the highest levels of medical debt include low-income households, non-insured households, households with members reporting fair to poor personal health, and females under the age of 50. Community conversation and focus group participants identified medical debt as a growing problem that is likely to be intensified in the coming years, as the responsibility of paying for healthcare, or a portion thereof, becomes more a personal responsibility.

Personal Health. Approximately two-thirds of survey respondents rated their personal health as good to excellent. The remaining one-third who reported personal health as less than good, were generally consistent with low-income and unemployed households, and those families with Medicare insurance.

Leading Health Problems. The leading health problems reported were: high blood pressure, high cholesterol, arthritis, and excess weight. These were followed by diabetes, asthma and chronic pain. Community conversation and focus group participants identified obesity as a major healthcare problem for the tri-county area noting that poor nutrition and lack of physical exercise were leading factors in the rise of this problem.

Mental Health. Depression was identified as the most prevalent mental health issue. While all surveys registered depression as most common, the frequency of responses ranged from 12% percent for the controlled survey to approximately 90% for the random surveys. The basis for the wide gap between surveys is unknown, but appears to indicate that respondents of the random surveys may have perceived a need to identify one of the listed mental healthcare answers.

Lack of Dental Care. A failure to obtain dental care was commonly referenced by survey participants, with roughly one-third indicating they had not visited a dentist within the past twelve months due primarily to a lack of dental insurance. Groups with the highest percentages of the need for dental care and failure to see a dentist due to cost, were the uninsured (52%) and those with a very low to low income status (76%). Community Conversation and Focus Groups pointed to the lack of dental care as a significant healthcare concern, particularly among school age children.

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. Approximately 2% reported use of hospital emergency rooms as their primary source of care. The core demographics that indicated the use of emergency rooms included respondents whose last check-up with a physician exceeded two years, those reporting difficulty in obtaining health insurance, and renters.

Following Physician Recommendations. Of those under the care of a physician, the vast majority (approximately 95%) indicated provider recommendation compliance as always or most of the time. Similarly, 94% report taking prescribed medications as always or most of the time.

Nutrition Education. All survey reports held to an approximate 31% of respondents who obtain nutrition information from their healthcare providers. These principal demographic groups are renter households, persons classifying personal health as less than good, non-homeowners, African-Americans, persons identifying themselves as very low income and persons in the 18 to 29 year age range. For others, nutrition information was largely obtained from media sources, including newspapers, magazines and the Internet.

Community Conversation and Focus Group participants expressed concern that nutrition information conveyed by commercial media sources was commonly misleading or less than complete in its representation of the nutritional value of products. They also noted that media sources and advertisers are primarily focused on selling products as opposed to educating the public.

Exercise. Some 56% of the women respondents reported they do non-vigorous exercise less than three days per week. About one-third of the male respondents exercise less than three times per week. Forty-five percent (45%) of all respondents report they rarely or never exercise on a regular basis because they are either unwilling to spend the time or do not see a need to do so.

Community Conversation and Focus Group participants expressed concern that outdoor recreational facilities for use in the winter are either missing or not properly maintained for ease of use (i.e., unplowed sidewalks and non-motorized trails). Additionally, they cited recommendations for public schools to reinstitute gym class as a required program activity.

Community Mental Health, Hackley Community Care Center, and Muskegon Family Care were the most frequently recognized healthcare resources.

Making the Community Healthier. Pursuant to upgrading the health of tri-county residents, improving nutrition and eating habits, increasing participation in physical activities/exercise programs, improving access to care services, and public education on related issues were identified as the most important areas of need.

Recognition of Health Resource Entities. Community Mental Health, Hackley Community Care Center, and Muskegon

Family Care were the most frequently recognized healthcare resources. Northwest Michigan Health Services was reported as the least recognized provider of healthcare services. Results for the Muskegon Community Health Project, Access Health and CALL 2-1-1 were somewhat skewed. The stratified phone sample revealed about 9% recognition for each of these organizations, while the randomly distributed survey indicated 39% recognition of the Health Project, 43% were familiar with Access Health, and 65% knew about CALL 2-1-1. This response is most likely due to its generally lower socioeconomic demographic.

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, usually for two to three hours, to discuss a topic of interest. The conversations are comprised of approximately 15 to 50 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 on local healthcare issues and concerns focusing on unmet needs, barriers, and problems related to healthcare access.

Two community conversations were held as part of the "Imagine Healthy" effort. The first, referred to as the "Imagine Muskegon Healthy Community Conversation" was held in Muskegon on March 20, 2009, hosting 57 participants. The group included representatives of local healthcare providers, schools, governments, civic and faith-based organizations, pharmaceutical companies, human services agencies, business and industry, and the general public. The second, referred to as the "Imagine Oceana County Healthy Community Conversation" was held in Hart, on April 2, 2009. There were 16 participants, including a contributor from nearby Newaygo County. Represented at this conversation were healthcare providers, educators, human services and public housing agencies, and faith-based organizations.

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 convened, with a facilitator. The group participants often represent a target audience demographic. A set series of questions or topics may be 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 that 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. Representatives used for this endeavor included those from the following community categories:

1) Health and Human Services
2) Faith-Based and Community-Based
3) Business and Labor
4) Government and Education
5) Physicians

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:
1) Facilitators remained neutral throughout the process—neither supporting nor challenging comments.
2) Caution was exercised by facilitators to avoid giving the impression that a particular message was being sought.
3) Facilitators employed interactive discussion techniques to make certain all participants were engaged in the process.
4) 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 the information to make the terminology fit a particular audience likely to review the findings, or drawing premature conclusions.
5) 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. The Community Conversations generated a series of healthcare issues and concerns encompassing fifteen broad categories, which are listed below. Each category is followed by the opinions most commonly voiced for the particular topic. Unless otherwise noted, the opinions reflect both community conversation groups.

1. Many study area residents do not have adequate access to healthcare providers and services. Low-income residents, and the uninsured and underinsured:
   a) lack access to healthcare services
   b) are unaware of services that may be available to them
   c) lack access to healthcare specialists. Note: this opinion was heavily emphasized by Oceana County participants.

d) lack assisted care providers and facilities for the low-income, dependent elderly
e) lack reliable transportation to healthcare providers, particularly low-income elders and special needs persons.

Note: this issue was reinforced by the Oceana County participants who emphasized their rural area as problematic to access of public transportation.

2. Addiction and substance abuse continue to be major problems in the study area.
a) There is a strong need for improved tobacco cessation programs for adults and minors. Current programs have failed to solve this problem.
b) Alcoholism is a major addiction in our area.
c) There is a need for long-term, in-patient care for substance abuse patients. Short-term programs are largely ineffective.
d) Addictive behaviors are pursued in spite of available information regarding the negative consequences.
e) Substance abuse statistics fail to consider higher income households capable of obtaining private, non-reported services.

3. Healthcare services have not kept pace with the needs of the aging and elderly.
a) Homecare programs for the elderly are limited and underfunded.
b) There is an increased need for physicians specializing in geriatric care.

4. Many of our healthcare problems are due to behavioral issues.
a) People have freewill to perform or not perform good healthcare practices. Healthcare providers cannot assist those unwilling to make responsible health choices.
b) Patients desire a quick-fix to their healthcare problems.
c) Our country is fostering wellness dependence versus personal accountability.
d) Due to political correctness, we are unwilling or afraid to confront many behavioral issues.

5. The lack of communication among healthcare providers reduces the efficiency of the delivery of healthcare services.
a) Poor communication among healthcare providers regarding a common (shared) patient often reduces the quality of care received.
b) There is no mechanism in place that allows healthcare providers/agencies to easily communicate with each other regarding available programs and services.
c) Privacy laws have fostered a lack of communication among healthcare providers.

6. There continues to be a strong need for educating people on healthcare matters.
a) People do not understand the scope and limits of their healthcare coverage.
b) The large selection of insurance programs is too complex for people to comprehend.
c) Lack of consumer education on insurance choices and selecting program fit.
d) People are unaware of potential healthcare services available to them through local, state, or federal programs.
e) Physicians fail to educate their patients.
f) The Internet has improved patient knowledge of healthcare matters, but should not be viewed as reaching a majority of the public. Traditional educational methods remain important.
g) Healthcare providers commonly lack educational materials suitable for patients with language/ethnicity differences.

Note: The region's growing Hispanic population was often mentioned.

7. The future of healthcare remains uncertain.
a) The growth in healthcare costs is unsustainable.
b) People continue to depend on the continued expansion of healthcare services as opposed to practicing healthy lifestyle choices.
c) Employer-paid health insurance benefits will continue to decline as costs rise.

8. Income and poor health are directly linked.
a) Costly medications are avoided by people with no insurance or those having high co-pays.
b) Basic needs are met before healthcare needs.
c) Poverty leads to poor food choices and poor nutrition.
d) Those in poverty or with low incomes commonly engage in risk behaviors, such as smoking or drug abuse, leading to the degradation of their health.
e) Those in poverty or with low incomes avoid accessing preventive healthcare services.

9. The lack of health insurance is a leading factor in the cause of poor health.
a) Many people lack dental insurance, hence fail to obtain dental care.
b) The lack of preventive care incentives by insurance companies implies that they and many employers fail to recognize that prevention activities reduce long-term medical costs.
c) The lack of insurance results in greater use of emergency rooms for medical services, particularly primary care.

10. Poor nutrition is a leading cause of poor health.
    a) A large percentage of the general public does not understand or appreciate the benefits of good nutrition.
    b) Nutrition information can be conflicting, due largely to media advertising that hypes the benefits of certain products.
    c) There is a lack of available organically grown fresh foods.
    d) Healthy foods tend to be expensive and are avoided by or are financially inaccessible by many.
    e) Public schools allow the dispensing of non-nutritious foods and drinks for income-producing purposes.

11. The lack of patient compliance is a common cause of poor health.
    a) Patients commonly fail to overcome poor behavioral practices.
    b) Patients commonly fail to take prescribed medications, largely due to costs of medicines.
    c) Patients commonly fail to follow provider instructions and recommendations
    d) Providers fail to emphasize to their patients the consequences of non-compliance.

12. The delivery of healthcare services can be a major issue for some.
    a) Healthcare providers tend to be less tolerant and compassionate when treating low-income, elderly, and special-needs patients, and patients, as well as those culturally different from themselves.
    b) We have become an over-medicated society.
    c) Physicians employ medication over alternative or holistic options.
    d) Physicians fail to educate patients on health management.
    e) Physicians fail to understand and/or appreciate the cultural nuances of certain ethnic groups when rendering treatment.

13. The lack of physical activity contributes to poor health, particularly among children.
    a) There is a lack of access to outdoor physical activities and facilities in winter months.
    b) Children no longer regularly participate in physical activities.
    c) Public schools no longer require Physical Education.

14. The failure to implement preventive care programs is a strong impediment to achieving good health.
    a) Insurance providers routinely fail to offer preventive care coverage.
    b) Insurance companies and employers fail to incentivize preventive care.
    c) People fail to manage their lifestyles and habits toward healthy outcomes.

15. Our youth continue to be at risk.
    a) Teen sexuality and pregnancy continue to be rampant.
    b) Parents commonly fail to teach and/or discipline children regarding lifestyle choices.

Community Focus Groups. Based on the input gained from the community conversations and information gleaned from the healthcare surveys completed as part of the "Imagine Healthy" program, focus group participants were asked to respond to six topical areas. For each topic, group participants were asked to:

1) Concur or disagree with the assertions made based on their knowledge and perception of the subject matter.
2) If in agreement, identify the specific problems that have resulted in their community. If not, provide an explanation or basis for a differing opinion.
3) If in agreement, offer solutions to the problems raised.

