

Community Health Needs Assessment for:

Spectrum Health Hospitals d/b/a Spectrum Health Grand Rapids

Spectrum Health Medical Center, including

- Spectrum Health Butterworth Hospital
- Helen DeVos Children's Hospital
- Fred and Lena Meijer Heart Center
- Lemmen-Holton Cancer Pavilion

Spectrum Health Blodgett Hospital

Outpatient and Ambulatory Sites, including

- Ambulatory Surgery Centers
- Urgent Care Centers
- South Pavilion and West Pavilion

The “hospital facilities” listed above are part of Spectrum Health. Spectrum Health is a not-for-profit health system in West Michigan offering a full continuum of care through the Spectrum Health Hospital Group, which is comprised of nine hospitals; the Spectrum Health Medical Group and West Michigan Heart, physician groups totaling more than 600 providers; and Priority Health, a health plan with 625,000 members. Spectrum Health System is West Michigan's largest employer with more than 18,000 employees. The organization provided \$176.5 million in community benefit during its 2011 fiscal year. In 2011 and 2010, Spectrum Health System was named a Top 10 Health System by Thomson Reuters.

The focus of this Community Health Needs Assessment is to identify the community needs as they exist during the assessment period (late summer/fall 2011), understanding fully that they will be continually changing in the months and years to come. For purposes of this assessment, “community” is defined as the county in which the hospital facility is located. This definition of community based upon county lines, is similar to the market definition of Primary Service Area (PSA). The target population of the assessment reflects an overall representation of the community served by this hospital facility. The information contained in this report is current to the best of our knowledge as of December 5, 2011, with updates to the assessment anticipated every three (3) years in accordance with the Patient Protection and Affordable Care Act and Internal Revenue Code 501(r).

Kent County



Photo Courtesy of Brian Kelly Photography

2011 Community Health Needs Assessment and Health Profile

Prepared for Kent County

Submitted by the Michigan Public Health Institute



on behalf of *Kent County Working Together for a Healthier Tomorrow*

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Executive Summary

The vision of *Kent County Working Together for a Healthier Tomorrow* is a high quality of life, health, and well-being for all people in Kent County. The Kent County Community Health Needs Assessment (CHNA) is a systematic process for involving community partners in examining indicators of health in the population, gathering input from community members, identifying strategic issues, and identifying strategic priorities that, if addressed, would improve the health of Kent County residents. Community partners that sponsored the CHNA were the Kent County Health Department and several non-profit community hospitals. These partners convened a large Coalition that represented the agencies and institutions in the county that impact health. These partners also contracted with the Michigan Public Health Institute to facilitate a community health needs assessment and health improvement plan for Kent County.

The mission of the Kent County CHNA process is to ensure that the people of Kent County are empowered to achieve life-long physical, mental and social wellbeing through 1) equal access to high quality, affordable healthcare; 2) a coordinated system of care that is local, preventive, holistic, and patient centered; and 3) an environment that supports healthy living for all.

In order to achieve this mission, the Coalition formed two workgroups that collected population and community input data were collected that spoke to community health across groups and in multiple areas of health. The Population Data Workgroup identified indicators of health and reviewed existing local, state, and national secondary data sources (see Appendix C) to compile a comprehensive overview of the health status across populations within Kent County. These data are limited in populations represented and health indicators. Additional data collection methods were used by the Community Input Workgroup to gather data from community members whose voice and health status may not be represented through the local, state, and national secondary data sources. Community Input Walls were placed in large public venues as a method of collecting community feedback from the general public. Intercept interviews were conducted with vulnerable populations who were accessible within Grand Rapids and Kent County. Finally, focus groups were used to gather feedback from diverse and hard to reach populations within Grand Rapids and Kent County.

The CHNA Coalition reviewed assessment findings and identified 44 crosscutting, strategic issues. Using a structured prioritization process, the CHNA Steering Committee and Coalition narrowed this list to 5 strategic priorities that align with the mission to address through a community health improvement plan in the next phase of this project.

Strategic Priorities

1. Increase the proportion of community members, including the uninsured and the working poor, that have access to affordable healthcare *to promote equal access to high quality, affordable healthcare.*
2. Increase the number of providers available that accept Medicaid or offer low-cost/free services to promote *a coordinated system of care that is local, preventive, holistic, and patient centered.*
3. Reduce disparities in adequacy of prenatal care to promote a coordinated system of care that is local, preventive, holistic, and patient centered.
4. Increase healthy eating by ensuring access to healthy foods to promote *an environment that supports healthy living for all.*
5. Reduce the disparity in health risk factors and protective factors between students to promote an environment that supports healthy living for all.

Key Findings in Healthcare Resource Availability

- 13.6% of adults had no healthcare access during the past 12 months. However, the proportion increased for adults with less than a high school education (45.3%) and those lacking health insurance (54.9%).
- 10.7% adults in Kent County report that they have no healthcare coverage. These numbers increase to 16.9% for African Americans, 19.7% for adults with only a high school education, and 23.6% for adults with less than a high school education.
- Only 52.4% of youth who receive Ds/Fs in school had received a check-up in the past 12 months.
- 25.8% of adults in Kent County had not seen a dentist in the previous 12 months and this proportion increased to 47.9% for adults lacking health insurance.
- The current supply of dentists to serve low-income patients is about 55% of what is needed in Grand Rapids and only 29% of what is needed countywide.
- Access to healthcare was one of the most salient concerns of community members during focus groups and intercept interviews. Some of the issues that community members face include:
 - inability to afford preventive health care,
 - using the emergency department to address deteriorating health,
 - inability to access dental and mental health providers,
 - lack of availability of low-cost and free providers, and
 - lack of providers who serve patients who are insured through Medicaid.

Key Findings in Maternal and Child Health

- Prenatal care in Kent County is more likely to be adequate if you are white and inadequate if you are Arab, Black, or Hispanic/Latino:
 - White: 78% with adequate and 9.6% with inadequate prenatal care
 - Arab: 69.1% with adequate and 17.5% with inadequate prenatal care
 - Black: 67.1% with adequate and 19.8% with inadequate prenatal care
 - Hispanic: 67.2% with adequate and 17.9% with inadequate prenatal care
- The teen pregnancy rate is higher in Kent County (61.5/1,000 females ages 15-19) than Michigan (53.6/1,000 females ages 15-19). Teens are more likely than adult women to receive late or not prenatal care, deliver pre-term, and deliver a baby at a low birth weight.
- The Kent County Fetal Infant Mortality Review found that African American babies are significantly more likely to die before their first birthday than any other race. Further, African American and Hispanic mothers were more likely to receive Medicaid, have had late entry into or no prenatal care, and have experienced distrust, fear, or dissatisfaction with their healthcare.

Key Findings in Healthy Lifestyles and Access to Healthy Food

- 19,172 residents in Kent County live in a food deserts, meaning they do not have access to a grocery store, and there are 17,920 residents who have limited access to grocery stores in their neighborhoods.
- The food insecurity rate for Kent County is 15.2% overall; however, children in Kent County experience a much higher food insecurity rate of 23.2%.
- 34% of youth in Kent County report eating five or more servings of fruits and vegetables during the past 7 days and 52.4% report being physically active 60 minutes or more on at least 5 of the 7 days.
- 10.5% of Kent County youth are obese, and the youth most at-risk for being obese are males, American Indians, and students with Ds/Fs.
- 27.7% of Kent County adults are obese and 35.4% are overweight. Adult residents lacking health insurance are the least likely to be overweight, adult males are the most likely to be overweight, and African American adults are the most likely to be obese.

Key Findings in Youth Risk Factors

- 22.8% of the 9th and 11th grade students reported that they had at least one drink of alcohol during the past 30 days.
- Youth reported driving under the influence (7.5%) and riding with someone who had been drinking alcohol (22.6%) in the past 30 days.
- 6.5-7.3% of Kent County students took prescription medication in the last 30 days that did not belong to them. White students were more likely to take stimulants than their peers while African American and Hispanic/Latino were more likely to than their peers to take pain killers.
- 91.6% of youth usually wear a seat belt but of those riding bicycles, 83.8% of 9th and 11th grade youth report rarely or never wearing a helmet.
- 31.3% of students reported ever having sexual intercourse.
- Among Kent County students who had sexual intercourse during the past 3 months, 62.8% wore a condom.
- Students receiving Ds/Fs were on average twice as likely as their peers to engage in health risk behaviors mentioned above and further, they were more likely to have felt hopeless, expressed suicidal ideation, or attempted suicide.

Kent County Community Health Needs Assessment:

Kent County Working Together for a Healthier Tomorrow

The 2011 Community Health Profile is a comprehensive compilation of data about health and well-being in Kent County. This Profile was produced as part of Kent County's Community Health Needs Assessment (CHNA) process, which is an ongoing process that involves a systematic examination of community health status indicators used to identify key health needs and risks, as well as strengths and assets, in Kent County. The ultimate goal of this process is to identify Kent County's most pressing priority health needs. These needs will become the focus of Kent County's community health improvement plan, which will lay out strategies for improvement around each priority through collaboration and partnership.

Kent County's Community Health Needs Assessment draws from a variety of tools and best practices, including the Association for Community Health Improvement's Community Health Assessment Toolkit and the National Association of County and City Health Officials' Mobilizing for Action through Planning and Partnerships process. Key steps in the process include:

- Engaging stakeholders with a shared interest in community health needs assessment, including the Kent County Health Department and Kent County's non-profit hospitals
- Engaging a neutral partner to facilitate the assessment process
- Developing a Community Health Needs Assessment plan and timeline
- Engaging a broad group of partners and stakeholders that represent the public health system in Kent County
- Establishing a vision and mission
- Developing workgroups
- Gathering population data
- Gathering community input
- Reviewing data to identify key strategic issues
- Identifying priority health issues through a democratic process

Community engagement and collaborative participation are vital to the Community Health Needs Assessment process in Kent County. Community partners representing the public health system served on various committees and workgroups throughout the process. A detailed list of Kent County's Steering Committee, Coalition, Population Data Workgroup, Community Input Workgroup, and Systems Workgroup participants is included in Appendix A. The Michigan Public Health Institute (MPHI) was contracted as a neutral partner to assist Kent County in facilitating Kent County's Community Health Needs Assessment, Community Health Profile, and Health Improvement Plan.

Importantly, this effort is based on a broad definition of health, specifically the definition put forth by the World Health Organization:

"Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

Using this definition as a starting point, the Coalition developed the following vision and mission to guide this process.

Vision

High quality of life, health, and well-being for all people in Kent County

Mission

The people of Kent County are empowered to achieve lifelong physical, mental and social well-being through:

- Equal access to high quality, affordable healthcare
- A coordinated system of care that is local, preventive, holistic, and patient centered
- An environment that supports healthy living for all

Process and Methods

Population Data

A Population Data Workgroup, consisting of professionals representing multiple sectors, was recruited and met three times between June and August 2011. This workgroup was responsible for establishing the health indicators that would be collected for Kent County and identifying data sources. Existing data sources included data from publicly available resources, as well as data requested from community partners. The Community Health Profile provides a compilation of the health indicators and data sources identified by the Population Data Workgroup. These select indicators of health include: demographic indicators, socioeconomic indicators, quality of life indicators, environmental health indicators, health resource availability, behavioral risk factors for adults and youth, maternal and child health indicators, social, mental health, and substance abuse indicators, communicable and chronic disease, hospitalizations, mortality, and injury. Additional information about methods and data sources can be found in Appendix B of this document.

Gathering Community Input

The Community Input Workgroup identified methods, participants, questions, and procedures for gathering input from community members around issues of health in Kent County. MPHI provided training to workgroup and community members on methods for conducting intercept interviews and community input walls, which is a method for collecting anonymous responses from community members about health in Kent County at large public venues. In addition, MPHI conducted focus groups that included community members who represented a sub-population of concern. A method called Rapid Evaluation was used to analyze qualitative data collected from each of these sources in order to identify themes from community members related to health in Kent County. Quotes from community members are represented throughout the Community Health Profile. The contributions by these community members are a critical component of understanding health in Kent County. A detailed description of community input methods can be found in Appendix C.

Diverse and hard to reach populations provided Community Input:

- Parents (in GR public schools, Mothers on WIC),
- Race/ethnicity (African American, Hispanic/Latino, Asian, Filipino)
- Age (Older Adults, Youth)
- Income (Low-income, Homeless, Transient)
- Mental Health, Persons with Disabilities, Persons Receiving Public Health Services and Immunizations
- LGBT
- Re-Entry
- Geographical (inner city Grand Rapids, rural community)

Community input was gathered through:

- 4 Community Input Walls
- 12 Focus Groups with 119 community members participating
- 395 Intercept Interviews conducted by trained community members

Health Improvement Plan

The Kent County Community Health Improvement Plan will be developed based on the results of this Community Health Assessment and Community Health Profile. The Community Health Improvement Plan will lay out a long-term, systematic strategy to address the strategic health priorities identified in this document. The Plan will indicate how each partner in community health in Kent County will work in collaboration to develop and enhance programs and policies, coordinate their efforts, and target their resources toward priority health issues.

Demographics of Kent County

Kent County at a Glance

Kent County is located in Western Michigan and is the fourth largest population center in the state. The county is composed of twenty-one townships, five villages, and nine cities covering 864 square miles. Grand Rapids is the county seat and is 30 miles from Lake Michigan. Grand Rapids is also known for being the home of President Gerald R. Ford.

The health care resources in Kent County include Metropolitan Health, Spectrum Health-Butterworth Campus, Spectrum Health-Blodgett Campus, Saint Mary's Health Care, Pine Rest, and Mary Free Bed Rehabilitation Hospital. In addition, the Health Department operates six public health clinics throughout the county that offer personal health services. The Grand Rapids Home for Veterans and the Veterans Affairs Outpatient Clinic provide services for Veterans. In addition to major health centers and publicly funded services, Kent County offers numerous health-related services through non-profit and community-based organizations.

Kent County is a diverse community and offers a wealth of cultural, religious, and recreational opportunities. Kent County is also home to several colleges and universities: Aquinas College, Calvin College, Cornerstone University, Davenport University, Grand Rapids Community College, Grand Valley State University, Kendall College of Art and Design, Michigan State University Medical School and Van Andel Institute.

Population

In 2010, there were 602,622 people living in Kent County meaning 6.1% of Michigan's population lives in Kent County. However, Kent County is growing at a rate that is almost twice as fast as Michigan and the United States.

Age and Gender

A larger proportion of young people live in Kent County than Michigan or the United States. The median age for Kent County is 34.4 whereas Michigan's is 38.9. In Kent County, 51% of the population is female.

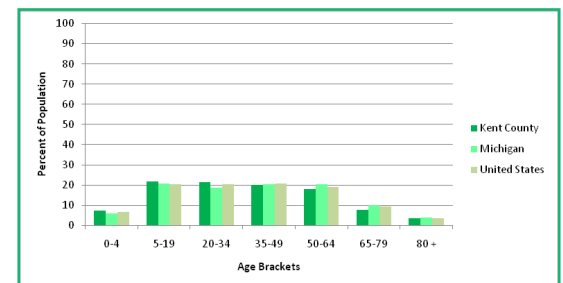


Figure 1. Age Estimates: 2010 Census
Data Source: U.S. Census Bureau, 2010 Census

Veteran Status

From 2005 to 2009, Kent County's civilian veteran population was comparable to Michigan and the United States at 8.4%.

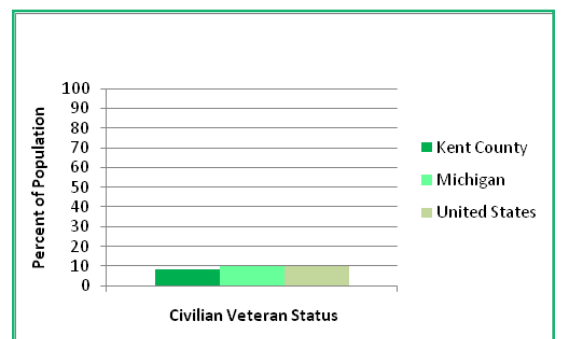


Figure 2. Civilian Veteran Estimates: ACS 2005-2009
Data Source: American Community Survey 5-year estimates, 2005-2009

Race & Ethnicity

Kent County has a higher proportion of white residents than Michigan and the United States. Residents of Kent County are more likely to identify as some other race or identify as having two or more races than Michigan residents overall. Kent County has more than twice as many residents who identify as Hispanic or Latino (any race) than Michigan as a whole.

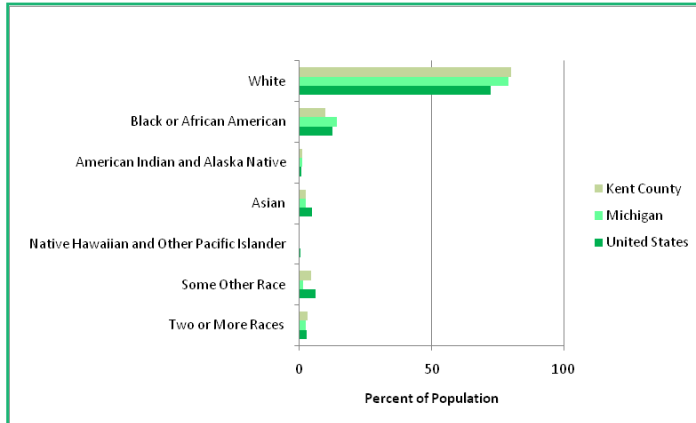


Figure 3. Race Estimates: 2010 Census
Data Source: U.S. Census Bureau, 2010 Census

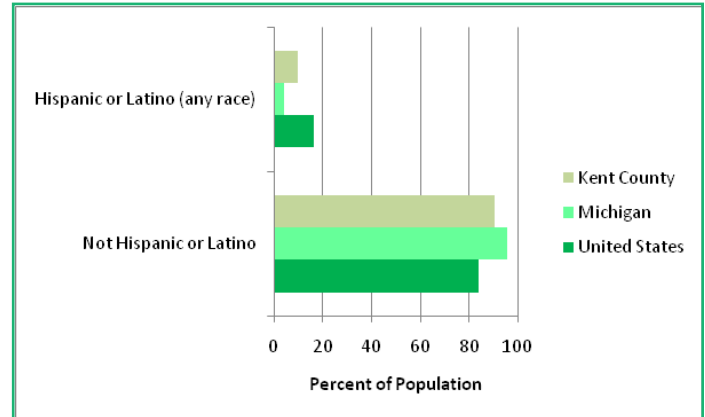


Figure 4. Ethnicity Estimates: 2010 Census
Data Source: U.S. Census Bureau, 2010 Census

Community Voice - Discrimination

Community members told us in the focus groups and interviews that quality of life depends on if you are experiencing discrimination. Themes that came out in the qualitative data included: the harmful effect of racism and discrimination, the expectation to assimilate, the sense that at times the conservative ethos in the community translates to racism, the feeling that there is pressure to fit into a very small box, or with the community norm (Dutch, white and conservative), as well as receiving poor treatment when you ask for help due to discriminatory policies and practices.

"When we think about health and well-being it embodies so many things, it includes our perspective of where we come from. For those of us who grew up in the U.S. I think our standard for health and wellness and how we have access to health and wellness could mean something completely different from someone who grew up in a country other than the United States, a Latin American country, for example.Our different perspectives have an influence on how we perceive health and wellness."

Socio-economic Characteristics of Kent County

Social and economic factors have a significant influence on community health. Factors such as employment, income, and education can protect health or put health at risk. Understanding how Kent County compares on these socio-economic factors can help put health outcomes in context.

Employment

Kent County has less unemployment than Michigan and the United States. In September of 2011, Kent County's seasonally adjusted unemployment rate was 8.5%.

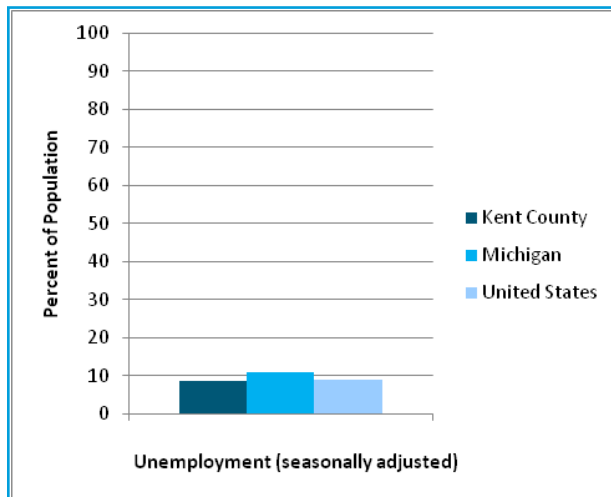


Figure 5. Unemployment Estimates: September 2011

Data Source: Michigan Department of Technology, Management, & Budget Labor Market Information, Seasonally adjusted unemployment rates for Michigan and Kent County, September 2011; U.S. Bureau of Labor Statistics, Seasonally adjusted unemployment rates for United States, September 2011

Education

Kent County has a higher proportion of residents with associate's, bachelor's and graduate or professional degrees than Michigan overall. However, Kent County and Michigan have the same proportion of residents with a 9th through 12th grade education and no diploma.

