

# Kent County Health Department



## 2014 Behavioral Risk Factor Survey

Assessing the health of our community is one of the core functions of your Kent County Health Department (KCHD). This 2014 Behavioral Risk Factor Survey (BRFS) is one of the primary means by which we do that. This survey was completed during a three month period in 2014 by a professional surveying company using standardized methods consistent with the Centers for Disease Control and Prevention. This BRFS report is a compilation of 1,225 completed surveys and presents the data according to a number of demographic characteristics. This report is also an important component in the Kent County Health Needs Assessment (CHNA) and Community Health Improvement Planning processes. You should find this information useful as our community works to understand and overcome socio-economic determinants of health.

Within this report you will find an impressive amount of information about our county's health status. There are, of course, a number of findings and trends which should be concerning to all of us. Our community reported an overall decline in perceived health status with 13.7% reporting fair or poor health compared with 10.8% during the most recent BRFS in 2008. A staggering 45.9% of adults reported no influenza shot in 2014 as opposed to just 32.9% six years ago. There was an increase in the rate of adults reporting that they did not see a dentist during the past year (2008: 21.1%, 2014: 26.1%). Important screenings for HIV and cancer were reported less frequently than survey respondents in 2008. Reported asthma rates continued to climb from 10.1% in 2002 to 12.2% in 2008 to 14.2% in 2014. Perhaps most concerning is the consistent upward trend in our obesity rate. Between 1993 and 2014, Kent County's obesity rate has increased from 17.0% to 27.6. Obesity is, of course, a major risk factor for diabetes and stroke; not surprisingly, the rates for both of those conditions have increased as well.

While many of the metrics for chronic disease are trending in a negative direction, there are also reasons for optimism. Throughout this report, you will generally observe that Kent County residents are reporting better health than the statewide and national rates. The rate of residents without health care coverage is significantly lower (11.6%) than it was six years ago (14.5%). The rate of people qualifying as "current smoker" has decreased from 20.6% to 12.8%, which is well below the statewide and national rates. This is significant progress in the struggle to overcome addiction and attachment to this risky behavior.

Finally, I would like to express my appreciation and gratitude to the fine epidemiology and CHNA team at KCHD. They have done an outstanding job gathering and presenting this information in a high quality format. I hope you find this report valuable in our collective efforts to advance health and wellness in Kent County.



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In 1990, *Healthy People 2000, National Health Promotion and Disease Prevention Objectives*, was released to the public. The document outlined the U.S. government's plan to improve the health of individuals, communities, and the nation. This plan was revised in 1999 (*Healthy People 2010*), and, subsequently, in 2010 (*Healthy People 2020*).

*Healthy People 2020* documents 10-year health objectives organized into 4 over-arching goals and 42 Focus Areas (page 4). These Focus Areas address factors such as behavior, biology, physical environment and social environment that interact to influence health. In addition to the Focus Areas, a smaller subset of 12 indicators called Leading Health Indicators (page 5) was developed. The LHIs reflect a life stages perspective, with the intent to draw attention to both individual and societal determinants that affect the public's health and contribute to health disparities from infancy through old age. This approach recognizes that specific risk factors and determinants of health vary across the life span. Health and disease result from the accumulation, over time, of the effects of risk factors and determinants. Therefore, intervening at specific points in the life course can help reduce risk factors and promote health.

How do behaviors fit into this framework? Behaviors are individual responses or reactions to internal stimuli and external conditions. It has been estimated that behavioral and environmental factors are responsible for about 70% of all premature deaths in the United States. Obtaining information surrounding behaviors that put one at risk for poor health is instrumental in developing policies and interventions.

This report explores the behaviors that put Kent County residents at risk for poor health. Leading Health Indicators are presented accompanied by their *Healthy People 2020* objective/Focus Area that will be measured over time. Questions not relating to Leading Health Indicators or Focus Areas may be addressed in future behavioral risk factor surveys.

## Healthy People 2020 Goals

1. Attain high-quality, longer lives free of preventable disease, disability, injury, and premature death.
2. Achieve health equity, eliminate disparities, and improve the health of all groups.
3. Create social and physical environments that promote good health for all.
4. Promote quality of life, healthy development, and healthy behaviors across all life stages.

## Healthy People 2020 Focus Areas

- |  |   |
|--|---|
| 1. Access to Health Services                             | 22. HIV   |
| 2. Adolescent Health                                     | 23. Immunization and Infectious Diseases          |
| 3. Arthritis, Osteoporosis, and Chronic Back Conditions  | 24. Injury and Violence Prevention                |
| 4. Blood Disorders and Blood Safety                      | 25. Lesbian, Gay, Bisexual and Transgender Health |
| 5. Cancer  | 26. Maternal, Infant, and Child Health            |
| 6. Chronic Kidney Disease                                | 27. Medical Product Safety                        |
| 7. Dementias, Including Alzheimer's Disease              | 28. Mental Health and Mental Disorders            |
| 8. Diabetes  | 29. Nutrition and Weight Status                   |
| 9. Disability and Health                                 | 30. Occupational Safety and Health                |
| 10. Early and Middle Childhood                           | 31. Older Adults                                  |
| 11. Educational and Community-Based Programs             | 32. Oral Health                                   |
| 12. Environmental Health                                 | 33. Physical Activity                             |
| 13. Family Planning                                      | 34. Preparedness                                  |
| 14. Food Safety  | 35. Public Health Infrastructure                  |
| 15. Genomics   | 36. Respiratory Diseases                          |
| 16. Global Health  | 37. Sexually Transmitted Diseases                 |
| 17. Health Communication & Health Information Technology | 38. Sleep Health                                  |
| 18. Health-Related Quality of Life & Well-Being          | 39. Social Determinants of Health                 |
| 19. Healthcare-Associated Infections                     | 40. Substance Abuse                               |
| 20. Hearing and Other Sensory or Communication Disorders | 41. Tobacco Use                                   |
| 21. Heart Disease and Stroke                             | 42. Vision  |

# Healthy People 2020 Leading Health Indicators



1. Access to Health Services
2. Clinical Preventive Services
3. Environmental Quality
4. Injury and Violence
5. Maternal, Infant, and Child Health
6. Mental Health
7. Nutrition, Physical Activity, and Obesity
8. Oral Health
9. Reproductive and Sexual Health
10. Social Determinants
11. Substance Abuse
12. Tobacco Use

# Methodology

The Behavioral Risk Factor Surveillance System (BRFSS) is an ongoing, state-based telephone surveillance system supported by the Centers for Disease Control and Prevention (CDC). Through a series of monthly telephone interviews, states uniformly collect data on the behaviors and conditions that place adults at risk for the chronic diseases, injuries, and preventable infectious diseases that are the leading causes of illness and death in the United States. The annual Michigan surveys follow the overall CDC telephone survey protocol for the BRFSS. Michigan Behavioral Risk Factor Survey (BRFS) data are collected quarterly by the Institute for Public Policy and Social Research (IPPSR) at Michigan State University.

In 2014, in order to obtain an estimate of the prevalence of these behaviors and conditions in Kent County, the Kent County Health Department retained the services of Issues & Answers Network. The Kent County Behavioral Risk Factor Surveys also follow the CDC protocol for the BRFSS and use the standardized core questionnaire.

For the needs of the 2014 Kent County BRFS, the interviews were administered via telephone to randomly selected adults from a sample of households in the County. The sample of telephone numbers was selected using a list-assisted, random-digit-dialed methodology with disproportionate stratification based on "listedness." The BRFS data were weighted to adjust for the probabilities of selection (based on the probability of telephone number selection, the number of adults in the household, and the number of residential phone lines). Additionally, a post-stratification weighting factor adjusted for sex, age, and race, using the 2010 Kent County Census population distributions.

## Sample Results

All of the respondents who were included in the final sample were drawn from a random sample of Kent County residents. Among the calls that were attempted, there were 1,225 completed interviews, 291 refusals, 1,830 non-working or disconnected numbers, 6,317 no answers, 701 numbers that were not private residences, 33 households with no eligible member, 1,560 numbers and/or respondents with undetermined eligibility, 91 households with physical or mental impairment, 69 eligible respondents selected but not interviewed, 85 households and/or eligible respondents with language barriers, 751 households with telecommunication barriers, 135 households on a never-call list, 479 households that were out-of-sample, 551 fax or modem lines, 4,544 answering machines, and 229 interviews that were terminated or partially completed. The Council of American Survey Research Organizations (CASRO) response rate was 12.19%. The refusal rate was 1.51%.

All of the interviews were completed between July 10 and September 29, 2014, with each completed interview lasting, on average, approximately 24 minutes.

*Please note that, when available, all comparisons to Michigan and national results presented in this report are based on the 2002, 2008, and 2013 Michigan and U.S. Behavioral Risk Factor Surveys.*

# Analysis of Selected Risk Factors



## Summary Table

Factor	Kent County	Michigan*
Perceived Health Status (fair/poor)	13.7%	17.7%
Quality of Life: Poor physical health (14+ days)	9.2%	12.7%
Quality of Life: Poor mental health (14+ days)	7.9%	12.0%
Disability	18.6%	25.5%
No Health Care Coverage (age 18-64)	11.6%	17.4%
Limited Health Care Coverage: No personal health care provider	14.3%	17.0%
Limited Health Care Coverage: No health care access due to cost	11.7%	15.5%
No Routine Checkup	24.8%	30.1%
No Flu Shot In Past Year (age 65 and over)	45.9%	43.2%
Never Had A Pneumococcal Vaccination (age 65 and over)	22.0%	31.4%
Motor Vehicle Safety: Do not always wear seatbelt	8.4%	10.4%
Motor Vehicle Safety: Ever drive after drinking too much	2.4%	N/A
Obesity (BMI ≥ 30)	27.6%	31.5%
No Leisure-Time Physical Activity	19.6%	24.4%
Alcohol Consumption: Binge Drinkers	17.1%	18.9%
Alcohol Consumption: Heavy Drinkers	0.5%	6.2%
Current Smokers	12.8%	21.4%
Breast Cancer Screening: Mammogram in past 2 years (age 40 and over)	76.7%	N/A
Cervical Cancer Screening: Pap test in past 3 years (age 18 and over)	69.3%	N/A
Colorectal Cancer Screening: No fecal blood test past 2 years (age 50 and over)	85.5%	86.7%
Colorectal Cancer Screening: Never had a sigmoidoscopy/colonoscopy (age 50 and over)	24.8%	26.0%
Diabetes: Ever told by a doctor of having diabetes	9.2%	10.4%
Heart Disease: Ever told had angina or coronary artery disease (age 35 and over)	4.8%	5.2%
Stroke: Ever told had a stroke (age 35 and over)	4.4%	3.6%
HIV Testing: Ever had an HIV test (age 18-64)	33.3%	41.2%
Oral Health: Not visited oral health care provider in the past year	26.1%	N/A
Asthma: Ever told had asthma	14.2%	16.6%