Topic 1. Poverty remains the number one challenge for improving healthcare delivery and individual health status in the study area.

All groups concurred with the premise of this topic. The specific problems occurring locally due to poverty are:
1) Lack of health insurance resulting in limited or no medical care or dental care.
2) Increase in substance abuse, especially the use of alcohol.
3) Poor nutrition leading to such problems as obesity and diabetes.
4) Failure to practice wellness programs.
5) Breakup of families/higher divorce rates.
6) Increased use of local hospital emergency rooms for primary care.
7) Increased demand for mental health services.
8) Out-migration of families seeking employment elsewhere.
9) Rise in the level of homeless people of all ages

Identified solutions:
1) Increase local employment opportunities.
2) Expand healthcare coverage programs, such as Access Health.
3) Improve access to educational opportunities for employee retraining.
4) Healthcare and social services agencies must improve coordination of services in order to achieve maximum benefit.
5) Improve coordination of services between local

churches, United Way, the Community Foundation, Gleaners, Love INC and others to maximize the collection and distribution of resources.

Topic 2. Lack of health insurance and the high cost of health insurance emerges consistently as a major barrier to healthcare by all moderate and low-income demographics, compounded by the high cost of healthcare.

All groups concurred with the premise of this topic. The specific problems occurring locally, due to a lack of insurance noted by moderate and low-income demographics, are:

1) Limited or no medical care.
2) Increase in medical debt.
3) Failure to fill prescriptions.
4) Increased no-shows by persons needing medical care.
5) Increased use of hospital emergency rooms for primary care.
6) Increased demand for public healthcare services by the County Health Department, Mental Health, etc.

Identified solutions:

1) Increase local, full-time employment opportunities with health insurance benefits.
2) Increase the coordination among area employers to achieve cost reductions in providing healthcare benefits through common/joint purchasing of healthcare insurance products.
3) Expand programs such as Access Health.
4) Educate the consumer on the best choices for healthcare insurance.
5) Expand the teaching of wellness programs at local schools, churches, big box stores, and other locations commonly frequented by low- and moderate-income residents.

Topics 3. A variety of risk behaviors are perceived to be major contributors to ill health and the high cost of healthcare in the tri-county area. Specifically cited are smoking, alcohol, and other drug abuse, sexually transmitted diseases, teen pregnancy, and obesity.

All groups concurred with the premise, citing the following reasons for engaging in these risk behaviors:

1) People fail to appreciate the long-term health ramifications of these risk behaviors.
2) Due to a need or desire, a large percentage of households experience both parents as full-time employees, resulting in limited time with their children for bonding, educating, supervising, and positive role modeling. These are the children at severe risk for engaging in risk behavior practices.
3) The media expresses many of these risk behaviors in a positive way, such as alcohol consumption, sexual behavior and violent behavior.
4) The level of public stigmas associated with engaging in these risk behaviors no longer exist.
5) Many of these risk behaviors are no longer labeled as acceptable to society.
6) Historically, the Muskegon area was cited as a "blue-collar" factory town where the use of tobacco and alcohol is a common practice.

Identified solutions:

1) Expand public education (advertising) on the ramifications of risk behaviors. Consider the greater use of role models to help spread the word.
2) Call upon churches/religious organizations to become more involved in educating the public on risk behaviors.
3) Ensure that children are educated/involved at a very early age regarding the risk behavior pitfalls.
4) Reinstate the use of high school guidance counselors to provide students with a caring professional, trained to assist with these matters.

Topic 4. Disparity in healthcare delivery, and quality of care and treatment is perceived by some sectors as a problem in our tri-county area, specifically among the very low-income, African-Americans and Hispanics.

A majority of participants questioned this premise. Approximately two-thirds did not agree. The remaining one-third was in partial or full agreement. Those disagreeing indicated:

1) Patients routinely receive equal care regardless of income or ethnicity.
2) Local hospitals carefully monitor quality of care services and make it a point to provide equal services for all patients.
3) The lack of income and healthcare insurance by some sectors may limit their ability to access certain healthcare providers or services.

Participants agreeing with the premise cited:

1) Failure of healthcare providers to understand and/or appreciate the cultural nuances of certain ethnic groups when rendering treatment.
2) Personal experience or experience of a family member.

Solutions identified by those agreeing with the premise:

1) Recruit more African-American and Hispanic physicians, nurses, and other medical personnel.
2) Medical schools and hospitals should provide sensitivity training for medical personnel.

Topic 5. Disability has become a significant problem in all three counties and should be a healthcare concern, according to the respondents. Generally, group participants expressed limited knowledge of this problem, but perceived it to be true, citing the following:

1) The area's industrial heritage (heavy industry, chemical industries, etc.) has resulted in high levels of work-related disabilities.
2) Due to medical advances, the population is aging and is more prone to disabilities.
3) Due to medical advances, people subject to traumatic injuries are able to survive, but often experience diminishment in select functional abilities.
4) The high rates of substance abuse often lead to disabling conditions.
5) People are becoming knowledgeable with regard to access of supplemental income and healthcare services if classified as disabled. The data may be somewhat skewed.
6) There has been a marked increase in the accepted range of medical conditions qualified as disabling or that lead to disabling conditions.

Identified solutions:

1) Expand public education/advertising on the negative outcomes of risk behaviors.
2) Improve patient monitoring and review by disinterested third parties to ensure that disability benefit recipients are actually disabled.
3) Redefine and tighten the meaning of disabling/disability pursuant to the receipt of supplemental income and healthcare services.

At the close of each session, focus group participants were asked to identify specific opportunities, which a unified hospital system might access at either a community level and/or clinical level, in order to address any or all of the problems mentioned. Commonly identified opportunities included:

1) Emphasize and market wellness as a regular part of marketing campaigns.
2) Help navigate people to available and appropriate services. Possibly create a fully staffed office that triangles people to available services.
3) Initiate cultural diversity training/workshops.
4) Educate people on the future of healthcare and how healthcare is funded.
5) Lead the charge on the coordination of local healthcare programs and services.
6) Make greater use of Physician Assistants and other lower-level practitioners who can diagnose basic problems.
7) Work with local schools to reinstate the school nurse program.
8) Implement patient registries, creating a personal health record for all patients, making them accessible to all physicians and hospital departments associated with the unified healthcare network.
9) Establish mobile clinics in out-county locations, or implement a reliable and flexible transportation system capable of transporting patients to hospitals and other healthcare agencies.
10) Retain highly visible professional athletes, entertainer and others to serve as young people's role models and spokespersons against risk behaviors.

The doctors acknowledged that health disparities exist, but insisted that these were due primarily to socio-economic conditions—not race.

Physician Focus Group. Six physicians participated in the focus group. These physicians were selected to represent the 306 members of the Lakeshore Health Network of physicians for monthly discussions of common issues. In a number of instances, the physician group concurred with the viewpoints expressed by community conversation and other focus group participants. Conversely, they also offered several pointedly different perspectives on improving healthcare delivery and community health, in general. On patient health behaviors, the group consensus was that obesity, weight control, hypertension and nutrition education are the most important factors to improve healthy lifestyles and general public health. They also felt strongly that health education cannot be exclusive to the physician's office, since they see patients an average of one hour per year. This is not enough time for reinforcement of behavioral change. Such changes require a robust, community-wide, multi-level program involving churches, schools and public awareness, especially in restaurants.

A couple of doctors commented that perhaps the medical profession is "enabling" unhealthy behaviors with advances in medical treatments and procedures; such as,

joint replacements, bypass surgeries and organ transplants. Patients have high expectations of medical remedies to fix the results of unhealthy behaviors. Consensus was that healthy behavior must have heavy financial incentives in insurance payments or discounts, and high taxes on tobacco and alcohol.

The doctors acknowledged that health disparities exist, but insisted that these were due primarily to socioeconomic conditions—not race. The doctors did acknowledge that physicians have trouble with cultural competence. Cultural competence is under-emphasized in medical education. Moreover, physicians cannot spend enough time with each patient to learn about the respective cultural factors that affect his or her health. A suggestion was to conduct local studies with Hispanic and/or African-American groups on cultural considerations/barriers and, then, offer a CME workshop on the resulting issues. On the subject of rural access to care, the concept of mobile medical units was soundly rejected as being an inefficient use of physician time and inadequate to meet treatment needs. Alternatively, they felt it may be cost-effective to provide transportation for patients to get to health-care centers.

The physicians cited recent "pay for performance" policies as having a role in the worsened access to care health disparity. They said that pay for performance has eroded the base for financial stability in practicing medicine insofar as it discourages doctors from practicing in low-income areas. Socioeconomic factors generally affect patient adherence levels in such things as filling prescriptions, taking proper doses and complying with treatment regimen and follow-up visits. Thus, lower-income patients tend to have poorer outcomes, resulting in lowered physician ratings and reduced compensation. This situation is exacerbated by fewer doctors entering primary care practice and more pursuing specialty care.

In conclusion, each physician was asked what the most important and immediate step would be to address these issues. The consensus responses were:

1) The need to recruit more primary care physicians by creating incentives (competitive compensation packages) to attract them to the Muskegon market, especially to the lower-income areas of need.
2) Equalize regional differences in reimbursement rates set by the government, based on historical costs. West Michigan is at a distinct disadvantage compared to rates in Detroit, and Michigan's rates as a state are much lower than other regions of the country.
3) Universal health coverage may be the only cure to existing health disparities among low-income and rural populations, but exercise caution that it wouldn't take full effect too soon. There are few primary care physicians at this time to absorb a huge spike in demand that would come with universal health coverage. Currently, only 2% of medical students are going into primary care. Primary care must be infused with substantial incentives, increased reimbursement rates and expanded residency programs.

The Business Survey – May, 2009.

Notice of the online survey questionnaire on Survey Monkey was sent out to 1,200 Muskegon Area Chamber of Commerce business members having 50 or fewer employee. Notice was also sent to the 150 members of the Employers' Association of West Michigan. Forty-six businesses responded to the survey (see Appendix 5). Two-thirds of the respondents were from the urban zip codes that include the Cities of Muskegon, Muskegon Heights, Norton Shores and Muskegon Township, and 13% were from Spring Lake and Grand Haven. Ninety percent (90%) were for-profit organizations and nearly half were manufacturing businesses. Seventy percent (70%) had been in business 16 years or more. Thirty-six percent (36%) had over 100 employees, and 27% less 50 employees. Three-fourths of the respondents reported having 10 or fewer part-time employees, with about half working 20-30 hours per week; 25% of the part-time workers work more than 30 hours per week. Three-fourths of the respondents said they have not replaced full-time with part-time workers. The serious health problems reported by most employers included: overweight (76%); smoking (74%); high blood pressure (43%); high cholesterol (38%); heart disease (19%); and depression (17%). About half reported losing 5 or fewer workdays per month, while 31% reported losing 6-15 days per month.

Almost all employers (96%) reported offering insurance to their employees; three-fourths said they also offer insurance to part-time workers. About 40% of the plans have deductibles under $250 and another 40% have $250-$1,000 deductibles; 23% have high deductibles at $1,001-

$5,000. However, 86% reported they have changed their health coverage in the last year: 73% have increased employee premium contributions, 58% have increased deductibles and co-pays, 18% have reduced benefits. Of concern is that nearly 90% also say they will be increasing employee contributions to premiums in the next year, as well as changing to higher deductibles (higher co-pays (52%) and reduced benefits (30%). The good news is that only 2 employers say they plan to drop coverage. Only 1 of 4 employers responding to the question say they plan to offer insurance to full-time employees in the next 12 months, while 1 of 8 respondents plan to offer insurance to part-time employees. Only 9% of responding employers offer a health saving plan and 3 say they will be adding a health saving plan this year.