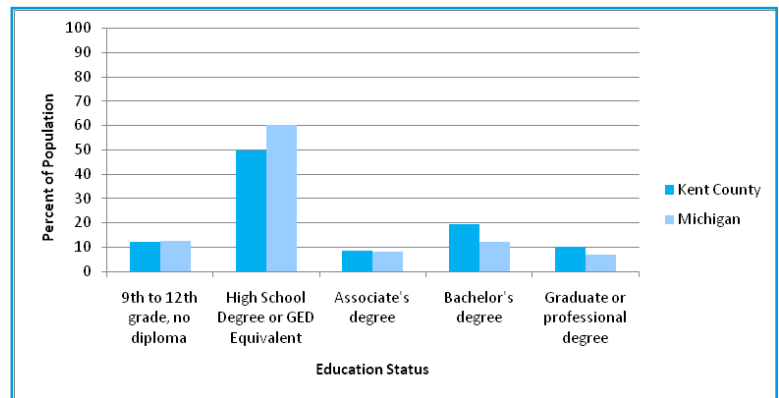


Figure 6. Estimates of Educational Attainment: 2010 Census
Data Source: U.S. Census Bureau, 2010 Census

"I feel like different parts of the county have better education than others...and so I know it's very good education. I don't know about other schools but I feel like there are more opportunities at certain schools than there are at others. I feel like that could be improved."

"Challenge is not what you know, it's who you know. Who you know can get you in the door quicker than what you know. I am speaking from a cultural standpoint. ...I went back to school and I have my MBA. However, I cannot get in the door with my degree. Nobody gave me a chance to prove myself as a result of that even with the credentials."

Income

From 2005 to 2009, the median household income for Kent County was \$49,908, which exceeded Michigan's median household income (\$48,700). Also, in 2009, Kent County had a lower proportion of residents living below the poverty level (14.5%) than Michigan as a whole (16.1%).

In 2009, Kent County had a lower proportion of children living in poverty than Michigan. However, a fifth of the children in Kent County ages birth to five were living in poverty. In addition, almost half of female head households with children less than five in Kent County are living in poverty.

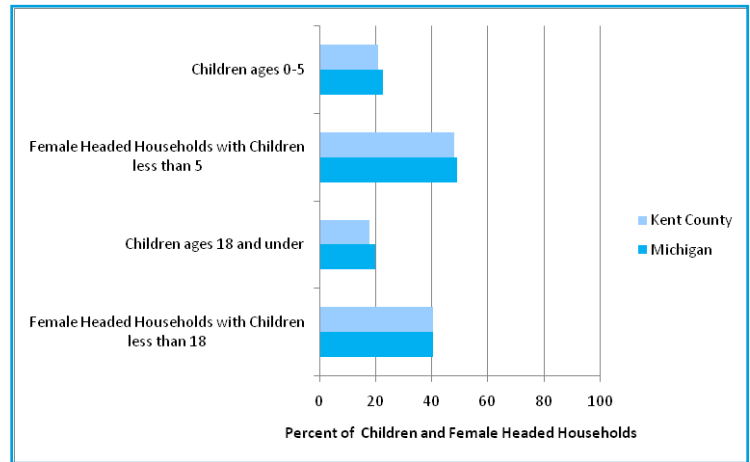


Figure 7. Children and Female Headed Households in Poverty with Children

Data Source: Community Research Institute Kent County ECI 2009; American Community Survey 5-year estimates, 2005-2009

Community Voice - Poverty

Community members told us in the focus groups and interviews that poverty has a negative impact on individuals and the whole community. Themes that came out in the qualitative data include: poverty leads to crime out of desperation, poverty leads to drug and alcohol abuse out of needing to escape, and poverty leads to a negative self-image and sense of hopelessness. We also heard that minimum wage is not enough to meet a family's basic needs but results in ineligibility for programs and services.

"That's when people do illegal activity. They think 'I can get by that way, I can survive that way.' They're not thinking about getting caught. They're thinking about living. Feeding their children. Getting them school clothes... It's self sufficiency."

"It's a shame though when you have an individual who is working, and willing to keep working, but when you are in a situation when you have nothing this is what they expect, they expect you to get a job. But then she has a job, she just needs help with childcare, that's it. It's expensive so you're living from check to check."

Entitlement Programs

Kent County has a smaller proportion of residents who receive food assistance than Michigan overall. However, Kent County has a higher proportion of residents enrolled in Medicaid than the State of Michigan. Kent County has half as many Medicare enrollees as Michigan, and a smaller percentage of Kent County residents who withdraw from Social Security as compared to Michigan. The percent of residents who use Supplemental Social Security Income in Kent County is similar to Michigan overall.

"I don't have it bad even though I am extremely low income. If you really low income and you have Medicaid you're actually better off than the people who are just a step above you because they're also at a very low level because they don't have that copay (referring to Medicaid)."

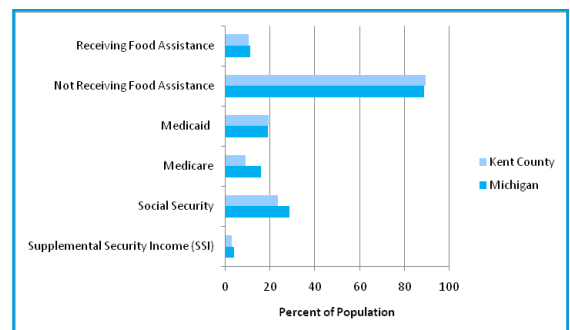
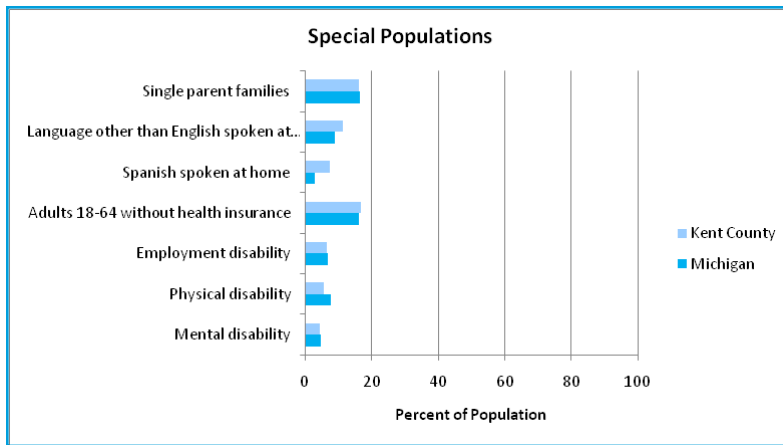


Figure 8. Entitlement Program Usage

Data Source: Michigan Department of Human Services, June 2010; Kaiser Commission Medicaid Facts, June 2010; American Community Survey 5-year estimates, 2005-2009; Dartmouth Institute Grand Rapids Hospital Service Area, 2007



Special Populations

Compared to Michigan, Kent County had a higher proportion of adult residents aged 18 to 64 who do not have health insurance and a higher proportion of households that speak Spanish or another language other than English at home. From 2005 to 2009, Kent County and Michigan had a similar proportion of single parent families.

Figure 9. Special Populations

Data Source: American Community Survey 5-year estimates, 2005-2009

"It hurts your soul and it hurts your body when you go out every day and strive for something but you get turned down. You get rejected. But once you get blessed by anything, the thing that makes you feel better is that you give back. You give back to the people and the community that's helped you get there."

Quality of Life in Kent County

Quality of Life in Kent County

The World Health Organization defines health as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity,” and the people of Kent County agree. Community members from all walks of life in Kent County said through interviews and focus groups that overall well-being, or quality of life, is much broader than physical health, and physical health is influenced by the quality of life in a community. Based on the idea that health is defined broadly and determined by many aspects of community life, the following indicators speak to factors that support and threaten a high quality of life in Kent County.

How does Kent County compare to similar counties on Quality of Life?

Using the County Health Rankings, Kent County can be compared to similar counties across the country, to Michigan, and to national benchmarks on indicators of Quality of Life. Compared to Michigan, Kent County has better access to healthy foods and recreational facilities, less access to liquor stores, and a lower violent crime rate.

However, compared to similar counties outside of Michigan, Kent County has a higher violent crime rate, a larger percentage of the labor force that drives alone to work, and less access to healthy food. Kent County also falls short of national benchmarks when it comes to access to healthy food, recreational facilities, and violent crime.

Table 1: Quality of Life

Quality of Life Measures	Kent Co, MI	Lake Co, IL	Wake Co, NC	Snohomish Co, WA	Michigan	National Benchmark
Access to healthy food (% of zip codes with a healthy food outlet)	89%	90%	94%	96%	73%	92%
Access to recreational facilities per 100,000	12	17	15	9	10	17
Percentage of high housing costs (> 30% of income)	34%	39%	30%	41%	35%	NA
Liquor store density per 100,000	10	11	4	4	14	NA
Percentage of the labor force that drives alone to work	82%	77%	80%	75%	83%	NA
Violent crime rate per 100,000	486	193	NA	253	536	100

Data Source: U.S. Census Bureau Zip Code Business Patterns, 2009; USDA Food Atlas, www.ears.usda.gov/foodatlas; American Community Survey, 2008-2010; U.S. Census Bureau County Business Patterns, 2009; American Community Survey 2008-2010; Uniform Crime Report, 2009

Crime

The Kent County Citizen Survey showed that 95% of residents felt that the importance of public safety was a worthy aim of local government, more important than pollution control (91%), road maintenance (85%), economic development programs (83%) and preserving farmland (81%).

“...you mentioned you didn’t feel safe having your kids play outside. I think that’s a big issue, if we don’t feel like we can tell our kids it’s all right go out and play in the yard for fear of or go to the neighborhood park.”

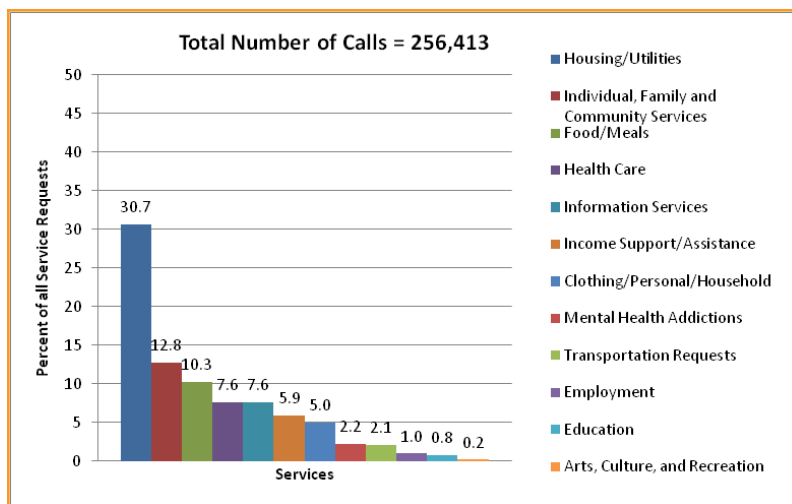
Community Voice- Raising Children

Community members told us in the focus groups and interviews that Kent County was a good place to raise children. Themes that we heard repeatedly included: there are many services available that focus on children, there are good schools in some places although school quality varies, with the exception of some neighborhoods the county is a safe place for kids, there are things for children to do such as parks and programs, and the cost of childcare is a major challenge.

"If the parents only had one job then this would be a good place to raise a family, it would be great because then you know they would have time to have dinner with the kids. But if the parent has to have two jobs and they have to ask the 10 year old to watch the 5 year old then it is really tricky. "

When the people of Kent County call for help, what do they need?

The United Way's 2-1-1 system links callers to the community services they need. From January 2008 through June 2011, 30.7% of all 2-1-1 service requests in Kent County were for housing/utilities, the most sought after service, followed by community services and food or meal assistance. Education services were the least requested service.



"People can call 211 and they can direct you to other things... for people to get help because that's what they are there for."

Figure 10. 2-1-1 Call Requests: Jan. 1, 2008 to June 30, 2011
Data Source: Heart of West Michigan United Way 2-1-1

How does Kent County's food environment compare?

Both the County Health Rankings and the 2-1-1 call information suggest that access to food is a problem for some community members. Information collected by the U.S. Department of Agriculture (USDA) provides more information on food access in Kent County.

The food insecurity rate for Kent County is 15.2% overall, but children in Kent County experience a much higher food insecurity rate of 23.2%. Also, compared to Michigan, a higher percentage of Kent County residents qualify for food assistance (SNAP).

Over the past few years, the need for food assistance in Kent County has grown. The number of SNAP and WIC redemptions are increasing, as is the number of SNAP and school lunch participants. Also, when Kent is compared with one of its sister counties, Lake County, Illinois, Kent County has more SNAP redemptions than Lake County, even though Lake County has had a larger increase in the number of SNAP-authorized stores. Kent County's average number of monthly SNAP participants is almost twice that of Lake County, 22.5 versus 12.5. Also, Kent County lost more WIC-authorized stores and redemptions from 2008 to 2009 than Lake County, Illinois.

However, USDA data also suggest that the number of healthy food outlets, such as grocery stores and farmers markets, are increasing. Kent County had a 5.5% increase in the number of grocery stores from 2008 to 2009, whereas Lake County only experienced a 0.1% change. As for fast-food restaurants, Kent County experienced a -2.1% loss and Lake County had a 0.8% gain from 2008 to 2009. However, there are still 19,172 residents in Kent County who live in a food desert, meaning they do not have access to a grocery store, and there are 17,920 residents who have limited access to grocery stores in their neighborhoods.

Farmers' Market

The Kent County Citizen Survey showed that 78% of households had visited a local farmers' market to purchase food several times during the past year and 36% frequent the farmers market either once a week or daily.

"The options at the Farmers Market with fresh fruits and veggies helps me [live a healthy life]. People like me with food benefits feel we have more options and can get more for less."

"As far as food, no one has any reason to go hungry in County. They will help you."

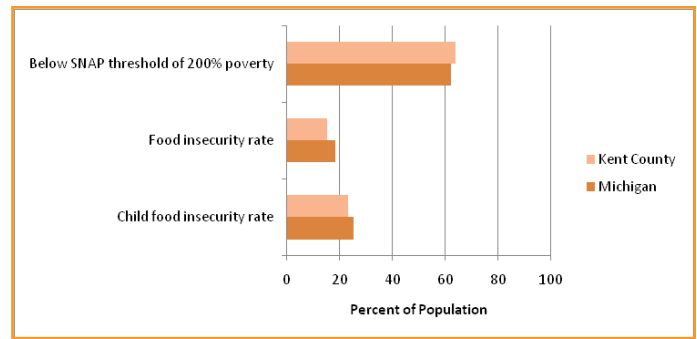


Figure 11. Food Insecurity

Data Source: Feeding America. Map the Meal Gap 2011: Food Insecurity Estimates at the County and State Level, www.feedingamerica.org

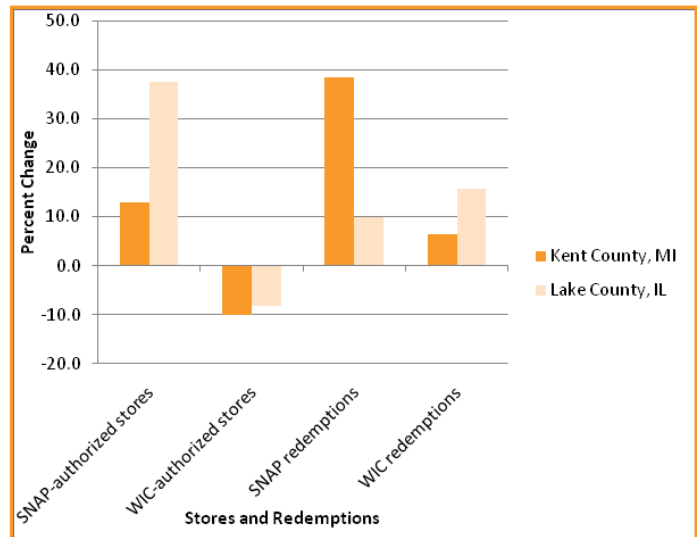


Figure 12. SNAP and WIC Availability: 2008-2009

Data Source: USDA Food Atlas, www.ears.usda.gov/foodatlas

Community Voice- Cultural Heritage

Community members told us in the focus groups and interviews that community and cultural resources and services improve quality of life for everyone. Themes that came out in the qualitative data included: there are few cultural events for African American community members, there are positive cultural resources for LGBT community members, senior centers are positive resources for the aging population, and services are also highly valued by individuals participating in the re-entry program. Participants indicated that programs could be improved by adapting them to the culture and heritage of community members with diverse backgrounds.

Do community members engage in social and civic life in their community?

Affordable housing, safety, access to food, and educational and employment opportunities form the foundation for a high quality of life in a community. However, it is an engaged and active community that truly has the capacity to solve its own problems and improve quality of life for all community members.

One indicator of civic engagement is voter participation. In 2010, there were 418,473 adults registered to vote in Kent County, and 195,999 adults voted in the gubernatorial election in that year, for a voter participation rate of 46.8%. This is a bit higher than Michigan's voter participation rate of 44.3%.

The Community Research Institute in Grand Rapids surveyed the people of Kent County about the ways that they engage with their community and gathered much more detailed information about social and civic engagement. They found that, in the past week, about 80% of community members surveyed spent time with friends, 61% talked with someone about current events or politics, 59% attended a social activity, and 57% attended a place of worship. However, in the past 12 months, only 24% of community members contacted or visited a public official and 5% of community members took part in a march, protest or demonstration. The level and type of social and civic engagement varies by population groups. In Kent County, as compared with other racial or ethnic groups, a higher proportion of:

- **Asian/Pacific Islander residents** attended a place of worship during the last week and were involved in any local groups, clubs, or associations.
- **Native American residents** in Kent County contacted or visited a public official in the past 12 months.
- **Hispanic/Latino residents** have taken part in a protest, march, or demonstration in the past 12 months.
- **African American residents** talked about current events or politics with anyone during the past week and went to a museum or other cultural activity during the past year.
- **White residents** attended a social activity during the past week, got together with friends or neighbors during the past week, and engaged in any volunteer work for a charitable organization for which they did not receive pay in the past 12 months.

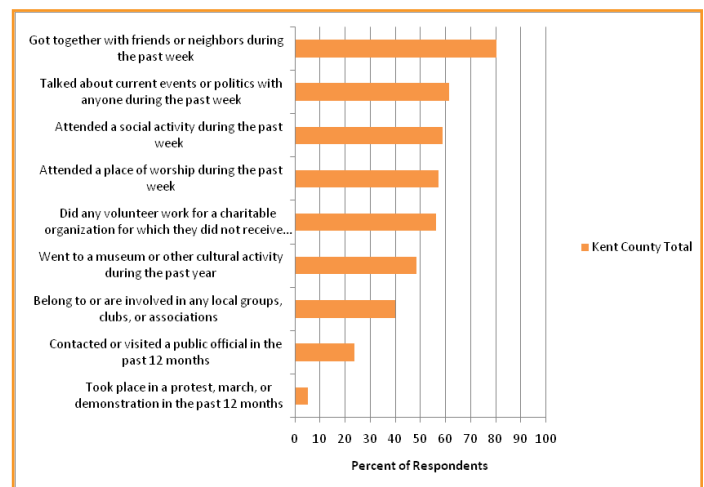


Figure 13. Community Engagement by Community Social Event/Activity

Data Source: Community Research Institute, Grand Rapids Community Survey, 2010

Civic participation also varied by **education**. In general, more highly educated community members were more likely to participate in social or community activities. However, community members with less than a high school education and community members with a graduate/professional degree were equally likely to have participated in a protest, march, or demonstration in the past 12 months.

Also, community members with less than \$25,000 annual **income** were less likely to participate in most categories of social or community activities. However, they were more likely to have participated in a protest, march, or demonstration in the past 12 months than Kent County residents as a whole.

"Involvement in finding out what people need means time and building relationships."

Quality of Life

When asked about whether or not they are satisfied with their lives as part of the Behavioral Risk Factor Surveillance System (BRFSS), 4.9% of Kent County residents who responded to the survey reported that they are dissatisfied with their life, as compared with 6.3% in Michigan. However, 16.8% of respondents who lack health insurance reported that they are dissatisfied with their life.

