Kent County Health Department

2020 Behavioral Risk Factor Survey

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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*).

Because the development of a new set of science-based national objectives – *Healthy People 2030* – is still underway, this report is based on the most recent document, i.e., *Healthy People 2020*[1], which outlines 10-year national health objectives organized into 4 over-arching goals and 42 Focus Areas (page 5). 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 6) was developed. The LHIs reflect a life stage 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.

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
2. Adolescent Health
3. Arthritis, Osteoporosis, and Chronic Back Conditions
4. Blood Disorders and Blood Safety
5. Cancer
6. Chronic Kidney Disease
7. Dementias, Including Alzheimer's Disease
8. Diabetes
9. Disability and Health
10. Early and Middle Childhood
11. Educational and Community-Based Programs
12. Environmental Health
13. Family Planning
14. Food Safety
15. Genomics
16. Global Health
17. Health Communication & Health Information Technology
18. Health-Related Quality of Life & Well-Being
19. Healthcare-Associated Infections
20. Hearing and Other Sensory or Communication Disorders
21. Heart Disease and Stroke
22. HIV
23. Immunization and Infectious Diseases
24. Injury and Violence Prevention
25. Lesbian, Gay, Bisexual and Transgender Health
26. Maternal, Infant, and Child Health
27. Medical Product Safety
28. Mental Health and Mental Disorders
29. Nutrition and Weight Status
30. Occupational Safety and Health
31. Older Adults
32. Oral Health
33. Physical Activity
34. Preparedness
35. Public Health Infrastructure
36. Respiratory Diseases
37. Sexually Transmitted Diseases
38. Sleep Health
39. Social Determinants of Health
40. Substance Abuse
41. Tobacco Use
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 Behavioral Risk Factor Survey (MiBRFSS) follows the overall CDC telephone survey protocol for the BRFSS and is conducted through a collaborative effort between the Population Health Surveillance Branch (PHSB) of the Centers for Disease Control and Prevention (CDC), the Michigan State University Institute for Public Policy and Social Research (IPPSR), and the Michigan Department of Health & Human Services (MDHHS).

In 2020, 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 as well as several survey modules.

For the needs of the 2020 Kent County BRFSS, the interviews were administered via telephone (via landline and cell phone) to randomly selected adults from a sample of households in the County.
- ✓ The sample of landline telephone numbers was selected using a random-digit-dialed methodology with disproportionate stratification. To elevate the representativeness of the collected data, the unlisted sample of the County was supplemented by a targeted sample of its African American and Hispanic residents.
- ✓ The cell phone sample included the application of Cellular Working Identification Number Service, which identified inactive telephone numbers within the cellular RDD sample. In order to improve the efficiency of the sample further and reduce the number of out-of-scope calls, a zip code matching process was also used.

The collected BRFSS data were weighted to adjust for gender, age, and race, using the 2010 Kent County Census population distributions.

Sample Results

In line with the standard requirements of statistical significance, the recommended number of completes was 1,200, including oversamples of the Hispanic and African American populations (each oversample constituting 10% of the total completes). The actual oversample achieved in the study was 9% for each of the two oversampled segments. This is because the entire targeted sample available for the Kent County was exhausted, and further attempts using the general population sample records would be inefficient, unnecessarily driving the total number of completes up. The recommended and actual number of completes are displayed in the table below:

Recommended Sample	Actual Sample
Total n=1,200	**Total n=1,375**
Inclusive of: • 10% Hispanic oversample (n=120) • 10% African American oversample (n=120)	Inclusive of: • 9% of Hispanic oversample (n=131) • 9% of African American oversample (n=131)

Among the calls that were attempted, there were 1,375 completed interviews (as shown above), as well as 812 refusals, 4,781 non-working or disconnected numbers, 11,137 no answers, 7,388 numbers that were not private residences, 13,846 numbers and/or respondents with undetermined eligibility, 90 households with physical or mental impairment, 121 eligible respondents selected but not interviewed, 272 households and/or eligible respondents with language barriers, 2,444 households with telecommunication barriers and special technological circumstances, 336 households on a never-call list, 1,894 households that were out-of-sample, 510 fax or modem lines, 17 cell phone numbers reached on a landline, 26 pagers, and 34 interviews that were terminated. The American Association for Public Opinion Research (AAPOR) response rate was 15.02%. The refusal rate was 1.73%.

All interviews were completed between February 3 and March 22, 2020, with each completed interview lasting, on average, approximately 24 minutes.

Note on Comparative Data

Please note that, when available, comparisons to Michigan and national results presented in this report are based on the 2018 Michigan and U.S. Behavioral Risk Factor Surveys (the most recent surveys released to the public).[2, 4]

In a few instances, for question topics not released to the public at this time, older state and national BRFSS data are used for comparisons. This is referenced underneath the charts presented for each topic. The affected report sections include:

- *Module 17: Mental Illness and Stigma – 2007 and 2009 Michigan and U.S. Behavioral Risk Factor Surveys data is used for comparisons. This is due to the availability of data: the last time Module 17 was asked as part of the Michigan BRFSS was in 2009. The last time it was asked nationwide on a large scale was 2007 (36 states).*

- *Core Section 4: Hypertension Awareness, Core Section 5: Cholesterol Awareness, and Core Section 12: Fruit and Vegetable Consumption – comparisons are based on 2017 Michigan and U.S. Behavioral Risk Factor Surveys, as this is the most recent data released.*

- *Module 1: Prediabetes – comparisons are based on combined 2012-2014 and 2015 Michigan BRFSS figures. These are the most recent figures available to the public.*

- *Module 25: Marijuana Use – comparisons are based on combined 2016-2017 U.S. Behavioral Risk Factor Survey data, which is the most recent nationwide data available to the public.*

- *Module 5: Sugar Sweetened Beverages – this optional module, in its current form, was introduced only in 2016 and asked twice (in years 2016 and 2017). The most recent publicly available data comes from 2016.*

- *Module 29: Sexual Orientation and Gender Identity – this optional module was first introduced in 2014, and the most recent publicly available data comes from 2016.*

In some cases, comparative BRFSS data is not available at all. The affected sections include:

- *Module 24: Social Determinants of Health – this module was asked for the first and only time in 2017. A total of 13 states utilized this optional module at that time, but Michigan was not one of them. National data has not been released to the public.*