Two-thirds of the employers with health plans say their plans do not offer wellness incentives, while the rest do. Nearly half of employers say their companies offer wellness benefits and incentives for participation in programs, such as weight management and fitness. It is worthy to note that 71% of the employers say they are interested in working with Mercy Health Partners to provide wellness programming. Two large employers in Muskegon requested contact from MHP for more information.

Businesses were asked a series of questions about their attitudes toward health policy changes. All responding employers supported greater transparency in health costs, improved health information technology, increased access to medical information and quality of care ratings, and published physician and hospital quality ratings. Two-thirds supported tax incentives to provide insurance for small businesses with 12 or fewer employees. Half of the employers supported a federal network for insurance pooling, early buy-in to the Medicare program and requiring employers to contribute to employee health insurance.

A little less than half of the employers responded when asked what kind of programs they would most be interested in working on with MHP. The top interest areas were general healthy living education classes (85%); general fitness programs on exercise and nutrition (70%); and in-workplace speakers, workshops or programs (60%). About half were interested in chronic disease patient education programs (55%); chronic disease self-management classes, and one-on-one or small group counseling.

VIII. REFLECTIONS ON THE NEEDS ASSESSMENT

The Process: Lessons Learned

Consumer Health Surveys. Our best results in conducting the consumer health surveys were obtained through a professional, limited sample phone survey and through the online "Survey Monkey." Whether a scientific stratified or randomly distributed survey, local agencies should not be asked to distribute and/or administer the surveys. More consistently reliable results will be obtained by using a professional survey firm, or well-trained personnel under single-point-of-contact supervision. This is particularly important for the distribution and administration of the paper survey questionnaires. Of course, the best approach is to have a professional survey firm conduct a community-wide survey using statistically valid techniques. However, this approach would be costly.

Although community conversations are best-suited to locations that are familiar and accessible community-based settings, focus groups may get better results when held within a local hospital.

Community partners are most productive and, therefore, best used to convene and host the "Community Conversations" forums and small focus groups. Activities to formulate invitee lists, recruit focus group participants, ensure maximum participation that is diverse and broadly representative of the community, distribute invitations, promote the events and conduct follow-up activities are best handled by facilities or organizations. Best results will come from the use of professional facilitators for conducting the actual forums and focus groups.

Community Input Forums. When inviting people to the community conversations or focus groups, take time to ensure they understand what will be taking place at the meeting and why they are being invited. Provide some particular details about both process and content. A preliminary agenda could satisfy this need. Particularly for the focus groups, emphasize the

importance of staying for the entire session. It will help to also emphasize that leaders will adhere to the advertised length of the sessions. Invitees should be encouraged to engage someone else to attend if they cannot. It may be worthwhile to consider providing a small stipend or complimentary gift for focus group participants to punctuate their commitment to the sessions.

Focus groups should include at least eight participants; preferably twelve. This would help ensure that one or two of the most vocal or assertive participants would be less likely to dominate discussions. Recognize that both focus groups and community conversations will probably take more time than first anticipated to fully complete the agenda. Thus, it is best not only to have a professional facilitator, but to have an agenda that is moderate in scope.

In the future, we should consider creating a couple of focus groups that are mixed in their make-up, should be considered in addition to the affinity group approach. These might include faith-based participants, educators, government officials, seniors, and business people. Another possibility is to consider a focus group of ordinary citizens, with no particular affiliation. These may help to increase attendance, as well as balance the weighted perceptions of specific interest groups.

Although community conversations are best-suited to locations that are familiar and accessible community-based settings, focus groups may get better results when held within a local hospital. This will help reinforce the importance of the event to community health, emphasize health issues, help participants remain focused on their "tasks", create non-medical personal links with the healthcare institution. This contextual factor will likely help increase attendance, as well as improve the logistics and cost of providing hospitality.

Considerations for Next Steps

1. Presentation of Findings. It is recommended that several interactive workshops on program findings (outcomes) be conducted by the Project for Health administrative, planning, and medical staff of area hospitals. Workshop agendas might include:

a) Presentation of findings
b) Review of identified pressing needs
c) Identification of local opportunities to meet pressing needs
d) Missing information
Items c) and d) would involve active dialogue among program participants.

The identification of local opportunities allows participants to detail suggestions and recommendations on ways to meet any need, given the existing resources. The discussion on missing information allows participants the opportunity to identify information they believe to be lacking and necessary to the project to advance the wellness of residents.

2. Creating a Healthy Community. Consensus on the greatest health concerns in the tri-county region was obesity, nutrition education and physical exercise. It is recommended that action programs be developed for each issue and should involve the following components:

a) Goal (Vision) - Identify what the healthcare community hopes to (should) accomplish.
b) Objectives (Action Steps) - Identify the steps or actions needed to achieve the vision.
c) Responsible Party - Identify the party responsible for administering the action programs.
d) Tools Needed - Identify the tools needed (people, agencies, funds, equipment, etc.) by the responsible party to achieve the actions.
e) Timeframe - Prepare a schedule identifying reasonable timeframes for achieving the identified actions.
f) Evaluate - Initiate periodic evaluations to determine the level of program success and identify adjustments that might be needed.

3. Agency Coordination. Develop a comprehensive program aimed at coordinating local healthcare agencies on available healthcare programs and services in each of the three counties. The program should identify the party (or parties) responsible for administering the program, how the program will be carried out, the timeframes for doing so, methods for evaluating its success, and determining and implementing needed program adjustments. It should be noted here that health and human service providers, especially in Oceana County, suggested MHP conduct more frequent "community conversations" for improved networking. As an important initial step, local health professionals should try to establish healthy lifestyle indicators that can be easily communicated to the general public via media messages, and serve as individual and community benchmarks for health.

4. Health Education. Develop a comprehensive program aimed at educating/informing the public on healthcare matters, particularly disease self-management. At a minimum, the program should identify the party (or parties) responsible for administering a comprehensive health education program, how the program(s) will be carried out, and the timeframe for doing so. Specific considerations include:

a) Improving communication networking for better coordination of care among providers and support services.
b) Programs for low-adhering patients, using the

existing patient registry. These could utilize trained community- and faith-based, non-clinical case managers to partner with medical practices, as well as chronic disease self-management classes.
c) Wider use of trained "health navigators," especially in the rural areas.
d) Strengthening the health education programs in the schools, using community "wellness" indicators.
e) Work on "incentivizing" participation in preventive care and behaviors, coupled with creative public marketing of "wellness" media messages. Worthy to note is that 80% of consumer survey respondents said they got their health education from their physicians. However, the focus group physicians indicated this is not realistic, as they spend about one hour per year with their patients. Moreover, those most in need have not seen a doctor in two or more years. It is also worth noting that 71% of the businesses surveyed said they want to work with MHP on healthy living education, fitness, exercise and nutrition classes and workplace programs.

5. Uninsured Citizens. Several interim activities should help mitigate the dilemma of the uninsured:

a) Increase efforts to enroll eligible people in the Medicaid and MIChild coverage programs
b) Expand enrollment activities in pharmaceutical company "Patient Assistance Programs" (PAP). It may be well to consider merging MCHP's existing Pharmaceutical Access Program with the Low-Income Pharmacy program.
c) Find ways to increase adult access to dental care and expand oral surgery services for children.
d) Create and design a program to help people manage significant medical debt without succumbing to default and/or bankruptcy.
e) Explore ways to expand the Access Health community coverage program to more people, especially low to moderate income people who are newly laid off.

6. Health Disparities. May be addressed with some of the following activities:

a) At least as an interim measure, implement a mobile unit to address the access needs for resource information, enrollment, screening and basic services in rural areas of the tri-county region. [Note: A "Wheels of Mercy" project is already in advanced planning stages.] For longer term implementation, begin exploring funding for nurse-practitioner clinics in strategic rural locations.
b) Develop strategies to target resource information and enrollment services in the areas most in need according to CALL 2-1-1 and current community

benefit/charitable care data for zip codes 49441, 49442 and 49444.
c) Develop a specific strategy to address the needs of persons with disabilities, which is an emergent problem in all three counties.
d) Sponsor local studies of barriers to care among local minority and ethnic groups, and create Continuing Medical Education (CME) events to promote cultural competency among medical providers.
e) Develop strategies for increasing recruitment of primary care physicians to practice in the tri-county area. To foster support and success of this effort, become actively involved in national political and other lobbying activities to affect the equalization of local Medicaid reimbursement rates with those in the eastern region of Michigan and other regions throughout the country.

7. Future Surveys. Using current consumer health survey results for benchmark purposes, conduct additional periodic surveys of the tri-county households at regular intervals to measure changes in the health status of local residents and identify any adjustments needed in the delivery of healthcare services.

IX. APPENDICES

The following pages contain supporting documentation on our findings.

APPENDIX 1: COMMUNITY DATA

Data Set	Muskegon County	Oceana County	Newaygo County	State	US	Source
Population & Trends - Population Projection (10-20 yrs)						
	174,386	27,800	49,171	10,003,422	304,059,724	
	(July 1, 2007)	(July 1, 2007)	(July 1, 2007)	(July 1, 2008)	(July 1, 2008)	U.S. Census Bureau American Fact Finder "American Community Survey"
2020 Projection	192,890	35,975	71,228	10,695,993	341,387,000	
2030 Projection	205,730	42,339	87,667	10,694,172	373,504,000	
	F	F	F	E	E	
Age/Sex						
Female	50.0%	49.6%	50.1%	50.8%	50.7%	
Male	50.0%	50.4%	49.9%	49.2%	49.3%	
	(07)A	(05-07)A	(05-07)A	(07)A	(07)A	U.S. Census Bureau American Fact Finder "American Community Survey"
Age/Male						
Under 5 years	7.0%	7.4%	6.6%	6.6%	7.1%	
5 to 9 years	6.3%	6.5%	6.6%	6.8%	6.8%	
10 to 14 years	7.8%	7.6%	8.3%	7.2%	7.1%	
15 to 19 years	7.7%	7.9%	7.9%	7.8%	7.6%	
20 to 24 years	7.7%	6.6%	6.2%	7.0%	7.3%	
25 to 29 years	7.0%	6.3%	7.3%	6.5%	7.1%	
30 to 34 years	6.7%	5.0%	5.1%	6.2%	6.6%	
35 to 39 years	6.4%	6.8%	6.3%	6.7%	7.1%	
40 to 44 years -	7.2%	6.1%	7.1%	7.7%	7.5%	
45 to 49 years	7.3%	8.3%	8.2%	8.0%	7.6%	
50 to 54 years	7.7%	7.0%	7.2%	7.4%	6.9%	
55 to 59 years	6.6%	6.4%	6.1%	6.4%	5.9%	
60 to 64 years	4.5%	4.9%	5.0%	4.9%	4.7%	
65 to 69 years	3.2%	3.7%	4.3%	3.5%	3.4%	
70 to 74 years	2.3%	3.6%	3.1%	2.6%	2.6%	
75 to 79 years	2.5%	2.8%	2.5%	2.2%	2.1%	
80 to 84 years	1.5%	1.9%	1.2%	1.6%	1.5%	
85 years and over	0.9%	1.1%	1.1%	1.0%	1.1%	
Age/Female						
Under 5 years	6.4%	7.0%	6.3%	6.0%	6.6%	
5 to 9 years	7.6%	5.3%	6.4%	6.2%	6.4%	
10 to 14 years	6.0%	7.7%	7.7%	6.7%	6.5%	
15 to 19 years	6.4%	7.2%	7.4%	17.2%	7.0%	
20 to 24 years	6.4%	6.1%	6.0%	6.5%	6.6%	
25 to 29 years	7.6%	7.2%	6.5%	6.3%	6.6%	
30 to 34 years	6.0%	5.3%	5.4%	5.8%	6.3%	
35 to 39 years	5.5%	6.6%	6.6%	6.7%	6.9%	
40 to 44 years	7.3%	6.1%	6.9%	7.3%	7.3%	
45 to 49 years	8.0%	7.8%	8.3%	7.8%	7.6%	
50 to 54 years	7.2%	6.6%	6.9%	7.4%	7.0%	
55 to 59 years	6.4%	6.1%	5.2%	6.3%	6.1%	
60 to 64 years	4.6%	5.1%	5.6%	5.1%	5.0%	
65 to 69 years	4.3%	4.3%	4.2%	3.9%	3.8%	
70 to 74 years	2.7%	3.9%	3.5%	3.0%	3.1%	
75 to 79 years	3.4%	2.0%	2.3%	2.8%	2.8%	
80 to 84 years	2.0%	2.2%	2.3%	2.4%	2.3%	
85 years and over	2.2%	3.5%	2.4%	2.4%	2.3%	
	(07)A	05-07(A)	(05-07)A	(05-07)A	(05-07)A	
Race/Ethnicity						
White	83.7%	90.4%	94.2%	81.0%	75.6%	
Black or African American	13.4%	0.3%	0.8%	14.3%	12.7%	
American Indian and Alaska Native	0.8%	0.0%	0.8%	0.5%	0.8%	
Asian	0.3%	0.2%	0.5%	2.4%	4.5%	
Native Hawaiian and other Pacific Islander	0.0%	0.0%	0.0%	0.0%	0.1%	
Some other race	1.7%	6.1%	2.1%	1.7%	6.3%	
Two or more races	2.8%	1.9%	1.6%	1.9%	2.2%	
Hispanic or Latino of any race	*4.3%*	*11.6%*	*4.9%*	*4.0%*	*15.1%*	
	(07)A	(05-07)A	(05-07) A	(07)A	(07)A	
Marital Status						
Age 15 and over						
Now married (except separated)	48.2%	56.7%	58.2%	49.8%	50.2%	
Widowed	6.4%	8.0%	5.8%	6.4%	6.3%	
Divorced	13.8%	10.6%	11.2%	11.1%	10.5%	