When asked about social support, 4.6% of respondents in Kent County said that they never get the social and emotional support that they need, compared with 7.1% in Michigan. However, those with less than a high school education and those who lacked health insurance were twice as likely to report that they never get the social and emotional support they need.

Community Voice - Quality of Life

Through interviews and focus groups we heard from community members that the quality of life is good, overall, in Kent County. They told us that:

- Community members experience a sense of community and feel connected
- Kent County is a supportive place for families and a good place to raise children
- Community and cultural resources, as well as recreation resources and activities, are available that improve everyone's quality of life
- Many public and private organizations provide valued services for community members who are in need
- The quality of healthcare is excellent, if you can afford it or are insured

However, they also told us that quality of life is unequally distributed, and it depends on:

- Where you live in Kent County because where you live impacts access to transportation, safety, quality of schools, accessibility of services, availability of parks and recreation opportunities, food availability, employment opportunities, drug availability, discrimination, environmental quality
- If you have a job that pays a livable wage and insurance because there are not enough jobs available, and if you can find one, minimum wage is not enough to live on and ends up disqualifying you for services you still need
- If you can be independent because self-worth is tied to your ability to take care of yourself and your family, for older adults, people with psychiatric or physical conditions, people returning from prison, and people who are low income
- If you are experiencing discrimination because the expectation to assimilate is harmful, and conservative sometimes translates to discriminatory

Environmental Health in Kent County

Clean air, safe food, and clean water play a critical role in protecting health, as does eliminating exposure to toxic substances such as lead and radon.

Air Quality

Like many communities on Michigan's west coast, Kent County's air quality is relatively poor. Poor air quality places the whole population at risk, but is especially dangerous for people with asthma, chronic bronchitis, emphysema, cardiovascular disease, diabetes, and both young and older community members. The air pollution indicators referenced below measure the annual number of days that air quality was unhealthy for at risk populations due to fine particulate matter and ozone.

When compared with similar counties and Michigan, Kent County had a higher number of days per year where the air quality was unhealthy due to fine particulate matter air pollution, as well as a higher number of days per year with unhealthy air quality due to the ozone than the state of Michigan and all of its comparison counties except Wake County, North Carolina.

Table 2. Number of Air Pollution Days per Year by Pollution Type

Air Pollution Measures	Kent Co, MI	Lake Co, IL	Wake Co, NC	Snohomish Co, WA	Michigan
Fine Particulate Matter Days	7	1	3	2	3
Ozone Days	7	2	7	0	1

Data Source: Public Health Air Surveillance Evaluation Community Multi-scale Air Quality Model, 2005

Food Quality

Kent County has a higher food-borne disease diagnosis rate of 42 per 100,000 population than the state of Michigan (36 per 100,000 population). Kent County implemented 66 enforcement actions against food facilities in 2005. Routine inspections have found food contact surface violations (25%), holding temperature violations (24%), and employee hygiene violations (16%) to be the most likely food inspection violations in Kent County.

Water Quality

Within the last 5 years, all non-community (100%) public water supplies have been surveyed in Kent County. Only 0.09% of non-community public water supplies exceeded maximum contamination levels. Almost one-fifth (19.5%) of the population in Kent County does not have access to municipal sewer services and only 1.5% of septic systems have been inspected in the last year.

Lead Poisoning

The number of Kent County children screened for lead poisoning increased from 2009 (n=8,487) to 2010 (n=10,735).

- 19.7% of 54,539 children six years of age and under screened
- 26.8% reside in pre-1950 housing
- 0.9% EBLL (> or = 10 µg/dL for venous and unconfirmed capillaries)
- 8% with BLL > = 5 µg/dL

Radon

In 2010, 16% of homes within Kent County were tested for and/or underwent remediation for excessive levels of radon.

Healthcare Resource Availability in Kent County

Access to routine medical care helps people prevent illness, identify health conditions, and treat health problems.

How does Kent County compare to similar counties on access to healthcare?

Using the County Health Rankings, Kent County can be compared to similar counties across the country, to Michigan, and to national benchmarks on indicators of access to healthcare. Overall, this information suggests that Kent County is comparable to similar counties, better than Michigan, and approaching national benchmarks on access to healthcare.

Table 3. Access to Healthcare

Healthcare Measures	Kent Co, MI	Lake Co, IL	Wake Co, NC	Snohomish Co, WA	Michigan	National Benchmark
Uninsured adults (% population <65)	15%	16%	19%	13%	14%	13%
Preventable hospital stays (per 1000 Medicare enrollees)	56	73	54	36	74	52
Primary care physicians	775:1	756:1	835:1	1246:1	874:1	631:1
Diabetic screening (% diabetic Medicare enrollees)	87%	80%	86%	89%	83%	89%
Mammography screening (% female Medicare enrollees)	72%	65%	71%	63%	68.5%	74%

Data Sources: U.S. Census Bureau, Small Area Health Insurance Estimates, 2009; Dartmouth Atlas of Health Care, Medicare Claims, 2008; HRSA Area Response File from AMA Master File Census Population Estimates, 2009; Dartmouth Atlas of Health Care, Medicare Claims, 2008; Dartmouth Atlas of Health Care, Medicare Claims, 2008

Disparities in Access to Healthcare within Kent County

The BRFSS survey asks several questions about access to healthcare. In Kent County, 10.7% adults compared to 13% in Michigan report that they have no healthcare coverage. These numbers increase to 16.9% of African American, 19.7% of adults with only a high school education, and 23.6% of adults with less than a high school education. While Kent County is similar to Michigan overall, adults without healthcare coverage were twice as likely to report poor health and far less likely to have accessed a primary care provider or dentist in the past year.

Healthcare access can also be measured by other items on the BRFSS. Responses to the items listed in Figure 14 suggest that healthcare is least accessible to adults who lack health insurance, have a high school education or less, and are African American.

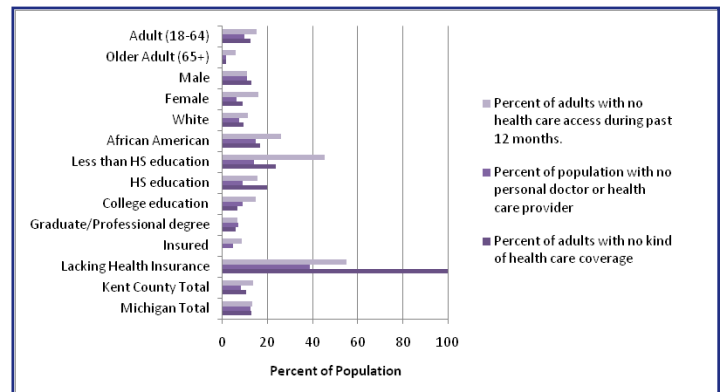


Figure 14. Healthcare Access by Adult Demographics
Data Source: Michigan Behavioral Risk Factor Surveillance System, 2008-2010 Combined

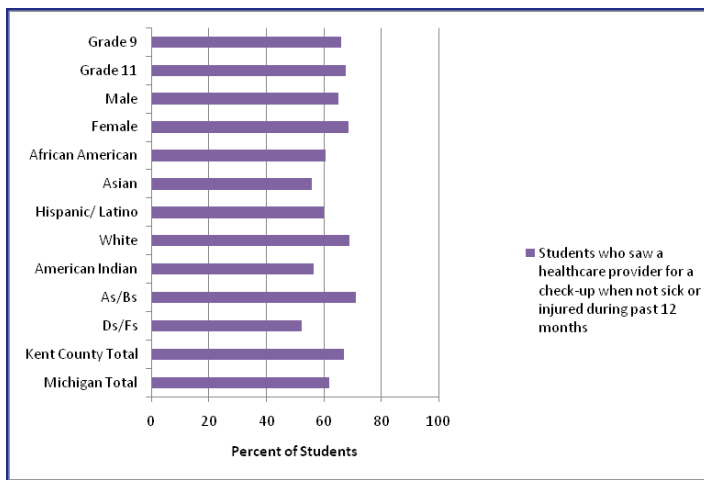


Figure 15. Youth Check-Ups by Demographics
Data Source: Michigan Profile for Healthy Youth, 2010

Youth Access to Healthcare

As part of the Michigan Profile for Healthy Youth (MiPHY), an online student health survey, students are asked to report if they have had a check up in the past year. Overall, youth in Kent County are more likely to have received check-ups during the past 12 months than youth in Michigan. Youth who received Ds/Fs are the least likely to have received a check-up in the past 12 months.

Access to Preventive Care

Access to preventive health screening helps make sure serious diseases such as cancer are detected and can be treated early.

In Kent County, women aged 40 and older were more likely to have reported ever having a mammogram than Michigan women of the same age. In Kent County, men aged 50 and older are receiving prostate cancer screenings at a similar rate as all men in Michigan. Adult residents aged 50 and older are less likely to have received colorectal cancer screenings than Michigan adults of the same age.

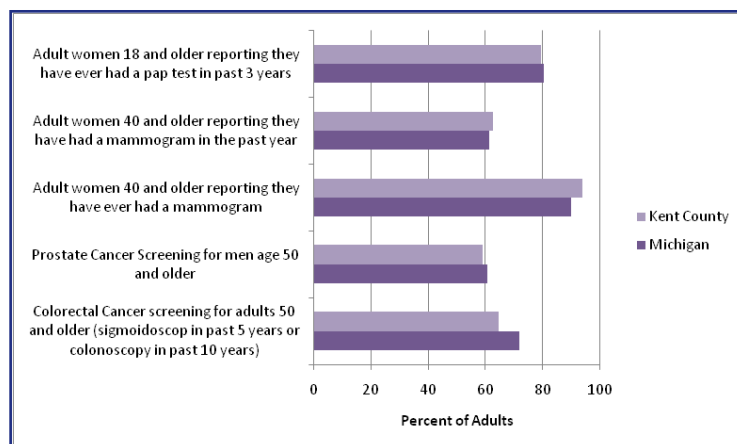


Figure 16. Adult Health Screenings
Data Source: Michigan Behavioral Risk Factor Surveillance System, 2008-2010 Combined

Community Voice - Healthcare Resource Availability

Healthcare is difficult to access. Residents identified the following barriers to healthcare access: location, provider availability, transportation, language, literacy, and services for individuals with special needs. Community members also described challenges associated with not knowing who accepts Medicaid patients. There were additional barriers for low- or mid-income individuals and families who were uninsured yet did not qualify for public assistance.

"..... If you're really low income and you have Medicaid you're actually better off than the people who are just a step above you."

"What is it about Medicaid that some doctors and places like that will not accept Medicaid even if you have it? Nine times out of ten you're low income so you can't afford the bills and a lot of doctor's won't take that."

Access to Dental Care

Access to dental care helps to ensure oral health, and it prevents serious diseases such as heart disease, which has been shown to be linked to poor oral health. Kent County has more licensed dentists per 100,000 population than Michigan with 65.3 per 100,000 versus 62.0 per 100,000 population. The percentage of residents in Kent County who see a dentist annually is about equivalent to the percentage in Michigan overall.

However, disparities do exist between adult populations within Kent County. Adults with less than a high school education and adults who lack health insurance are the least likely to have gone to the dentist within the past year. Residents with a graduate or professional degree are more likely to have seen a dentist within the past year than any other population in Kent County.

Dental check-ups are recommended for children starting at two years of age. Yet, approximately 65% of the children enrolled in Medicaid in the county are without regular dental care. Medicaid-enrolled children Kent County:

- 12,779 Medicaid enrolled ages 2-4
- 34,248 Medicaid enrolled ages 2-10
- 54,637 Medicaid enrolled ages 2-18

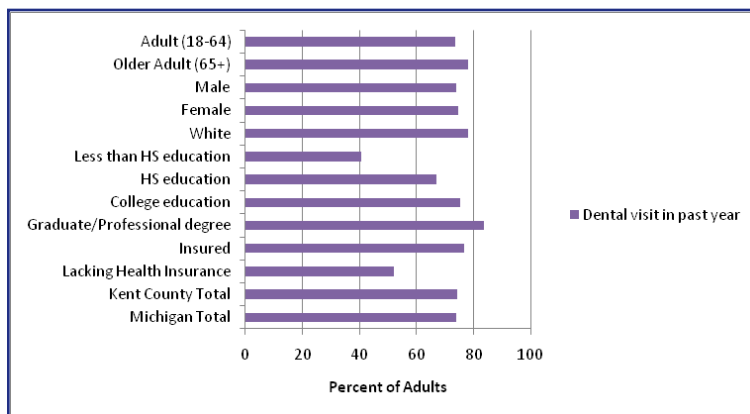


Figure 17. Dental Visits by Adult Demographics

Data Source: Michigan Behavioral Risk Factor Surveillance System, 2008-2010 Combined

Further, Kent County does not have 'Healthy Kids Dental' program. Community Dental Clinics, Inc. estimates that approximately 8,300 2 to 4 year-old children and 22,000 2 to 10 year-old children in the county do not have a dental provider, even though they have Medicaid insurance. **Cherry Street services approximately 35% of the child Medicaid population in the county.**

Data Source: DHS Green Book Report of Key Program Statistics, April 2011.

"I have been searching for a dentist in the area. I cannot find one who is accepting new patients over 21 years old with Medicaid."

"Finding a dentist who accepts Michigan Medicaid for kids is very difficult and wait is very long to get into office. Insurance can be very overwhelming."

"I haven't been in eight years, to a dentist, since I've had kids... I have fillings that have fallen out and stuff but it's just too expensive."

Community Voice - Access to Healthcare

Community members told us in the focus groups and interviews that the quality of healthcare is excellent, overall, if you can afford it. Kent county residents identified area hospitals, clinics, specialty providers and the local health department as providing excellent service and care. However, the quality of healthcare residents received was dependent on their ability to pay for services and providers.

Kent County community members identified the lack of access to low-cost and free providers as a healthcare barrier. These providers tend to have long wait lists and times, and limited services are available for mental health, substance abuse, or dental care. Even community members who had health insurance experienced barriers to healthcare related to cost. Community members indicated that they had insufficient or no coverage of prescription medications, no Medicaid coverage for adult dental or vision care, that there are a lack of providers who take Medicaid, and lack of private insurance due to employer affordability and coverage, and employment status.

"What is it about Medicaid that some doctors and places like that will not accept Medicaid even if you have it? Nine times out of ten you're low income so you can't afford the bills and a lot of doctor's won't take that."

Community Voice - Systems

Quality healthcare is compromised by the way the system works. Residents identified healthcare systems as complicated with a lack of care coordination or continuity in care. Residents describe a redundancy of paperwork and the lack of accommodation for physical impairments or language barriers when processing this paperwork. Residents expressed concern when providers rush to keep visits short and feel this compromises the providers' ability to fully assess their health concerns. Residents also expressed concern for the services needed but not covered by their insurance (Medicaid).

"It's systems....they tend to treat people in silos instead of treating the whole person."

Community Voice - Inequality in Healthcare Experience

Community members indicated that they have had experiences that were demeaning or discriminatory when accessing care. They indicated that people who have Medicaid are treated differently. They described the demeaning experience of being turned away by providers and being treated as though they have little value. Community members also indicated that some providers lack cultural competence.

"We don't want to be treated like a number. We want to be treated with respect. And listen to what we have to say."

"To an extent I care if you look like me, but you need to relate to me. They need to be culturally competent to deal with people."

"There are different environmental triggers that may bring out certain disorders within individuals. When we talk about health care that's culturally competent, for immigrants those triggers are going to be a lot different."

Healthy Lifestyles in Kent County

Healthy eating and regular physical activity reduce the risk of obesity, which can lead to a variety of poor health outcomes.

How does Kent County compare to similar counties in adult obesity and physical activity?

The Behavioral Risk Factor Surveillance System (BRFSS) includes several questions about physical activity and obesity, and is completed by counties across the country that are comparable to Kent County. Kent County exceeds similar counties and the National Benchmark with the percent of the adult population that is obese (BMI>30). Kent County is comparable to similar counties in the percent of the adult population that is physically inactive. Michigan residents are more likely to be physically inactive than Kent County residents.

Table 4. Health Behavior

Healthy Lifestyle Measure	Kent Co, MI	Lake Co, IL	Wake Co, NC	Snohomish Co, WA	Michigan	National Benchmark
Adult Obesity (BMI>30)	29%	25%	27%	28%	31%	25%
Physical Inactivity (no leisure-time physical activity)	20%	21%	19%	19%	24%	NA

Data Source: Behavioral Risk Factor Surveillance System, 2009

Physical Activity and Obesity - Adults

Adults in Kent County who completed the BRFSS in Kent County between 2008 to 2010 report being limited in activities due to physical, mental, or emotional problems more frequently than Michigan adults. However, Kent County adults are less likely to report having an activity limitation on at least 14 days in the past month than adults in Michigan, and they are less likely to report that they are dissatisfied with their life. Kent County adults are also less likely to report not participating in any leisure-time physical activities or exercise in the past month than adults in Michigan.

Physical activity varies by population group in Kent County. Adults with less than a high school education are the most likely to report being limited in any activities because of physical, mental, or emotional problems. Adults aged 65 or older are more likely to experience an activity limitation on at least 14 days in the past month and not participate in any leisure-time physical activities or exercise in the past month than any other adult population in Kent County. Adults in Kent County who lack health insurance are the mostly likely to report being dissatisfied with their life.

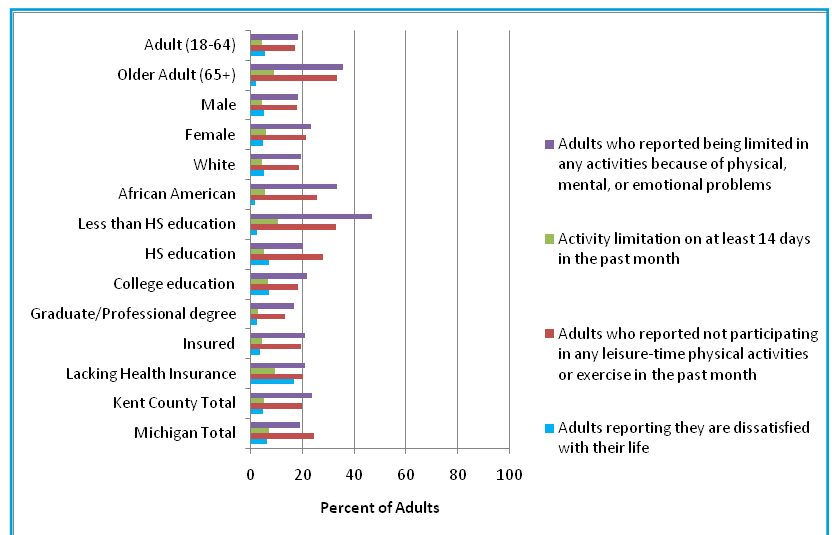


Figure 18. Adult Physical Activity & Life Satisfaction by Demographics
Data Source: Michigan Behavioral Risk Factor Surveillance System, 2008-2010 Combined

Note that the data reported in Figure 19 and the data reported for comparison counties reflect different reporting years for the BRFSS. Kent County adult residents are more likely to be at a healthy weight and less likely to be overweight or obese than Michigan adult residents as a whole. In Kent County, adult residents lacking health insurance are the most likely to be at a healthy weight, adult males are the most likely to be overweight, and African American adults are the most likely to be obese.

Healthy Eating, Physical Activity, and Obesity - Youth

MiPHY includes several questions about healthy eating and physical activity. Survey results from 9th and 11th graders surveyed 2009 to 2010 school year are reported. Youth in Kent County are much more likely to eat five or more servings of fruits and vegetables during the past 7 days and to be physically active for 60 minutes per day 5 or more days of the past 7 day as compared with Michigan youth. They are also less likely to be obese.

However, American Indian youth in Kent County are the least likely to report healthy eating. Asian youth are the least likely to report adequate physical activity. Kent County youth most at-risk for being obese are males, American Indians, and students with Ds/Fs.

Youth most likely to report healthy eating are African American youth, Asian and Hispanic youth in the 9th grade, and youth with As/Bs. Male youth are more likely to be physically active than any other youth population in Kent County. Kent County youth least likely to be obese are females, Asians, and students with As/Bs.

Community Voice- Healthy Eating

Community members told us in the focus groups and interviews that healthy eating is a critical component of staying healthy and the availability of farmers' markets and the WIC double-up program helps with healthy eating. Some of the barriers to healthy eating are the lack of healthy food resources in some communities and the dependence on corner stores that either do not carry healthy food options or carries them at a cost prohibitive price. Also while food is available through food pantries, they do not always have healthy food or food for people with dietary restrictions. We also heard that there was a difference in the healthy food options in different schools, with some districts making healthy food available and others not. School vending machines also get in the way of healthy eating. Some of the food choices made by community members had to do with convenience, saving time by eating fast food, and the affordability and prevalence of fast food chains.