- *Module 14: Healthcare Access – this module was first introduced in 2013. The last time it was utilized on a large scale was 2014 (41 states, including Michigan). Since then, only a handful of states have used this module, and Michigan has not been one of them. The 2014 Michigan data for this module has not been published. Nationwide data for any of the iterations from 2013 to 2020 has not been published either.*

- *Module 1: Prediabetes – only partial nationwide BRFSS data from this optional module has been published.*

- *Module 25: Marijuana Use – this module was first introduced in 2016 and has not been asked in Michigan to date.*

- *Module 25: Marijuana Use, Module 5: Sugar Sweetened Beverages, and Module 29: Sexual Orientation and Gender Identity – these optional modules have not been asked in Michigan to date.*

- *Module 13: Reactions to Race – this optional module has been asked in some years in the period 2004-2013, by 1-3 states at a time. The only time it was asked in Michigan was 2006. Neither national nor state data are publicly available.*

Analysis of Selected Risk Factors

Summary Table: At a Glance

Factor	Kent County	Michigan
Health Status (fair/poor)	12.0%	19.3%*
Healthy Days: Poor physical health (14+ days)	8.4%	14.3%*
Healthy Days: Poor mental health (14+ days)	13.9%	14.3%*
Mental Illness & Stigma: Nervous feelings all/most of the time (past 30 days)	8.3%	6.0%**
Mental Illness & Stigma: Hopeless feelings all/most of the time (past 30 days)	3.8%	2.8%**
Mental Illness & Stigma: Restless/fidgety feelings all/most of the time (past 30 days)	7.9%	7.8%**
Mental Illness & Stigma: Depressed feelings all/most of the time (past 30 days)	3.5%	2.6%**
Mental Illness & Stigma: Feelings that everything was an effort all/most of the time (past 30 days)	8.5%	9.0%**
Mental Illness & Stigma: Worthless feelings all/most of the time (past 30 days)	2.5%	2.5%**
Mental Illness & Stigma: Treatment can help people with mental illness lead normal lives – level of disagreement	3.5%	5.6%***
Mental Illness & Stigma: People are generally caring and sympathetic to people with mental illness – level of disagreement	35.1%	38.6%***
Social Determinants of Health: Inability to pay bills	8.0%	N/A
Social Determinants of Health: Unsafe neighborhoods	5.0%	N/A
Social Determinants of Health: Food insecurity	3.7%	N/A
Social Determinants of Health: Healthy meal insecurity	4.2%	N/A
Social Determinants of Health: Not enough money at the end of the month	6.5%	N/A
Social Determinants of Health: Stress all/most of the time (past 30 days)	10.2%	N/A
Healthcare Access: No health care coverage (age 18-64)	10.6%	9.0%*
Healthcare Access: No personal health care provider	12.7%	14.9%*
Healthcare Access: No health care access due to cost	8.8%	11.8%*
Healthcare Access: No routine checkup	18.9%	20.5%*
Hypertension Awareness: Ever told had high blood pressure	29.2%	34.7%****
Cholesterol Awareness: Blood cholesterol not checked within last 5 years	10.3%	10.8%****
Cholesterol Awareness: Had blood cholesterol checked and told it was high	25.7%	35.1%****
Chronic Health Conditions: Ever told had a heart attack	2.9%	5.3%*
Chronic Health Conditions: Ever told had angina or coronary artery disease	3.9%	5.0%*

Note: Based on 2018 BRFSS of Michigan Residents
**Note: Based on 2007 BRFSS of Michigan Residents
***Note: Based on 2009 BRFSS of Michigan Residents
****Note: Based on 2017 BRFSS of Michigan Residents
^Items marked in red fall below the statewide figures and may require the County's attention.
Items marked in green indicate areas where the County is outperforming the state.

Analysis of Selected Risk Factors

Summary Table: At a Glance

Factor	Kent County	Michigan
Chronic Health Conditions: Ever told had a stroke	2.5%	3.4%*
Chronic Health Conditions: Ever told had asthma	16.8%	16.0%*
Chronic Health Conditions: Ever told had COPD	4.0%	8.6%*
Chronic Health Conditions: Ever told had a depressive disorder	23.7%	23.2%*
Chronic Health Conditions: Ever told had kidney disease	2.9%	3.5%*
Chronic Health Conditions: Ever told had skin cancer	4.6%	6.4%*
Chronic Health Conditions: Ever told had any other types of cancer	5.7%	7.7%*
Chronic Health Conditions: Ever told had diabetes (excluding pregnancy)	8.5%	11.7%*
Prediabetes: Had diabetes test (past 3 years)	47.8%	55.3%**
Prediabetes: Ever told had prediabetes	9.5%	6.8%*****
Arthritis: Ever told you had some form of arthritis	23.1%	32.1%*
Tobacco Use: Current smoker	13.5%	18.9%*
Marijuana Use: Used 1+ day (past 30 days)	16.1%	N/A
Alcohol Consumption: Binge drinking	15.8%	18.2%*
Alcohol Consumption: Heavy drinking	2.1%	6.4%*
Physical Activity: No activity (past 30 days)	25.4%	23.9%*
Fruit Consumption (<1 time/day)	36.7%	36.4%***
Vegetable Consumption (<1 time/day)	19.7%	18.5%***
Sugar Sweetened Beverages (1+ time/day)	21.4%	32.1%****
Immunization: No flu shot in past year (age 65+)	20.9%	48.2%*
Immunization: Never had pneumococcal vaccination (age 65+)	23.0%	25.8%*
HIV/AIDS: Ever had an HIV test	37.6%	39.9%*
Sexual Orientation & Gender Identity: LGBO orientation	4.8%	N/A
Sexual Orientation & Gender Identity: Transgender status	0.7%	N/A
Reactions to Race: Discrimination at work	3.1%	N/A
Reactions to Race: Discrimination when seeking health care	1.5%	N/A
Reactions to Race: Physical effects of discrimination	2.6%	N/A
Reactions to Race: Emotional effects of discrimination	6.3%	N/A

*Note: Based on 2018 BRFSS of Michigan Residents
**Note: Based on 2012-2014 BRFSS of Michigan Residents
***Note: Based on 2017 BRFSS of Michigan Residents
****Note: Based on 2016 BRFSS of Michigan Residents
*****Note: Based on 2015 BRFSS of Michigan Residents
^Items marked in red fall below the statewide figures and may require the County's attention.
Items marked in green indicate areas where the County is outperforming the state.