APPENDIX 1: COMMUNITY DATA

Data Set	Muskegon County	Oceana County	Newaygo County	State	US	Source
Separated	1.3%	1.1%	1.5%	1.5%	2.2%	
Never married	30.2%	23.6%	23.2%	31.2%	30.8%	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Males						
Age 15 and over						
Now married (except separated)	49.4%	56.7%	59.0%	51.8%	52.3%	
Widowed	2.8%	4.0%	2.7%	2.6%	2.5%	
Divorced	13.4%	10.1%	11.4%	10.0%	9.3%	
Separated	1.2%	0.9%	1.4%	1.3%	1.8%	
Never married	33.2%	28.3%	25.4%	34.3%	34.0%	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Females						
Age 15 and over						
Now married (except separated)	47.0%	56.8%	57.5%	47.9%	48.3%	
Widowed	10.0%	11.9%	8.8%	9.9%	9.9%	
Divorced	14.3%	11.0%	11.1%	12.1%	11.7%	
Separated	1.4%	1.3%	1.6%	1.7%	2.5%	
Never married	27.3%	19.0%	21.0%	28.4%	27.6%	
	(07)A	(05-07) A	(05-07) A	(07)A	(07)A	U.S. Census Bureau American Fact Finder "American Community Survey"
Households						
	64,455	10,364	18,950	3,849,007	112,377,977	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Households by Type						
Family	66.9%	71.9%	73.2%	66.5%	66.8%	
Non-family	33.1%	28.1%	26.8%	33.5%	33.2%	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Married-couple family	48.8%	56.9%	58.0%	49.7%	49.7%	
Male householder, no wife present, children	4.9%	4.1%	5.5%	4.3%	4.6%	
Female householder, no husband present, children	13.2%	11.0%	9.7%	12.5%	12.5%	
Householder living alone	28.6%	22.3%	21.4%	28.2%	27.3%	
Householder not living alone	4.5%	5.7%	5.4%	5.3%	5.9%	
	(07)	(05-07)	(05-07)	(07)A	(07)A	U.S. Census Bureau American Fact Finder "American Community Survey"
With related children under 18 years	34.9%	35.4%	36.2%	33.1%	34.1%	
With own children under 18 years	32.2%	31.9%	33.6%	30.9%	31.4%	
	(05-07)	(05-07)	(05-07)	(05-07)	(05-07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Households with one or more people under 18 years	34.3%	36.3%	37.4%	33.2%	34.4%	
Households with one or more people over 60 years	9.4%	33.2%	31.9%	23.2%	23.4%	
65 years and over	10.4%	8.6%	8.5%	9.5%	9.1%	
	(07)	(05-07)	(05-07)	(07)A	(07)A	U.S. Census Bureau American Fact Finder "American Community Survey"
Persons Per Household						
	2.58	2.59	2.56	2.55	2.61	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Household Income						
Median	$39,099	$38,295	$42,818	$47,950	$50,740	
Mean	$49,884	$46,055	$51,278	$62,922	$69,193	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"

APPENDIX 1: COMMUNITY DATA

Data Set	Muskegon County	Oceana County	Newaygo County	State	US	Source
Vehicles Per Household						
No vehicle available	8.2%	5.2%	4.5%	6.8%	8.7%	
One available	33.2%	28.6%	28.0%	34.0%	33.1%	
Two available	37.9%	41.1%	41.3%	39.8%	38.1%	
Three or more	20.6%	25.1%	26.1%	19.5%	20.1%	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Social Security						
Households	31.2%	31.7%	32.5%	28.4%	26.9%	
Household Mean	$14,827	$14,626	$14,603	$15,339	$14,493	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Medicare						
Total Number of Beneficiaries	29,512	5,204	8,658	1,571,709	44,831,390	
	(07)K	(07)K	(07)K	(08)J	(08)J	
Enrollment as a percentage of population				15%	15%	
				(08)J	(08)J	
Enrollment as a percentage of population (estimate)	16.9%**	18.7%**	17.6%**			
***= We computed % by compariing enrollment to 2007 Population estimates*						
Medicaid						
Enrollment as a percentage of total				18%	25%	
				(05)J	(05)J	
Enrollment	25,908	3,848	5,930			
	(05)M	(05)M	(05)M			
Enrollment as a percentage of population (estimate)	14.8%**	13.8%**	12.1%**			
***= We computed % by compariing enrollment to 2007*						
Population estimates						
Poverty < FPL (150% & 200%)						
Individuals	15.6%	19.5%	15.4%	14.0%	13.0%	
Families	11.1%	14.5%	12.6%	10.1%	9.5%	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Individuals						
Under 100% FPL	16.0%	19.5%	15.4%	13.7%	13.3%	
Under 150% FPL	25.1%	32.6%	26.6%	21.7%	22.1%	
Under 200% FPL	35.2%	45.3%	37.0%	30.1%	31.2%	
	(05-07)	(05-07)	(05-07)	(05-07)	(05-07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Uninsured						
Under 18 Yrs	NA	NA	NA	5.9%	11.3%	Kaiser State Health Facts, 2006-07
Over 18 Yrs	19.4%	22%	10.3%	NA	NA	EPIC-MRA (extrapolated), 2009
18 - 64 Yrs	23.5%	27.6%	12.7%	15.2%	19.7%	Kaiser State Health Facts, 2006-07
Total Population	14.10%	15.80%	7.40%	12.40%	17.2%	Kaiser State Health Facts, 2006-07
Homeless						
	792 individuals	92 individuals	166 individuals	28,295 individu	671,859 individuals	
	(06)	(05)	(06)	(07)	(07)	National Alliance to End Homelessness (County figures from their 10 year Plans)
Occupation/Employment Sectors						
Agriculture, forestry, fishing, hunting and mining: 0.9%	0.9%	8.4%	4.5%	1.2%	1.8%	
Construction	4.3%	9.2%	8.2%	5.6%	7.7%	
Manufacturing	30.0%	24.3%	23.4%	18.8%	11.3%	
Wholesale trade	2.0%	2.4%	2.1%	2.9%	3.2%	
Retail trade	10.2%	12.5%	11.3%	11.3%	11.4%	
Transportation and warehousing and utilities	3.7%	2.9%	4.2%	4.3%	5.2%	
Information	1.0%	0.7%	1.3%	2.0%	2.5%	

APPENDIX 1: COMMUNITY DATA

Data Set	Muskegon County	Oceana County	Newaygo County	State	US	Source
Finance and insurance, and real estate and rental and leasing	3.6%	3.0%	5.2%	5.8%	7.2%	
Professional scientific and management, and administrative and waste management	6.5%	3.5%	4.7%	8.5%	10.3%	
Educational services, and health care and social assistance	19.7%	17.0%	18.1%	22.3%	21.2%	
Arts, entertainment, and recreation, and accommodation and food service	10.1%	8.8%	7.8%	9.3%	8.8%	
Other services, except public administration	4.6%	4.2%	6.1%	4.6%	4.8%	
Public administration	3.3%	3.0%	3.1%	3.6%	4.7%	
xxx	xxx	xxx	xxx	xxx	xxx	
Management, professional and related occupations: 24.8%	24.8%	20.9%	22.6%	33.0%	34.6%	
Service occupations: 18.4%	18.4%	15.5%	15.8%	17.5%	16.7%	
Sales and office occupations: 22.1%	22.1%	20.6%	22.4%	24.8%	25.6%	
Farming, fishing, and forestry occupations: 0.5%	0.5%	6.0%	2.9%	0.5%	0.7%	
Construction, extraction, maintenance and repair occupations: 8.7%	8.7%	12.1%	12.4%	8.1%	: 9.7%	
Production, transportation and material moving occupations: 25.5%	25.5%	24.9%	23.9%	16.0%	12.7%	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Disability Sectors						
Population 5 years and over:						
Without any disability: 79.9%	79.9%	79.3%	81.7%	83.7%	85.1%	
With one type of disability: 7.7%	7.7%	7.0%	8.3%	7.2%	6.7%	
With 2 or more types of disabilities: 12.4%	12.4%	13.7%	10.1%	9.1%	8.3%	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
With any disability (estimated)	20.1%	20.7%	18.3%	16.3%	15.0%	
With a sensory disability (estimated)	4.6%	6.8%	5.1%	4.2%	4.2%	
With a physical disability (estimated)	11.8%	13.3%	10.3%	9.9%	9.4%	
With a mental disability (estimated)	9.3%	9.7%	8.5%	6.7%	5.8%	
With a self-care disability (estimated)	4.6%	7.0%	3.2%	3.5%	3.1%	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
With a go-outside-home disability (16 and	7.5%	10.0%	5.5%	5.9%	5.4%	
With an employment disability (16 to 64)	11.8%	12.2%	10.4%	8.3%	7.1%	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Housing by Type						
1-unit, detached	77.0%			71.6%	61.7%	
1-unit, attached	1.7%			4.5%	5.7%	
2 units	3.0%			2.9%	4.0%	
3 or 4 units	2.1%			2.7%	4.5%	
5 to 9 units	2.8%			4.2%	4.9%	
10 to 19 units	3.5%			3.8%	4.5%	
20 or more units	3.5%			4.5%	7.9%	
Mobile home	6.4%			5.7%	6.7%	
Boat, RV, van, etc.	0.0%			0.0%	0.1%	
	(07)			(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
1-unit, detached		70.9%	71.7%			
1-unit, attached		1.1%	0.8%			
2 apartments		2.7%	1.1%			
3 or 4 apartments		1.4%	1.4%			
5 to 9 apartments		1.5%	1.3%			
10 or more apartments		0.9%	2.7%			
Mobile home or other type of housing		21.6%	20.9%			U.S. Census Bureau American Fact Finder "American Community Survey"
		(05-07)	(05-07)			
Occupied housing units	87.9%	65.3%	76.6%	85.0%	87.9%	
Vacant housing units	12.1%	34.7%	23.4%	15.0%	12.1%	
Owner-occupied units	77.1%	80.7%	82.4%	74.8%	67.2%	
Renter-occupied units	22.9%	19.3%	17.6%	25.2%	32.8%	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Education Attainment (pop. 25 yrs +)						
Less than 9th grade	3.6%	8.0%	5.4%	3.5%	6.4%	
9th to 12th grade, no diploma	8.4%	9.0%	10.4%	9.1%	9.1%	
High school graduate (includes equivalency)	36.6%	40.2%	41.2%	32.4%	30.1%	
Some college, no degree	24.5%	22.5%	21.1%	22.3%	19.5%	