"I like the farmers market. The program they have now where you can double up... Because you want to eat healthy, be healthy, but it's expensive. And so I'm able to go to the farmers market and purchase my food there, vegetables, fruits, and I get double that. So it's like 'I can do this, I can try to eat healthy, I can try to be healthy. So I really like that program that they have.'"

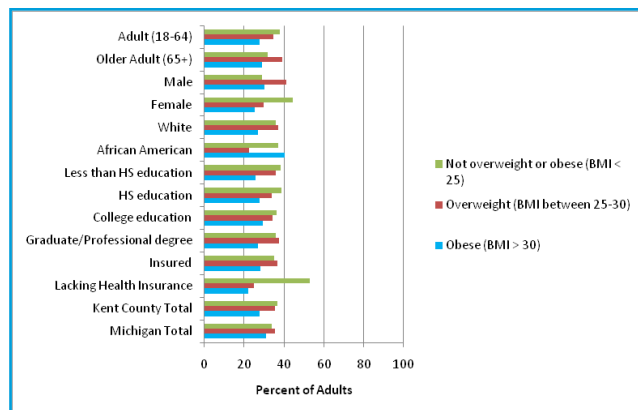


Figure 19: Adult Weight Status by Demographics
Data Source: Michigan Behavioral Risk Factor Surveillance System, 2008-2010 Combined

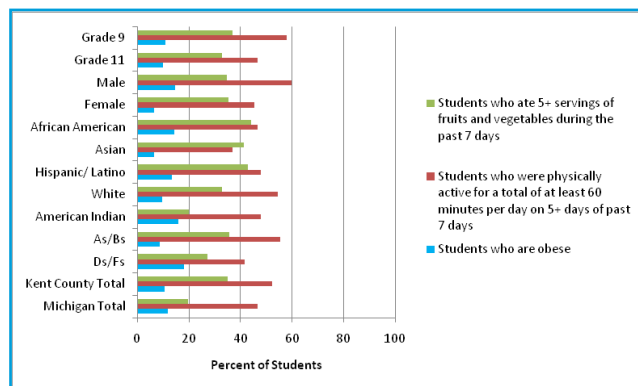


Figure 20. Youth Healthy Eating, Physical Activity, and Obesity by Demographics
Data Source: Michigan Profile for Healthy Youth, 2010

Maternal and Child Health in Kent County

Every child deserves a healthy start, and healthy babies need healthy mothers. The health of women and children are intricately linked, and factors that threaten women's health also threaten the health of the next generation. Social determinants of women's health such as inequity in access to interconception and obstetric care, poverty, the food environment, violence, racism and stress have consequences for the health and well-being of children.

How does Kent County compare to similar counties on maternal and child health?

The Kent County teen pregnancy rate is higher than Michigan and all comparison counties. The Kent County teen birth rate per 1,000 females ages 15-19 is nearly twice that of the national benchmark. Kent County is similar to comparison counties and lower than Michigan in the percentage of babies born with a low birthweight. A baby is considered low birthweight if it is less than 2,500 grams (approximately 5 lbs. 8 oz.).

Table 5. Maternal and Child Health

Maternal and Child Health Measure	Kent Co, MI	Lake Co, IL	Wake Co, NC	Snohomish Co, WA	Michigan	National Benchmark
Teen birth rate per 1,000 female population ages 15-19	42	29	30	27	35	22
Percent of live births with low birthweight	7.4%	7.4%	7.8%	5.7%	8.2%	6%

Data Source: National Vital Statistics, Birth Data, 2009

"...but then the doctor's office that she was at decided that they weren't gonna take it and now I have like \$2000 in bills sitting there and I'm pregnant now and they switched me from Medicaid to priority and (provider) doesn't take that and it's just...it's very frustrating."

Prenatal Care

A healthy birth begins with a healthy pregnancy, and healthy pregnancy is supported by adequate prenatal care. Adequacy of prenatal care can be measured by the Kotelchuck Index recorded in the birth record. This index incorporates both how early moms enter prenatal care and the number of prenatal care visits they received.

- Adequate Plus Prenatal Care - Prenatal care begun by the 4th month and 110% or more of recommended prenatal visits were received
- Adequate Prenatal Care - Prenatal care begun by the 4th month and 80% to 109% of recommended prenatal visits were received
- Intermediate Prenatal Care - Prenatal care begun by the 4th month and 50% to 79% of recommended prenatal visits were received
- Inadequate Prenatal Care - Prenatal care begun after the 4th month or less than 50% of recommended prenatal visits were received

Although adequacy of prenatal care in Kent County is comparable to Michigan in general, prenatal care in Kent County is more likely to be adequate if you are white and inadequate if you are African American, Arab, or Hispanic/Latino.

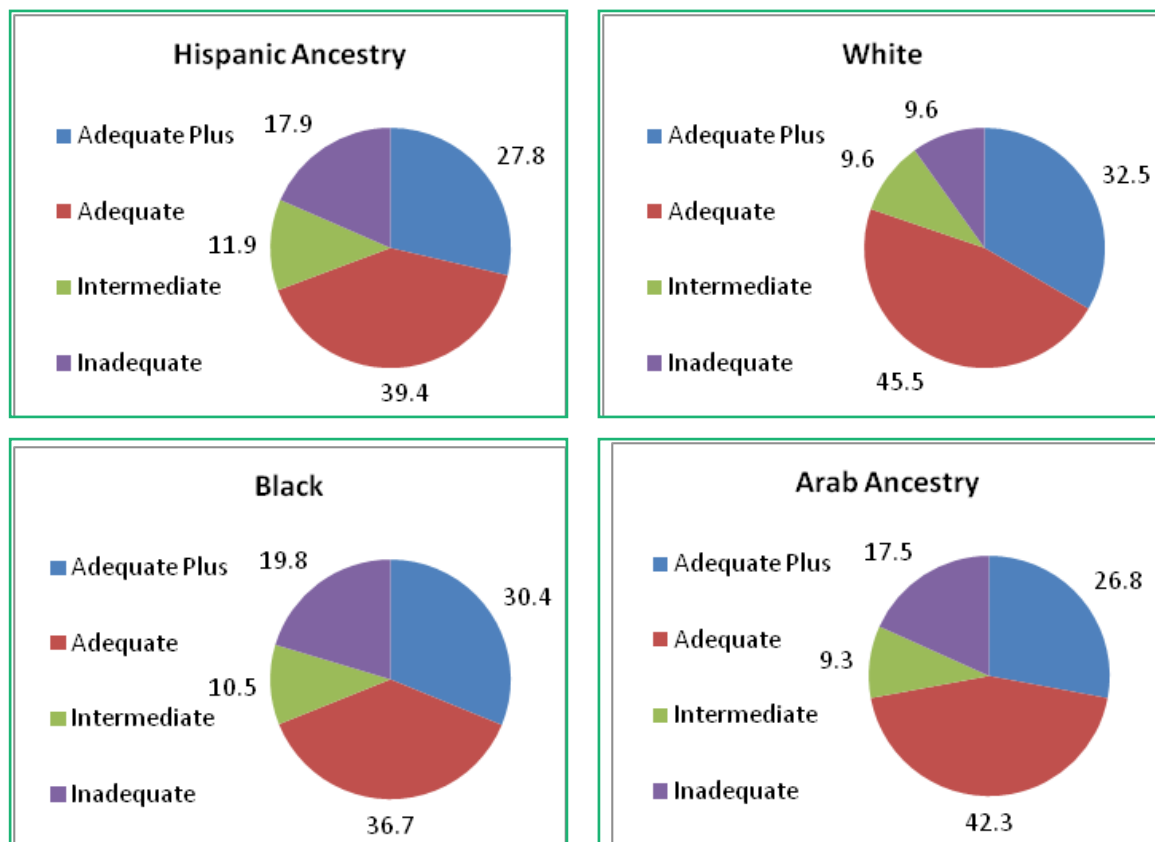


Figure 21. Adequacy of Prenatal Care in Kent County

Data Source: Michigan Department of Community Health, Vital Records and Health Statistics, 2009

Early prenatal care is especially important because it allows healthcare providers to identify and address issues that might threaten a healthy pregnancy, such as substance abuse, mental health concerns, or economic stress. However, prenatal care is less likely to begin in the first trimester for moms who are younger than 24, African American, Arab (unless 20-24 or 35-39), or Hispanic.

Table 6. Percent of Live Births in Kent County with Prenatal Care Beginning in the 1st Trimester

Age of Mother	All Races	White	Black	Arab Ancestry	Hispanic Ancestry
Less than 15	22.2%	25.0%	20.0%	NA	NA
15-19	54.7%	56.9%	51.8%	50.0%	48.2%
20-24	67.3%	70.0%	58.2%	77.8%	66.1%
25-29	78.0%	80.0%	65.0%	66.7%	67.5%
30-34	80.9%	82.3%	68.5%	55.6%	72.5%
35-39	78.9%	80.8%	57.4%	83.3%	67.5%
40 and Over	76.5%	78.7%	64.7%	33.3%	62.1%
<i>Total</i>	<i>74.1%</i>	<i>76.7%</i>	<i>59.8%</i>	<i>66.0%</i>	<i>64.8%</i>

Data Source: Michigan Department of Community Health, Vital Records and Health Statistics, 2009

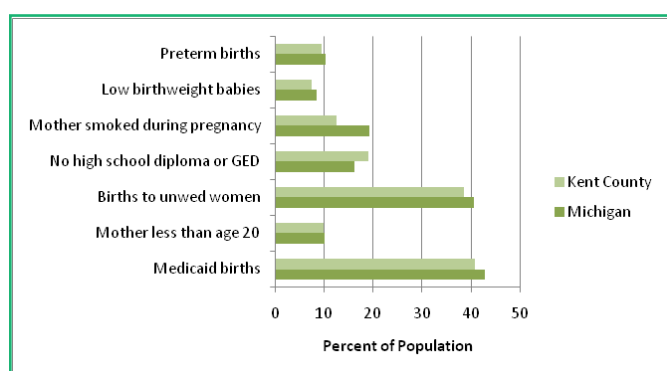


Figure 22. Rates for Selected Birth Indicators 2008-2009
Low birthweights are less than 2,500 grams. Pre-term births are infants born prior to 37 completed weeks of gestation. Data Source: Annie E. Casey Foundation, KIDS COUNT Data Center, 2008-2009; 2009 Michigan Resident Birth Files, Division for Vital Records & Health Statistics, Michigan Department of Community Health

Birth Indicators

Kent County is doing better than Michigan on most indicators of a healthy birth, including pre-term births, low birthweight, and maternal smoking. However, African American mothers are more likely to deliver pre-term and to have a baby born at a low birthweight. In addition, mothers in Kent County (22.7%) are much less likely than mothers in Michigan (33.2%), overall, to plan to breastfeed, despite the many health benefits to both mom and baby from breastfeeding.

Teen Pregnancy

Teenagers who become pregnant face more risks than adult women. Teens are more likely than adult women to receive late or no prenatal care, deliver pre-term, and deliver a baby at a low birthweight. All of these factors increase the risk of developmental delay, illness, and mortality. The teen pregnancy rate is higher in Kent County (61.5/1,000 females ages 15-19) than Michigan (53.6/1,000 females ages 15-19).

In addition, the percent of live births to moms with less than a high school education in 2009 was higher in Kent County (18.9%) than Michigan overall (15.9%). In fact, Kent County is ranked 62 (out of 83 counties) in the state for births to mothers with no high school diploma or GED.

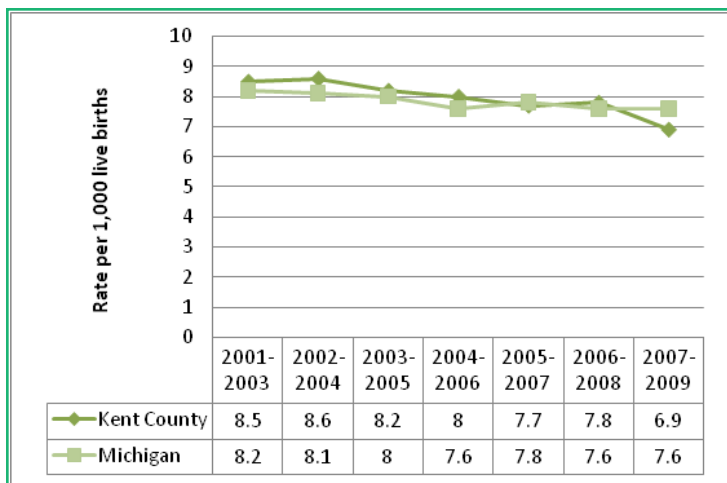


Figure 23. Trends in Infant Death Rates

Data Source: Michigan Department of Community Health, Vital Records and Health Statistics, 2009

Infant Mortality

The infant mortality rate is the number of babies per 1,000 live births who die before their first birthday. Often this indicator is used as a measure for the health of an entire community. For every 1,000 live births in Kent County, approximately seven infants die before reaching their first birthday. Some of the causes for infant mortality include: prematurity, low birthweight, and positional asphyxia. Since 2001, the infant mortality rate in Kent County has declined, as has the rate in Michigan.

While trends in infant mortality in Kent County and Michigan are moving in a positive direction, the racial disparity in infant mortality is striking. African American babies are significantly more likely to die before their first birthday than any other race. This disparity is reflected in infant deaths, neonatal deaths, and postneonatal deaths.

Fetal Infant Mortality Review

Kent County has a Fetal Infant Mortality Review (FIMR) team that analyzes infant deaths in Kent County in order to understand the factors that contributed to each death and to develop prevention strategies. FIMR data in Kent County suggest that:

- In 28% of infant deaths reviewed, the mother received no prenatal care or had late entry into prenatal care.
- African American mothers faced more environmental risk factors than white mothers.
 - For example, 14% of African American mothers were living in a shelter or were homeless as compared with 1% of white mothers.
 - Further, 22% of African American mothers were living in unsafe neighborhoods as compared with 3% of white mothers.
- African American and Hispanic mothers were also more likely to receive Medicaid, have had late entry into or no prenatal care, and have experienced distrust, fear, or dissatisfaction with their healthcare.
- White mothers were more likely to have private insurance, not be tested for drugs, and more likely to smoke than other races.

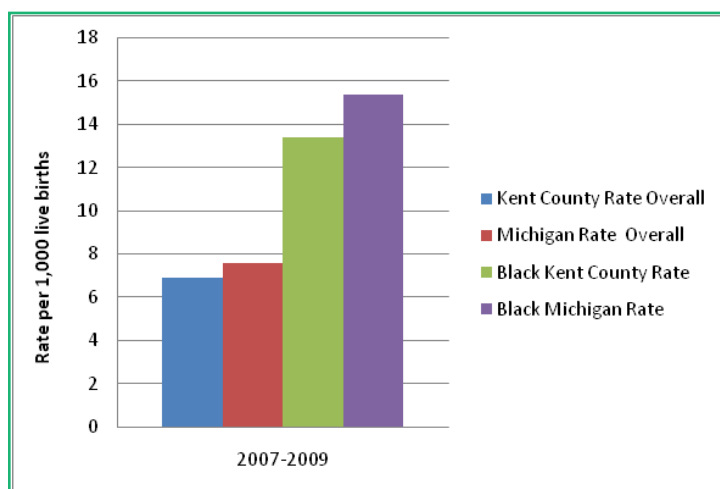


Figure 24. Racial Disparity in Infant Death Rates

Data Source: Counties with High Infant Mortality Rates in Michigan, Michigan Department of Community Health, 2007-2009

Social and Mental Health and Substance Abuse in Kent County

Residents of Kent County described health not as the absence of disease, but the presence of good physical, emotional/mental, and spiritual well-being. Like other health problems, mental illness and substance abuse disorders can have biological causes and specific symptoms that interfere with physical wellness and relationships. In Kent County, 8.7% of adults reported 14 or more days out of the previous 30 that their mental health was not good. This includes stress, problems with emotions, and depression.

How does Kent County compare to similar counties on mental health and substance abuse?

Using the County Health Rankings, Kent County can be compared to similar counties across the country, to Michigan, and to national benchmarks on indicators of mental health and substance abuse. Compared with similar counties and against a national benchmark, Kent County community members report more days of poor mental health when responding to the Behavioral Risk Factor Surveillance System (BRFSS). Also, more adults report binge drinking in the past 30 days in Kent County than adults in similar counties or in Michigan (See Table 7).

Table 7. Mental Health and Substance Abuse

Social and Mental Health Measure	Kent Co, MI	Lake Co, IL	Wake Co, NC	Snohomish Co, WA	Michigan	National Benchmark
Poor mental health days (past 30 days)	3.5	2.8	2.4	3.5	3.7	2.3
Adult binge drinking (past 30 days)	17%	16%	13%	15%	16.6%	NA

Data Source: Behavioral Risk Factor Surveillance System, 2009

Diagnosis

Although data are not available on the incidence and prevalence of specific psychiatric disorders for Kent County, data are available from Network 180, a mental health service provider that serves Kent County. Network 180's clients are most commonly diagnosed with co-occurring mental health and substance abuse disorders or depression, and they are least commonly diagnosed with schizophrenia or attention deficit hyperactivity disorder (ADHD).

Kent County males receiving services from Network 180 are more likely than females to be treated for psychiatric admission, schizophrenia, mental retardation, and co-occurring mental health and substance abuse disorders. Females are more likely than males to be treated for depression and bipolar disorder.

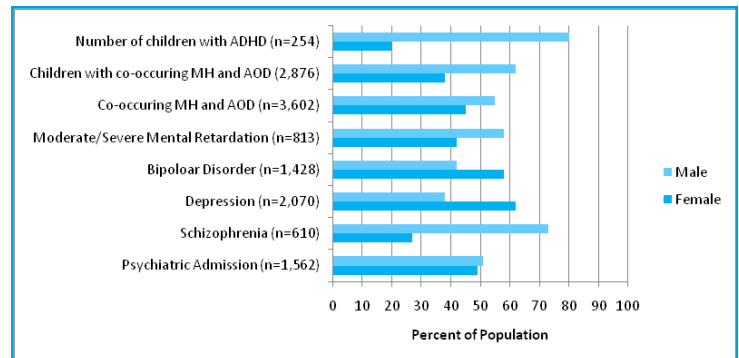
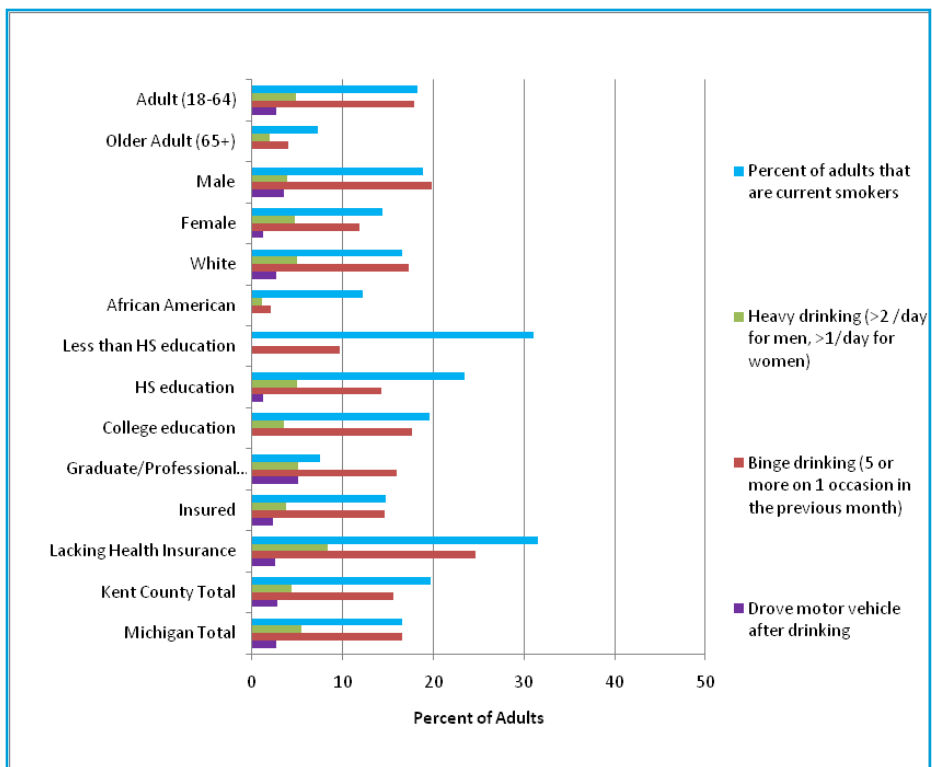


Figure 25. Mental Health Diagnosis

Data Source: Network180

As someone who has been treated for severe clinical depression, there have definitely been times, and periods of years where I actually needed the assistance of someone else to deal with all of the bills, administrative, insurance, and all that stuff. I was just too sick. I couldn't even read a paragraph and comprehend what I was reading because I was so sick. And yet, theoretically, I was supposed to be doing all of this stuff myself. And there was just no way I could do it.