2020 Behavioral Risk Factor Survey

Health Status

HEALTH DEPARTMENT
Caring today for a healthy tomorrow

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.

Only 12.0% of Kent County residents report fair or poor general health – a rate which is notably below the Michigan and nationwide figures (19.3% and 17.3%, respectively).

The Kent County score represents a roughly 4-point drop since 2017, and the most favorable result since 2008. At the same time, the state result shows an increase of nearly 1 point since 2017, while the nationwide result is essentially consistent with the previous research wave.

The self-reported rate of fair/poor health peaks among residents older than 65 years of age, with over one-fifth giving this response. Additionally, in line with the results observed in the past iterations of Kent BRFSS, African Americans, residents with less than a high school education, and those with less than $50,000 in an annual household income are among the most likely to rate their health as fair or poor.

Percentage of respondents who said their health, in general, was fair or poor

Demographic Characteristics	Prevalence
Total	12.0%
Age	
18-24	5.4%
25-34	10.4%
35-44	10.6%
45-54	12.4%
55-64	12.0%
65+	21.5%
Gender	
Male	10.4%
Female	13.4%
Race	
White	10.3%
Black	22.2%
Hispanic	15.1%
Non-Hispanic	11.6%
Education	
< High School	24.7%
High School Grad	16.7%
Some College	12.7%
College Graduate	6.8%
Household Income	
<$20,000	16.9%
$20,000-$34,999	20.2%
$35,000-$$49,999	24.1%
$50,000-$74,999	3.4%
$75,000 or more	2.5%

Health Status: Fair or Poor

Year	Kent County	Michigan	U.S.
2002	12.9%	13.5%	14.8%
2008	10.8%	14.5%	14.7%
2014	13.7%	16.8%	16.9%
2017	16.1%	18.4%	17.7%
2020*	12.0%	19.3%	17.3%

■ Kent County ■ Michigan ■ U.S.

Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Healthy Days: Physical Health

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

Health-related quality of life is a multi-dimensional concept that includes domains related to physical, mental, emotional, and social functioning. Physical well-being relates to vigor and vitality, feeling very healthy and full of energy. The key indicator used in this analysis is the number of days in the past month when residents experienced physical health problems, and, in particular, whether they had experienced problems for 14 or more days within that timeframe.

A total of 8.4% of Kent County residents report having 14 or more days of poor physical health. While the state- and nationwide figures remain consistent with the 2017 results, Kent County's poor physical health rate continues to fall below them. It is also the most favorable score noted in the County since 2008.

Further analysis by demographic factors shows that respondents over the age of 35, as well as those with household incomes below $50,000 per year, are among the most likely to report poor physical health. This is a continuation of a trend observed in previous survey waves.

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

Demographic Characteristics	Prevalence
Total	8.4%
Age	
18-24	5.3%
25-34	2.1%
35-44	9.4%
45-54	10.3%
55-64	11.7%
65+	12.8%
Gender	
Male	7.1%
Female	9.6%
Race	
White	8.9%
Black	6.2%
Hispanic	3.9%
Non-Hispanic	8.8%
Education	
< High School	11.6%
High School Grad	8.9%
Some College	10.7%
College Graduate	6.0%
Household Income	
<$20,000	15.9%
$20,000-$34,999	11.4%
$35,000-$$49,999	12.3%
$50,000-$74,999	6.1%
$75,000 or more	3.5%

Poor Physical Health
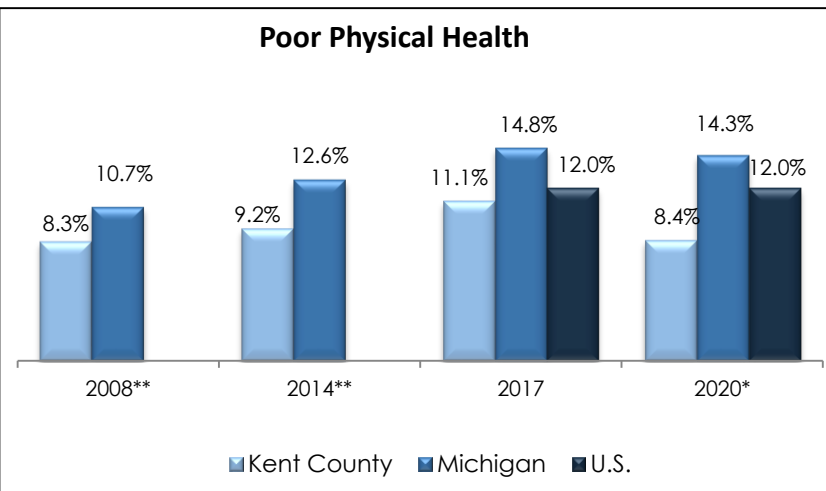
Year	Kent County	Michigan	U.S.
2008**	8.3%	10.7%	
2014**	9.2%	12.6%	
2017	11.1%	14.8%	12.0%
2020*	8.4%	14.3%	12.0%

Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)
**National comparative data is not available for this category for years 2008 and 2014.*

Healthy Days: Mental Health

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

Mental well-being includes being satisfied with one's life; balancing positive and negative emotions; accepting one's self; finding purpose and meaning in one's life; seeking personal growth, autonomy, and competence; believing one's life and circumstances are under one's control; and generally experiencing optimism. The key indicator used in this analysis is the number of days in the past month that residents experienced mental health problems and, in particular, whether they had experienced problems for 14 or more days within that timeframe.

A total of 13.9% of Kent County residents report having 14 or more days of poor mental health. The percentage of respondents citing poor mental health has remained essentially unchanged over the past 3 years and continues to be slightly below the Michigan figure (14.3%) and somewhat above the nationwide score (12.4%).

In comparison to 2017, a massive lift (over 12 points) occurred among young residents of Kent County (age 18-24) reporting poor mental health. At present, they are by far the most likely segment to report mental health issues.

Additionally, mirroring the patterns noted in previous survey waves, females, white and non-Hispanic residents, non-college graduates, and those with less than $75,000 in annual household incomes drive the incidence of reported poor mental health.

Poor Mental Health

Bar chart "Poor Mental Health" showing Kent County, Michigan, U.S.:
- 2008**: Kent County 10.0%, Michigan 10.6%
- 2014**: Kent County 7.9%, Michigan 12.9%
- 2017: Kent County 13.2%, Michigan 13.7%, U.S. 12.0%
- 2020*: Kent County 13.9%, Michigan 14.3%, U.S. 12.4%

☐ Kent County ☐ Michigan ☐ U.S.

Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

**National comparative data is not available for this category for years 2008 and 2014.*

Percentage of respondents with 14 or more days of poor mental health	
Demographic Characteristics	**Prevalence**
Total	13.9%
Age	
18-24	30.2%
25-34	13.0%
35-44	14.5%
45-54	11.5%
55-64	13.2%
65+	5.2%
Gender	
Male	10.5%
Female	17.3%
Race	
White	15.3%
Black	7.6%
Hispanic	8.4%
Non-Hispanic	14.7%
Education	
< High School	12.6%
High School Grad	18.3%
Some College	18.2%
College Graduate	8.5%
Household Income	
<$20,000	21.6%
$20,000-$34,999	20.3%
$35,000-$$49,999	19.8%
$50,000-$74,999	13.5%
$75,000 or more	4.7%

Mental Illness & Stigma: Nervous Feelings

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

Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. It is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community and society. Mental disorders are health conditions that are characterized by alterations in thinking, mood, and/or behaviour that are associated with distress and/or impaired functioning. Mental illness is the term that refers collectively to all diagnosable mental disorders.[1]

A total of 8.3% of Kent residents report feeling nervous all or most of the time within the past 30 days. This figure is above the results noted for Michigan (6.0%) and U.S. as a whole (5.7%).

The incidence of nervous feelings peaks among the youngest resident segment (18-24), with almost a fifth claiming they felt nervous all or most of the time in the past month.

Additionally, females, respondents with annual household incomes below $50,000, as well as non-college graduates are more likely than their counterparts to report feeling nervous all or most of the time.

Percentage of respondents who felt nervous all/most of the time during the past 30 days

Demographic Characteristics	Prevalence
Total	8.3%
Age	
18-24	19.4%
25-34	9.2%
35-44	7.3%
45-54	8.1%
55-64	4.4%
65+	3.0%
Gender	
Male	5.6%
Female	10.9%
Race	
White	8.7%
Black	6.5%
Hispanic	6.5%
Non-Hispanic	8.5%
Education	
< High School	9.6%
High School Grad	10.2%
Some College	11.1%
College Graduate	4.9%
Household Income	
<$20,000	11.2%
$20,000-$34,999	14.6%
$35,000-$$49,999	9.0%
$50,000-$74,999	5.3%
$75,000 or more	1.7%
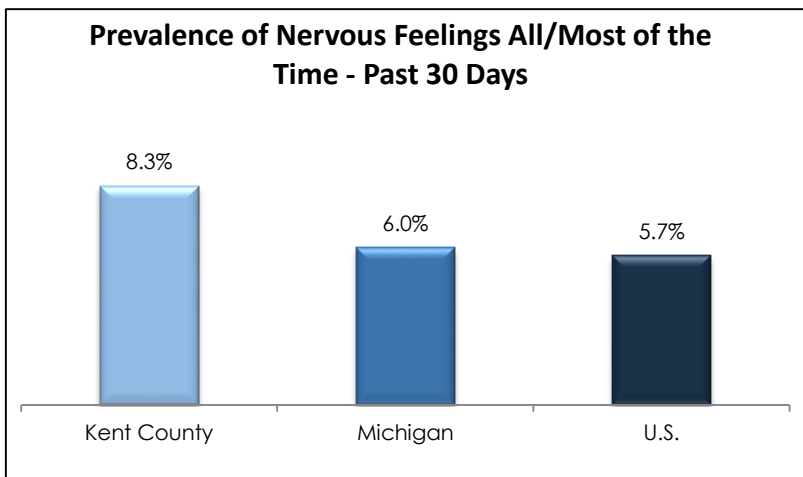
Prevalence of Nervous Feelings All/Most of the Time - Past 30 Days

- Kent County: 8.3%
- Michigan: 6.0%
- U.S.: 5.7%

Note: The 2020 comparative data is based on 2007 BRFSS of Michigan Residents and 2007 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Mental Illness & Stigma: Hopeless Feelings

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

Healthy People 2020 objective MHMD-1: Reduce the suicide rate

Healthy People 2020 objective MHMD-3: Reduce the proportion of persons who experience major depressive episodes (MDEs).

Mental disorders are among the leading causes of disability. The resulting disease burden of mental illness is among the highest of all diseases. In any given year, and estimated 18% (nearly 44 million) of U.S. adults suffer from mental illness.[1] Mental illness also accounts for premature mortality, with suicide being the 10th leading cause of death in the country.[5] Hopelessness is a risk factor of all three types of suicidal behaviors (completed suicide, suicide attempts and suicidal ideation).[6]

A total of 3.8% of Kent County residents report feeling hopeless all or most of the time during the past 30 days. This is above the state and nationwide levels (2.8% and 2.6%, respectively).

The hopeless feelings are driven by younger respondents, and particularly those age 18-24, as well as non-college graduates and lower income earners (i.e., those making less than $50,000 per year).

Percentage of respondents who felt hopeless all/most of the time during the past 30 days

Demographic Characteristics	Prevalence
Total	3.8%
Age	
18-24	6.8%
25-34	4.2%
35-44	3.4%
45-54	4.2%
55-64	3.9%
65+	0.8%
Gender	
Male	3.8%
Female	3.8%
Race	
White	3.8%
Black	3.5%
Hispanic	1.9%
Non-Hispanic	4.0%
Education	
< High School	6.0%
High School Grad	6.6%
Some College	5.1%
College Graduate	0.9%
Household Income	
<$20,000	10.6%
$20,000-$34,999	5.0%
$35,000-$$49,999	4.9%
$50,000-$74,999	1.5%
$75,000 or more	0.3%

Prevalence of Hopeless Feelings All/Most of the Time - Past 30 Days

Kent County: 3.8%
Michigan: 2.8%
U.S.: 2.6%

16 *Note: The 2020 comparative data is based on 2007 BRFSS of Michigan Residents and 2007 Nationwide BRFSS (States, DC and Territories)*

Mental Illness & Stigma: Restless/Fidgety Feelings

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

Healthy People 2020 objective MHMD-3: Reduce the proportion of persons who experience major depressive episodes (MDEs).