APPENDIX 1: COMMUNITY DATA

Data Set	Muskegon County	Oceana County	Newaygo County	State	US	Source
Associates degree	9.8%	7.1%	8.3%	8.0%	7.4%	
Bachelor's degree	12.0%	8.1%	9.2%	15.2%	17.4%	
Graduate or professional degree	5.1%	5.3%	4.4%	9.5%	10.1%	
	(07)	(05-07)	(05-07)	(07)	(07)	U.S. Census Bureau American Fact Finder "American Community Survey"
Household Church Attendance						
We were unable to find much on chuch attendance						
Estimated Church and other faith membership	73,114	9,603	8,658	5,110,455	176,477,348	
	(00)N	(00)N	(00)N	(00)N	(00)N	
Estimated percentage of total population	43.0%	35.7%	36.6%	51.4%	62.7%	
Computed by comparing the membership figure to the but we did find the following						
2000 Census population						
Language Spoken at Home						
English only	95.60%	88.51%	94.30%	91.00%	80.30%	
Spanish	3.10%	9.82%	3.90%	3.00%	12.30%	
-Speak English less than "very well" -	1.30%	4.32%	1.80%	1.30%	5.80%	
Other Indo-European languages	1.00%	1.41%	1.30%	3.00%	3.70%	
-Speak English less than "very well"	0.20%	0.22%	0.70%	0.90%	1.20%	
Asian and Pacific Islander languages	0.20%	0.14%	0.20%	1.40%	3.00%	
-Speak English less than "very well"	0.10%	0.04%	0.10%	0.60%	1.40%	
Other Languages	0.20%	0.14%	0.20%	1.50%	0.80%	
-Speak English less than "very well"	0.10%	0.02%	0.10%	0.60%	0.20%	
	(05-07)A	(2000)G	(05-07)A	(07)A	(07)A	
Grandparents as Caregivers						
	1,471	N	483	69,008	2,514,256	
	(07)A	(05-07)A	(05-07) A	(07)A	(07)A	U.S. Census Bureau American Fact Finder "American Community Survey"

A = U.S. Census Bureau American Fact Finder "American Community Survey"
B = U.S. Census Bureau "State & County Quick Facts"
C = Critical Health Indicators
D = "Primary Health Care Profile of Michigan" - MPCA
E = U.S. Census Bureau: "U.S> Population Projections"
F = West Michigan Shoreline Regional Development Commission
G = 2000 U.S. Census (www.censusscope.com)
H = National Alliance to End Homelessness
I = Heartland Alliance (developed from Census Bureau's "American Community Survey"
J = Statehealthfacts.org (Kaiser Foundation)
http://www.statehealthfacts.org/profileind.jsp?cat=6&sub=74&rgn=24
K = HHS Centers for Medicare & Medicaid Services: Medicare Enrollment Reports
(http://www.cms.hhs.gov/MedicareEnrpts/)
L = HHS Centers for Medicare & Medicaid Services: Medicaid Enrollment Reports
(http://www.cms.hhs.gov/MedicaidEnrpts/)
M = MDCH: Medicaid Health Plan Enrollees
(http://www.michigan.gov/documents/mdch/JE02022009_266732_7.pdf)
N = The Association of Religion Data Archives: Religious Congregations and Membership Study, 2000
http://www.thearda.com/Archive/Files/Descriptions/RCMSST.asp (Data includes Jewish and Islamic congregations)

The best data available does not track day-to-day attendance, but, rather, Congregational Membership. The ARDA keeps the best records of these memberships, and their most recent data sets come from 2000. They caution that while these numbers are appropriate--as are state to county comparisons - State to State, or State to National comparisons are unwise (due to the regional inconsistencies of self-reporting practices). This is explained as follows:
http://www.thearda.com/Archive/Files/Descriptions/RCMSST.asp.

Additionally, many "Historically African-American" Congregations' did not participate in 2000 and a statistical method for including/extrapolating their membership was derived by the Researchers. After searching all known sources for the data (external to the ARDA), and speaking (via phone) with the original Researchers I am convinced of the quality and consistency of what they refer to as the 'adjusted' numbers, as explained here:
http://www.thearda.com/mapsReports/Accounting%20for%20the%20Uncounted.pdf.

APPENDIX 2: HEALTH DATA

Indicator	HP 2010 Objective	Muskegon County	Oceana County	Newaygo County	State	US	Source
Priority I Health Indicators:							
Diabetes							
Prevalence	25/1K (2.5%)					57/1K (5.7%)	
						(06)I	
Ever told Diabetes		10.5%	5.0%	7.7%	9.0%		
		(07)H	(05-07)H	(05-07)H	(07)H		
Cardiovascular Disease							BRFSS County Indicators (includes MDCH BRFS memo) - 95% Confidence Interval
Ever Told Heart Attack	NA: No similar targets	4.6%	5.3%	3.3%	4.9%	4.2%	
Ever Told Angina or Coronary Heart Disease		1.6%	4.5%	6.0%	4.9%	4.9%	
Ever Told Stroke		2.7%	3.2%	2.5%	2.8%	2.8%	
		(07)	(05-07)	(05-07)	(07)	(07)	
HP2010 Target:							
Coronary heart disease deaths per 100K age	162 (revised)				173(05)	154	CDC Data 2010 (HP2010)
						(05)	
Stroke deaths per 100K age adjusted	50 (revised)				47	47	CDC Data 2010 (HP2010)
					(05)	(05)	
COPD							
Deaths (excluding Asthma) per 100K pop age	62.3 (revised)				116.3	118.8	
					(07)A	(07)I	
Deaths per 100K pop age 50-74		69.9	75.1	75.7			
Deaths per 100K pop age 75 and over		588.7	361.6	450.7			
		(06)C	(04-06)C	(04-06)C			
Asthma							
Prevalence						9.4% of children; 7.3% of adults	
Lifetime Asthma Prevalence		11.2%	9.2%	15.6%	14.7%	(06)M	
Current Asthma Prevalence		10.0%	7.8%	10.6%	9.5%		
		(07)H	(05-07)H	(05-07)H	(07)H		
	NA: Does not include incidence rates as targets						
	Deaths from Asthma:					Deaths from	
	Ages 5-14: 0.9/1M pop					Ages 5-14: 2.4/M	
	Ages 15-34: 1.9/M					Ages 15-34: 4.1/M	
	Ages 35-64: 8/M					Ages 35-64:	
	Ages 65 and over: 87/M					Ages 65 and over: 52.3/M	
						(05) I	
	Hospitalizations from Asthma					Hospitalizations from Asthma	
	Under age 5: 25.0/M					Under age 5:	
	Ages 5 to 64: 7.7/M					Ages 5 to 64:	
	Ages 65 and over: 11.0/M					Ages 65 and over: 23.7/M	
						(06)I	
	Hospital emergency department visits for Asthma					Hospital emergency department visits for Asthma	
	Under age 5: 148.3/M					Under age 5:	
	Ages 5 to 64: 50.0/M					Ages 5 to 64:	
	Ages 65 and over: 15.0/M					Ages 65 and over: 22.8/M	
						(04-06)I	
Teen Pregnancy							
	39/1K population	74.1/1K (04-06) C	71.9 (04-06) C	58.9 (04-06)C	54.1 (04-06) C	44/1 K population	
	(ages 15-17)					(ages 15-17)	
						(02)I	
Immunizations							
Children 19-35 months receiving all	80.0%	83.2	73.2%	78.6%	72.4%	80.8%	
	(P)	(07)O	(07)O	(07)O	(07)O	(05)P	
Different figure					82.7%		
					(05)P		
Tobacco Use	Cigarette Smoking: 12%					Cigarette Smoking : 21%	
	Spit Tobacco use - 0.4%					(06)I	
	Cigar Smoking:1.2%					Spit Tobacco Use:2.3$	
	(All adults 18 and over)					(05)I	
						Cigar Smoking: 2.2%	
						(05)I	

APPENDIX 2: HEALTH DATA

Indicator	HP 2010 Objective	Muskegon County	Oceana County	Newaygo County	State	US	Source
Current smoking		35.4%	29.0%	23.0%	21.1%		Michigan BRF memo from MDCH - 95% Confidence Interval
Former smoking		18.3%	29.7%	29.2%	24.9%		
Never smoked		46.3%	41.3%	47.8%	54.0%		
		(07) H	(05-07)H	(05-07)H	(07)H		
Priority II Health Indicators:							
STD							
County rates at 95% confidence interval							
Gonorrhea: New Cases		631	7 cases	4	17,237		
Rate per 100K	19	360	24	26	172	119.9	
		(07)C	(07)C	(07)C	(07)C	(07)L	
Syphils:Primary & Secondary: New Cases		3	0	0	137		
Rate per 100K	0.2	2	0	0	1	3.8	
		(07)C	(07)C	(07)C	(07)C	(07)L	
Chlamydia: New Cases	No target for prevalence	1,123	36	76	41,291		
Rate per 100K		641	126	153	409	370.2	
		(07)C	(07)C	(07)C	(07)C	(07)L	
HIV							
Prevelance - HIV & AIDS combined	NA:Does not include incidence rates among targets	155 cases	10 cases	17 cases	13,794 cases	Estimated 1.1 million	
Rate per 100K		66	35	34	137		
The US figure is an estimate because some states don't report		(08)K	(08)K	(08)K	(08)K	(06)E	
HIV infection deaths - age adjusted per 100K	0.7				2.2	2.5	
					(05)I	(05)I	
Cancer							
Annual deaths from all cancers/100K population	159.9	194.6			195.3	189.8	
		(04-06)C			(01-05)N	(01-05)N	
Incidence rate per 100K population age-adjusted	HP2000 has no target for incidence rate	543.8			504.3	473.6	
		(04-06)C			(01-04)N	(01-04)N	
Low Birth Weight Rate							
	5%	8.4%	6.4%	6.4%	8.4%	8.2%	
		(04-06)C	(04-06)C	(04-06)C	(04-06)C	(05)I	
Osteoporosis							
Cases Age 50 and over	8%	N/A	N/A	N/A	N/A	N/A	
Ever told Osteoporosis		N/A	N/A	N/A	4.7%	N/A	
					(07)H		
Affected		N/A	N/A	N/A	N/A	Estimated 10 million cases	
						(Q)	
Injury							
Nonfatal unintentional injuries per age adjusted	9,000.0					9,192.9	
						(05)I	
Deaths from unintentional injuries per 100K	17.1(revised)	58.8	52.4	44.1	34.6	39.1	
(Note: US figure is for "age adjusted")		(06)C	(06)C	(06)C	(06)C	(05)I	
Emergency Department visits - injury related; age adjusted per 1K pop.	108 (revised)					109	
						(05)I	
Hospitalizations for injury or poisoning per 10K	NA	94.7	83.1	95.1	98.1		
		(06)	(06)	(06)	(06)		MDCH (appears to be exact figures with no confidence interval)