Adult Alcohol and Substance Abuse

The abuse of alcohol and drugs can lead to many preventable illnesses, injury, and deaths, including those injuries or deaths associated with driving under the influence, liver disease, and violence.

Based on BRFSS results, 16.6% of adults in Kent County are current smokers, as compared with 19.7% of adults in Michigan. However, smoking rates are twice as high among those who lack health insurance (31.5%) and those who have less than a high school education (31.0%). Also, 4.3% of survey respondents in Kent County said that they are heavy drinkers, as compared with 5.4% in Michigan. However, heavy drinking is twice as common among those without health insurance (8.3%). The rates of binge drinking are similar in Kent County (15.6%) and Michigan (16.6), but, again, binge drinking is more common among those who lack health insurance (24.6%).

Figure 26. Adult Smoking and Drinking by Demographics

Data Source: Michigan Behavioral Risk Factor Surveillance System, 2008-2010 Combined

"Using drugs is an easy way out... I don't believe that for the future I can live like I was living... I was emotionally, I was messed up. I don't have the answers for everything, but I'm moving forward. I'm not looking back."

Alcohol abuse and dependence often occur with other co-existing mental health concerns including anxiety and mood disorders like depression and bipolar. Just over nineteen percent (19.3%) of adults and 45.8% of youth less than 18 years of age served by Network180 in 2010 had a co-occurring mental health and alcohol or other drug disorder.

"For me, my best support is the compassionate case manager and the therapist that I do have. I think what makes a huge difference is the compassion that they do have."

The Michigan Traffic Crash Facts reported that 776 traffic crashes in Kent County involved alcohol in 2010. This resulted in 396 persons injured and another 20 individuals who lost their life in alcohol related accidents. In the BRFSS, 2.8% of adults in Kent County report that they had driven when they had too much to drink at least once in the previous month, which is comparable with Michigan (2.7%).

Youth Alcohol and Substance Abuse

The youth in the county also tend to be proportionally better than Michigan in most of the substance use and abuse risk factors. The percentage of students who took a prescription drug such as Ritalin, Adoral, or Xanax without a doctor's prescription during the past 30 days is also listed in Figure 27 even though there is not a Michigan comparison. Kent County students with Ds/Fs were more than twice as likely to have taken prescription drugs and pain killers without a doctor's prescription during the past 30 days.

Kent County has lower rates of youth ever using marijuana and having used marijuana within the past 30 days than Michigan overall. Kent County students who received Ds/Fs were the most likely to have used marijuana ever and within the past 30 days.

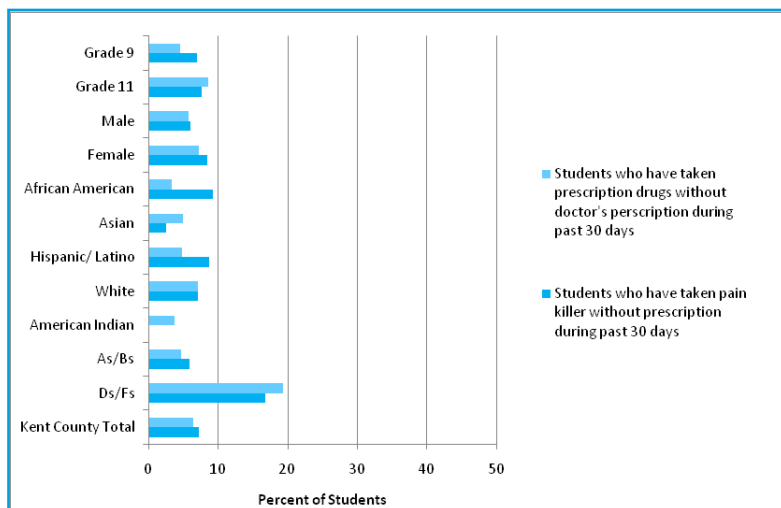


Figure 27. Youth Prescription Drug Use by Demographics
Data Source: Michigan Profile for Healthy Youth, 2010

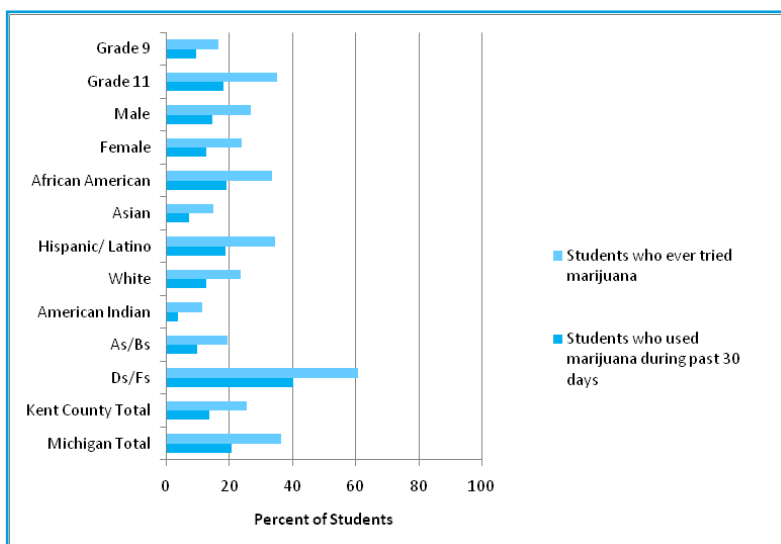


Figure 28. Youth Marijuana Use by Demographics
Data Source: Michigan Profile for Healthy Youth, 2010

Youth in Kent County were less likely to have used any tobacco in the past 30 days than Michigan youth. When compared with Michigan and Kent County, students who received Ds/Fs were almost two and three times more likely to have used any tobacco in the past 30 days.

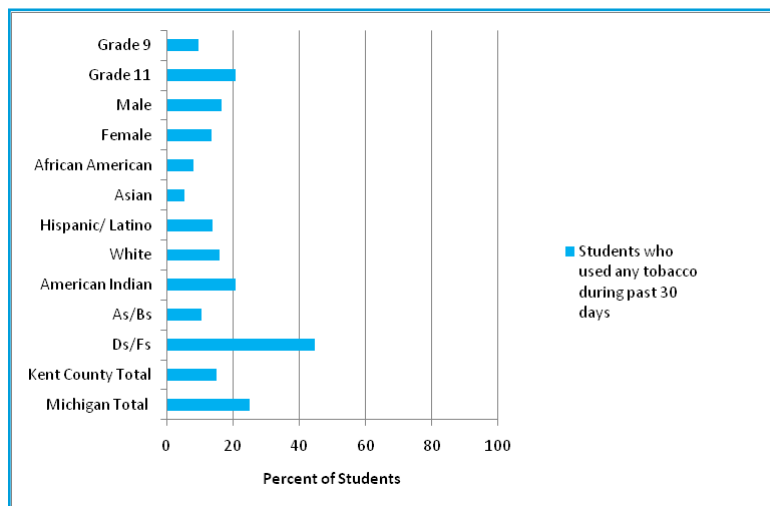


Figure 29. Youth Tobacco Use by Demographics
Data Source: Michigan Profile for Healthy Youth, 2010

Youth of Kent County report that they rode in a car driven by someone who had been drinking alcohol one or more times during the past 30 days (22.6%). Further, 7.5% of Kent County students reported that they drove a car when they had been drinking alcohol one or more times during the past 30 days. Students who are receiving Ds/Fs are at greater risk than their peers in both cases involving alcohol and riding or driving a car.

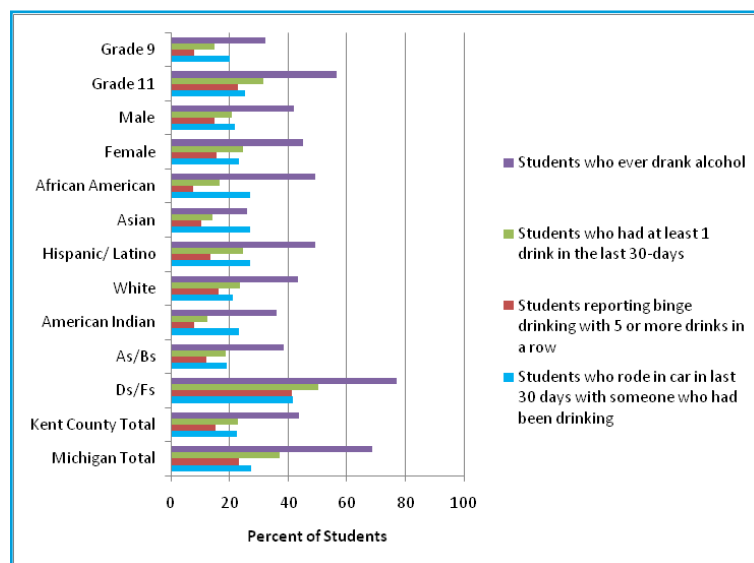


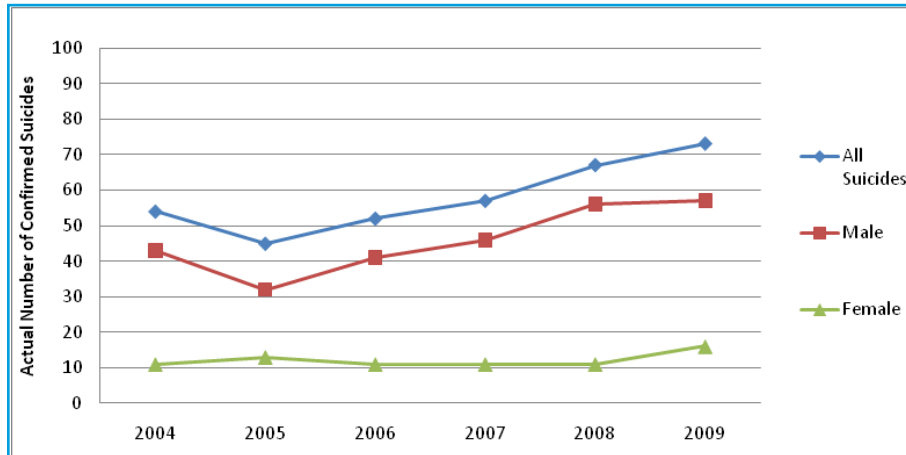
Figure 30. Youth Alcohol Use and Behavior by Demographics
Data Source: Michigan Profile for Healthy Youth, 2010

"I agree with both of them about you have to be mental cause those things, drugs and alcohol, they fog your mind, that's your decision maker right there so you can't make good choices for yourself because you don't know what's happening. I think it's like she said, it's the whole package. You need to make good choices, not just for yourself but for other people."

Suicide

Suicide is a major preventable public health problem. Depression, other mental disorders, substance-abuse disorder, and co-occurring disorders place individuals at risk for suicide. More than 90% of people who die by suicide have one of these risk factors.

The rate of suicide in Kent County is increasing, and it is increasing more dramatically than Michigan's rate. The annual average suicide rate per 100,000 population in Kent County for 2004 to 2008 was 9.2 and increased to 12.0 in 2009. The Michigan rate increased from 11.2 to 11.7 over the same time period.



Individuals aged 45 to 64 appear to have the greatest risk for suicide. The suicide rate for this age group increased from 13.2 for 2004 to 2008 to a rate of 21.2 in 2009. The Michigan rate for the same age group increased from 15.8 to 17.2 during the same time period.

Figure 31. Kent County Suicide Trends

Data Source: 2009 Michigan Resident Death File, Division for Vital Records & Health Statistics, Michigan Department of Community Health

Youth Suicide

Students are asked several questions related to suicide as part of the MiPHY survey. Over 30% of students reported that they had felt so sad or hopeless over a two week period that they stopped doing usual activities, and almost 8% reported that they attempted suicide during the past 12 months. Youth who received Ds and Fs in school may be at greater risk for suicide than their peers. These Kent County students were much more likely to have felt sad or hopeless every day for 2 weeks; more likely to have considered, made a plan, or attempted suicide; and more likely to have made a suicide attempt that resulted in an injury that had to be treated.

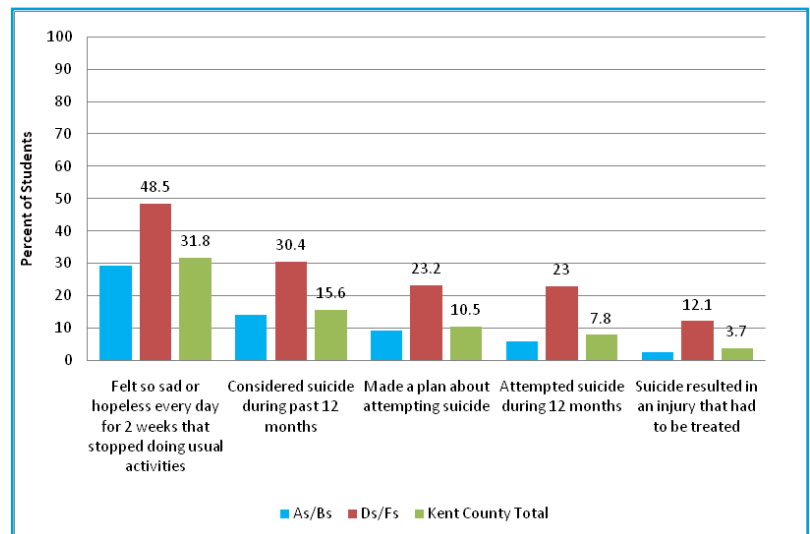


Figure 32. Suicide Risk for Youth by Grades

Data Source: Michigan Profile for Healthy Youth, 2010

Community Voice - Mental Health

The Kent County Community Health Needs assessment included a focus group of community members affiliated with Mental Health services in Kent County. Most of the 8 participants had two roles: They were individuals who had personal experience of self or family member with mental illness and they worked as peer supports, recovery coaches, and other professionals who interact with this population. Like other groups, health and well-being is tied to one's ability to take personal responsibility. Well-being was compromised when an individual was unable to get a job or unable to get a job that provided benefits. For this sub-population, the inability to get an appointment with a psychiatrist or inability to pay for needed medications led to a deterioration in their health and well-being. Examples given in the focus group were use of alcohol and drugs to self-medicate and in extreme cases knowing someone or having a loved one that committed suicide because they were unable to get the help that was needed. In addition to having a mental illness, a lower socio-economic status and being a person of color contributed to disparities experienced in Kent County. Stigma was also a contributing barrier to a high quality of life for these individuals. The source of stigma that they had experienced came from a lack of education about the biological component of mental illness and cultural influences. Ethnic and religious factors were specifically mentioned as contributing to the negative stigma about mental illness.

These cultural influences affect the perception of mental illness and contribute to the "self-stigma" that prevents individuals from getting help. As a whole, the group felt that there was a need to educate the community, churches, and schools about mental illness. As professionals interacting with others in the field, they felt that the lack of trust from the mental health community was sometimes justified. There was a strong sense of need to build relationships with this population that was often marginalized. An important theme for this group was relationship building.

"A lot of people get overwhelmed from the lack of having a job and they just give in... you find them drinking and drugging. Thank god for [services] but there are a lot of people caught in that situation where that hope is... that negativity breeds negativity."

"I'm frustrated that I'm in my late forties and unemployed with major health issues and I'm not eligible for Medicaid and have to go without my meds."

Communicable and Chronic Disease in Kent County

A communicable disease is an illness or infection and can spread from person to person. It is the leading cause of sickness and death worldwide and the third leading cause of death in the United States. Kent County has fewer cases of many communicable diseases as compared with Michigan. However, Kent County has a substantially higher incidence of tuberculosis infections.

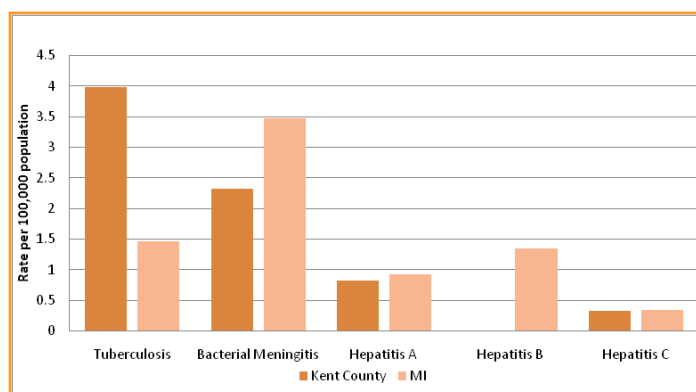
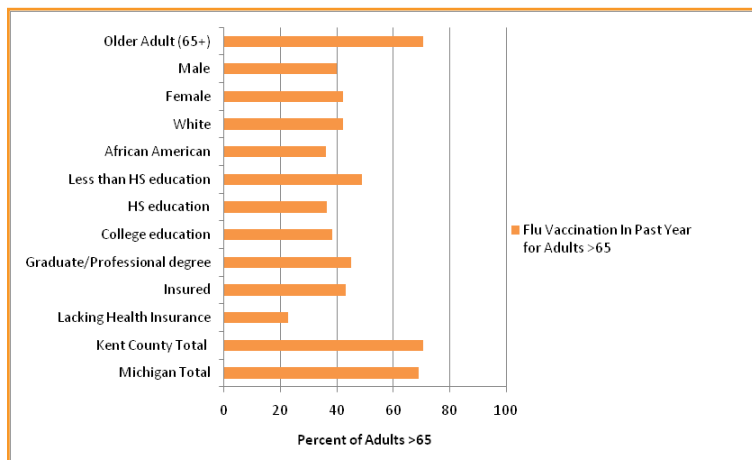


Figure 33. Incidence of Communicable Disease
Data Source: Kent County Health Department, Notifiable Disease Report, December 2009



Influenza

Influenza (flu) is a respiratory infection that can cause serious illness, especially for young children and older adults. A flu shot often protects individuals from coming down with the flu. In Kent County, adults aged 65 and older are more likely to receive a flu vaccination than Michigan adults of the same age. Less than a quarter of adults aged 65 and older who lack health insurance in Kent County received their flu vaccination, making them the least likely group of older adults to be vaccinated.

Figure 34. Flu Vaccinations for Adults >65
Data Source: Michigan Behavioral Risk Factor Surveillance System, 2008-2010 Combined

Sexually Transmitted Infections

Sexually transmitted infections in general are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, involuntary infertility, and premature death.

How does Kent County compare to similar counties on Sexually Transmitted Infections?

When compared with similar counties and with Michigan, Kent County had a higher prevalence rate of sexually transmitted infections than Michigan overall and all of the comparison counties.

Table 8. HIV and Sexually Transmitted Infection Rates

Communicable and Chronic Disease Measure	Kent Co, MI	Lake Co, IL	Wake Co, NC	Snohomish Co, WA	Michigan	National Benchmark
HIV prevalence (per 100,00 population)	139	94	344	105	NA	NA
Sexually transmitted infections (per 100,000 population)	556	355	365	245	446	83

Data Source: Centers for Disease Control and Prevention, National HIV Surveillance System, 2009; Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2009

The incidence of several types of sexually transmitted infections in Kent County is similar to the incidence per 100,000 population in Michigan. However, the Kent County rate per 100,000 population for Chlamydia is higher than the rate in Michigan. Chlamydia is the most common bacterial sexually transmitted disease in America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain.

Trend data suggest that the rates of Chlamydia and Syphilis may be increasing in Kent County, whereas the rate of Gonorrhea may be decreasing.