\*Note: Based on 2013 BRFs of Michigan Residents



# Perceived Health Status

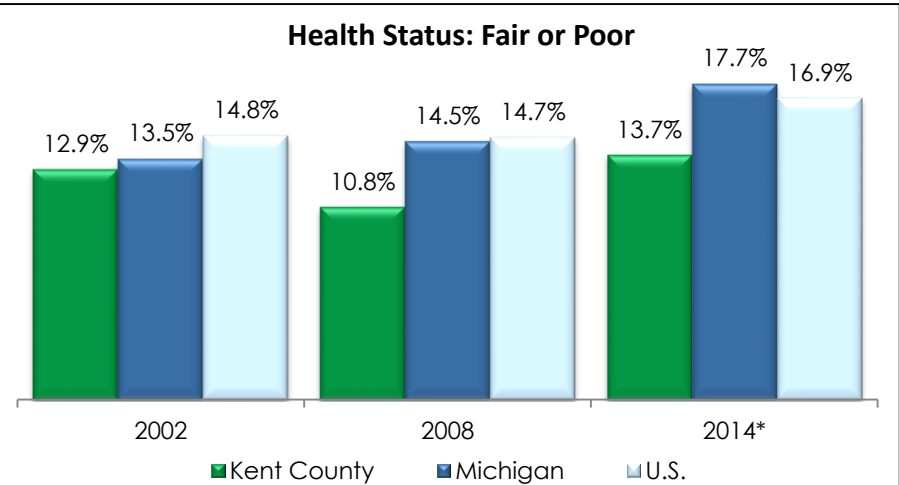


## Healthy People 2020 objective HRQOL/WB-1: Increase the proportion of adults who self-report good or better health

A primary goal of Healthy People 2020 is to help individuals improve their quality of life. General health status is a reliable self-rated assessment of one's perceived health, which may be influenced by all aspects of life, including behaviors, environmental factors, and community. Self-rated general health status is useful in determining unmet health needs, identifying disparities among subpopulations, and characterizing the burden of chronic diseases within a population. The prevalence of self-rated fair or poor health status has been found to be higher within older age groups, females, and minorities, and has also been associated with lower socioeconomic status in the presence or absence of disease.

The results of the Kent County BRFSS suggest that, overall, local residents have a lower rate of self-reported fair or poor general health than their counterparts state- and nationwide. However, the percentage of Kent respondents viewing their health as either fair or poor has increased by nearly 3 points in the past 6 years, mirroring the state and national trends.

In line with the results observed in the past iterations of this survey, the self-reported rate of fair/poor health ratings is highest among residents older than 65 years of age (19.4%), African Americans (32.4%), residents with less than a high school education (42.7%), and those with less than \$20,000 in an annual household income (32.1%).



\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents and 2013 Nationwide BRFSS (States, DC and Territories)

Percentage of respondents who said their health, in general, was fair or poor	
Demographic Characteristics	General Health Fair or Poor
<b>Total</b>	13.7%
<b>Age</b>	
18-24	10.8%
25-34	6.3%
35-44	15.4%
45-54	15.4%
55-64	17.1%
65+	19.4%
<b>Gender</b>	
Male	11.4%
Female	15.9%
<b>Race</b>	
White	10.1%
Black	32.4%
Hispanic	29.7%
Non-Hispanic	11.7%
<b>Education</b>	
< High School	42.7%
High School Grad	16.9%
Some College	14.8%
College Graduate	4.3%
<b>Household Income</b>	
<\$20,000	32.1%
\$20,000-\$34,999	22.1%
\$35,000-\$49,999	7.4%
\$50,000-\$74,999	4.5%
\$75,000 or more	1.9%

**Healthy People 2020 objective HRQOL/WB-1.1: Increase the proportion of adults who self-report good or better physical health**

**Healthy People 2020 objective HRQOL/WB-1.2: Increase the proportion of adults who self-report good or better mental health**

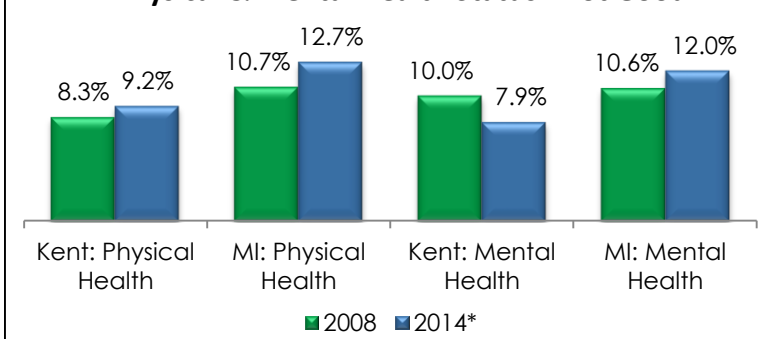
*Health-related quality of life reflects a personal sense of physical and mental health and the ability to react to factors in the physical and social environments. The key indicator used in this analysis is the number of days in the past month that residents experienced physical or mental health problems, and in particular, whether they had experienced problems for 14 or more days within that timeframe.*

A total of 9% of Kent County residents report having 14 or more days of poor physical health, and 8% say the same about their mental health. Both rates fall below the results observed in the State of Michigan survey. Notably, the percentage of respondents citing poor mental health has dropped in the past 6 years, indicating Kent County performs well in terms of objective HRQOL/WB-1.2.

A more in-depth analysis shows that African Americans, residents who have less than a high school education, and those in the lowest income bracket are substantially more likely to report both physical and mental health problems.

While, predictably, older respondents (i.e. those over the age of 45) are much more apt to report at least 14 days of poor physical health, the highest prevalence of mental health issues occurs among Kent residents age 35-54.

**Physical & Mental Health Status "Not Good"**



*\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents. National data is not available for this category for any of the 10 presented years..*

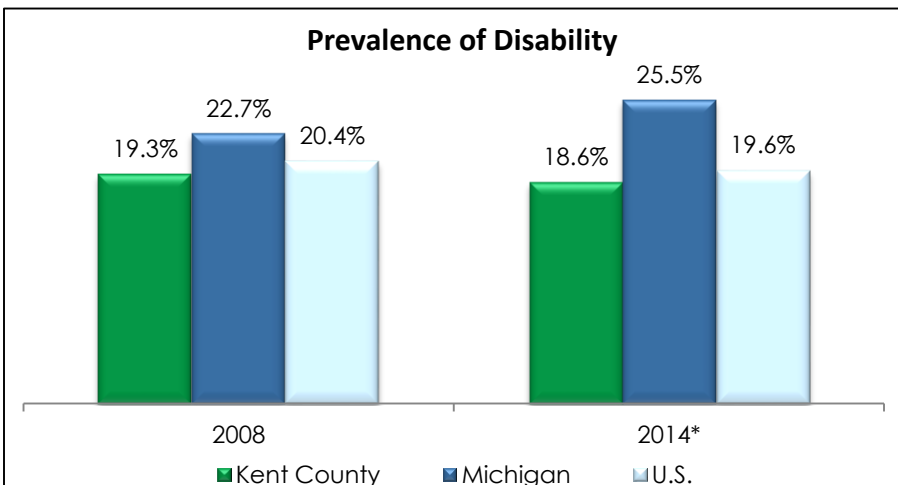
**Percentage of respondents with 14 or more days of poor physical or mental health**

Demographic Characteristics	Physical Health Not Good	Mental Health Not Good
<b>Total</b>	9.2%	7.9%
<b>Age</b>		
18-24	3.9%	7.5%
25-34	4.0%	5.8%
35-44	10.2%	9.5%
45-54	11.8%	10.8%
55-64	12.3%	8.6%
65+	13.4%	5.5%
<b>Gender</b>		
Male	7.3%	5.1%
Female	10.9%	10.7%
<b>Race</b>		
White	7.7%	6.5%
Black	19.8%	15.1%
Hispanic	11.2%	9.9%
Non-Hispanic	8.6%	7.5%
<b>Education</b>		
< High School	20.3%	16.0%
High School Grad	11.2%	5.8%
Some College	10.7%	10.9%
College Graduate	4.0%	5.3%
<b>Household Income</b>		
<\$20,000	20.9%	19.9%
\$20,000-\$34,999	13.8%	9.8%
\$35,000-\$49,999	8.7%	7.8%
\$50,000-\$74,999	2.4%	4.3%
\$75,000 or more	3.5%	1.6%

One of the Healthy People 2020 goals is to “promote the health and well-being of people with disabilities.” There are many ways in which disability can be defined, ranging from experiencing difficulty in participating in certain activities (such as lifting and carrying objects, seeing, hearing, talking, walking or climbing stairs) to having more severe disabilities that require assistance in personal care needs (i.e. bathing) or routine care needs (i.e. housework). In this report, disability is defined as being limited in any activities because of physical, mental, or emotional problems.

Nearly 19% of the Kent County adult population live with a disability, compared to roughly one-fourth (25.5%) of the Michigan population and almost 20% of the U.S. population. While the results noted for the state of Michigan show an increase in the percentage of respondents with disabilities, the Kent County figures are generally at par with the previous survey iteration, mirroring the nationwide trends.

Unlike the statewide results, the prevalence of disability in Kent County is not significantly different when comparing age and ethnic segments. However, just as in Michigan overall, Kent County respondents representing the highest income bracket are least likely to report disabilities.



\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents and 2013 Nationwide BRFSS (States, DC, and Territories)

## Percentage of respondents limited in activities because of physical, mental or emotional problems

Demographic Characteristics	Disability
<b>Total</b>	18.6%
<b>Age</b>	
18-24	24.8%
25-34	15.8%
35-44	19.1%
45-54	17.7%
55-64	17.7%
65+	18.4%
<b>Gender</b>	
Male	16.1%
Female	21.0%
<b>Race</b>	
White	18.7%
Black	22.3%
Hispanic	17.1%
Non-Hispanic	18.6%
<b>Education</b>	
< High School	16.2%
High School Grad	16.7%
Some College	22.7%
College Graduate	17.3%
<b>Household Income</b>	
<\$20,000	33.2%
\$20,000-\$34,999	18.7%
\$35,000-\$49,999	24.3%
\$50,000-\$74,999	19.4%
\$75,000 or more	9.9%

# Access to Health Care

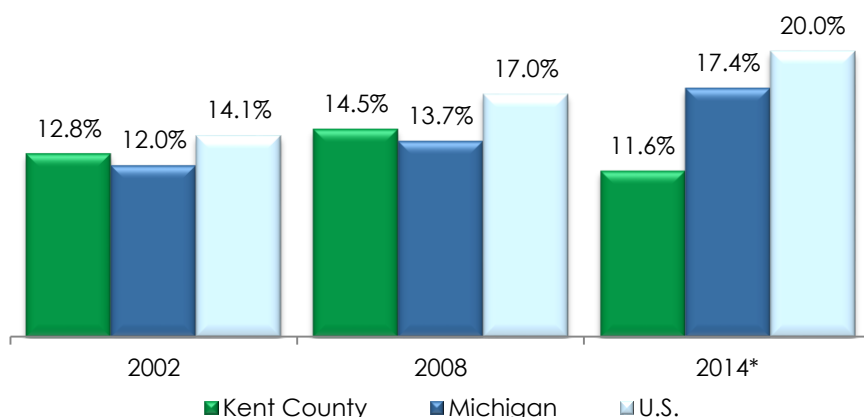
## Healthy People 2020 objective AHS-1.1: Increase the proportion of persons with medical insurance

Adults who do not have health care coverage are less likely to access health care services, including preventive care, primary care, and tertiary care, and delay getting needed medical attention.<sup>1</sup> Utilization of preventive health care services, such as mammography, Pap tests, prostate exams, influenza vaccinations, and cholesterol tests, could reduce the prevalence and severity of diseases and chronic conditions in the United States. The Healthy People 2020 target for health care coverage is to have 100% insured by 2020.