APPENDIX 2: HEALTH DATA

Indicator	HP 2010 Objective	Muskegon County	Oceana County	Newaygo County	State	US	Source
Alcohol Use							
Heavy Drinking		5.4%	11.7%	6.3%	6.1%	5.2%	
Binge Drinking in the past month	13.4%	27.4%	21.1%	18.3%	18.4%	15.8%	
		(07)H	(05-07)H	(05-07)H	(07)H	(07) B	
Substance Abuse							
Adults using illicit drugs in the past 30 days	3.2% (revised)	10.4%	NA	NA	9.0%	8.1%	
County level data for Newaygo & Oceana appear to be unavailable		Avg. (02-07) R			Avg (04-06)S	(06)I	
						(06) I	
Obesity							
Obesity in adults age 20 & over	15%					33%	
						(03-06)I	
Healthy Weight in Adults age 20 & over	60%					32%	
						(03-06)I	
Obese		22.9%	25.2%	19.1%	28.4%		
Overweight		40.3%	42.7%	36.4%	36.2%		
Not overweight or obese		35.4%	32.2%	44.5%	35.4%		
		(07)H	(05-07)H	(05-07)H	(07)H		
only for those receivign public assistance (see below)							
Schizophrenia	Treatment for Adults with Schizophrenia -75%					Schizophrenia affects approx. 2.4 million adults (1.1%) each year	
						J	
Individuals on public assistance disagnosed with					14,285		
					(FY 06-07)		
Depression	Treatment for Adults with Depression - 64% (revised)					Major Depressive Disorder affects aprox 14.8 million adults (6.7%) in any given year	
						J	
Individuals on public assistance disagnosed with					33,031		
					(FY 06-07)		
Bipolar Disorder						Bipolar Disorder affects approx. 5.7 million adults (2.6%) each year	
						J	
Individuals on public assistance disagnosed with					24,951		
					(FY 06-07)		
Mental Retardation							
Individuals on public assistance disagnosed with					23,742		
					(FY 06-07)		
Co-Occur Mental Ill/Sub Abuse	Treatment for Co-Occurring Substance Abuse and Mental Disorders - 57%						
ADHD						ADHD affects approx. 4.1 % of adults age 18-44 in any given year	
						J	
Individuals on public assistance diagnosed with Attention Deficit and Disruptive Behavior					16,043		
					(FY 06-07)		

A = Critical Health Indicators, 2007
B = BRFSS
C = MDCH (95% confidence interval)
D = MichBRFS 2005-2007
E = CDC HIV Prevalance estimates, United States (http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5739a2.htm)
G = MPCA
H = MDCH memo BRFSS
I = CDC Data 2010 (HP2010)
J = NIMH website: The Numbers Count: Mental Disorders in America
K = MDCH Quarterly HIV/AIDS Report, October 2008
L = CDC STD Surveillance Report, 2007
M = HHS Progress Review: Respiratory Diseases
N = National cancer Institute: "State Cancer Profiles" - apparently survey data - 95% confidence interval.
O = Michigan League for Human Services "Kids Count in Michigan - Data Book 2008)
P = MDCH: "Comparison of Michigan Health Indicators & Healthy People 2010 Targets"
Q = National Osteoporosis Foundation's "Fast Facts"
R = HHS: Substance Abuse and Mental Health Statistics: National Survey on Drug Use and Health (specially provided by email)
S = HHS: Substance Abuse and Mental Health Statistics: National Survey on Drug Use and Health (95% CI)

Note: The MDCH chart for COPD deaths is titled "Chronic Lower Respiratory Diseases Deaths and Death Rates".

Note: Two people from MCDH, plus Ken Krauss (Muskegon County Public Health Director), told us they do not believe the mental health data is available.

APPENDIX 3: Table 3 - ENVIRONMENTAL HEALTH DATA

Data Set	Muskegon County	Oceana County	Newaygo County	State	U.S	Source
Food/Water/Vector-borne Diseases Diagnosed (2008)	133campylobacter, Cryptosporidiosis, e. coli, Giardiasis, Salmonellosis, Shigellosis, Malaria, Hepatitis A, B, and C)	6 (giardiasis, salmonella, Hepatitis B, Encephalistis)	31 (Giardiasis, Cryptosporidiosis, Campylobacter, Salmonellosis, Hepatitis A and B, Histoplasmosis, rockey Mountain Spotted Fever)	2105 (Giardiasis, Cryptosporidiosis, Campylobacter, Salmonellosis, Hepatitis A and B, Histoplasmosis, rockey Mountain Spotted Fever)	Data not available	Local Data: Local Health Departments (PHMC, and District 10)
Animal bites/Exposures (2008)	569	50	103	Data not available	Data not available	Local Data: Local Health Departments (PHMC, and District 10)
Animals Positive-Rabies w/exposure occurring (2008)	0	0	2 (bats)	79	Data not available	MDCH, 2009
Toxic Chemical Releases – TRI On-site and Off-site Reported Disposed of or Otherwise Released (in pounds), for facilities in All Industries, for All Chemicals, 2006 in lbs.	1,820,370	10,278 lbs/yr – Kurdzeil Iron	1,722 lbs/yr. – Valspar Coating 3,762 lbs/yr. – Magna Donnelly 3,221 lbs/yr – North Amer. Refractories	88,304,123	4,294,568,026	US EPA – TRI Explorer
Air Pollutants (Primary Standards) 2005 in Tons – Annual pollutant total Carbon Monoxide (9ppm – 8hr) Lead (.15 ug/m3 rolling 3-month average) Nitrogen Dioxide (.053 ppm – Annual Arithmetic Mean) Particulate Matter PM10 (150 ug/m3 – Annual Arithmetic Mean) Particulate Matter PM2.5 (15.0 ug/m3 – Annual Arithmetic Mean) Ozone (.08ppm 1997standard - 0 .075ppm 2008 standard) Sulfur Dioxide (.03 ppm – Annual Arithmetic Mean)	 2693.08 0.55 4308.98 17.82 15.31 In Attainment 25.86	No monitoring sites	No monitoring sites	Data not readily available	Data not available	Michigan Department of Environmental Quality Air Emissions Program
Lead Poison Cases/Levels (Confirmatory 2008) Levels 0-9 10 – 19 20+	 123 59 13	 No data 1 (10-14) No data	 No data 3 (1 @t 10-14, 2 @t 15-19) No data	Data not available	Data not available	Stellar system
Lead-High Risk Homes* (2006) County-wide housing pre-1950	30.3%	27%	23%	Data not available	Data not available	MDCH, 2009

APPENDIX 3: Table 3 - ENVIRONMENTAL HEALTH DATA

Data Set	Muskegon County	Oceana County	Newaygo County	State	U.S	Source
Fatal Injuries:	93	15	39			
(Type) suicide (2006)	17	2	12	1132	Data not available	MDCH, 2009
(Type) Motor Vehicle Accidents (2006)	23	5	8	1152	Data not available	MDCH, 2009
(Type) Other Unintended (falls, drowning, fire, poisonings) (2006)	53	8	19	1715	Data not available	MDCH, 2009
Failed Septic Systems (Reported to Health Department) Failed Existing/Replacement (2008)	15	47	104	Data not available	Data not available	Local Data: Local Health Departments (PHMC, and District 10)

APPENDIX 4

COMMUNITY HEALTH NEEDS ASSESSMENT
Health Survey (Final) - January 28, 2009

Hello, my name is (first name of interviewer) and I am calling on behalf of Mercy Health Partners, the United Way of the Lakeshore, the and Public Health Departments. Do you have a few minutes for me to ask you some questions regarding you and your family's health and health care?

Are you over the age of 18 years? ___ Yes ___ No

[If "no," end interview or ask for an adult in the home.]

1. Do you have any kind of health care coverage, including health insurance or plans such as Medicaid or Medicare? ___ Yes ___ No

[If Yes, ask which apply]

___Through an employer ___Bought privately ___ Medical Savings Account
___Medicaid ___Medicare
___ Other (specify): _____

Do you have coverage for prescription drugs? ___ ___
Does your insurance cover office visits? ___ ___
Does your health insurance have and annual deductible? ___ ___
If "yes," please indicate the amount of the deductible (check below):

___Less than $1,000 __ Between $1,000 - $2,000
___Between $2,000-$3,000 __More than $3,000

Is your deductible for: __ One Person ___Two Persons ___ Family

2. Are you having trouble getting healthcare services for you or your family? ___YES ___NO

3. If so, which are the biggest problems you are having in getting health care services for you or your family? (Check all that apply)

[Read list]

___Cost of health care, in general
___Prescription costs
___Dental care
___Finding a doctor
___Cost of insurance
___Insurance limited in coverage
___No insurance
___High deductible
___Too busy to get to the doctor
___Hospital costs
___ER waiting time
___Transportation
___Doctor not accepting new patients
___High co-pay for office visits
___Medication not covered by insurance
___Getting specialist care
___No vision insurance
___Dropped for missed appointments

4. In general, how would you say your health is? (Check only one)
____Excellent
____Very good
____Good
____ OK
____Not Good

5. Have you ever been told by a doctor or health professional that you have any of the following? (Check all that apply)

[Read list]

____High blood pressure
____High cholesterol
____Diabetes
____Being over weight
____Cancer
____Asthma
____Chronic pain
____Arthritis
____Heart Disease, or heart attack
____Stroke
____Lung disease/ COPD
____Alcoholism or other addiction
____ Other (Specify): _____

6. Has any member of your IMMEDIATE family been told by a doctor or health professional that he/she has any of the following? (Check all that apply)

[Read list]

____Schizophrenia
____Depression
____Bi-polar
____Mental retardation
____Co-Occurring Mental illness/Substance abuse
____Attention Deficit Hyperactivity Disorder
____Other Mental Health disorder
____ Autism
___Other (Specify): _____

7. Where do you usually go when you have a health problem? (Check one only)

____Private doctor's office/clinic
____Muskegon Family Care
____Hackley Community Care Center
____Urgent care or walk-in Medi-center
____Emergency room
____Community Mental Health
___ Family Health Care
___ Northwest Michigan Health Services
___ Other _____

8. Was there a time in the past 12 months when you needed to see a doctor but could not because of the cost? **YES** _____ **NO** ___
Don't know/Not sure ____
No answer____

	YES	NO
a. Did you skip a follow up visit , medical test or treatment because of the cost?	____	____
b. Did you not fill a prescription because of cost?	____	____
c. Did you need dental care but didn't see a dentist because of the cost?	____	____
d. Did you skip a flu shot this year because of cost?	____	____

10. Have you ever had a mental health issue but didn't see the doctor because of what other people might think? YES ____ NO ____

11. Now, thinking about your mental health, which includes stress, depression or problems with emotions, for how many days during the past month was your mental health not good?
____ # of days

12. About how long has it been since you last visited a doctor for a routine checkup? A routine checkup is a general physical exam, not an exam for a specific injury or illness. (If female, may be either primary care doctor OR ob/gyn)

[Read list]

___ Within the last 12 months __ Between 1 and 2 years
__Between 2 and 5 years __ Don't know/Not sure __Never

___ No answer

13. Do you have any unpaid medical bills at this time? YES____ NO____

13-A. If you answered "yes" to question #11, indicate how much medical debt you have at this time:
__ Less than $500 ___Between $500- $1,500 __ Between $1,500 - $3,000

__ Between $3,000 - $5,000 ___$5,000 and over

14. How well do you follow your doctor's recommendations? (check one only)
___Always __ About half the time
___Mostly __ Less than half the time

15. How well do you take your medications as prescribed by your doctor? (check one only)
___Always ___About half the time
___Mostly ___Less than half the time

16. Where do you most often get information about the importance of a healthy diet? (check only one)

[Read list]

____TV ____Relative, friend, co-worker
____Newspapers or magazines ____Internet
____Your Health Care Provider ____Radio
____Other _____

17. What is your current employment status?

__ Employed Full-time ___ Employed Part-time ___ Laid –off ____Retired
___ Unemployed ___ Student

18. If employed, are you:

___Salaried ___Hourly

19. Have you ever had to borrow money to pay your medical bills?

____ Yes __ No

20. Between 0-7 days how many days per week do you do vigorous activities for at least 10 minutes a day, such as running or aerobics or other that cause you breath heavily? ____ Days

Between 0-7 days how many days per week do you do moderate activities for at least 10 minutes a day, such as walking or bicycling or other that cause you a small increase in breathing? ____ Days

***If respondent rarely exercises or does so less than once a week, ask question 21.**

OTHERWISE, skip to question 22.