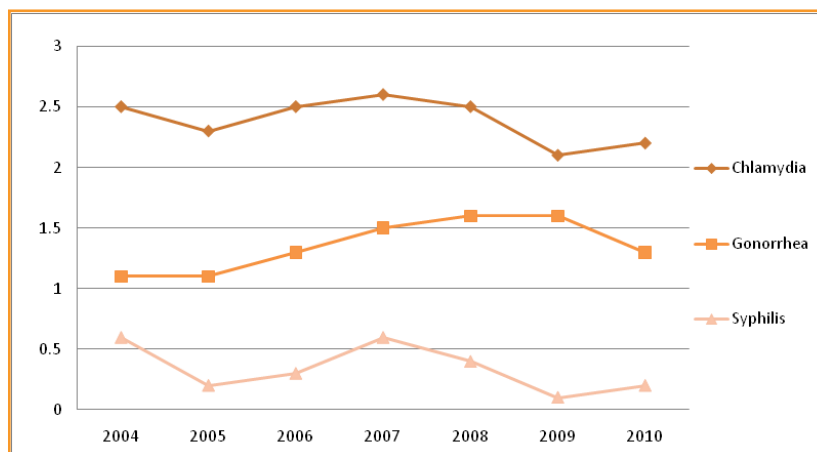


Figure 35. Trends in Sexually Transmitted Infections

Data Source: Michigan Sexually Transmitted Diseases Database, Sexually Transmitted Disease Section, Division of HIV/AIDS-STD, Michigan Department of Community Health; Table prepared by the Division for Vital Records and Health Statistics, Michigan Department of Community Health, 2004-2010

Sexually Transmitted Disease (STD) infection rates vary by age group. In Kent County, 15 to 19 year olds were more likely to have contracted Chlamydia and Gonorrhea; however, in 2010, 20 to 24 year olds were at highest risk of contracting Chlamydia and Gonorrhea. Residents aged 30 to 44 years of age were at highest risk of contracting syphilis from 2005 to 2009 and in 2010. Syphilis rates increased for all age groups in Kent County from 2005 to 2009 to 2010 with the exception of residents aged 45 and older.

Table 9. Sexually Transmitted Disease Cases: Annual Average 2005-2009 and 2010

Age Group	Chlamydia		Gonorrhea		Syphilis	
	Annual Average 2005-2009	2010	Annual Average 2005-2009	2010	Annual Average 2005-2009	2010
Less than 15 Years	1.5%	1.1%	1.2%	1.0%	-	-
15-19 Years	37.2%	32.5%	32.3%	27.5%	3.7%	6.8%
20-24 Years	34.7%	39.2%	30.4%	38.8%	11.1%	22.7%
25-29 Years	15.7%	15.0%	16.4%	17.8%	11.1%	15.9%
30-44 Years	9.7%	10.7%	15.7%	12.8%	44.4%	36.4%
45+ Years	1.0%	1.4%	4.0%	2.5%	33.3%	18.1%
<i>Total</i>	7.5%	6.4%	6.4%	5.4%	5.2%	7.2%

Data Source: Michigan Sexually Transmitted Diseases Database, Sexually Transmitted Disease Section, Division of HIV/AIDS-STD, Michigan Department of Community Health; Table prepared by the Division for Vital Records and Health Statistics, Michigan Department of Community Health, 2005-2009, 2010

The rate of HIV/AIDS contraction in 2011 in Kent County, was 136 per 100,000 population. Males (210/100,00 population), Blacks (535.5/100,000 population), and Hispanics (190.7/100,000 population) exceed the overall prevalence rate for the county. Both the Black males (626/100,000 population) and females (451.5/100,000 population) are disproportionately affected.

Table 10. Demographic Information on Prevalence of HIV/AIDS in Kent County

Demographics	Actual Cases	HIV, not AIDS	AIDS	Total	Rate per 100,000
Males	830	71.0%	81.0%	77.0%	210
Females	250	29.0%	19.0%	23.0%	62.9
White	540	52.0%	48.0%	50.0%	86
Black	370	34.0%	35.0%	34.0%	535.5
Hispanic	140	11.0%	15.0%	13.0%	190.7
<i>Total</i>	1,080	5.2%	5.8%	5.5%	136

Data Source: October 2011 Quarterly HIV/AIDS Analysis: Kent Co., Michigan Department of Community Health

Chronic Disease

Chronic diseases such as asthma and diabetes increase healthcare costs and reduces a person's overall health and well-being.

How does Kent County compare to similar counties on the rate of diabetes?

Diabetes is a leading cause of death and disability, and rates of diabetes across the country are increasing. Kent County has a slightly higher percentage of Medicare recipients who are diabetic than similar counties, and the same percentage as Michigan.

Table 11. Diabetic Persons

Communicable/Chronic Disease Measure	Kent Co, MI	Lake Co, IL	Wake Co, NC	Snohomish Co, WA	Michigan	National Benchmark
Diabetic Persons	9%	8%	8%	8%	9%	NA

Data Source: Dartmouth Atlas of Health Care, Medicare Claims, 2008

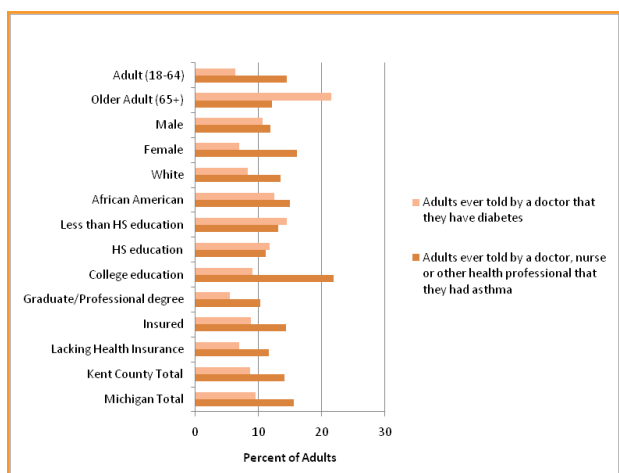


Figure 36. Adult Asthma and Diabetes by Demographics

Data Source: Michigan Behavioral Risk Factor Surveillance System, 2008-2010 Combined

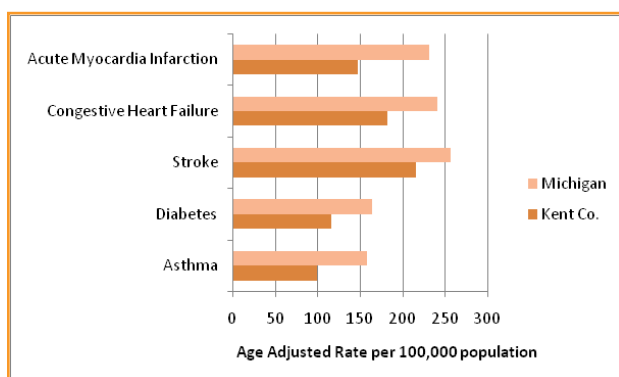


Figure 37. Hospital Discharges for Chronic Diseases
Data Source: 2009 Michigan Resident Death File, Division for Vital Records & Health Statistics, Michigan Department of Community Health

Self-Reported Chronic Disease Rates in Kent County

There are differences across population groups in Kent County when they are asked to self-report their rate of diabetes and asthma on the BRFSS. A higher proportion of college educated adults in Kent County have been told by a doctor, nurse, or other health professional that they had asthma even when compared to all adult residents in Kent County and Michigan adults as a whole. Older adults (65+) in Kent County are more likely to have been told by a doctor that they have diabetes than adults of the same age in Kent County and Michigan. Adults in Kent County with a graduate or professional degree are least likely to have been told by a doctor, nurse, or other health professional that they had asthma and told by a doctor that they had diabetes.

Hospital Discharges for Chronic Disease

Vital Records data includes information about rates of hospital discharges for cardiovascular disease. Hospital discharges for cardiovascular disease from 2007 to 2009 in Kent County were lower than Michigan overall, as were discharges for diabetes and asthma.

Hospitalized with diabetes, the hospital social worker got her connected with Medicaid. There are people within the hospital system that are saying hey we can find ways to help you out and are going that extra mile to get connected to other services in the community. That made a huge difference for me.

Cancer Rates

Prevention efforts such as eliminating tobacco, eating healthy low fat diets, and using sunscreen with SPF 15 or greater can reduce the number of new cancer cases. Meanwhile, early detection and treatment increases the likelihood of successful treatment. Based on Vital Records data for the years 2005 to 2007, the age adjusted rate of cancer was 464.1 per 100,000 population, as compared with Michigan's higher incidence rate of 494.3 per 100,000 population. Prostate and breast cancer have the highest incidence rates in Kent County, followed by lung and bronchus cancer.

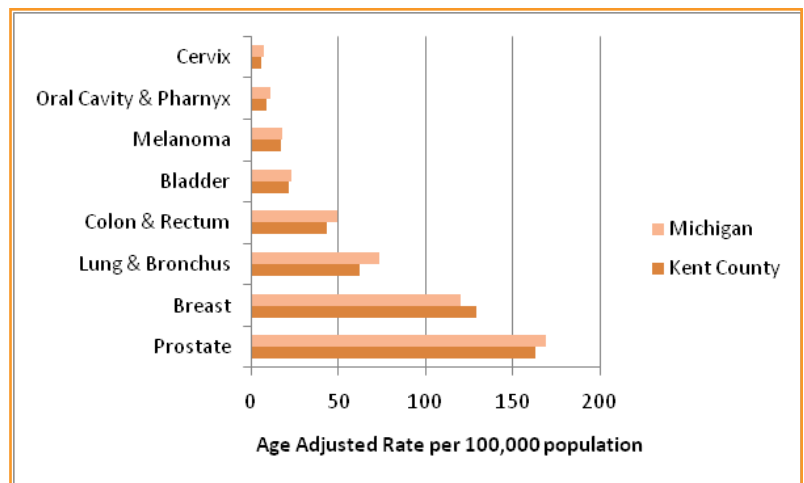


Figure 38. Incidence of Cancer

Data Source: 2009 Michigan Resident Death File, Division for Vital Records & Health Statistics, Michigan Department of Community Health

"Access to cancer support groups like Gilda's Club –helps from feeling alone."

The age-adjusted rate for all cancers in Kent shows a disparity between African American and whites with African Americans being at greater risk for cancer. In examining cancer types, the incidence and apparent disparity were consistent for lung, colorectal, and prostate cancers. However, this was not true for breast cancer where the incidence rate is higher among whites than African Americans.

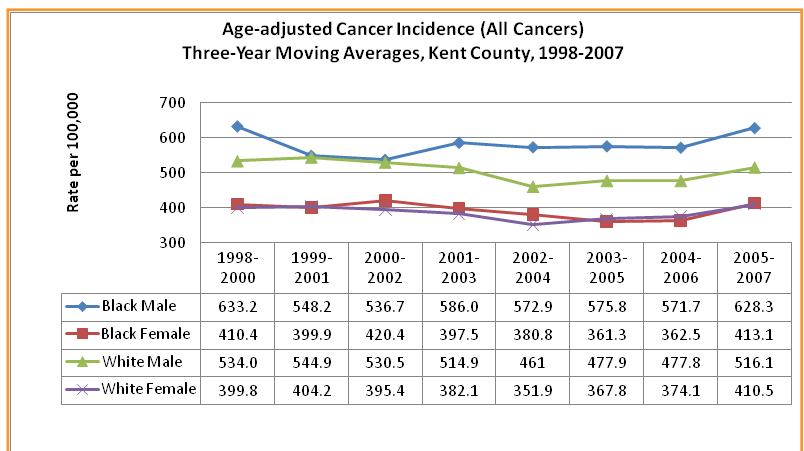


Figure 39. Incidence of Cancer by Race

Data Source: Michigan Resident Cancer Incidence File. Updated with cases processed through November 22, 2005. Vital Records & Health Data Development Section, Michigan Department of Community Health

Hospitalizations in Kent County

Leading Causes of Hospitalization in Kent County

This section reports the leading causes of hospitalizations in Kent County and Michigan. The Kent County hospitalization rate per 10,000 population is less than the Michigan rate for the leading causes of hospitalizations. The leading cause of hospitalization in Kent County is injury and poisoning, followed by heart disease.

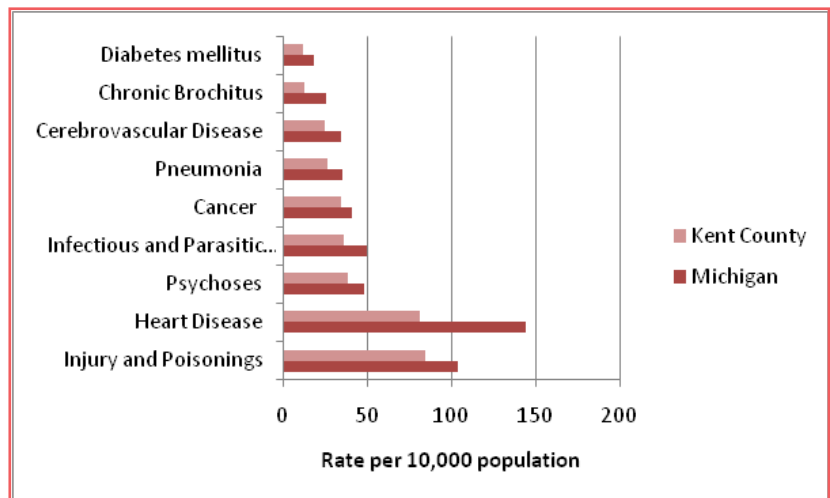


Figure 40: Hospitalizations

Data Source: Michigan Resident Inpatient Files, Division for Vital Records and Health Statistics, Michigan Department of Community Health

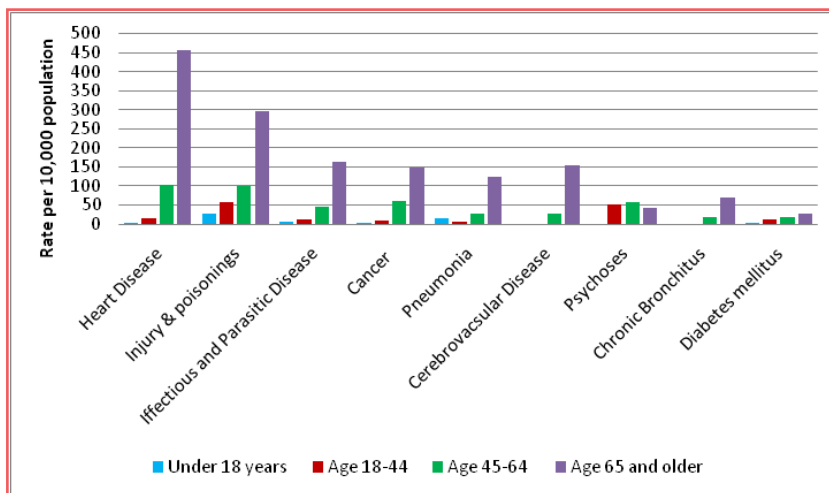


Figure 41. 2009 Hospitalizations in Kent County by Age

Data Source: Michigan Resident Inpatient Files, Division for Vital Records and Health Statistics, Michigan Department of Community Health

Hospitalizations by Age

Children under the age of 18 who live in Kent County are more likely to be hospitalized for injuries and poisonings, pneumonia, and infectious parasitic disease than any other causes. Also, the rate of hospitalization for psychoses (mental illness) among adults age 18 to 64 is proportionally more than other types of hospitalizations. As one might expect, the rate of hospitalizations for Kent County residents increases with age.

I think the quality is good for overall healthcare; I do think there should be more attention paid to preventive medicine..."

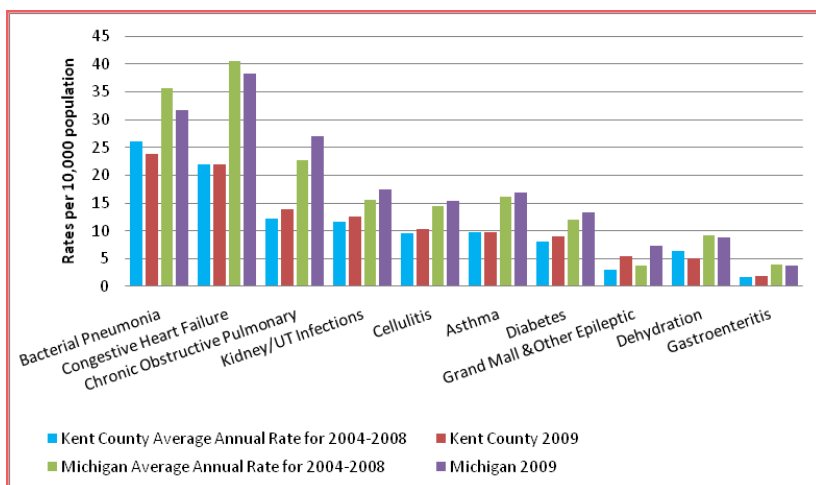


Figure 42. Michigan's Top 10 Ambulatory Care Sensitive Hospitalizations: Kent County and Michigan Trends 2004-2009
Data Source:

Ambulatory Care Sensitive Conditions

Ambulatory Care Sensitive Conditions are medical problems that likely could be prevented by timely and effective primary care. A high rate of hospitalization for such conditions may indicate that a community lacks options for preventive care, a shortage of primary care providers, poor performance in the delivery of primary healthcare systems, or other barriers that prevent community members from obtaining timely and effective care.

The rate of hospitalization for ambulatory care sensitive conditions in Kent County is lower than Michigan's rate overall. The most common causes of preventable hospitalization in Kent County are bacterial pneumonia, congestive heart failure, chronic obstructive pulmonary disease, and kidney/urinary tract infections.

"When I went to the nursing home they just assumed that I had the ability of a two year old, and they treated me like that. Forget about my 180 IQ and my Ph.D., I was treated like I was a nobody. And if it is happening to me, it is happening to everybody."

Payment Source for Hospitalizations

Kent County hospitals provided data regarding payment source for hospitalizations in fiscal year 2010 and the first three quarters of fiscal year 2011. Hospitals provided the number and percent of discharges by the party responsible for payment across three categories:

- Public Insurance (Medicaid, Medicare, Other Government, Title V, Workers' Compensation, Corrections Contract)
- Private Insurance (HMO, PPO/PPA, Managed Care Type Unknown)
- Uninsured (No charge, Self-pay)

The percentage of Kent County residents who were either uninsured or insured by public insurance was higher with ambulatory care sensitive hospitalizations compared to all other hospitalizations, suggesting that community members who are uninsured or have public insurance might be more likely to lack effective primary care than those with private insurance.

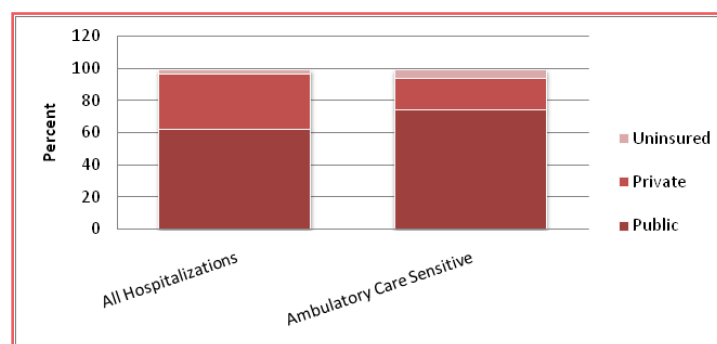


Figure 43. Payment Source for Hospitalizations

Data Source: Aggregate data compiled at MPH. Original sources: Spectrum Health (Spectrum Health Medical Center, Helen DeVos Children's Hospital and Blodgett Hospital) Fiscal year 2010 and first 3 quarters of 2011, Metro Fiscal year 2010 and first 3 quarters of 2011, and St. Mary's Hospital Fiscal Year 2010. *Less than 1% other or missing data on payment type

Preventable Hospitalizations (Top 15 Zip Codes in Kent County with the Greatest Need)

Hospitals also provided data regarding the zip codes they served. These data suggest that people who are hospitalized for preventable conditions live in the following zip codes, many of which are in Grand Rapids.

Table 12. Preventable Hospitalizations

	Dental 2010	Dental 2011	Failure to Thrive 2010	Failure to Thrive 2011	Iron Deficiency Anemia 2010	Iron Deficiency Anemia 2011	Nutritional Deficiencies 2010	Nutritional Deficiencies 2011	TOTAL
49505	2	6	2	1	12	2	0	0	25
49508	0	0	1	2	7	9	0	1	20
49548	0	0	1	2	7	9	0	1	20
49509	1	1	1	0	6	3	2	2	20
49506	0	0	0	0	7	6	3	1	17
49418	1	0	0	2	6	2	3	0	14
49519	1	1	2	0	3	5	2	0	14
49546	1	0	-	-	4	7	-	1	12
49341	1	2	1	0	3	2	2	1	12
49301	0	1	1	1	1	3	2	1	10
49331	0	0	0	1	5	2	1	1	10
49525	1	1	1	0	5	3	0	0	10

Data Source: Michigan Health and Hospital Association MHASC Data Services, 2010-2011

"In Kent County emergency room use is really high....and some of the people who use the emergency room a lot are people who don't have access to proper health care or some other kind of care, so people go in for one problem, that really is a bundle of problems."

Community Voice - Emergencies

Community members told us in the focus groups and interviews that a lack of access to and coverage of preventive care as leading to an increased use of the emergency room for preventable or chronic conditions and a delay in receiving care for physical and mental health concerns. They described experiences where their physical or mental health deteriorated due to lack of preventive or early care, which resulted in serious health problems down the road.