An estimated 11.6% of the Kent County residents between the ages of 18 and 64 report having no health insurance coverage – a rate much below the state and national figures (17.4% and 20%). It is also the lowest rate noted since 2002. This result illustrates that Kent County is well on its way to meet the Healthy People 2020 target under this Focus Area.

Access to health care appears to be closely related to several socio-economic factors. Specifically, non-white segments of Kent residents are substantially less likely to have coverage than their Caucasian counterparts. Predictably, less educated and less affluent respondents are also more likely to be uninsured. Finally, age and gender are closely associated with health care coverage, with women being more apt than men to report that they have health insurance coverage, and older individuals being more likely to do so than those younger than 35 years of age.

**No Health Care Coverage: Adults 18-64**



\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents and 2013 Nationwide BRFSS (States, DC and Territories)

### Percentage of respondents age 18-64 who have no health care insurance coverage

Demographic Characteristics	No Health Insurance
<b>Total</b>	11.6%
<b>Age</b>	
18-24	12.4%
25-34	20.4%
35-44	8.2%
45-54	9.2%
55-64	6.7%
<b>Gender</b>	
Male	14.5%
Female	8.8%
<b>Race</b>	
White	9.3%
Black	22.4%
Hispanic	30.2%
Non-Hispanic	9.1%
<b>Education</b>	
< High School	32.2%
High School Grad	17.8%
Some College	11.7%
College Graduate	2.5%
<b>Household Income</b>	
<\$20,000	28.3%
\$20,000-\$34,999	14.7%
\$35,000-\$49,999	5.5%
\$50,000-\$74,999	1.2%
\$75,000 or more	2.9%

# Limited Health Care Coverage

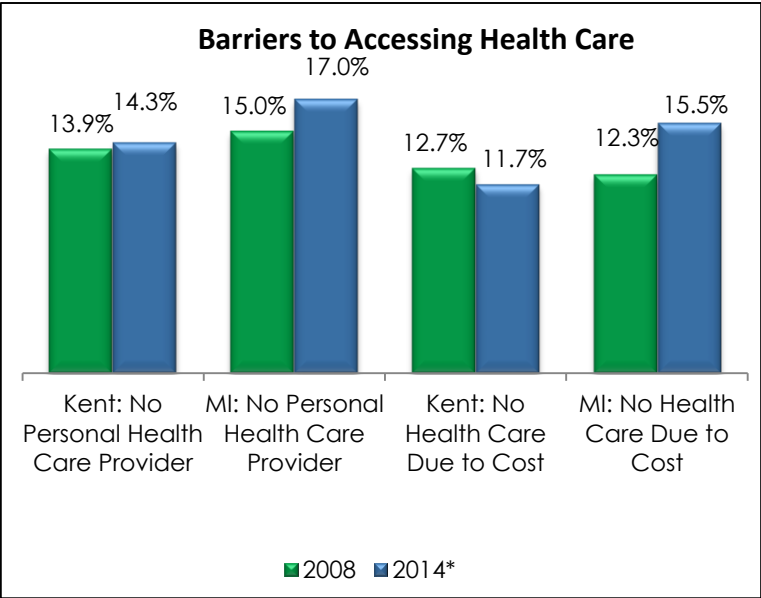


## Healthy People 2020 objective AHS-3: Increase the proportion of persons with a usual primary care provider

Two additional indicators that address issues related to health care access include not having a personal doctor or health care provider and having had a time during the past 12 months when health care was needed but could not be obtained because of cost.

An estimated 14.3% of Kent County adults do not have a personal doctor or health care provider – a figure virtually at par with the 2008 survey results, and notably lower than the statewide and nationwide rates. Moreover, a total of 11.7% of Kent County residents could not see a doctor because of the cost. This result represents a 1-point drop in comparison to 6 years ago, indicating progress toward meeting Healthy People 2020 objective AHS-3.

As in the past survey wave, men are substantially more likely than women to have no personal health care provider (17.8% vs. 11%). Moreover, access to a personal provider and cost barriers continue to be cited more often among less educated and less affluent population segments. Hispanics are the most likely cohort to report having no personal health care provider, and both Hispanics and African Americans are more likely than Caucasians to say that cost was a problem. Finally, the likelihood of having a personal provider is lowest among respondents under the age of 35.



Percentage of respondents with no personal health care provider and percentage of respondents who reported an instance of not obtaining care due to cost		
Demographic Characteristics	No Personal Health Care Provider	No Health Care Access Due to Cost
Total	14.3%	11.7%
Age		
18-24	28.2%	11.2%
25-34	27.7%	17.2%
35-44	13.2%	8.2%
45-54	6.1%	18.0%
55-64	8.2%	10.4%
65+	3.1%	3.4%
Gender		
Male	17.8%	10.0%
Female	11.0%	13.3%
Race		
White	12.1%	10.4%
Black	9.6%	22.9%
Hispanic	34.6%	20.1%
Non-Hispanic	12.1%	10.9%
Education		
< High School	28.7%	16.2%
High School Grad	18.8%	13.5%
Some College	12.1%	15.2%
College Graduate	9.8%	6.7%
Household Income		
<\$20,000	23.5%	31.7%
\$20,000-\$34,999	15.6%	17.6%
\$35,000-\$49,999	12.6%	8.5%
\$50,000-\$74,999	8.7%	2.0%
\$75,000 or more	6.1%	4.5%

\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents and 2013 Nationwide BRFSS (States, DC, and Territories). National data is not available for this category for year 2008.

# No Routine Checkup

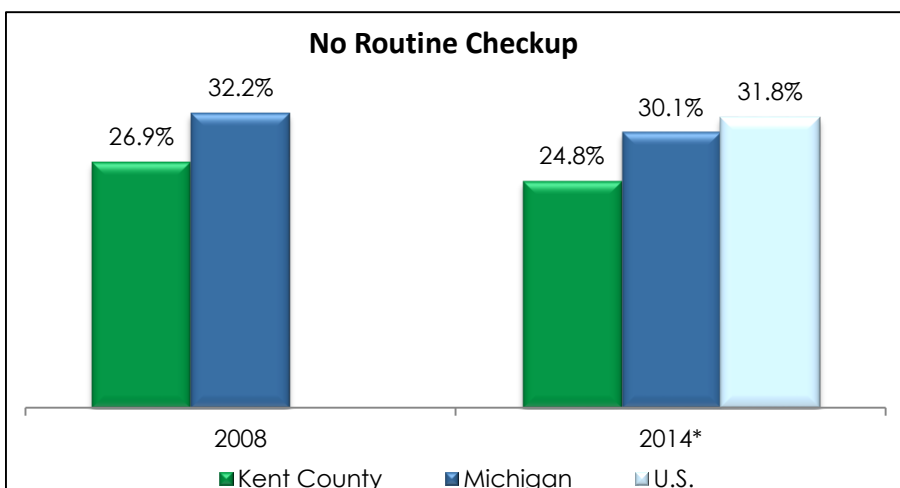
*A yearly routine checkup with a health care professional provides an opportunity to raise awareness regarding adult preventive services, conduct individual risk assessments, promote informed decision-making, and potentially benefit from early detection.*

Kent County adult residents are more likely than respondents state- and nationwide to report having a routine checkup within the past 12 months (75.2%, vs. 69.9% and 68.2%, respectively).

Just as in 2008, men residing in Kent County are significantly more likely than women to have not had their checkup (28.3% vs. 21.5%), as are residents age 18-34 in comparison to residents age 35 and older.

## Percentage of respondents who had no routine checkup in the past year

Demographic Characteristics	No Routine Checkup
<b>Total</b>	24.8%
<b>Age</b>	
18-24	28.5%
25-34	33.6%
35-44	27.1%
45-54	23.2%
55-64	24.9%
65+	10.2%
<b>Gender</b>	
Male	28.3%
Female	21.5%
<b>Race</b>	
White	25.6%
Black	18.4%
Hispanic	29.2%
Non-Hispanic	24.5%
<b>Education</b>	
< High School	22.7%
High School Grad	28.7%
Some College	23.8%
College Graduate	23.5%
<b>Household Income</b>	
<\$20,000	26.1%
\$20,000-\$34,999	32.7%
\$35,000-\$49,999	25.7%
\$50,000-\$74,999	18.8%
\$75,000 or more	18.0%



\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents and 2013 Nationwide BRFSS (States, DC and Territories). National data is not available for this category for year 2008.



# Adult Immunization

**Healthy People 2020 objective IID-12.5: Increase the percentage of noninstitutionalized adults aged 65 years and older who are vaccinated annually against seasonal influenza**

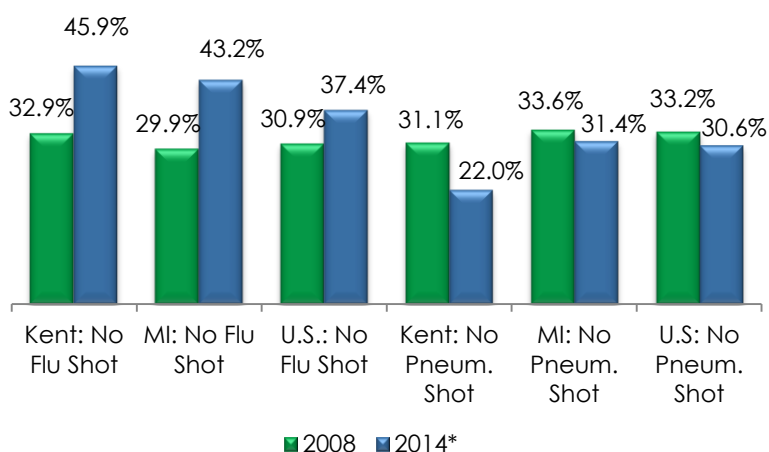
**Healthy People 2020 objective IID-13.1: Increase the percentage of noninstitutionalized adults aged 65 years and older who are vaccinated against pneumococcal disease**

Adult immunizations against influenza and pneumococcal disease are important health indicators that need to be routinely monitored since morbidity and mortality are associated with both of these diseases among different demographic groups.<sup>2</sup> Influenza and pneumonia were the 8th leading cause of death in 2013 in Michigan, attributing to just under 1,600 deaths.<sup>3</sup> A Healthy People 2020 objective is to ensure that 80% of adults aged 65 years and older are vaccinated annually against influenza and 90% have ever been vaccinated against pneumococcal disease.