21. Which of the following do you think is your greatest obstacle in exercising regularly?
    _____Unwilling to spend the time
    _____Don't see the need
    _____Don't have exercise equipment or facilities they need
    _____Don't have encouragement from others.
    _____I can't afford membership to a fitness facility
    _____Other (specify): _____

22. Please check (tell me) the TOP 3 areas you think are most important to make the residents of your community healthier.

[Read list]

    ____ Improve access to health care
    ____Educate residents regarding health care issues and services
    ____Improve nutrition and eating habits
    ____Increase participation in physical activities and exercise programs
    ____Improve air quality, including more smoke-free public areas
    ____Improve water quality
    ____Other (specify) _____

23. Have you volunteered your time for a community service program in the last 12 months?
    ____Yes ___ No

[Now, I would like to ask questions about you that we will use to help us better serve everyone in the community. We will not use this information for any other purpose.]

24. I am:

    ___ 18 - 24 years old ___ 25 – 29 ___ 30 - 40 ___ 41 - 49

    ___ 50 - 55 ___ 56 – 64 ___ 65 and over

    Race/Ethnicity:

    __ Caucasian ___African American __Hispanic ___Asian ___Other

Next, I would like to ask questions about your living situation:

My ZIP Code is _____

What town do you live in? _____

25. Are you a homeowner (not renting or living with family or friends)? ___Yes ___ No

26. Do you pay rent? ___Yes ____No

27. How much of your income do you spend on housing?

___one-quarter ___more than one-quarter to one-half __ more than one-half

28. I think of my household income as:

___Very Low ___ Low ___ Average/Moderate ___ Good ____ High

29. Is your income adequate to support your family?
___No ____ Yes If yes, Barely enough ___ If yes, More than enough___

30. Have you donated money to a local charity in the last 12 months? ____Yes ___No

31. During the last 12 months, have you been in the habit of making regular deposits to a savings account?
___Yes ___ No

32. Have you ever heard of:	YES	NO
The Health Project?	___	___
Hackley Community Care Center?	___	___
Muskegon Family Care ?	___	___
CALL-211?	____	___
Family Health Care?	____	___
Northwest Michigan Health Services?	____	____
Access Health	____	____
Community Mental Health	____	____

33. You are: ____ Male ___ Female

APPENDIX 5

1. Community Health Needs Assessment 2009 - BUSINESS SURVEY

1. What is your Business Zipcode?

ZIP:

2. Specify type of business. Check ALL that apply.

- ◯ For-profit
- ◯ Not-for-profit
- ◯ Manufacturing
- ◯ Service
- ◯ Retail

Other (please specify)

3. Is your business a:

- ◯ Corporation
- ◯ Partnership
- ◯ Sole-proprietorship
- ◯ LLC

Other (please specify)

4. How long have you been in this business?

- ◯ Less than 1 year
- ◯ 1-3 years
- ◯ 4-6 years
- ◯ 7-10 years
- ◯ 11-15 years
- ◯ 16 years or more

5. How many full-time employees do you have?

6. How many part-time employees do you have?

7. What is the average number of hours per week worked by your part-time employees?

- ◯ 10 or less hours
- ◯ 11-20 hours
- ◯ 21-30 hours
- ◯ More than 30 hours

8. Have you had to replace full-time employees with part-time employees as a means of saving business expense?

- ◯ Yes
- ◯ No

APPENDIX 5

9. What do you perceive to be the most serious health problems among your employees?

- ☐ Smoking
- ☐ Heart Disease
- ☐ Chronic Pain
- ☐ Alcohol Addicition
- ☐ Depression
- ☐ Overweight
- ☐ Drug Addicition
- ☐ High Blood Pressure
- ☐ Cancer
- ☐ Lung Disease
- ☐ High Cholesterol
- ☐ Mental Illness
- ☐ Industrial Accident
- ☐ Arthritis
- ☐ Diabetes
- ☐ Asthma

Other (please specify)

10. On average, how many worker days per month do you lose due to employee illness?

11. If you have FULL-TIME employees, do you offer health coverage to your full-time employees at this time?

- ◯ Yes
- ◯ No

12. If you have PART-TIME employees, do you offer health coverage to your part-time employees at this time?

- ◯ Yes
- ◯ No

2.

PLEASE NOTE: If you answered "NO" to BOTH Questions 10 and 11, skip to Question 19 on Page 3.

13. If you offer a health plan, what type do you offer? Check ALL that apply.

- ☐ HMO PPO
- ☐ Traditional 80/20 Plan
- ☐ High-Deductible Plan
- ☐ Self-Funded Plan
- ☐ Health Savings Account Plan

Other (please specify)

14. What is the annual deductible for plan members?

- ◯ $0 - $250
- ◯ $5,001-$7,500
- ◯ $251-$1,000
- ◯ $7,501-$10,000
- ◯ $1,001-$2,500
- ◯ Over $10,000
- ◯ $2,501-$5,000

15. What has been the impact of health insurance increases on your business? Check ALL that apply.

- ☐ No salary increases
- ☐ Held off on growth strategies
- ☐ Delayed purchase of new equipment
- ☐ Lowered or eliminated 401(k) contribution
- ☐ Laid off employees
- ☐ Changed health coverage

APPENDIX 5

16. If you have changed your health coverage in the past 12 months, what changes have you made? Check ALL that apply.

- ☐ Increased deductibles
- ☐ Increased co-payments
- ☐ Increased employee contribution to their premiums
- ☐ Reduced benefits
- ☐ Added a Health Savings Account Plan
- ☐ Switched to a cafeteria-style program
- ☐ Dropped coverage and gave money directly to employees
- ☐ Dropped all coverage

17. What changes, if any, are you considering making during the coming year? Check ALL that apply.

- ☐ Increasing employee contribution
- ☐ Changing to policy with higher deductible
- ☐ Changing to policy with higher co-payments
- ☐ Reducing benefits
- ☐ Dropping coverage and giving money directly to employees
- ☐ Adding a Health Savings Account Plan
- ☐ Switching to a cafeteria-style program
- ☐ Dropping all coverage

18. Does your insurance plan offer decreased premiums, lower co-pays or lower deductible to employees who participate in a Wellness Program?

- ◯ Yes
- ◯ No

APPENDIX 5

3.

19. Do you currently offer your employees any wellness benefits or incentives; such as, contributing to a fitness club membership, a weight-loss program, or other healthy-living programs?

◯ Yes

◯ No

20. Would you be interested in working with Mercy Health Partners to offer a Wellness Program or wellness incentives to your employees?

◯ Yes

◯ No

21. If you do not currently offer health benefits to your employees, do you have any plans to offer health coverage to your FULL-TIME employees within the next 12 months?

◯ Yes

◯ No

22. If you do not currently offer health benefits to your employees, do you have any plans to offer health coverage to your PART-TIME employees within the next 12 months?

◯ Yes

◯ No

APPENDIX 5

23. Please indicate with an "X" your support or opposition to the following proposed reforms:

	Support	Oppose
Insurance responsibility placed on the individual	◯	◯
Greater transparency in the cost of health services and medications	◯	◯
Improved health information technology	◯	◯
Increased access to medical information and quality-of-care ratings	◯	◯
Create a federal network for insurance pooling	◯	◯
Tax incentives for small businesses with fewer than 12 employees	◯	◯
Eliminate state regulation and oversight on health insurance	◯	◯
Allow for early buy-in to the Medicare Program	◯	◯
Aggressively pursue reducing waste, duplication, errors and fraud in federal and state health programs	◯	◯
Require employers (depending on size and/or revenue) to contribute a certain amount toward employees' health insurance	◯	◯
Publish physician and hospital quality ratings	◯	◯

24. Would you be interested in working with Mercy Health Partners in any of the following areas? Also, we would appreciate any comments you have. Check ALL that apply.

- ☐ In-workplace speakers, workshops, programs
- ☐ Off-site speakers, workshops, programs
- ☐ One-on-one or small-group counsel
- ☐ General fitness programs - exercise and nutrition
- ☐ General healthy living education classes
- ☐ Chronic disease patient education programs
- ☐ Chronic disease self-management classes

Comments:

Appendix 6: Call 2-1-1- Summary of calls for Medical Care Health Support Services 2006-2009

	2006-2007						2007-2008					2008-2009(to date)				
Health Supportive Services	49441	49442	49444	Other ZIP	Total	Oceana	49441	49442	49444	Other ZIP	Oceana	49441	49442	49444	Other Zip	Oceana
Prescription Expense Assistance	70	159	106	81	416	5	78	151	102	70	5	53	146	92	94	9
Disease/Disability Information	4		1	1	6		3	1	2	6	1	4	8	1	6	2
Medical Equipment/Supplies	8	22	14	8	52		9	14	14	12	1	2	6		4	
Prescription Drug Patient Assist. Programs	34	65	45	56	200	4	34	59	40	25	7	25	48	35	47	8
Health Insurance Information/Counseling	29	36	20	40	125	1										
Assistive Technology Loan	2	15	9	13	39	1	8	25	13	10	1	5	18	7	11	2
Medical Bill Payment Assistance	19	39	13	36	107	2	24	51	28	30	4	19	33	16	28	7
Blood Drives				1	1								1			
Glasses/Contact Lenses	15	29	11	8	63	1	8	25	14	20	2	18	47	27	25	6
Hearing Augmentation Aids	4	6	5	4	19		3	4	2	7	2	3	5	5	4	1
CPR Instruction	1	2		2	5			1	1	2		1	1			
Physician Referrals	9	12	5	10	36		17	43	22	26	5	6	12	5	13	1
Prescription Drug Discount Cards	4	2	3	4	13			1	1	2		2	2	2	1	
Low vision aids	1			1	2			2	4	1						
Dental Bill Payment Assistance		2	1	2	5		2	3	5	5		1	5	1	1	
Presc. Drugs for Spec. Health Conditions	5	2	4	1	12		1	1		2		1				
Aging and Disability Resource Centers	13	4	4	8	29		29	25	15	32	3	11	10	8	21	1
Assistive Technology Purchase Assistance	8	11	8	3	30	1	3	7	5	4	1	2	5	2	9	
Medicare Information/Counseling	3	7	5	4	19		21	38	14	26	1	23	29	21	37	4
Medicaid Planning		1		2	3		4	4	1	6		1	1		2	1
Poison Control	1	2		2	5		1	2				1	2		1	
Nutrition Education	1		1		2		3	1	1	2		1	1		2	
Long Term Care Insurance	1				1					2						1
Dental Referrals	6	5	1	3	15											
Insulin Injection supplies	3	4	5	3	15		2	6	3	4		7	10	7	12	
Long Term Care Insurance Info/Counseling	3	3		2	8		5	3	3	2	1		1		3	
AIDS/HIV Prevention Counseling		1			1		1					1				
Visual/Reading Aids		1			1											
Blood Donor Stations		1		1	2											
Mobility Aids		1			1		1	2		2		1	1			
Reverse Mortgage Programs	2	1	1		4		3									
Medical Social Work		1		1	2											
Wigs	1				1			1		2		1	1			
Prescription Medication Monitoring Systems			1		1		2			2						
Orthopedic/Orthotic Devices				1	1			1		1	1					
Assistive Technology Resale/Listing Service							2	4	1	5	1		2	1	6	
General First Aid Instruction								1								
Appearance Enhancement Consultation Programs							1	1								
Mercy Flights									1							
Referral to Physicians Donating Their Services									1							
Occasional Medical Equipment/Supplies												2	4	4	6	2
Sickroom Equipment/Supplies														2		1
Wheelchairs/Wheeled Mobility													3		1	
Blind Mobility Aids													1			
Health & Residential Facilitiy Evaluation Info												1				
Respiratory Aids													1			
Automobile/Van Adaptations															1	
Compression Hosiery																1
Transfer Devices																1
Health Insurance Premium Assistance										2				2	1	
Totals	49688	49876	49707	298	1242	15	99147	99361	99181	310	36	49633	49846	49682	336	48