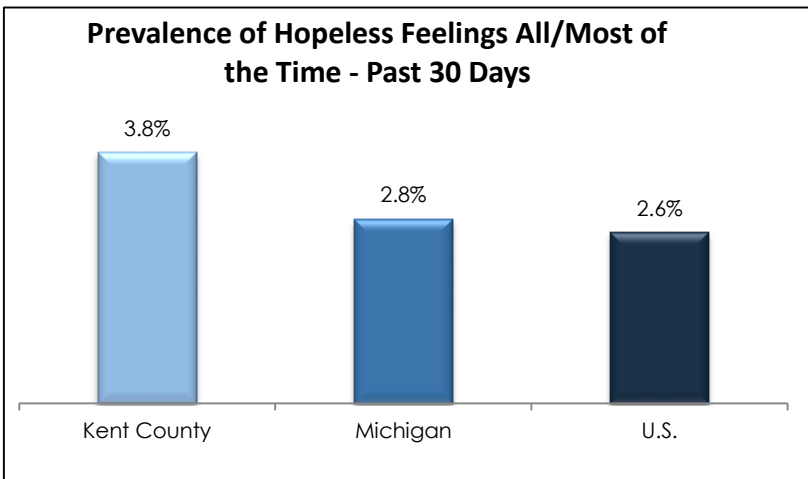*Feeling restless and/or fidgety is a physical expression of anxiety and mental tension and may be a symptom of depression or another mental health condition, such as bipolar disorder or schizophrenia.*[7]

A total of 7.9% of Kent County residents report feeling restless or fidgety all or most of the time during the past 30 days. This result is on par with the Michigan-wide figure of 7.8%, and only minimally above the U.S. score of 7.0%.

It is attributable mostly to young respondents (and especially those age 18-24), as well as non-college graduates, and lower income earners (i.e., those making less than $50,000 per annum).

Percentage of respondents who felt restless/fidgety all/most of the time during the past 30 days

Demographic Characteristics	Prevalence
Total	7.9%
Age	
18-24	17.0%
25-34	9.2%
35-44	6.9%
45-54	7.3%
55-64	5.1%
65+	3.7%
Gender	
Male	6.7%
Female	9.1%
Race	
White	8.5%
Black	4.7%
Hispanic	5.7%
Non-Hispanic	8.1%
Education	
< High School	11.8%
High School Grad	11.6%
Some College	10.4%
College Graduate	3.4%
Household Income	
<$20,000	8.8%
$20,000-$34,999	10.2%
$35,000-$$49,999	15.1%
$50,000-$74,999	5.5%
$75,000 or more	3.4%

Prevalence of Restless/Fidgety Feelings All/Most of the Time - Past 30 Days

	Kent County	Michigan	U.S.
	7.9%	7.8%	7.0%

Note: The 2020 comparative data is based on 2007 BRFSS of Michigan Residents and 2007 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Mental Illness & Stigma: Depressed Feelings

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

Healthy People 2020 objective MHMD-3: Reduce the proportion of persons who experience major depressive episodes (MDEs).
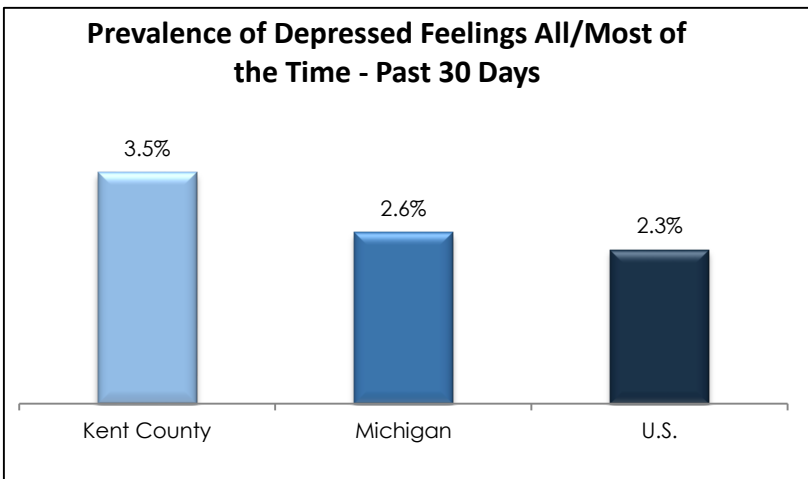
Up to 25 million people in the United States alone meet the criteria for some type of depressive disorder in a given year. Depressive disorders result in considerable financial expenditure including time spent away from the workplace and health care costs. The annual economic cost of depressive disorders in the U. S. may be over $40 billion.[8]

During the past month, 3.5% of Kent County residents felt so depressed that nothing could cheer them up – all or most of the time. This figure is above the state- and nationwide results of 2.6% and 2.3%, respectively.

Feeling depressed is reported most often by respondents in the youngest age segment (18-24), as well as by non-college graduates, and those who make less than $50,000 in annual household incomes.

Percentage of respondents who felt depressed all/most of the time during the past 30 days

Demographic Characteristics	Prevalence
Total	3.5%
Age	
18-24	8.0%
25-34	2.0%
35-44	2.8%
45-54	4.4%
55-64	3.1%
65+	1.8%
Gender	
Male	3.0%
Female	4.0%
Race	
White	3.2%
Black	2.8%
Hispanic	1.7%
Non-Hispanic	3.8%
Education	
< High School	4.0%
High School Grad	5.5%
Some College	4.7%
College Graduate	1.4%
Household Income	
<$20,000	7.7%
$20,000-$34,999	3.9%
$35,000-$$49,999	6.4%
$50,000-$74,999	0.2%
$75,000 or more	0.9%

Prevalence of Depressed Feelings All/Most of the Time - Past 30 Days

	Kent County	Michigan	U.S.
	3.5%	2.6%	2.3%

Note: The 2020 comparative data is based on 2007 BRFSS of Michigan Residents and 2007 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Mental Illness & Stigma: Feelings That Everything Was an Effort

HEALTH DEPARTMENT
Caring today for a healthy tomorrow

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

Healthy People 2020 objective MHMD-3: Reduce the proportion of persons who experience major depressive episodes (MDEs).

Fatigue is often defined as tiredness or lack of energy or experiencing "everything as an effort." It may be indicative of psychiatric disorders such as major depression and anxiety disorders. Studies have found that persons suffering from chronic fatigue were more likely to be diagnosed with mental illness.[9]

Over the past 30 days, 8.5% of Kent County residents felt that everything was an effort – all of the time or most of the time. This result is slightly below the Michigan figure (9.0%) and essentially on par with the nationwide score (8.2%).