Approximately one-half (54.1%) of the Kent County residents over the age of 64 have had a flu shot in the past 12 months; this figure is lower than the state and national rates (56.8% and 62.6%). This result also represents a significant drop when compared to the 2008 survey. Considering the Healthy People 2020 objectives, this Focus Area needs particular attention from the Kent County Health Department.

At the same time, a notable improvement is observed in the percentage of Kent County residents who have ever had a pneumonia vaccination (78%). This result is higher than the state and national figures, which have also increased over the past 6 years.

**Adult Immunization (age 65 and over)**



\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents and 2013 Nationwide BRFSS (States, DC and Territories)

**Proportion of respondents age 65 years and older who have not had a flu shot in the past 12 months and who never had a pneumonia shot**

Demographic Characteristics	No Flu Shot	Never Had Pneum. Shot
<b>Total</b>	45.9%	22%
<b>Age</b>		
65-74	50.2%	24.7%
75+	41.5%	19.3%
<b>Gender</b>		
Male	49.2%	22.7%
Female	42.5%	21.3%
<b>Race</b>		
White	42.8%	20.9%
Black	60.3%**	30.2%**
Hispanic	68.1%**	30.2%**
Non-Hispanic	45.7%	21.9%
<b>Education</b>		
< High School	48.7%**	29.1%**
High School Grad	53.8%	24.9%
Some College	44.9%	13.7%
College Graduate	38.8%	23.9%
<b>Household Income</b>		
<\$20,000	53.3%**	27.6%**
\$20,000-\$34,999	37.0%**	19.4%**
\$35,000-\$49,999	51.1%**	16.7%**
\$50,000-\$74,999	45.1%**	19.2%**
\$75,000 or more	41.1%**	16.2%**

\*\*Caution: fewer than 50 respondents

# Motor Vehicle Safety: Seatbelt Use

**Healthy People 2020 objective IVP-12: Reduce motor vehicle crash-related deaths**

**Healthy People 2020 objective IVP-15: Increase use of safety belts**

In 2013, 951 people died in automobile accidents in Michigan, with an additional 71,031 people injured.<sup>4</sup> Seatbelt use has been proven to save lives and prevent injuries. Statewide, forty-six percent (46%) of passenger vehicle occupants who died were unrestrained.<sup>5</sup> Nationwide, it has been estimated that seatbelt use saves \$50 billion in medical care, productivity, and other injury-related costs.

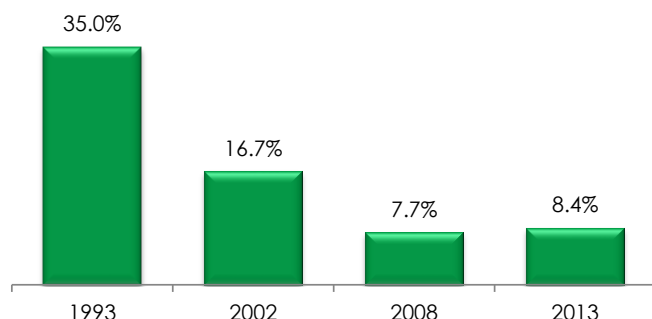
Over the past 20 years, there has been a marked increase in the proportion of Kent County residents who always wear their seat belt while driving, which could be partially attributed to the primary enforcement seat belt law enacted in 2000. This shows the effectiveness of policy changes on matters of public health. However, it needs to be stressed that, over the past 6 years, the results have remained essentially flat, with no further drops (from 7.7% in 2008 to 8.4% in 2013).

Younger respondents (18-24 years of age) as well as those in the bottom income categories (up to \$35,000 per year) are more likely than their counterparts to say they do not always wear a seatbelt.

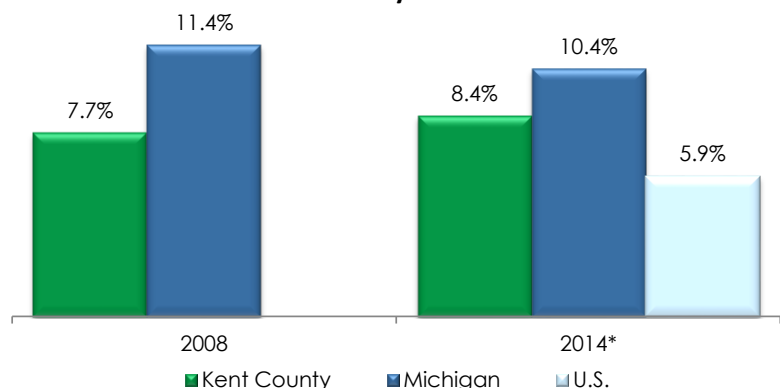
## Percentage of respondents who do not always use seatbelts when driving/riding in the car

Demographic Characteristics	Do Not Always Use Seatbelt
<b>Total</b>	8.4%
<b>Age</b>	
18-24	19.2%
25-34	10.2%
35-44	2.8%
45-54	6.9%
55-64	6.2%
65+	6.8%
<b>Gender</b>	
Male	10.4%
Female	6.5%
<b>Race</b>	
White	7.8%
Black	11.5%
Hispanic	13.0%
Non-Hispanic	8.0%
<b>Education</b>	
< High School	10.7%
High School Grad	9.1%
Some College	9.8%
College Graduate	6.3%
<b>Household Income</b>	
<\$20,000	9.4%
\$20,000-\$34,999	13.6%
\$35,000-\$49,999	7.5%
\$50,000-\$74,999	4.2%
\$75,000 or more	3.4%

**Kent County: Do Not Always Use Seat Belt**



**Do Not Always Use Seat Belt**





# Motor Vehicle Safety: Driving While Drinking

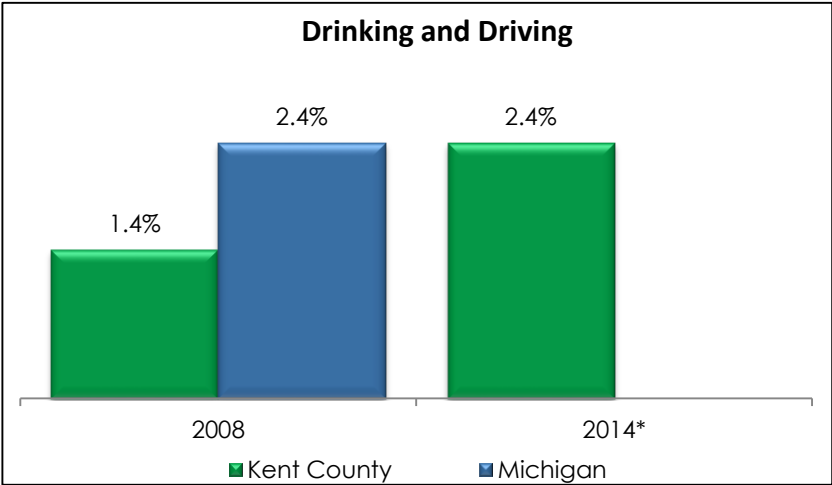


Healthy People 2020 objective IVP-12: Reduce motor vehicle crash-related deaths  
Healthy People 2020 objective SA-17: Decrease the rate of alcohol-impaired driving fatalities

*In Michigan, 3.1% of all crashes were reported to involve drinking in 2013. During this same time period, approximately two out of every ten fatal motor vehicle crashes involved drinking.<sup>5</sup> Consumption of alcohol is a major factor in the more serious types of motor vehicle crashes.*

The proportion of Kent County adults who had driven when they had too much to drink at least once in the previous month is 2.4%. Though this result is still low, it represents a 1-point increase since 2008.

Just as in the previous survey iteration, men continue to be somewhat more likely than women to drive after drinking, and African Americans are somewhat more likely to do so than their counterparts representing other ethnic backgrounds. Similarly, younger respondents (age 25-34) are somewhat more inclined than others to engage in this type of a behavior. However, the only statistically significant difference occurs in terms of income levels, with those in the bottom and top brackets (under \$20,000 per year and at least \$75,000 per year) being substantially more likely than others to drive after drinking too much.



Percentage of respondents who have driven after drinking too much at least once in the past month	
Demographic Characteristics	Drove Vehicle After Drinking
Total	2.4%
Age	
18-24	1.7%
25-34	4.5%
35-44	2.6%
45-54	2.6%
55-64	1.4%
65+	1.0%
Gender	
Male	3.4%
Female	1.4%
Race	
White	2.5%
Black	4.1%
Hispanic	2.3%
Non-Hispanic	2.4%
Education	
< High School	1.7%
High School Grad	3.3%
Some College	2.3%
College Graduate	1.9%
Household Income	
<\$20,000	3.3%
\$20,000-\$34,999	3.1%
\$35,000-\$49,999	1.3%
\$50,000-\$74,999	0.5%
\$75,000 or more	4.6%

\*Note: Michigan data is not available for this category in 2014. National data is not available for year 2008 and 2014.

**Healthy People 2020 objective NWS-8: Increase the proportion of adults who are at a healthy weight**

**Healthy People 2020 objective NWS-9: Reduce the proportion of adults who are obese**

Obese and overweight adults are at a higher risk than adults who are at a healthy weight to develop chronic conditions such as high blood pressure, diabetes, gallbladder disease, osteoarthritis, and high cholesterol.<sup>6</sup> In Michigan, obesity-related medical expenditures have been estimated to be \$4.2 billion in 2009 dollars.<sup>7</sup> Overweight is defined as having a body mass index (BMI) between 25.0 and 29.9; an obese weight status is a BMI greater than or equal to 30.0. BMI is defined as weight in kilograms divided by height in meters squared ( $w/h^2$ ) and was calculated from the self-reported height and weight measurements of Kent County residents participating in the survey.

Mirroring the trends observed both statewide and nationally, the rate of obesity in Kent County has continued to increase since 1993, showing an almost 11-point lift (from 17% in 1993 to 27.6% at present). However, obesity in Kent County is still less prevalent than it is in Michigan or the U.S. overall. Considering that the Healthy People 2020 target for obesity among adults is set at 30.6%, it is safe to say that Kent County is very likely to meet it.

Just as in the previous survey iteration, the percentage of obese respondents is highest in the lowest income bracket (under \$20,000 per annum) and among African Americans. Moreover, the lowest rates of obesity continue to be observed in the youngest age cohort (18-24 year olds).