APPENDIX 7

Youth Risk Behavior Survey For Muskegon County 2008-2009 *

What is the Youth Risk Behavior Survey (YRBS)?

YRBS was developed in the early 1990's as part of a national initiative to gather data for a "picture" of youth health-related activities and to monitor over time priority health risk behaviors that contribute to the leading causes of death, disability, and social problems among youth. In 1996, a YRBS questionnaire based on the national model was developed by the Muskegon County Health Department with input from school districts and agencies for the first County-wide survey.

Who takes the survey?

Survey participants include 8th, 10th and 12th grade students in Muskegon County. The survey is anonymous and parents have the opportunity to excuse their child from participation.

What kinds of questions are asked?

The survey provides a glimpse into the life of youth and the kinds of behaviors, or perceptions of behaviors, in which our youth are engaged. Questions range from alcohol use to the amount of exercise they get. It also includes questions on other risky behaviors such as substance use, violence, nutrition, sexual behavior, and emotional health. The survey also measures risk and protective factors most predictive of alcohol, tobacco, and other drug use.

Why give the survey in schools?

Our schools provide the best opportunity to reach large numbers of youth in a setting that is designed for thoughtful assessment and reflection. Further, schools use the data to determine if programs being provided are "working" and to guide decisions about needed programs. YRBS is essential to meet the requirements of the Title IV, Safe and Drug Free Schools program, which requires specific needs assessment and results reporting. The YRBS meets this requirement as well as that needed for other prevention and health programming.

How often is the survey given?

When the YRBS was first made available, Muskegon County administrators took the leadership and committed to giving the survey every four years to determine whether health risk behaviors increased, decreased or stayed the same over time. Previous to this year, the last time the survey was given was 2004. Due to lack of grant funding for the survey, this year area agencies and school districts have pooled funds to conduct the survey one more time. Conducting the survey this year was important as the current 12th graders participated in the survey as 8th graders thus providing an excellent opportunity to determine if prevention programs have made a difference.

Who else uses the YRBS results?

The health of our youth is a community issue, not just a school issue. Schools work with several agencies – many that provide services in the community and in the schools – who are required to report results just as schools are. Over $3 million in funds for Muskegon County agency programming require data available from YRBS to maintain funding levels. Further, with new results, evidence provided by the 8th through 12th grade cohort group, it is estimated that additional funding – which may go to other communities – could be garnered for additional prevention services for Muskegon County youth.

*Jean Chang, Ph.D., Epidemiologist, Public Health of Muskegon County; Community Coordinating Council of Muskegon County and Muskegon Community Health Project; Muskegon, Michigan; June 2009.

YRBS Overview

The Muskegon County YRBS survey is a county wide, school-based, confidential survey. This report contains findings from the 2008 YRBS in the following five priority areas:

- Unintentional and Intentional Injuries
- Tobacco Use
- Sexual Behaviors
- Alcohol and Other Drug Use
- Nutrition, Physical Activity and Weight

The YRBS has been conducted every four years since 1996. The 2008 YRBS was administered between January and February 2009 to 8th, 10th and 12th grade students in all of the county public school districts including an Alternative Education Center and one K-12 Charter School. Students who attended school on the survey days were encouraged by school administration to participate. Parents were notified of the survey and were provided an opportunity to excuse their child from participation.

Throughout the State, most surveys of this type use a statistical sampling approach. In Muskegon County a total sample approach has been used to ensure reliability of the results. In 2008 a total of 5,142 surveys were collected. Given an estimated 6,800 student enrollment for these grades in these schools, the student capture rate was 75.5%.

Two survey instruments were provided to school districts, one contained 95 questions. The other included the same questions with an additional eight (8) questions related to sexual behaviors and activities. Most districts selected the latter survey resulting in 4,262, or 83% of students responding to the entire questionnaire.

Survey Methodology

Procedures: Survey procedures were designed to protect the privacy of students by allowing anonymous and voluntary participation. Students (and their parents) were informed that they could decline to take the survey and could skip questions that they preferred not to answer.

Data Analysis:

All questionnaires were administered by professional staff who worked for or were retired from area agencies and educational institutions. Students recorded their responses on answer sheets that were then computer scanned.

Data were "cleaned" and edited in accordance with established statistical and scientific criteria which consisted of checking responses for range, plausibility, and logical consistency. Thus, the edit criteria compared two questions at a time. If responses from the two questions conflicted logically, both variables were eliminated.

Calculation for "at risk of being overweight" and "overweight" was based on self-reported weight and height, which were used to determine body mass index (BMI) by age and sex in accordance with Center for Disease Control, National Center for Health Statistics standards.

Analysis of survey data were conducted to:

1. Examine differences in risk behavior by demographic variables such as grade, gender and race/ethnicity, and
2. Determine trend or changes in risk behaviors that have occurred in Muskegon County over time.

YRBS Participation

Schools	1996	2000	2004	2008
Public School Districts	11	12	12	12
Charter Schools	0	0	1	1
Private Schools	2	0	0	0
Alternative Education	0	1	1	1
Student Capture Rates	80%	82%	82%	76%
Whole Questionnaires	85%	60%	74%	83%
Total Students	5,455	5,595	5,870	5,142

Highlights of Findings

Behaviors Contributing to Unintentional Injuries/Violence

- 5.9% of students had rarely or never worn a seat belt when riding in a car driven by someone else. This is an improvement over 2000 (8.9%) and 2004 (7.8%). (Question was not asked in 1996.)
- The number reporting that they had ridden in a car driven by someone who had been drinking alcohol was slightly less (27.9%) as compared to 2000 (30.2%) and 2004 (30%). (Not asked in 1996.) The Muskegon rate is lower than 2007 statewide results of 29% for 10th graders and 34% for 12th graders.
- The percent of students who had driven a car in the past 30 days who had been drinking alcohol was relatively consistent over the past three surveys 2008 (10.4%), 2000 (11.9%), 2004 (10.4%). (Question not asked in 1996.) Muskegon 12th grade results (15.7%) are less than statewide 12th grade results (19%)
- The number of students carrying a weapon (knife, gun, club) in the 30 days prior to the survey (15.7%) was higher than that of 2000 (12.2%), but less than that of 2004 (16.3%).
- The number of students carrying a gun in the last 30 days is relatively consistent: 2008 (5%), 2000 (4.4%), 2004 (5.8%).
- The number of students who report missing school due to feeling unsafe has slightly increased: 2008 (6.8%), 2000 (5%), 2004 (5.9%).
- The number of students reporting that they had been in a physical fight in the last 12 months (33.3%) is a slight decrease (1-3 percent) over previous survey reports. This is also true for fights resulting in injury that needed treatment.
- 7.4% of students report that they had been forced to have sex. This is consistent with previous reports in 2004 (7.2%). (Question not asked in 1996 or 2000).
- Survey results show some improvement with regard to depression and suicidal behaviors. 13.2% of students report having considered attempting suicide in the past 12 months as compared to 2000 (16%) and 2004 (15.6%).
- Actual suicide attempts dropped in 2008 (7.4%) as compared to 2000 (8.3%) and 2004 (8.9%).

Sexual Behavior

- Students reporting ever having sexual intercourse is increasing: 2008 (44.1%), 2004 (38.3%), 2000 (37.9%), 1996 (41.6%).
- The number of students reporting four or more partners has remained relatively consistent: 2008 (12.3%), 2004 (14.6%), 2000 (12.7), 1996 (11.8%).
- While condom use (56.2%) has decreased over the past three surveys, the use of birth control pills has Increased: 2000 (17.5%), 2004 (15.6%). (Not asked in 1996).
- The number of students reporting that they have had HIV/AIDS instruction in school has decreased from a high of 94.8% in 2000 to 86.5% in 2008.

Tobacco Use

- While still high, the number of students reporting having tried cigarettes (41%) has decreased from previous years. 1996 (58.1%), 2000 (56.6%), 2004 (46.8%).
- Students reporting having smoked cigarettes in the last 30 days (18.3%) are consistent with 2004 data (18.2%), but lower than 1996 (41.3%) and 2000 (26.3%).
- Consistent cigarette smoking has generally declined while use of chewing tobacco and/or snuff has increased over 2004.

Alcohol & Other Drug Use

- The percent of students having had at least one drink in the last 30 days has remained relatively consistent: 2008 (39%), 2004 (33.2%), 2000 (39.3%), 1996 (39.7%).
- Binge drinking (5 drinks over a 2-hour period of time) appears to be increasing: 2008 (22.7%), 2004 (18.5%)
- While the use of marijuana decreased from 1996 and 2004, the percent reporting current use (33.7%) has increased over 2004 (28.6%).
- Cocaine use for the first time (6.3%) and over the 30 day period prior to the survey (10.4%) has remained relative Consistent since 1996.
- Inhalant use ever (10.4%) and during the 30 days prior to the survey (5.3%) has decreased 1% to 6% since 1996.
- Heroin (3.1%), methamphetamines(4.1%), and steroid (3.7%) use have remained relatively consistent since 1996, all under 5%.
- Alarmingly, the percent of students reporting that they had been offered or given an illegal drug during the last 12 months is 36.6%, an increase over 2004 (31.4%).

Weight, Nutrition, Physical Activity

- 13.3% of students were overweight (95% of BMI) and 16.6% are at risk of being overweight. These rates are consistent with 2004 results.
- The percentage of students reporting eating vegetables has increased somewhat over 2004.
- The number of students reporting they ate fruits or drank fruit juice is also slightly increased.
- The percentage of students reporting use of risky behaviors for weight loss (vomiting, diet pills, laxatives) are less than 6.5% but remain consistent over the surveys in which these questions were asked.
- The percentage of students attending physical education classes one or more days during a school week (38.9%) declined from a high of 40.4% in 2004.
- One-third of students (33.3%) report watching TV 3+ hours per school day. This is relatively consistent with 2000 (31.6%) and 2004 (34.3%).
- New on this year's survey: 25.7% of students report that they play video or computer games 3 or more hours per day on an average school day.