Mirroring the patterns observed for the previously discussed Mental Illness & Stigma metrics, young residents (and particularly those age 18-34), non-college graduates, and lower income earners (less than $50,000 per year) are significantly more likely than their counterparts to report feeling that everything was an effort all or most of the time during the past month.

Percentage of respondents who felt everything was an effort all/most of the time during the past 30 days

Demographic Characteristics	Prevalence
Total	8.5%
Age	
18-24	11.4%
25-34	12.2%
35-44	8.3%
45-54	6.8%
55-64	7.2%
65+	5.8%
Gender	
Male	7.3%
Female	9.6%
Race	
White	7.8%
Black	12.5%
Hispanic	9.6%
Non-Hispanic	8.4%
Education	
< High School	13.0%
High School Grad	14.5%
Some College	9.0%
College Graduate	3.9%
Household Income	
<$20,000	19.9%
$20,000-$34,999	13.3%
$35,000-$$49,999	11.1%
$50,000-$74,999	3.9%
$75,000 or more	2.9%

Prevalence of Feeling That Everything Was an Effort All/Most of the Time - Past 30 Days

Kent County: 8.5%
Michigan: 9.0%
U.S.: 8.2%
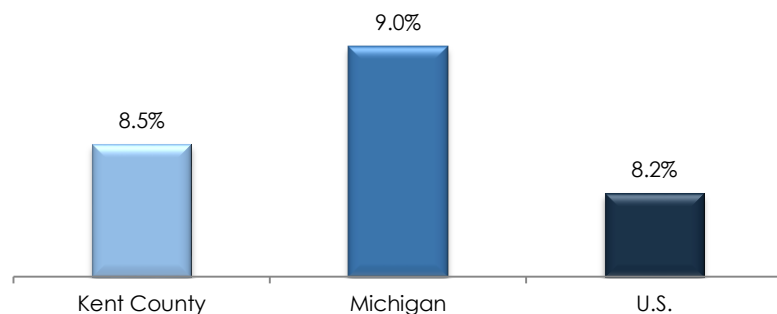
19 *Note: The 2020 comparative data is based on 2007 BRFSS of Michigan Residents and 2007 Nationwide BRFSS (States, DC and Territories)*

Mental Illness & Stigma: Worthless Feelings

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

Healthy People 2020 objective MHMD-3: Reduce the proportion of persons who experience major depressive episodes (MDEs).
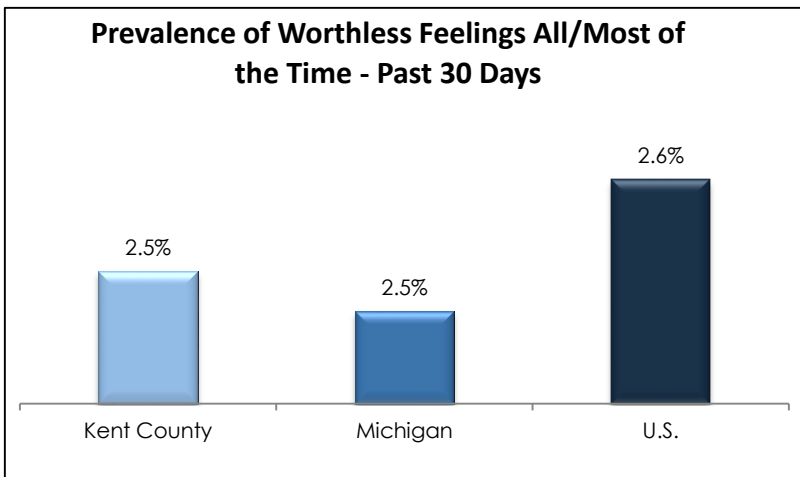
Depressed individuals see themselves as deficient in those qualities of life they most highly value: intelligence, achievement, popularity, attractiveness, health and strength. These feelings of low-esteem, inadequacy, and worthlessness are central to psychological distress.[10]

During the past 30 days, 2.5% of Kent County residents felt worthless all of the time or most of the time. This result is on par with the Michigan and nationwide scores (2.5% and 2.6%, respectively).

The Kent County figure is driven by white and non-Hispanic respondents, non-college graduates, and lower income earners (i.e., those who earn less than $50,000 per year).

Percentage of respondents who felt worthless all/most of the time during the past 30 days

Demographic Characteristics	Prevalence
Total	2.5%
Age	
18-24	4.0%
25-34	2.7%
35-44	3.4%
45-54	3.2%
55-64	1.2%
65+	0.7%
Gender	
Male	2.1%
Female	2.9%
Race	
White	2.7%
Black	0.7%
Hispanic	1.9%
Non-Hispanic	2.6%
Education	
< High School	2.2%
High School Grad	5.2%
Some College	3.3%
College Graduate	0.5%
Household Income	
<$20,000	3.9%
$20,000-$34,999	5.1%
$35,000-$$49,999	4.3%
$50,000-$74,999	0.4%
$75,000 or more	-

Prevalence of Worthless Feelings All/Most of the Time - Past 30 Days

Kent County	2.5%
Michigan	2.5%
U.S.	2.6%

Note: The 2020 comparative data is based on 2007 BRFSS of Michigan Residents and 2007 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Mental Illness & Stigma: Treatment Can Help People with Mental Illness Lead Normal Lives

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

Healthy People 2020 objective MHMD-9: Increase the proportion of adults with mental health disorders who receive treatment
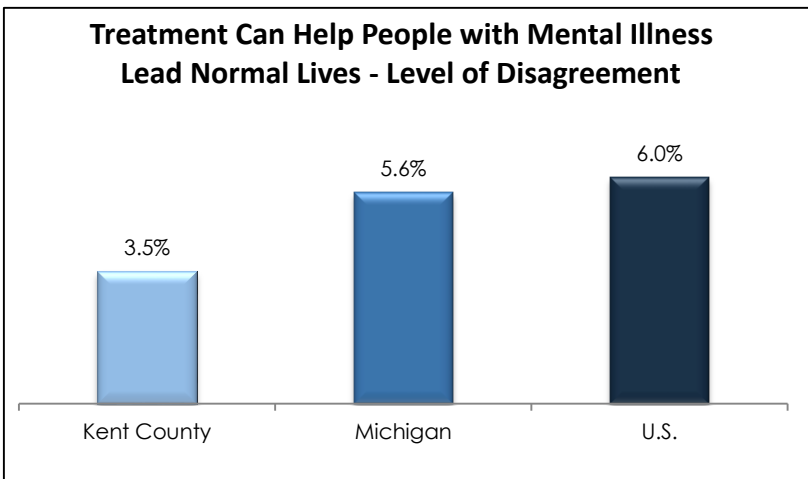
Mental illness-related stigma has been identified as a major barrier to access treatment and recovery. Stigmatization occurs on multiple levels simultaneously, and includes self-stigma, i.e., an individual's reluctance to seek care and/or discontinuation of treatment. Emphasizing recovery from a mental illness and showing ways in which healthcare providers play an impactful role in that process are among key ingredients for effective stigma reduction.[11]