**Body mass index (BMI) is defined as weight divided by height squared. A BMI of 30 or greater is considered obese.**

Demographic Characteristics	Obesity (BMI≥30.0)
-----------------------------	--------------------

<b>Total</b>	27.6%
--------------	-------

<b>Age</b>	
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18-24	18.9%
-------	-------

25-34	24.1%
-------	-------

35-44	30.4%
-------	-------

45-54	34.2%
-------	-------

55-64	33.3%
-------	-------

65+	24.4%
-----	-------

<b>Gender</b>	
---------------	--

Male	27.0%
------	-------

Female	28.1%
--------	-------

<b>Race</b>	
-------------	--

White	26.2%
-------	-------

Black	46.0%
-------	-------

Hispanic	27.6%
----------	-------

Non-Hispanic	27.5%
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<b>Education</b>	
------------------	--

< High School	23.6%
---------------	-------

High School Grad	34.3%
------------------	-------

Some College	27.4%
--------------	-------

College Graduate	23.9%
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<b>Household Income</b>	
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<\$20,000	36.5%
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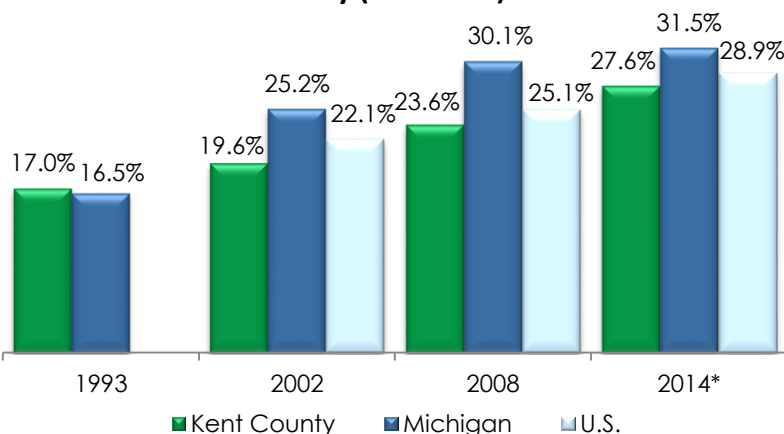
\$20,000-\$34,999	33.6%
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\$35,000-\$49,999	29.0%
-------------------	-------

\$50,000-\$74,999	33.7%
-------------------	-------

\$75,000 or more	22.5%
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**Obesity (BMI≥30.0)**



\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents and 2013 Nationwide BRFSS (States, DC and Territories)

# Physical Activity

## Healthy People 2020 objective PA-1: Reduce the proportion of adults who engage in no leisure-time physical activity

Regular physical activity has been shown to reduce the risk of premature mortality and a number of chronic diseases, such as colon cancer, hypertension, cardiovascular disease, and diabetes. Keeping physically active not only helps maintain a healthy body weight and normal muscle strength, bone mass, and joint function, but it can also relieve symptoms of depression.<sup>8</sup> The Healthy People target for no leisure-time physical activity is set at 32.6%.

The percentage of Kent County residents who report at least some leisure-time physical activity stands at approximately 80%, which is slightly above the statewide rate. However, this result has decreased somewhat since the 2008 survey and is now roughly at the 2002 level. This being said, the prevalence of no leisure-time activity among Kent County adults is currently 13 points below the 2020 target, so if the County can maintain the current rate for this indicator, the Healthy People objective will be easily met.

Leisure-time physical activity is least prevalent among the oldest respondent segment (age 65+), as well as among African Americans and Hispanics. Moreover, mirroring the patterns observed in 2008, individuals with relatively low educational attainment (high school graduate or less) and the less affluent ones (up to \$34,999 per year) are significantly less likely to report leisure-time physical activity than their counterparts.

### Percentage of respondents who reported no leisure-time physical activity

Demographic Characteristics	No Physical Activity
-----------------------------	----------------------

<b>Total</b>	19.6%
--------------	-------

#### Age

18-24	15.1%
25-34	24.4%
35-44	14.7%
45-54	17.6%
55-64	19.3%
65+	24.7%

#### Gender

Male	20.1%
Female	19.0%

#### Race

White	17.3%
Black	28.5%
Hispanic	30.9%
Non-Hispanic	18.2%

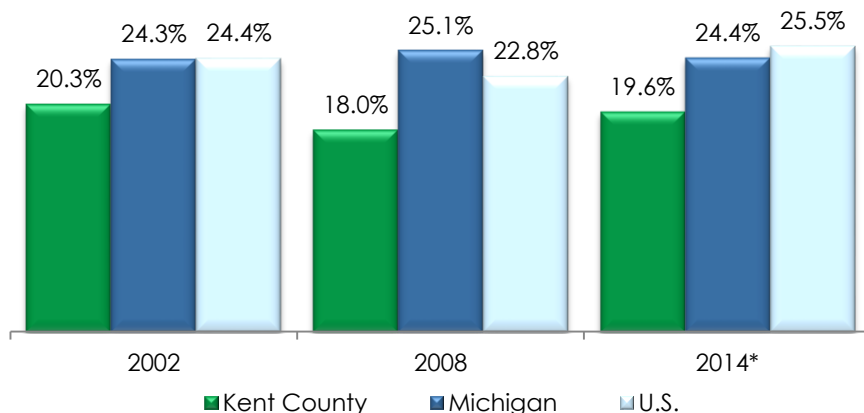
#### Education

< High School	38.6%
High School Grad	32.6%
Some College	15.3%
College Graduate	9.1%

#### Household Income

<\$20,000	29.9%
\$20,000-\$34,999	27.3%
\$35,000-\$49,999	19.1%
\$50,000-\$74,999	11.9%
\$75,000 or more	7.7%

### No Leisure-Time Physical Activity



\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents and 2013 Nationwide BRFSS (States, DC and Territories)

# Alcohol Consumption

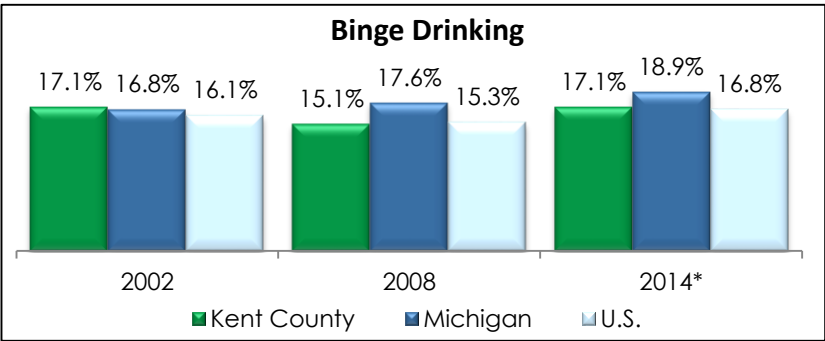


**Healthy People 2020 objective SA-14: Reduce the proportion of persons engaging in binge drinking during the past 30 days – adults aged 18 years and older**

**Healthy People 2020 objective SA-15: Reduce the proportion of adults who drank excessively in the previous 30 days**

Alcohol abuse has been associated with serious health problems such as cirrhosis of the liver, high blood pressure, stroke, and some types of cancer, and can increase the risk for motor vehicle accidents, injuries, violence, and suicide. In Michigan, the percent of fatal motor vehicle crashes that involved any alcohol was 22% in 2013.<sup>5</sup> Binge drinking is defined as consuming five or more drinks per occasion (for men) or 4 or more drinks per occasion (for women) at least once in the past month, while heavy drinking is defined as consuming more than two alcoholic drinks per day (for men) or more than one drink per day (for women) in the past month.

While the rate of heavy drinking among Kent County residents has dropped dramatically since 2008, the percentage of binge drinkers is back to 2002 levels, mirroring similar lifts observed state- and nationwide. Predictably, the highest rate of binge drinking continues to be observed among respondents under the age of 34, as well as Hispanic and Caucasian males, and those in the top income bracket (over \$75,000 per annum).



Percentage of respondents reporting heavy drinking and percentage of respondents reporting binge drinking		
Demographic Characteristics	Heavy Drinking	Binge Drinking
<b>Total</b>	0.5%	17.1%
<b>Age</b>		
18-24	-	28.8%
25-34	-	29.3%
35-44	0.9%	14.4%
45-54	1.4%	14.1%
55-64	0.8%	12.3%
65+	-	4.5%
<b>Gender</b>		
Male	1.0%	23.2%
Female	0.1%	11.3%
<b>Race</b>		
White	0.7%	18.3%
Black	-	6.6%
Hispanic	-	22.0%
Non-Hispanic	0.6%	16.7%
<b>Education</b>		
< High School	1.7%	17.9%
High School Grad	1.0%	20.1%
Some College	-	14.7%
College Graduate	0.4%	16.9%
<b>Household Income</b>		
<\$20,000	-	15.5%
\$20,000-\$34,999	-	19.2%
\$35,000-\$49,999	-	11.9%
\$50,000-\$74,999	0.8%	14.7%
\$75,000 or more	1.7%	20.1%

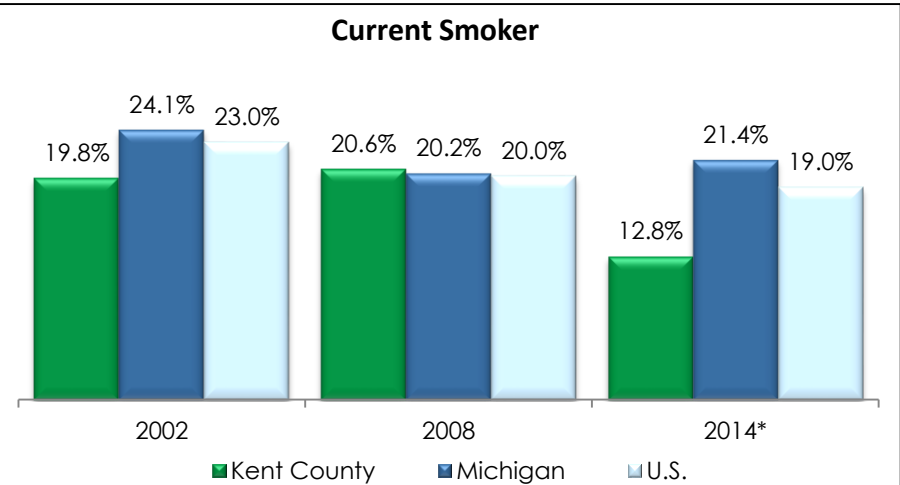
# Cigarette Smoking

## Healthy People 2020 objective TU-1: Reduce cigarette smoking by adults

Smoking contributes to the development of many kinds of chronic conditions, including cancers, respiratory diseases, and cardiovascular diseases, and “is the single most preventable cause of disease, disability, and death in the United States.”<sup>9</sup> It has been estimated that smoking costs the United States \$96 billion in annual medical costs and another \$97 billion in health-related economic losses,<sup>9</sup> as well as over 5 million years of potential life lost each year.<sup>10</sup> Current smoking status is defined as ever having smoked 100 cigarettes (five packs) and smoking cigarettes now, either every day or on some days.