"I had a grand-daughter that needed to see a (unnamed) specialist and her appointment was three months out. She was sick. She was six weeks old and had (disease). It ended up that night she went to the hospital and was admitted and spent three days in the hospital. But I thought three months out, she'll die by the time they get this baby in. And that was because he's the only specialist in his area. So that wait time, depending on what field it is, that can be really bad."

Death and Mortality in Kent County

Mortality rates from disease are typically lower in Kent County as compared with Michigan and the United States (U.S.). Heart disease and cancer are the leading causes of death, but rates are lower than Michigan overall. The age-adjusted death rates for both heart disease and cancer are declining. The age-adjusted death rate for diabetes is remaining stable. The rate of death from Alzheimer's disease is higher in Kent than Michigan and it has been increasing over time.

Table 13. Ten Leading Causes of Death in Kent County

Rank	Cause of Death	Rate of Deaths per 100,000 population		
		Kent Co, MI	Michigan	U.S.
1	Heart Disease	175.4	231.1	203.1
2	Cancer	152.9	202.4	186.2
3	Unintentional Injuries	39.6	36.8	39.9
4	Chronic Lower Respiratory Diseases	35	49.6	46.4
5	Stroke	28.6	44.3	44
6	Alzheimer's Disease	28.6	25.6	27.1
7	Diabetes Mellitus	14.5	27	23.2
8	Pneumonia/Influenza	12.8	15.4	18.5
9	Intentional Self-harm (Suicide)	12	11.7	11.8
10	Kidney Disease	11	17	15.9
	<i>Sub Total</i>	<i>510.4</i>	<i>660.9</i>	<i>616.1</i>
	<i>All Other Causes</i>	<i>167</i>	<i>204.8</i>	<i>197.1</i>
	<i>Total</i>	<i>677.4</i>	<i>865.7</i>	<i>813.2</i>

Data Source: Michigan Resident Death File, 2009, Division for Vital Records & Health Statistics, Michigan Department of Community Health; Population Estimate, September 2009, National Center for Health Statistics; National Center for Health Statistics, December 2010, Deaths, Hyattsville, MD: National Center for Statistics

Mortality Rates from Unnatural Causes of Death

In Kent County, unintentional injury is the third leading cause of death. Kent County typically has higher rates of mortality from unnatural causes as compared with Michigan; however, mortality rates are higher for Kent such events as falls. Deaths attributable to falls in Kent County (14.8/100K population) are nearly twice as high as the rates for Michigan (7.7) and the US (7.3).

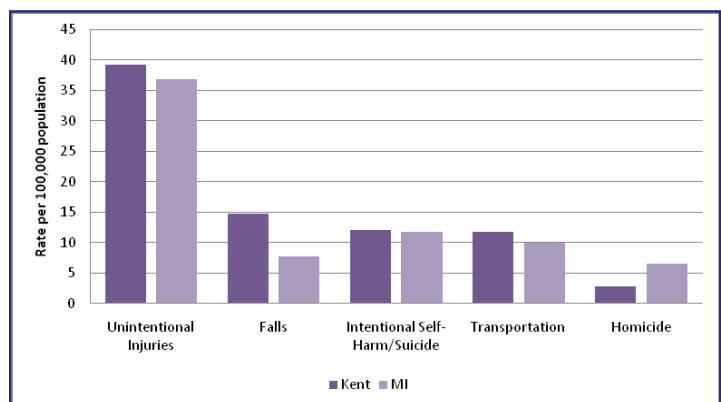


Figure 44. Morality Rates by Cause of Death

Data Source: <http://www.mdch.state.mi.us/pha/osr/CHI/fatal/frame.html>

How does Kent County compare to similar counties on causes of death?

The rate of premature deaths in Kent County (6,033) is noticeably higher than the National Benchmark (5,564). Kent County exceeds comparison counties for premature deaths; however, a person is more likely to experience premature death just by living in Michigan. The motor vehicle crash death rate in Kent County is similar to its comparison counties with the exception of Lake County, IL where it is less. Kent County's motor vehicle crash death rate (13/100,000) is the same as Michigan and slightly higher than the National Benchmark (12/100,000).

Table 14. Cause of Death

Cause of Death Measure	Kent Co, MI	Lake Co, IL	Wake Co, NC	Snohomish Co, WA	Michigan	National Benchmark
Premature death rate (before age 75 per 100,000 population)	6,033	4,907	5,326	5,509	111,792	5,564
Motor vehicle crash death rate (deaths per 100,000 population)	13	8	12	10	13	12

Data Source: Centers for Disease Control and Prevention, National Vital Statistics, 2005-2007; Centers for Disease Control and Prevention, National Vital Statistics, 2001-2007

Injury in Kent County

Unintentional Injury Leading to Death

Injuries are often preventable occurrences; however, they can lead to long term health problems and even death. Indeed, injury is the third leading cause of death in Kent County. The leading causes of death include unintentional motor vehicle traffic crashes, unintentional poisoning, and fatal falls.

Table 15. Unintentional Fatal Injuries: Kent County and Michigan

Unintentional Injury	Kent Co. Number of Unintentional Fatal Injuries	Kent Co. Percent of Distribution	MI Number of Unintentional Fatal Injuries	MI Percent of Distribution
Transport Fatal Injuries	71	30	1,001	27.9
Poisoning	52	21.9	1,082	30.1
Fall	90	38	764	21.3
Suffocation	12	5.1	207	5.8
Burn, Fire/Flame	1	0.4	123	3.4
Drowning/Submersion	1	0.4	95	2.6
Natural/Environmental	2	0.8	54	1.5
Struck by Object	3	1.3	27	0.8
Machinery	-	-	13	0.4
Firearms	-	-	12	0.3
Cut/Pierce	-	-	4	0.1
Unintentional - Other	5	2.1	207	5.8
<i>ALL UNINTENTIONAL INJURIES</i>	<i>237</i>	<i>100</i>	<i>3,589</i>	<i>100</i>

Data Source: 2009 Michigan Resident Death Files, Data Development Section, Michigan Department of Community Health.

Unintentional Injury by Age

The rate of death due to specific injuries varies by age group.

- **Fatal fall** rates increase directly with age, 89% of the fatal falls in Kent County were among residents 65 years of age or older.
- **Poisonings** were most common among adults between the ages of 25 and 64, and was the leading cause of unintentional fatal injury for persons ages 25 to 44.
- **Suffocation** was the leading cause of unintentional fatal injury for children under the age of five.
- **Traffic crashes** were the leading cause of unintentional fatal injury for persons aged 15 to 24 and ages 45 to 64.

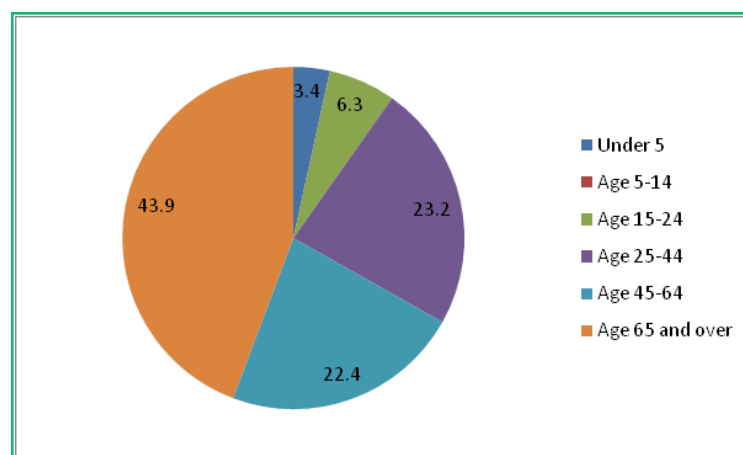


Figure 45. All Unintentional Injuries by Age in Kent County
Data Source: Michigan Resident Death Files, Data Development Section, Michigan Department of Community Health

Location of Patients Hospitalized with Injury and Poisoning

Every community is impacted by unintentional injury and poisoning. The highest number (not adjusted for population) of injury and poisoning related hospitalization came from the following zip codes in Kent County.

Table 16. Injury and Poisonings: 2010 and 2011*

Injury & Poisonings	2010	2011*	Total
49504	422	305	727
49505	349	263	612
49508	329	271	600
49503	303	262	565
49507	321	240	561
49546	274	222	496
49548	266	192	458
49509	251	186	437
49506	263	169	432
49341	228	185	413

Data Source: Michigan Health and Hospital Association MHASC Data Services

* Data cited is for the first three quarters of 2011

Injury Prevention

Preventing injury is critical to ensuring a healthy population. The BRFSS and the MiPHY collect some information about prevention from adults and youth, respectively.

Adults

The percentage of adults who report they always use a seatbelt is similar in Kent and Michigan. Kent County residents who lack health insurance are the least likely to wear their seat belt when driving or riding in a car. In Kent County, women and adults aged 65 or older are the most likely to wear their seat belts when they drive or ride in a car.

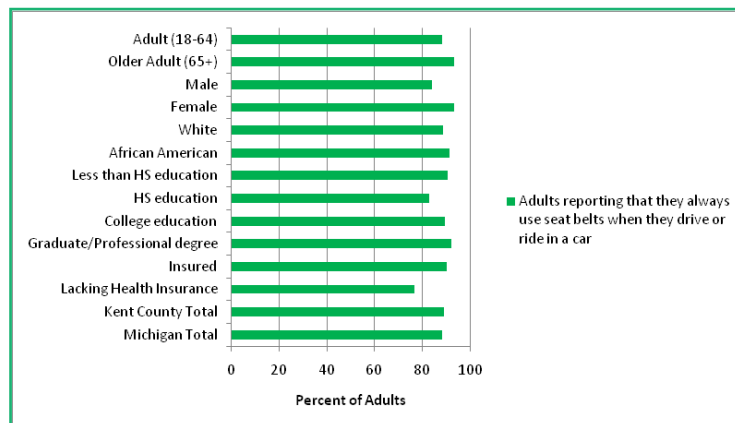


Figure 46. Adult Seat Belt Use by Demographics

Data Source: Michigan Behavioral Risk Factor Surveillance System, 2008-2010 Combined

Youth

Kent County and Michigan are similar when comparing rates of students who rarely or never wore a seat belt. When compared to Michigan, Kent County students are more likely to never or rarely wear a bicycle helmet when they rode their bicycle during the past 12 months. Students with Ds/Fs are most likely to rarely or never wear a seat belt or a bicycle helmet.

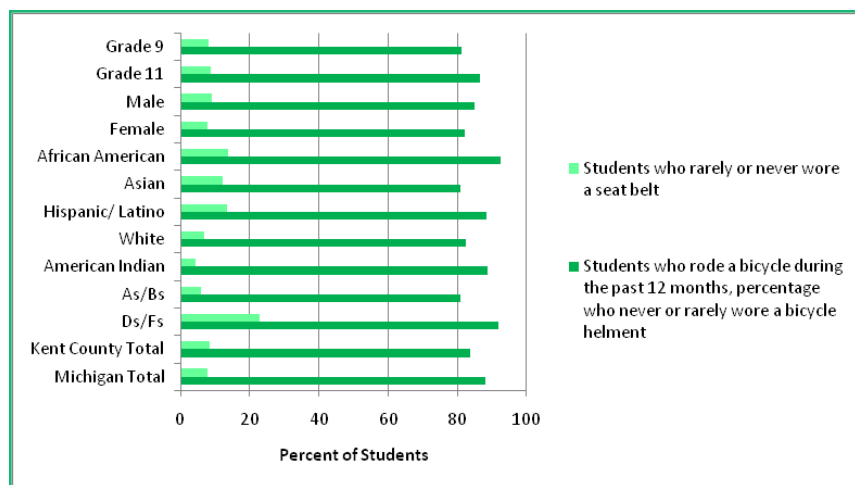


Figure 47. Youth Seat Belt and Helmet Use by Demographics
Data Source: Michigan Profile for Healthy Youth, 2010

Information Gaps

This process generated a wealth of information about health in Kent County and was useful in identifying strategic issues related to a breadth of health issues and outcomes. However, there were gaps between what the Population Data Group identified as key health indicators for Kent County and what was available. There were also gaps in the information available at the sub-county level.

Missing Indicators

The following indicators were rated as important by the Population Data Group, but data were not available or accessible at the time of this CHNA.

Health Factor	Health Indicator
Health Resource Availability	Medicaid eligible to participating physicians Medicaid physician availability Licensed opticians/optometrists Adult living facility beds Proportion of population without a regular source of dental care Proportion of population provided primary care services by private providers Proportion of population provided primary care services by community and migrant health centers Proportion of population provided primary care services by other sources Proportion of population with dental insurance Proportion of population with prescription drug insurance Customer satisfaction with health resources
Maternal and Child Health	Rate of children with well-baby visits ER usage by pregnant women
Quality of Life	Number of openings in child care facilities for low income families Number of neighborhood crime watch areas Proportion of residents planning to stay in the community/neighborhood for next five years Proportion of youth involved in organized after school recreational/educational activities Number of child care facilities/preschool-age population Number of support resources identified by residents Number of inter-ethnic community groups and associations Participation in developing a shared community vision
Healthy Lifestyles	Proportion of schools that sell sweetened beverages Proportion of districts that require schools to make fruits and vegetables available wherever food is sold Number of policies for the built environment that enhance access to and availability of opportunities for physical activity Proportion of schools that require daily physical education for all students
Injury, Illness, and Death	Non-fatal injury by type-true incidence Chronic disease by type-true incidence Mental illness and substance abuse disorders by type-true incidence

In addition, as the group discussed the data that were collected, they uncovered a need to consider exploring additional, health related data elements that were not included in the original list of indicators, such as those related to:

- School & neighborhood violence
- Child abuse & neglect
- Domestic violence & sexual assault
- School performance & environment
- Health related policies

Finally, the group discussed the potential benefits of identifying and focusing on a more narrowly defined list of leading indicators, rather than focusing on a wide variety of leading and lagging indicators.

Sub-County Level Data Gaps

There were also gaps in information that were available for analysis at the sub-county level. The BRFSS is a major data source throughout this assessment, and, due to sample size, can only be used to represent the difference between African American and White community members. Other racial and ethnic groups are not represented in BRFSS results. Race and ethnicity data are also absent from data regarding hospitalizations, another critical indicator of disparity across the population. One important population group in Kent County that is particularly invisible in population datasets is undocumented community members.

While several datasets used in the assessment are able to provide indicators by age, there are no indicators available that specifically focus on the health of children between the ages of 5-12 that are readily available and routinely collected at the population level.

Geographically referenced data would have been informative as well. Community members suggested that health risk and protective factors vary significantly by neighborhood, and there is increasing recognition in the public health community that 'place matters.' Including geographic data elements – such as census tract or nearest intersection – into existing data collection systems would be extremely useful.

Results suggest that health risk and protective factors for youth varied significantly by student performance, but, because MiPHY data are not available at the building level, it was not possible to determine whether health risk and protective factors also varied by school or school district. This information would be helpful in targeting specific interventions.

Strategic Health Priorities

Kent County Working Together for a Healthier Tomorrow went through a systematic process of reviewing these data, understanding the input of community members, and reflecting on their own experiences as professionals in the public health community in order to identify strategic health priorities that will be the focus of Kent County's Community Health Improvement Plan.

A joint workgroup meeting was held of the Population Data and Community Input Workgroups in order to review and process the data. Workgroup members Community Health Needs Assessment findings in detail and engaged in a facilitated process designed to elicit member's feedback on what they saw and heard in the data. As part of this process, individuals and small groups generated ideas about the most salient assessment findings, and, as a large group, clustered similar ideas about key findings. The workgroup used these clustered findings to develop a list of strategic health issues. The guidelines for the workgroup were as follows:

- The strategic health issue must be based on data plus your knowledge and experiences
- The strategic health issue must center on a problem to be resolved
- The strategic issue might be addressed in different ways
- The strategic health issue must be something that the local health system can address
- The strategic health issue must be truly strategic in that by addressing it will move community closer to the Vision

The Community Health Advisory Committee also reviewed the data and provided feedback and additional input regarding the strategic issues identifies by the Joint Workgroup. The revised strategic issues were presented to the Steering Committee, along with a presentation of key assessment findings, and additional feedback was used to inform further revisions to the strategic issues.

Through this process, Kent County Working Together for a Healthier Tomorrow identified 44strategic issues in 8 strategic areas. In order to identify strategic priorities, the Coalition was asked to vote on strategic issues using a structured tool and process. After reviewing data, the coalition members rated each strategic issue in four categories:

1. Is the strategic issue linked to vision and mission?
2. Does the data suggest a need to improve?
3. Is the issue Important to community members?
4. Does Kent County have the ability to make an impact?

Each strategic issue was rated against each criteria: 4 = High priority, 3 = Moderate priority, 2 = Low priority, and 1 = Not priority. In order to generate a score for each strategic issue, an average score was calculated for each strategic issue in each category and the average scores were summed across the four categories for each strategic issue. Issues with higher scores were used to identify the top 10 strategic issues. A full list if the issues and weighted scores can be found in Appendix D.

The Top Strategic Issues

The top scoring strategic issues are organized to align with the mission of the Kent County Community Health Needs Assessment with decision for placement for coalition made during the meeting and decision for placement for steering committee made by consultants prior to the steering committee meeting.

Mission statement - **Equal access to high quality, affordable healthcare**

Strategic Issues:

- Ensure all community members, including the uninsured and the working poor, have access to healthcare
- Improve access to affordable healthcare
- Reduce disparities in access to care and health outcomes
- Ensure providers are available that accept Medicaid or offer low-cost/free services

- Ensure access to dental care
- Ensure access to care for persons with mental illnesses and substance abuse disorders
- Reduce disparities in the adequacy of prenatal care

Mission statement - **A coordinated system of care that is local, preventive, holistic, and patient centered**

Strategic Issues:

- Ensure providers are available that accept Medicaid or offer low-cost/free services
- Increase community members knowledge of the resources that are currently available in the community through culturally appropriate messages
- Reduce racial disparity in infant mortality
- Reduce disparities in the adequacy of prenatal care

Mission statement - **An environment that supports healthy living for all**

Strategic Issues:

- Reduce the disparity in health risk factors and protective factors between students
- Increase healthy eating by ensuring access to healthy foods
- Reduce racial disparity in infant mortality
- Prevent obesity, including childhood obesity

The Steering Committee met to review the strategic issues, discuss overlap, and determine a strategic priority (by vote) in each area of the mission statement. The outcome of the November 14 meeting was to recommend the following strategic issues as the focus of the community health improvement plan: (1) increase the number of providers who accept Medicaid or offer low-cost or free services, (2) reduce disparities in adequacy of prenatal care, and (3) increase healthy eating by ensuring access to healthy foods.

The Coalition met on a separate date to review the strategic issues, determine how each of the strategic issues aligned with the mission statement, and then vote on a priority in each category. The outcome of the November 21 meeting was to recommend the following strategic issues as the focus of the community health improvement plan (1) ensure all community members, including the uninsured and the working poor, have access to affordable healthcare, (2) insure providers are available that accept Medicaid or offer low-cost/free services, and (3) reduce the disparity in health risk factors and protective factors between students.

The strategic priorities are a combination of the recommendations from both the Steering Committee and Coalition meetings. These strategic priorities will be the first areas addressed in the next phase of the project as the community works together to develop a Community Health Improvement Plan.