Only 3.5% of Kent County residents disagree that treatment can help people with mental illness lead normal lives. This level of disagreement is notably lower than the state and nationwide figures (5.6% and 6.0% disagreeing, respectively).

The youngest respondent segment (age 18-24) is significantly more inclined than those older to disagree that treatment can help people with mental illness lead normal lives. Similarly, males are more apt to disagree than females, non-college graduates are more likely to do so than graduates, and those in the bottom income category (below $20,000 per year) are more likely to express disagreement than higher income earners.

Percentage of respondents who disagree that treatment can help people with mental illness lead normal lives

Demographic Characteristics	Prevalence
Total	3.5%
Age	
18-24	8.1%
25-34	4.8%
35-44	1.5%
45-54	2.5%
55-64	2.1%
65+	2.6%
Gender	
Male	4.9%
Female	2.1%
Race	
White	2.6%
Black	7.5%
Hispanic	6.9%
Non-Hispanic	3.2%
Education	
< High School	9.5%
High School Grad	6.8%
Some College	3.8%
College Graduate	0.4%
Household Income	
<$20,000	6.9%
$20,000-$34,999	4.6%
$35,000-$$49,999	3.6%
$50,000-$74,999	1.3%
$75,000 or more	2.1%

Treatment Can Help People with Mental Illness Lead Normal Lives - Level of Disagreement

Kent County	Michigan	U.S.
3.5%	5.6%	6.0%

*Note: The 2020 comparative data is based on 2009 BRFSS of Michigan Residents and 2009 Nationwide BRFSS (States, DC and Territories)

Mental Illness & Stigma:
People Are Generally Caring and Sympathetic to People with Mental Illness

HEALTH DEPARTMENT
Caring today for a healthy tomorrow

Healthy People 2020 objective HRQOL/WB-1.2: Increase the proportion of adults who self-report good or better mental health
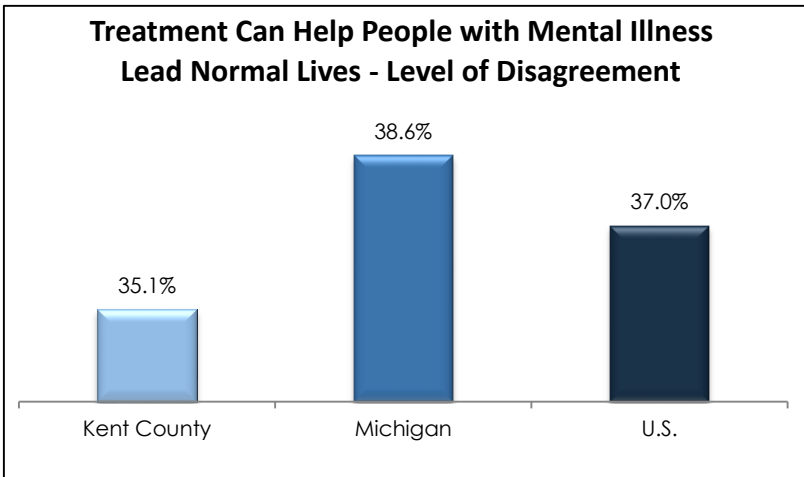
In December 2006, the Ad Council, in partnership with SAMHSA (Substance Abuse and Mental Health Services Administration), launched a national public service advertising campaign that asked young adults to support friends they know are experiencing a mental health problem by demonstrating the roles they can play in their friend's recovery. The public service announcement campaign utilized channels including TV, online videos, radio, outdoor, print, and online communities in an effort to combat the stigma associated with mental illness.[12]

More than a third (35.1%) of Kent County residents disagree that people are generally caring and sympathetic to people with mental illness. In comparison to Michigan as a whole, the disagreement level is lower by more than 3 percentage points (38.6%). It is also below the disagreement level observed for U.S. (37.0%).

Kent County residents most likely to disagree with this statement include respondents age 25-54, females, as well as those who completed some college coursework or graduated from college.

Percentage of respondents who disagree that people are generally caring and sympathetic to people with mental illness

Demographic Characteristics	Prevalence
Total	35.1%
Age	
18-24	33.5%
25-34	38.6%
35-44	42.1%
45-54	34.7%
55-64	33.0%
65+	28.3%
Gender	
Male	27.5%
Female	42.5%
Race	
White	35.3%
Black	39.9%
Hispanic	27.7%
Non-Hispanic	36.0%
Education	
< High School	21.4%
High School Grad	31.0%
Some College	36.0%
College Graduate	38.8%
Household Income	
<$20,000	33.9%
$20,000-$34,999	34.3%
$35,000-$$49,999	39.0%
$50,000-$74,999	32.0%
$75,000 or more	38.7%

Treatment Can Help People with Mental Illness Lead Normal Lives - Level of Disagreement

Kent County	Michigan	U.S.
35.1%	38.6%	37.0%

Note: The 2020 comparative data is based on 2009 BRFSS of Michigan Residents and 2009 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Social Determinants of Health: Inability to Pay Bills / Unsafe Neighborhoods