Approximately 13% of Kent County adult residents are current smokers, based on the definition cited above. This figure represent a significant drop in comparison to previous survey waves, while the statewide and national results remain relatively stable since 2008. This being said, Kent County is well on track to meet the Healthy People 2020 objective in this Focus Area of reducing the number of current smoking adults to 12%.

Prevalence of smoking is least common among respondents over the age of 65, females, Caucasians and Hispanics, as well as those with at least some college education and individuals with a household income of at least \$35,000 per year.



\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents and 2013 Nationwide BRFSS (States, DC and Territories)

### Percentage of respondents who had ever smoked at least 100 cigarettes in their life and who smoke cigarettes now

Demographic Characteristics	Current Smoker
Total	12.8%
Age	
18-24	13.9%
25-34	14.5%
35-44	16.9%
45-54	9.2%
55-64	16.0%
65+	7.7%
Gender	
Male	15.0%
Female	10.6%
Race	
White	12.6%
Black	19.6%
Hispanic	11.3%
Non-Hispanic	13.0%
Education	
< High School	31.7%
High School Grad	19.9%
Some College	11.3%
College Graduate	4.8%
Household Income	
<\$20,000	21.3%
\$20,000-\$34,999	25.0%
\$35,000-\$49,999	11.1%
\$50,000-\$74,999	10.5%
\$75,000 or more	3.6%

# Breast Cancer Screening

**Healthy People 2020 objective C-3: Reduce the female breast cancer death rate**

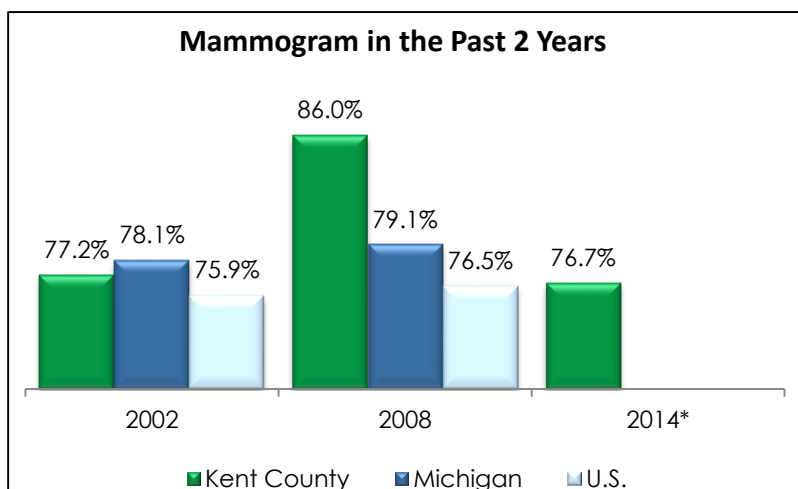
**Healthy People 2020 objective C-11: Reduce late-stage female breast cancer**

**Healthy People 2020 objective C-17: Increase the proportion of women who receive a breast cancer screening based on the most recent guidelines**

*Breast cancer is the second leading cause of cancer deaths among United States women. In 2013, there were 1,360 deaths among Michigan women due to breast cancer.<sup>11</sup> Early detection of breast cancer can occur through the use of screening tools such as mammography and clinical breast exams. Current recommendations from the American Cancer Society indicate that women aged 20-39 years should have a clinical or physical breast exam by a health professional every three years, and women aged 40 years and older should have both a clinical breast exam (CBE) and mammogram annually.*

Currently, roughly six in ten Kent County women 40 years of age and older (57.8%) claim to have had a mammogram in the past year, compared to 69.9% in 2008. Additionally, approximately three-quarters (76.7%) of women in the same age cohort have had a mammogram in the past two years; this is a nearly 10-point drop since the previous survey wave. These results call for Kent County Health Department's attention.

Compliance with regular mammograms is most prevalent among women in the top income bracket (at least \$75,000 per annum) as well as those age 50-69.



\*Note: Michigan and national data are not available for this category in 2014.

## Percentage of female respondents age 40 and over who have had a mammogram in the past year or in the past two years

Demographic Characteristics	Had Mammogram	
	Past Year	Past 2 Years
<b>Total</b>	57.8%	76.7%
<b>Age</b>		
40-49	51.5%	73.6%
50-59	61.7%	80.4%
60-69	68.7%	86.4%
70+	52.4%	66.8%
<b>Race</b>		
White	58.9%	76.3%
Black	55.7%	71.7%
Hispanic	50.5%**	68.4%**
Non-Hispanic	58.7%	77.9%
<b>Education</b>		
< High School	58.0%**	70.7%**
High School Grad	57.8%	77.6%
Some College	56.7%	77.0%
College Graduate	58.6%	77.1%
<b>Household Income</b>		
<\$20,000	42.9%	71.2%
\$20,000-\$34,999	55.7%	70.3%
\$35,000-\$49,999	52.3%	74.9%
\$50,000-\$74,999	58.5%**	75.9%**
\$75,000 or more	67.1%	84.3%

\*\*Caution: fewer than 50 respondents



# Cervical Cancer Screening

**Healthy People 2020 objective C-4: Reduce the death rate from cancer of the uterine cervix**

**Healthy People 2020 objective C-10: Reduce invasive uterine cervical cancer**

**Healthy People 2020 objective C-15: Increase the proportion of women who receive a cervical cancer screening based on the most recent guidelines**

Current guidelines for cervical cancer screening recommend that Pap testing should begin at 21 years of age and end at 65 years of age, regardless of the age of onset of sexual activity. Pap tests should be performed once every three years.<sup>12</sup> The target set by Healthy People 2020 is to increase the percentage of females aged 21-65 who received a cervical cancer screening to 93%.

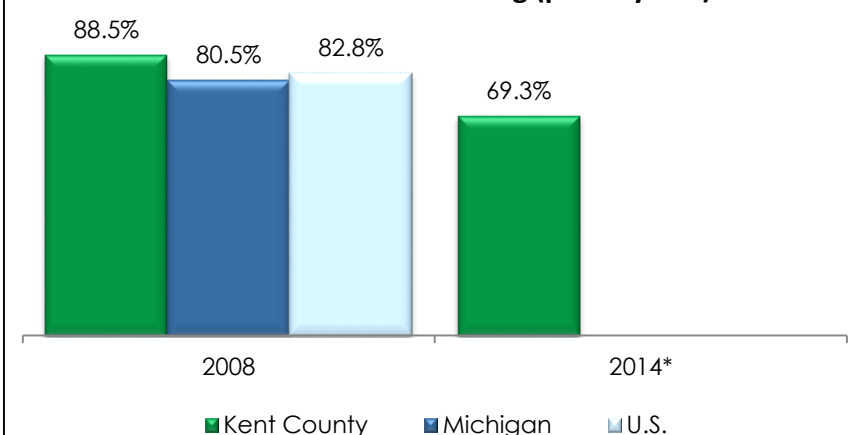
In 2014, nearly seven in ten Kent County women (69.3%) have had appropriately timed Pap test (within the past three years). This is a 19-point drop since the previous research wave, indicating this Focus Area needs Kent County Health Department's attention.

Regular Pap tests are most common in the 25-54 age segment, as well as among women with at least college education and those in the higher income brackets (at least \$50,000 per year).

## Percentage of female respondents who have had a Pap test within the last three years

Demographic Characteristics	Had Appropriately Timed Pap Test
<b>Total</b>	69.3%
<b>Age</b>	
18-24	33.4%
25-34	88.8%
35-44	85.2%
45-54	82.0%
55-64	68.3%
65+	41.3%
<b>Race</b>	
White	68.3%
Black	75.6%
Hispanic	72.3%
Non-Hispanic	68.8%
<b>Education</b>	
< High School	73.5%
High School Grad	60.0%
Some College	65.3%
College Graduate	78.5%
<b>Household Income</b>	
<\$20,000	64.4%
\$20,000-\$34,999	67.6%
\$35,000-\$49,999	57.6%
\$50,000-\$74,999	79.0%
\$75,000 or more	83.5%

## Cervical Cancer Screening (past 3 years)



\*Note: Michigan and national data are not available for this category in 2014.

# Colorectal Cancer Screening



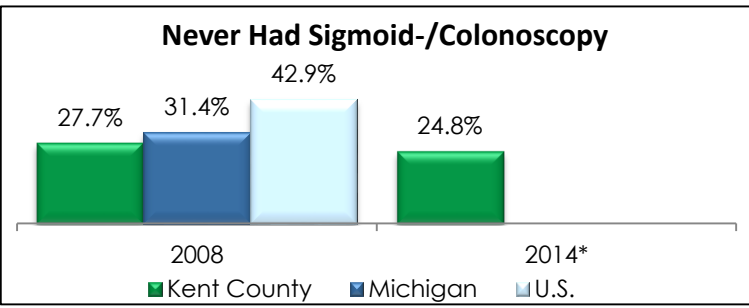
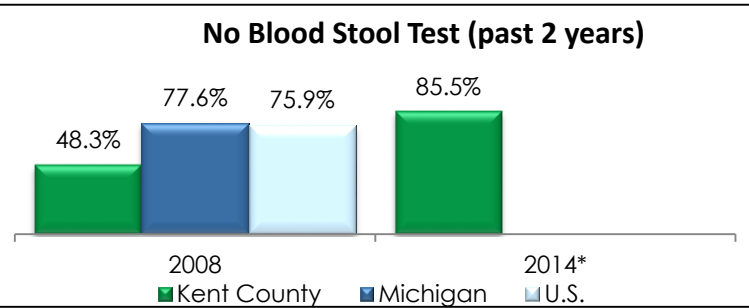
- Healthy People 2020 objective C-5: Reduce the colorectal cancer death rate
- Healthy People 2020 objective C-9: Reduce invasive colorectal cancer
- Healthy People 2020 objective C-17: Increase the proportion of adults who receive a colorectal cancer screening based on the most recent guidelines

In 2012, colorectal cancer was the second leading cause of cancer-related deaths in Michigan, with 1,721 deaths.<sup>13</sup> Fecal occult blood tests, sigmoidoscopy, and colonoscopy are screening procedures that are performed to detect colorectal cancer in the early stages. Appropriate colorectal cancer screening consists of a FOBT within the past year, sigmoidoscopy within the past five years, and colonoscopy within the past ten years.<sup>14</sup> One of the Healthy People 2020 targets is to increase the proportion of adults aged 50+ who have received such screening to 70.5%.

In 2014, almost nine in ten Kent County residents 50 and older (85.5%) did not have a blood stool test within the past 2 years. This figure represents a dramatic increase over the 2008 county results, but it is not too different from the 2008 state- and nationwide rates. Additionally, almost one-quarter of Kent County respondents have never had sigmoid- or colonoscopy; this is an approximately 3-point improvement over the 2008 survey. Further analysis shows that younger individuals, i.e. those age 50-59 are the most likely cohort to have never had any type of screening. Moreover, those in the lower education and lower income brackets are more likely to have never had sigmoid-/colonoscopy.