Strategic Priorities:

1. Increase the proportion of community members, including the uninsured and the working poor, that have access to affordable healthcare to promote equal access to high quality, affordable healthcare
2. Increase the number of providers available that accept Medicaid or offer low-cost/free services to promote a coordinated system of care that is local, preventive, holistic, and patient centered
3. Reduce disparities in adequacy of prenatal care to promote a coordinated system of care that is local, preventive, holistic, and patient centered
4. Increase healthy eating by ensuring access to healthy foods to promote an environment that supports healthy living for all
5. Reduce the disparity in health risk factors and protective factors between students to promote an environment that supports healthy living for all

Appendix A: Kent County Community Health Needs Assessment and Health Improvement Plan

Coalition Meeting Dates

May 24, October 24, and November 21, 2011

Steering Committee Meeting Dates

May 2, June 6, July 11, August 8, October 10, November 14, and December 5, 2011 (Postponed to January)

Population Data Group Meeting Dates

June 20, July 18, August 22, and October 6, 2011 (Joint Workgroup with Community Input Group)

Community Input Group Meeting Dates

June 20, July 18, and October 6, 2011 (Joint Workgroup with Population Data Group)

Systems Group Meeting Dates

To Be Determined

Steering Committee Members

Alliance for Health - Lody Zwarensteijn
Baxter Community Center - Sandy TenHoeve
Blue Cross Blue Shield - Cle Jackson
Cherry Street Health Services - Michael Reagan
Community Health Advisory Committee - Shana Shroll
Community Research Institute (GVSU) - John Risley
Family Futures - Candace Cowling
First Steps - Rebecca Fennell
Frey Foundation - Lynn Farrel
Grand Rapids African American Health Institute (GRAAHI) - Shannon Wilson
Healthy Homes Coalition - Paul Haan
Heart of West Michigan United Way - Deanna Demory
Ionia County Health Department - Lisa McCafferty
Kent County Correctional Facility - Randy Demory
Kent County Health Department - Barb Hawkins Palmer, Brian Hartl, Cheryl Clements, Cathy Raevsky, Bill Anstey, Jim Smedes, Dayna Porter, and Lisa LaPlante
Kent County Prevention Coalition - Denise Herbert

Kent Health Plan - Jan Hronek
Kent Intermediate School District - Cheryl Blair
Mary Free Bed - Randall Deneff
Metro Health Hospital - Mishelle Bakewell
Michigan Public Health Institute - Julia Heany and Lisa Gorman
Michigan State University - Jennifer Raffo and Tracy Thompson
Network180 - Mark Witte and Christopher Smith
Ottawa County Health Department - Marcia Knol
Our Community's Children - Lynn Heemstra
Pine Rest Christian Mental Health Services - Carol VanderWal
Planned Parenthood of West and Northern Michigan - Kathy Humphrey
Saint Mary's Health Care - Bradford Mathis
Spectrum Health Healthier Communities - Andre Pierre and Erin Inman
Spectrum Health - Meg Tipton
Steelcase Foundation - Susan Broman
Trinity Home Health Services - Denise Garman
Value Health Partners - Mary Kay VanDriel
Yo Pseudo Program - Angel Rodriguez

Coalition Members

Alliance for Health - Lody Zwarensteijn
Area Agency on Aging of Western Michigan - Jackie O' Connor and Barb Nelson
Area Agency on Aging of Western Michigan - Sandra Ghoston-Jones
Baxter Community Center - Sandy Ten Hoeve
Blue Cross Blue Shield of MI - Cle Jackson
Calvin College Nursing Department - Gail Zandee
Catherine's Health Center - Karen Kaashoek
Cherry Street Health Services - Mike Reagan
Community Health Advisory Committee - Shana Shroll
Community Representatives - Yvonne Woodward and Jean Parks
Community Research Institute (GVSU) - John Risley and Diane Gibbs
Essential Needs Task Force (ENTF) - Kent County - David Schroeder and Liz Genslet
Family Futures - Candace Cowling
First Steps - Maureen Kirkwood and Rebekah Fennel
Frey Foundation - Lynn Farrel
Friends of Grand Rapids Park - Steve Faber
Goodwill Industries of Greater Grand Rapids - Jill Wallace
Grand Rapids African American Health Institute (GRAAHI) - Shannon Wilson
Grand Rapids Area Center for Ecumenism (GRACE) - Lisa Mitchell
Grand Rapids Area Coalition to End Homelessness - Janay Brower and Breanne McKee
Grand Rapids Area Health Ministry Consortium - Suzan Couzens
Grand Rapids Department of Parks and Recreation - Jay Steffen
Grand Rapids Planning Dept. - Suzanne Schulz
Grand Valley State University - Jean Nagelkerk
Guiding Light Mission - Stuart Ray
Healthy Homes Coalition - Paul Haan
Heart of West Michigan United Way - Deanna Demory, Cindy Mathis, and Dave Miller
Ionia County Health Department - Dave Miller
Hispanic Center of Western Michigan - Victor Vasquez
Kent County Correctional Facility - Randy Demory
Kent County Courts - Randy Demory
Kent County Department of Veterans Affairs - Carrie Jo Roy and Rich Goodrich
Kent County EMS - Damon Obiden
Kent County Family and Children's Coordinating Council - Matthew Van Zetten
Kent County Fetal Infant Mortality Review (FIMR) - Sarah MacDonald
Kent County Health Department - Cathy Raevsky, Bill Anstey, Gail Brink, Mark Hall, Joann Hoganson, Adam London, Bobby Peacock, Lisa LaPlante, Shane Green, Jim Smedes, and Dayna Porter
Kent Intermediate School District - Cheryl Blair
Kent County Medical Society - Patricia Dalton
Kent County Parks Department - Roger Sabine
Kent County Prevention Coalition - Denise Herbert and Shannon Cohen
Kent County School Nurses - Stephanie Painter
Kent Health Plan - Jan Hronek
Kent School Services Network (KSSN) - Carole Paine-McGovern
Kentwood City Planners - Terry Schweitzer
Lions Club - Kent County - Rick Stevens
Local First - Elissa Hillary
Mary Free Bed - Randall Deneff
Meijer - Julie Dykstra
Michigan College of Optometry - Ferris State University - Mark Swan
Michigan Department of Community Health - Jessica Austin
Michigan Public Health Institute - Julia Heany and Lisa Gorman
Michigan State University - Tracy Thompson and Jennifer Raffo
Network180 - Mark Witte and Christopher Smith
Oasis of Hope - Barbara Grinwis
Our Community's Children - Lynn Heemstra
Pine Rest Christian Mental Health Services - Carol VanderWal and Carleen Crawford
Planned Parenthood of West and Northern Michigan - Kathy Humphrey
Priority Health - Kim Horn
Saint Mary's Health Care - Bradford Mathis and Amanda J. Echler
Spectrum Health Healthier Communities - Erin Inman and Andre Pierre
Spectrum Health - Meg Tipton
Steelcase Foundation - Susan Broman
The Rapid - Bill Kirk
Trinity Home Health Services - Denise Garman
Value Health Partners - Mary Kay VanDriel
West Michigan Asian American Association, Inc. - Minnie Morey and Remi Kuklewski
West Michigan Environmental Action Coalition (WMEAC) - Rachel Hood
West Michigan Regional Planning Commission - Dave Bee
West Michigan Strategic Alliance (WMSA) - Jessica Materson
YMCA of Greater Grand Rapids - Kelly Hagmeyer

Community Input Workgroup Members

Alliance for Health - Lody Zwarensteijn
Asian Community Center - Minnie Morey
Area Agency on Aging of Western Michigan - Barb Nelson
Calvin College Nursing Department - Gail Zandee
Catherine's Health Center - Karen Kaashoek
Community Health Advisory Committee - Shana Shroll
Frey Foundation - Lynne Ferrell
Grand Rapids Area Center for Ecumenism (GRACE) - Lisa Mitchell
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Mary Free Bed - Randall Deneff
Meijer - Julie Dykstra
Metro Health Hospital - Mishelle Bakewell
Pine Rest Christian Mental Health Services - Carleen Crawford
Spectrum Health Healthier Communities - Diane Gibbs and Stephanie Painter
Steelcase Foundation - Susan Broman
The Rapid - Bill Kirk
Value Health Partners - Mary Kay VanDriel
West Michigan Environmental Action Council - Rachel Hood
West Michigan Strategic Alliance (WMSA) - Jessica Materson
YMCA of Greater Grand Rapids - Kelly Hagmeyer

Population Data Group

Area Agency on Aging of Western Michigan -
Jackie O'Connor

Blue Cross Blue Shield - Cle Jackson

Cherry Street Health Services/ProAction Behavioral Health
Mike Reagan

Community Research Institute (GVSU) - John Risley

Essential Needs Task Force (ENTF) - Kent County
David Schroeder

Essential Needs Task Force (ENTF) - Kent County
Liz Genlser

Family Futures - Candace Cowling

First Steps - Maureen Kirkwood

Friends of Grand Rapids Park - Steve Faber

Grand Rapids African American Health Institute (GRAAHI) -
Shannon Wilson

Heart of West Michigan United Way - Deanna Demory

Kent County Correctional Facility - Randy Demory

Kent County EMS (KCEMS) - Damon Obiden

Kent County Fetal Infant Mortality Review (FIMR) -
Sarah MacDonald

Kent County Health Department - Cathy Raevsky, Brian Hartl,
Barb Hawkins Palmer

Kent County Medical Society - Patricia Dalton

Kent County Prevention Coalition (network180) -
Denise Herbert

Kent County Prevention Coalition - Wedgwood

Christian Serv. - Shannon Cohen

Kentwood City Planners - Terry Schweitzer

Michigan State University - Tracy Thompson

Michigan State University - Jennifer Raffo

Oasis of Hope - Barbara Grinwis

Pine Rest Christian Mental Health Services -

Carol VanderWal

Public Health Emergency Preparedness - Dayna Porter

Saint Mary's Health Care - Bradford Mathis and Amanda J. Echler

Spectrum Health Healthier Communities - Andre Pierre and Erin Inman

Trinity Home Health Services - Denise Garman

West Michigan Regional Planning Commission - Dave Bee

West Michigan Strategic Alliance (WMSA) - Greg Northrup

YMCA of Greater Grand Rapids - Kelly Hagmeyer

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Appendix B: Data Sources

The Kent County Health Department at <http://www.accesskent.com/> and the Kent County Community Health Needs Assessment website www.kentcountychna.org

EPIC-MRA, Kent County Citizen Survey, December 2010.

The local hospitals including Spectrum Health <http://www.spectrumhealth.org/>; Metro Health Hospital <http://www.metrohealth.net/locations/hospital>; and Saint Mary's Health Care <http://www.mercyhealthgrandrapids.com/welcometosaintmarys>

Network180 at <http://network180.org/>

Community Research Institute at <http://www.cridata.org/>

Heart of West Michigan United Way's 2-1-1 call center <http://hwmuw.org/211.php>;

Cherry Street Health Services Survey, July 2009.

State and National Data Sources

Comparison counties were calculated using the County Health Rankings which is Published on-line at www.countyhealthrankings.org by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation.

The Michigan Department of Community Health County and State Health Statistics Profiles was a major source of county and state level data on indicators of communicable diseases, hospitalizations, infant mortality, mortality, and fatal injuries retrieved at <http://www.michigan.gov/mdch>

The Michigan Behavioral Risk Factor Surveillance System (MiBRFSS) is composed of annual, state-level telephone surveys of Michigan residents, aged 18 years and older. These annual, state-level surveys, also known as Michigan Behavioral Risk Factor Surveys (MiBRFS) act as the source of state-specific, population-based estimates of the prevalence of various behaviors, medical conditions, and preventive health care practices among Michigan adults.

The Michigan Profile for Healthy Youth (MiPHY) is an online student health survey offered by the Michigan Departments of Education and Community Health to support local and regional needs assessment. To get county results and information about the Michigan Profile for Healthy Youth (MiPHY), go to www.michigan.gov/miphy.

Michigan Health and Hospital Association at <http://www.mha.org/>

National Center for Health Statistics (NCHS) at <http://www.cdc.gov/nchs/>

National Center for Chronic Disease Prevention and Health Promotion (Division of Diabetes Translation) <http://www.cdc.gov/diabetes/>

National Center for Hepatitis, HIV, STD, and TB Prevention at <http://www.cdc.gov/nchhstp/>

CDC Environmental Protection Agency (EPA) Collaboration at <http://www.cdc.gov/nceh/ehs/ceha/collaboration.htm>

Health Resources and Services Administration (Area Resource File) at <http://datawarehouse.hrsa.gov/arf.aspx>

American Community Survey at http://www.census.gov/acs/www/about_the_survey/american_community_survey/
The U.S. Census Bureau's Small Area Health Insurance Estimates (SAHIE) program produces estimates of health insurance coverage for states and all counties. These data are available at <http://www.census.gov/did/www/sahie/>.
Dartmouth Atlas of Health Care at <http://www.dartmouthatlas.org/>

National Center for Education Statistics (NCES) at <http://nces.ed.gov/>

Appendix C: Community Input Methods

Qualitative data collection involved conducting focus groups, brief intercept interviews, and community input walls with community members. Each of these methods are described along with the questions used in the Kent County Community Health Needs Assessment.

Focus Groups

In the focus groups, a MPHI researcher interviewed people in small groups. The rationale for the focus groups is that group discussion will stimulate dynamic conversations and in-depth conversations about a particular topic. In this case, the purpose was to generate community input from various population groups about health and wellbeing in Kent County. Because the focus groups were tape recorded with the knowledge of participants, researchers are able to capture verbatim the words spoken about a particular health topic and utilized to support specific themes found in the qualitative data collection.

- 12 Focus Groups were conducted with 119 community members participating

Intercept Interviews Methods

This method is designed to engage participants who may not be inclined to attend a focus group or town hall meeting. It is typically one interviewer and one participant. It is also intended to generate open ended feedback from a broad group of community members on the topic of health and wellbeing. Some populations are more comfortable being interviewed by a community member or trusted individual than by an outside researcher and intercept interviews is a tool to collect input from those community members.

The intercept interviews were translated into Spanish for the Latino/Hispanic community and other languages spoken by the Asian community. Intercept interviews were conducted by volunteer interviewers (trained by MPHI) from the Kent County Health Department and other partners engaged with the CHNA. MPHI provided interviewers with the interview materials needed, as well as technical assistance. Completed interviews were returned to MPHI for analysis.

- 395 Intercept Interviews were conducted in three languages by trained community members

Community Input Walls

This strategy involves gathering input from community members directly by posting large sheets of paper in a public space and asking community members to answer questions about community health by writing their thoughts on the wall.

- 4 Community Input Walls

Questions

The following questions were used as the basis for each information gathering activity:

1. The vision of Kent County Working Together for a Healthier Tomorrow is to have a high quality of life, health, and well-being for all people in Kent County. What do 'health' and 'wellbeing' mean to you?
2. What about this community helps you live a healthy life? What about this community makes it hard to stay healthy?
3. How do you feel about the quality of life in Kent County? [If they get stuck, ask the following probing questions:] Is it a good place to raise children? Grow old? Are there job opportunities? Can you find affordable housing? Do you feel safe?
4. Are there people or groups in your community whose health or quality of life is not as good as others? If so, why do these differences exist?
5. How do you feel about health care in Kent County? [If they get stuck, ask the following probing questions:] Ability to get appointments? Quality of services? Informed about your options as a patient? Cost? Respect for your culture?
6. What do you need to improve your health and wellbeing? At home? At work? At school? In your neighborhood?
7. What do we need to know to make Kent County a healthier place for everyone who lives here?

Appendix D: Strategic Issue Scores

Coalition members ranked the Strategic Issues as they relate to the headings presented according to the following scale: 4 = high priority, 3 = moderate priority, 2 = low priority, 1 = not a priority. SPSS was utilized to calculate the means for each strategic issue. Weighted means and subsequent ranking are included.

	Mean Score: Linked to Vision and Mission	Mean Score: Data Suggest a Need to Improve	Mean Score: Important to Community Members	Mean Score: Ability to Make an Impact	Weighted Mean	Rank
Ensure community members' basic needs are met						
• Reduce the rate of food insecurity in Kent County	3.6512	3.4186	3.4185	3.3721	3.4651	12
• Improve access to affordable, stable, livable housing and utility assistance	3.5000	3.3810	3.4419	3.1190	3.3605	16
• Improve availability of transportation	3.1628	2.8372	2.9535	2.9762	2.9824	42
• Ensure a healthy environment, and address the health effects of poor air quality	3.1163	3.1190	2.6047	2.2791	2.7798	44
• Increase the number of jobs that pay a livable wage	3.3721	3.6047	3.7442	2.5366	3.3144	20
• Reduce racial disparities in economic stability	3.4048	3.5238	3.4762	2.9286	3.3333	19
• Ensure a safe environment, and address the effects of violent crime	3.2326	3.1951	3.2791	2.6190	3.0814	40
• Improve access to affordable healthcare	3.9070	3.7442	3.7442	3.4186	3.7035	2
Support community members in achieving a healthy weight						
• Prevent obesity, including childhood obesity	3.7857	3.6667	3.4048	3.2791	3.5341	9
• Increase healthy eating by ensuring access to healthy foods	3.7907	3.6512	3.4762	3.3953	3.5783	7
• Increase physical activity by ensuring access to resources to be physically active	3.5116	3.2857	3.0488	3.0952	3.2353	26
• Increase healthy eating through education about healthy food choices	3.5476	3.0476	2.8810	3.2791	3.1888	30
• Ensure that educational materials are adapted to reflect the cultural diversity in the community	3.3095	2.9268	2.8810	3.3333	3.1127	38
• Improve transportation to healthy food sources and recreational facilities	3.1395	3.0465	2.8140	2.8837	2.9709	43
Intervene with youth						
• Decrease the difference in quality among schools, ensuring all public schools offer students a high quality K-12 education	3.2093	3.4000	3.3333	2.6744	3.1543	33
• Increase level of educational attainment	3.3659	3.4250	3.2500	2.7317	3.1931	29
• Reduce the disparity in health risk factors and protective factors between students who are getting Ds/Fs and students who are getting As /Bs	3.6667	3.8049	3.0976	3.0238	3.3982	15
• Reduce racial disparities in health risk factors and protective factors among youth	3.6667	3.7073	3.2250	3.0732	3.4180	13
• Develop strategies for engaging high school students in activities that are healthy and safe	3.3256	3.2927	2.8537	2.9524	3.1061	39
• Ensure Hispanic/Latino youth have access to culturally appropriate services	3.4524	3.3684	2.7632	3.1026	3.1716	32
• Reduce alcohol use among youth	3.3810	3.4500	3.0732	2.8810	3.1963	27

	Mean Score: Linked to Vision and Mission	Mean Score: Data Suggest a Need to Improve	Mean Score: Important to Community Members	Mean Score: Ability to Make an Impact	Weighted Mean	Rank
Ensure community members are aware of available resources						
• Increase community members' knowledge of the resources that are currently available in the community	3.6190	3.4146	3.3810	3.5476	3.4906	11
• Ensure messages regarding available services are culturally appropriate and reflect the diversity in the community	3.6098	3.2500	3.2927	3.4878	3.4101	14
Improve access to care & reduce disparities in chronic disease rates by race						
• Ensure all community members, including the uninsured and working poor, have access to healthcare, including access to preventive care & a medical home	3.9512	3.8780	3.7750	3.3250	3.7323	1
• Ensure access to dental care	3.7561	3.8333	3.6098	3.3415	3.6352	5
• Ensure access to care for persons with mental illnesses and substance abuse disorders	3.7750	3.6154	3.3590	3.2564	3.5014	10
• Ensure access to care for Veterans	3.6500	3.1316	3.0513	2.9487	3.1954	28
• Ensure providers are available that accept Medicaid or offer low-cost/free services	3.8537	3.7317	3.6829	3.0000	3.5671	8
• Reduce racial disparities in access to care & health outcomes	3.8947	3.7179	3.5526	3.3590	3.6311	6
Improve quality of care for all community members						
• Identify policy barriers to ensuring a high quality of care	3.3571	3.1250	3.0750	3.1000	3.1643	34
• Address inequalities in experiences with the healthcare system and perceptions of care	3.5610	3.3500	3.2500	3.0732	3.3085	22
• Address the root causes of disease and treat the whole person	3.6341	3.1500	3.2051	3.0000	3.2473	25
• Ensure culturally & linguistically appropriate care, including translation	3.5750	3.2000	3.0769	3.2683	3.2801	23
Ensure mental health, substance abuse, and social service needs of community members are met						
• Reduce heavy drinking and binge drinking among adults	3.2051	3.4103	2.8205	2.7179	3.0385	41
• Reverse the suicide trend among men age 45-64	3.2308	3.6410	2.8718	2.8205	3.1410	36
• Reduce stigma related to mental health	3.2250	3.0256	3.1250	3.1000	3.1189	37
• Ensure culturally appropriate mental health, substance abuse, and social services are available	3.6750	3.3590	3.1500	3.2000	3.3460	18
• Increase the number of mental health care providers available	3.4615	3.1892	2.9730	2.9459	3.1424	35
• Ensure resources are in place to address the mental health consequences of life stressors, including economic insecurity	3.4000	3.2368	3.0500	3.0500	3.1842	31
• Increase the availability of mental health and substance abuse data and resources	3.5000	3.2703	3.0000	3.2564	3.2567	24
Ensure healthy beginnings of children born in Kent County						
• Reduce Disparities in the adequacy of prenatal care	3.8250	3.7895	3.4474	3.5789	3.6602	4
• Increase access to preconception care for women who are of child bearing age	3.5366	3.4474	3.0513	3.2000	3.3088	21
• Reduce the rate of teen pregnancy	3.500	3.5641	3.2105	3.1579	3.3581	17
• Reduce racial disparity in infant mortality	3.8108	3.8378	3.6111	3.4722	3.6830	3

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