## Percentage of respondents age 50 and over who did not have a blood stool test within the last two years, and percentage of respondents who had never had a sigmoidoscopy or a colonoscopy

Demographic Characteristics	No Blood Stool Test	Never Had Sigmoid- or Colonoscopy
<b>Total</b>	85.5%	24.8%
<b>Age</b>		
50-59	92.8%	33.3%
60-69	82.8%	19.7%
70+	79.5%	18.9%
<b>Gender</b>		
Male	84.4%	21.8%
Female	86.6%	27.7%
<b>Race</b>		
White	86.2%	23.8%
Black	78.6%	27.8%
Hispanic	90.6%**	63.0%**
Non-Hispanic	85.3%	23.9%
<b>Education</b>		
< High School	77.9%**	37.5%**
High School Grad	85.8%	30.3%
Some college	87.8%	22.8%
College	85.1%	20.4%
<b>Household Income</b>		
<\$20,000	84.7%	40.0%
\$20,000-\$34,999	84.4%	22.8%
\$35,000-\$49,999	84.0%	17.1%
\$50,000-\$74,999	89.1%	17.7%
\$75,000 or more	87.9%	19.5%



24 \*Note: Michigan and national data are not available for this category in 2014. \*\*Caution: fewer than 50 respondents

2014 Behavioral Risk Factor Survey

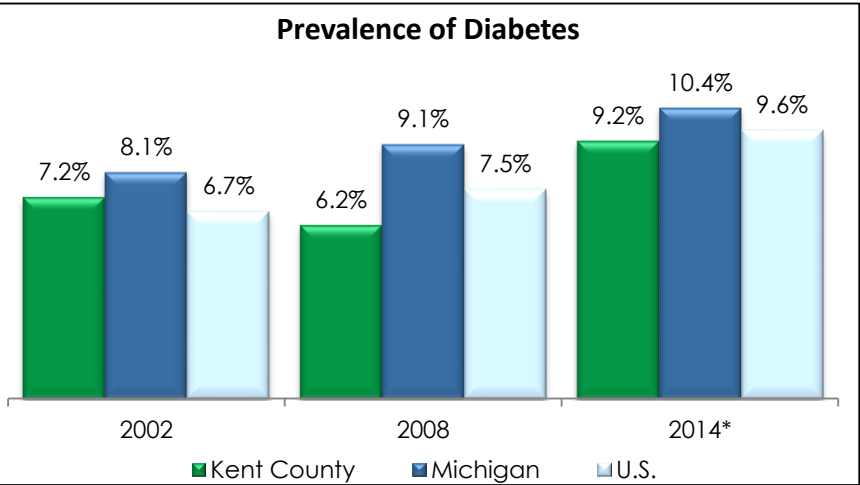


## Healthy People 2020 objective D-1: Reduce the annual number of new cases of diagnosed diabetes in the population

Diabetes mellitus is a chronic disease characterized by high glucose levels, owing to insufficient production of insulin by the pancreas or to a reduction in the body's ability to use insulin. In Michigan, diabetes was the seventh leading cause of death with 2,684 deaths in 2012. It was the primary cause of 3% of deaths statewide.<sup>3</sup> Obesity, poor diet, physical inactivity, and high blood pressure are just a few of the known risk factors that are associated with the development of diabetes.<sup>15</sup>

At 9.2%, the prevalence of diabetes among Kent County residents is up by 3 points since the 2008 survey. However, just as in previous iterations, this figure remains slightly lower than the statewide rate.

Mirroring the 2008 patterns, prevalence of diabetes increases substantially with the age of residents. It is also significantly higher among individuals with lower income levels (up to \$34,999 per year) and among African Americans.



\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents and 2013 Nationwide BRFSS (States, DC and Territories)

### Percentage of respondents who had ever been told by a doctor that they have diabetes (excluding gestational diabetes)

Demographic Characteristics	Ever Told You Have Diabetes
<b>Total</b>	9.2%
<b>Age</b>	
18-24	-
25-34	5.6%
35-44	4.6%
45-54	7.1%
55-64	16.7%
65+	22.5%
<b>Gender</b>	
Male	9.3%
Female	9.2%
<b>Race</b>	
White	8.5%
Black	18.9%
Hispanic	3.7%
Non-Hispanic	9.8%
<b>Education</b>	
< High School	15.6%
High School Grad	9.3%
Some College	10.7%
College Graduate	6.6%
<b>Household Income</b>	
<\$20,000	14.0%
\$20,000-\$34,999	13.8%
\$35,000-\$49,999	9.7%
\$50,000-\$74,999	11.0%
\$75,000 or more	3.7%

**Healthy People 2020 objective HDS-1: Increase overall cardiovascular health in the U.S. population**

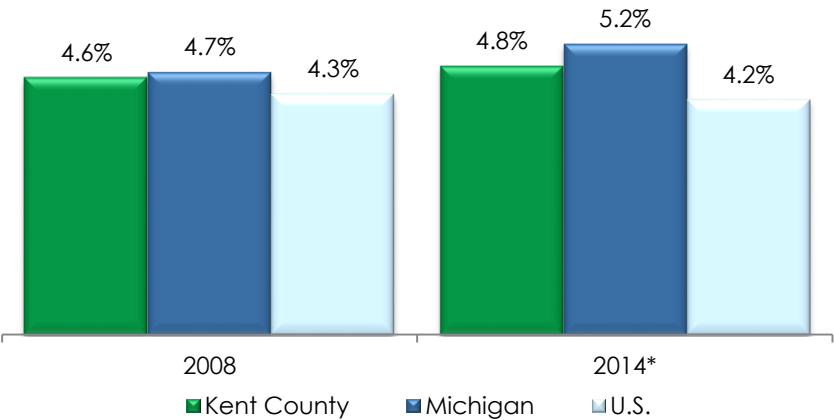
**Healthy People 2020 objective HDS-2: Reduce coronary heart disease deaths**

Heart disease and stroke are leading causes of death in the United States for both genders and across all ethnic groups. In 2012, in Michigan, heart disease was the primary cause of 23,502 deaths.<sup>3</sup> More than 5.1 million people nationwide have had heart failure, and about one-half of these individuals will die within five years of diagnosis. Cardiovascular disease costs the nation an estimated \$32 billion annually.<sup>16</sup> Modifying cardiovascular disease risk factors offers the greatest potential for reducing death and disability.

Among Kent County adults age 35 years of age or older, approximately 1 in 20 (4.8%) have been told at some point that they had angina or coronary heart disease. This figure has remained essentially unchanged since 2008, and is comparable to the Michigan and U.S. prevalence data.

Unsurprisingly, residents over the age of 65 report a significantly higher rate of heart disease than younger individuals. Moreover, males, non-Hispanics, those with less than high school education and those with an income of under \$35,000 per year are somewhat more apt to report heart disease than their counterparts; these patterns, however, are not statistically appreciable.

**Prevalence of Coronary Heart Disease**



\*Note: The 2014 comparative data is based on 2013 BRFS of Michigan Residents. National data is not available for this category for year 2002.

**Percentage of respondents age 35 and over who were told by a doctor that they had angina or coronary heart disease**

Demographic Characteristics	Ever Told You Have Angina or Coronary Heart Disease
Total	4.8%
Age	
35-44	0.9%
45-54	1.7%
55-64	5.8%
65+	12.1%
Gender	
Male	5.9%
Female	3.8%
Race	
White	5.2%
Black	5.8%
Hispanic	0.3%
Non-Hispanic	5.1%
Education	
< High School	8.9%
High School Grad	4.9%
Some College	6.6%
College Graduate	2.8%
Household Income	
<\$20,000	7.6%
\$20,000-\$34,999	7.9%
\$35,000-\$49,999	3.3%
\$50,000-\$74,999	4.7%
\$75,000 or more	2.4%

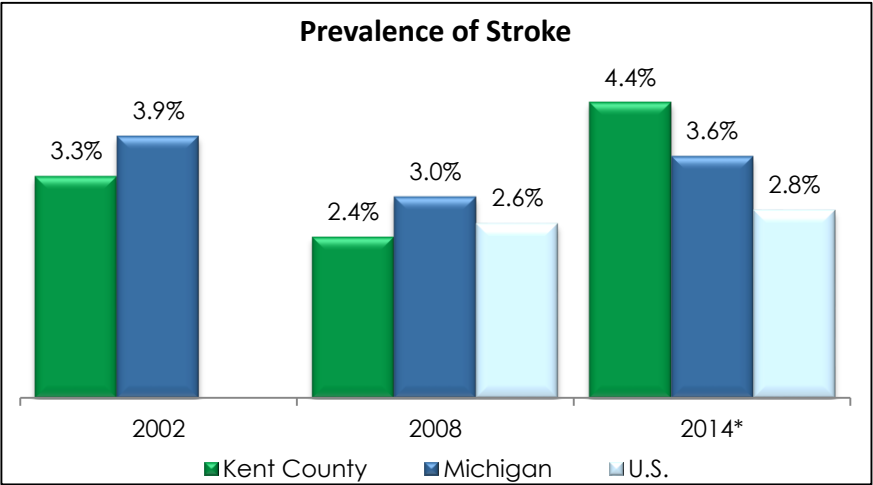
**Healthy People 2020 objective HDS-3: Reduce stroke deaths**

**Healthy People 2020 objective HDS-17: Increase the proportion of adults aged 20 years and older who are aware of the symptoms and how to respond to a stroke**

Stroke kills nearly 130,000 Americans each year – that's 1 of every 19 deaths. Stroke and Cardiovascular Heart Disease share many of the same risk factors. Although the health complications from stroke are great, the risk of stroke can be greatly reduced by increasing physical activity, reducing fat and salt in the diet, avoiding drinking too much alcohol, and quitting smoking.<sup>17</sup>

The overall rate of stroke among Kent County adults age 35 and older is 4.4%. This figure represents a 2-point increase over the 2008 result, and is somewhat higher than the statewide and national rates. This Focus Area may need the Kent County Health Department's particular attention.

Again, predictably, stroke is most common in the oldest age cohort (at least 65 years olds). Mirroring the 2008 survey patterns, it is also significantly more prevalent among African Americans, those in the lower income categories (up to \$34,999 per annum) and those with limited educational attainment (less than a high school).



\*Note: The 2014 comparative data is based on 2013 BRFs of Michigan Residents. National data is not available for this category for year 2002.

**Percentage of respondents age 35 and over who reported a doctor has told them they had a stroke**

Demographic Characteristics	Ever Told You Had a Stroke
-----------------------------	----------------------------

<b>Total</b>	4.4%
--------------	------

**Age**

35-44	2.5%
-------	------

45-54	3.4%
-------	------

55-64	4.7%
-------	------

65+	7.5%
-----	------

**Gender**

Male	5.8%
------	------

Female	3.1%
--------	------

**Race**

White	3.9%
-------	------

Black	8.1%
-------	------

Hispanic	0.0%
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Non-Hispanic	4.6%
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**Education**

< High School	13.1%
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High School Grad	4.1%
------------------	------

Some College	5.1%
--------------	------

College Graduate	2.6%
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**Household Income**

<\$20,000	9.4%
-----------	------

\$20,000-\$34,999	8.3%
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\$35,000-\$49,999	5.5%
-------------------	------

\$50,000-\$74,999	0.7%
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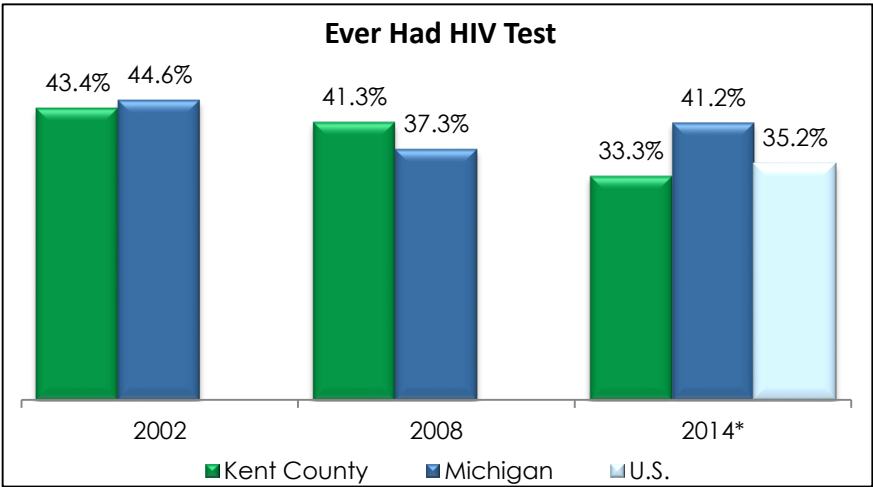
\$75,000 or more	0.7%
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- Healthy People 2020 objective HIV-1: Reduce new HIV diagnoses among adolescents and adults**
- Healthy People 2020 objective HIV-14: Increase the proportion of adolescents and adults who have been tested for HIV in the past 12 months**
- Healthy People 2020 objective HIV-12: Reduce deaths from HIV infection**

*It is estimated that 19,100 people are living with HIV/AIDS in Michigan,<sup>18</sup> a fair proportion of whom may not know that they are infected. Early awareness of an HIV infection through HIV testing can prevent further spread of the disease, and an early start on antiretroviral therapy can increase the quality of life among those who are living with HIV/AIDS.*

One-third (33.3%) of Kent County residents aged 18-64 have ever been tested for HIV, apart from blood donations. This percentage represents a notable drop as compared to 6 years ago. It is also below the state- and nationwide results, therefore calling for the Kent County Health Department's attention.

A segment analysis reveals that respondents aged 25-54 are significantly more likely than those younger and those older to indicate they have ever been tested. Similarly, respondents in the bottom income category (under \$20,000 per year) are much more likely to have been tested than their more affluent counterparts. Finally, just as in the previous survey iteration, women are substantially more likely than men to have been tested, and African Americans and Hispanics are much more likely to have been tested than Caucasians.



*\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents and 2013 Nationwide BRFSS (States, DC and Territories). National data is not available for this category for year 2002 and 2008.*

Percentage of respondents age 18-64 who have ever had an HIV test, excluding HIV tests when donating blood	
Demographic Characteristics	Ever Tested for HIV
Total	33.3%
Age	
18-24	16.1%
25-34	46.3%
35-44	41.9%
45-54	32.5%
55-64	24.5%
Gender	
Male	25.9%
Female	40.3%
Race	
White	29.4%
Black	65.3%
Hispanic	48.8%
Non-Hispanic	31.4%
Education	
< High School	38.7%
High School Grad	32.8%
Some College	32.4%
College Graduate	33.3%
Household Income	
<\$20,000	48.8%
\$20,000-\$34,999	34.5%
\$35,000-\$49,999	30.8%
\$50,000-\$74,999	36.3%
\$75,000 or more	28.4%

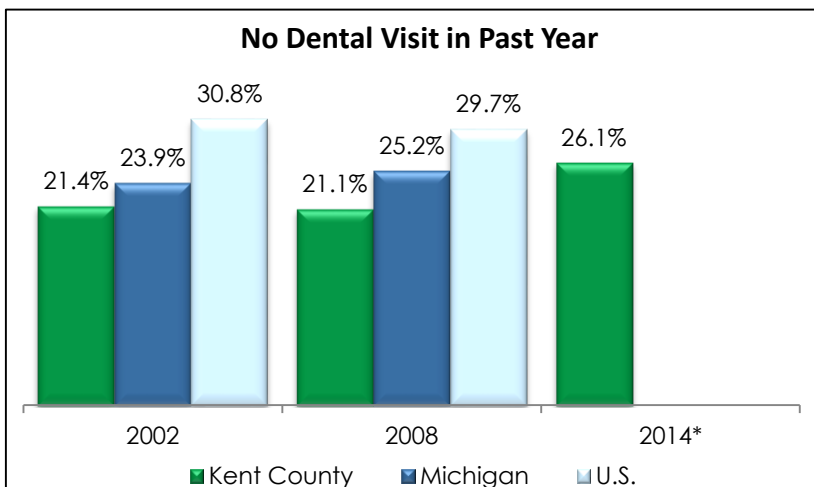
**Healthy People 2020 objective OH-3: Reduce the proportion of adults with untreated dental decay**

**Healthy People 2020 objective OH-14: Increase the proportion of adults who receive preventive interventions in dental offices**

*Oral health is an important part of one's general health and quality of life. Regular dental care includes preventive dental services such as teeth cleaning, and permits early diagnosis and treatment of tooth decay and periodontal diseases. In general, lower income status has been associated with poorer oral health status.<sup>19</sup>*

Approximately one-quarter (26.1%) of Kent County residents have not visited an oral health care provider in the past year. This is a 5-point increase when compared to previous survey iterations, and a signal that this Focus Area may need the Kent County Health Department's attention.

Substantial differences are observed in terms of age of Kent County residents, with younger individuals (i.e. those under the age of 35) being less likely to comply with a healthy oral health care routine. Moreover, African Americans are the most likely ethnic segment to report no dental visits in the past 12 months. Regular visits are cited most commonly by respondents in the top education and income brackets (i.e. those with a minimum of a college degree and at least \$75,000 per annum).



\*Note: Michigan and national data are not available for this category in 2014

**Percentage of respondents who have not visited a dentist or dental clinic within the past 12 months**

Demographic Characteristics	Not Visited Dentist in the Past Year
<b>Total</b>	26.1%
<b>Age</b>	
18-24	36.7%
25-34	33.7%
35-44	26.7%
45-54	22.3%
55-64	19.6%
65+	19.8%
<b>Gender</b>	
Male	28.8%
Female	23.6%
<b>Race</b>	
White	23.2%
Black	42.9%
Hispanic	33.5%
Non-Hispanic	25.3%
<b>Education</b>	
< High School	49.5%
High School Grad	32.1%
Some College	30.1%
College Graduate	13.4%
<b>Household Income</b>	
<\$20,000	54.3%
\$20,000-\$34,999	36.4%
\$35,000-\$49,999	21.7%
\$50,000-\$74,999	15.6%
\$75,000 or more	6.9%

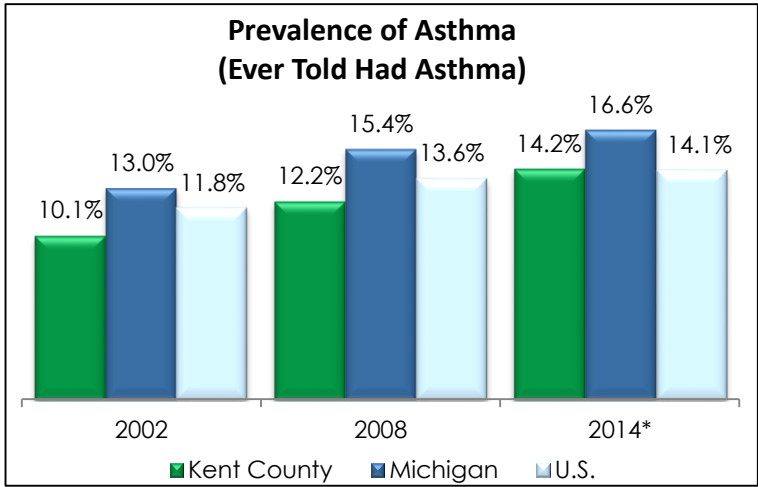
**Healthy People 2020 RD-1: Reduce asthma deaths**

**Healthy People 2020 objective RD-7: Increase the proportion of persons with current asthma who receive appropriate asthma care according to National Asthma Education and Prevention Program (NAEPP) guidelines**

Asthma is a chronic inflammatory disorder of the lungs, and is characterized by wheezing, coughing, difficulty breathing, and chest tightness. Asthma attacks can be triggered by a variety of factors, such as cold air, allergens, irritants, and respiratory viral infections. Allergies, a family history of asthma or allergy, low birth weight, and exposure to tobacco smoke are just a few potential risk factors that are associated with the development of asthma.<sup>20</sup>

Mirroring the trends observed for Michigan and the U.S. in general, the prevalence of self-reported asthma among Kent County adults has been increasing gradually since 2002. It is currently at 14.2%, a result lower than the statewide figure, and at par with the national rate.

Just as in the 2008 survey wave, asthma appears to be significantly more prevalent among females and African Americans than among their counterparts.



\*Note: The 2014 comparative data is based on 2013 BRFSS of Michigan Residents and 2013 Nationwide BRFSS (States, DC and Territories)

**Percentage of respondents who have ever been told by a doctor that they had asthma, and percentage of respondents who still have asthma**

Demographic Characteristics	Ever Told Have Asthma	Still Have Asthma
Total	14.2%	9.0%
Age		
18-24	19.7%	11.7%
25-34	10.5%	4.3%
35-44	15.6%	11.1%
45-54	14.2%	9.2%
55-64	15.2%	10.7%
65+	10.7%	8.2%
Gender		
Male	11.9%	5.5%
Female	16.3%	12.3%
Race		
White	13.3%	8.3%
Black	20.8%	17.3%
Hispanic	8.4%	4.2%
Non-Hispanic	14.3%	9.4%
Education		
< High School	10.4%	5.0%
High School Grad	10.6%	5.3%
Some College	16.7%	12.6%
College Graduate	15.6%	9.7%
Household Income		
<\$20,000	18.1%	16.1%
\$20,000-\$34,999	12.8%	5.8%
\$35,000-\$49,999	14.4%	10.5%
\$50,000-\$74,999	12.4%	8.1%
\$75,000 or more	13.4%	8.9%

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## **2014 Kent County**

### **Behavioral Risk Factor Survey**

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