Healthy People 2020 objective SDOH-1: [Decrease the] proportion of persons living in poverty
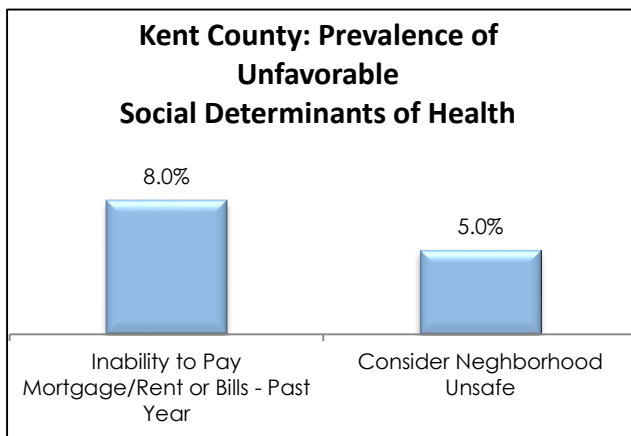
Healthy People 2020 objective SDOH-2: [Decrease the] proportion of households that experience housing cost burden

Conditions in the places where people live, learn, work, and play affect a wide range of health risks and outcomes. These conditions are known as social determinants of health (SDOH). Poverty limits access to healthy foods and safe neighborhoods, which are a predictor of better health. Differences in health are striking in communities with poor SDOH, such as unstable housing, low income, and unsafe neighborhoods.[14]

In Kent County, 8.0% of residents state that there was a time during the last 12 months when they were unable to pay their mortgage, rent, or utility bills. Moreover, 5.0% believe their neighborhoods are unsafe.

Inability to pay bills is reported most often by residents under the age of 54 and females, while unsafe neighborhoods – by those up to the age of 64.

Non-college graduates, as well as lower income earners (less than $50,000 per annum) are more likely than their counterparts to cite both inability to pay bills and unsafe neighborhoods.

Percentage of respondents with unfavourable social determinants of health

Demographic Characteristics	Unable to Pay Mortgage / Rent or Bills in Past Year	Consider Their Neighborhood Unsafe
Total	8.0%	5.0%
Age		
18-24	10.1%	5.2%
25-34	9.7%	5.7%
35-44	8.1%	6.0%
45-54	8.7%	4.7%
55-64	6.4%	5.5%
65+	3.8%	2.6%
Gender		
Male	6.1%	4.0%
Female	9.7%	6.1%
Race		
White	7.3%	5.1%
Black	12.9%	5.6%
Hispanic	12.1%	6.2%
Non-Hispanic	7.6%	4.9%
Education		
< High School	19.9%	7.7%
High School Grad	12.4%	6.9%
Some College	8.9%	6.4%
College Graduate	2.9%	2.5%
Household Income		
<$20,000	15.2%	12.3%
$20,000-$34,999	17.3%	7.7%
$35,000-$$49,999	9.3%	7.8%
$50,000-$74,999	2.3%	2.5%
$75,000 or more	2.4%	0.1%

Kent County: Prevalence of Unfavorable Social Determinants of Health

8.0% — Inability to Pay Mortgage/Rent or Bills - Past Year

5.0% — Consider Neghborhood Unsafe

23 *Note: No comparative data available.*

Social Determinants of Health: Food & Healthy Meal Insecurity

KENT COUNTY MICHIGAN HEALTH DEPARTMENT
Caring today for a healthy tomorrow

Healthy People 2020 objective SDOH-1: [Decrease the] proportion of persons living in poverty

Healthy People 2020 objective NWS-13: Reduce household food insecurity and in doing so reduce hunger

Resources that enhance quality of life can have a significant influence on population health outcomes. Examples of these resources include, among others, safe and affordable housing, public safety, and availability of healthy foods. Understanding how conditions in a person's environment impact their health is fundamental to creation of a healthier population, society, and workforce.[1]

A total of 3.7% of Kent County residents admits that, within the past 12 months, the food they bought just didn't last, and they often didn't have money to get more. Additionally, a similar proportion (4.2%) reports that, within the past year, they often couldn't afford to eat balanced meals.

Food insecurity is driven mostly by residents under the age of 44 and those with household incomes below the $35,000 threshold.

Healthy meal insecurity, on the other hand, is attributable mainly to those age 18-24 and those with incomes lower than $50,000.

Non-college graduates are more likely than college graduates to report both food insecurity and healthy meal insecurity.
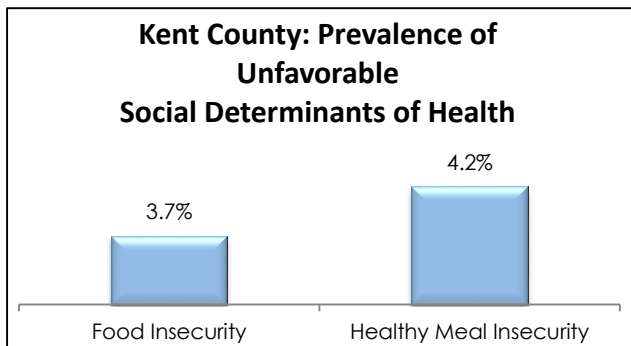
Percentage of respondents with unfavourable social determinants of health

Demographic Characteristics	Often Did Not Have Money to Buy More Food in Past Year	Often Did Not Have Money for Balanced Meals in Past Year
Total	3.7%	4.2%
Age		
18-24	6.2%	9.2%
25-34	4.4%	4.4%
35-44	5.0%	3.4%
45-54	2.7%	4.7%
55-64	2.8%	2.4%
65+	1.6%	1.5%
Gender		
Male	2.8%	4.1%
Female	4.6%	4.3%
Race		
White	3.4%	4.4%
Black	6.2%	4.9%
Hispanic	5.5%	4.7%
Non-Hispanic	3.6%	4.2%
Education		
< High School	10.6%	12.7%
High School Grad	5.4%	8.8%
Some College	4.8%	3.7%
College Graduate	0.9%	0.6%
Household Income		
<$20,000	9.6%	7.1%
$20,000-$34,999	9.6%	10.2%
$35,000-$$49,999	1.6%	4.2%
$50,000-$74,999	0.8%	0.7%
$75,000 or more	0.4%	1.0%

Kent County: Prevalence of Unfavorable Social Determinants of Health

Food Insecurity: 3.7%
Healthy Meal Insecurity: 4.2%

24 *Note: No comparative data available.*

Social Determinants of Health: Finances & Stress

KENT COUNTY MICHIGAN

HEALTH DEPARTMENT
Caring today for a healthy tomorrow

Healthy People 2020 objective SDOH-1: [Decrease the] proportion of persons living in poverty

Healthy People 2020 objective SDOH-2: [Decrease the] proportion of households that experience housing cost burden

Healthy People 2020 objective NWS-13: Reduce household food insecurity and in doing so reduce hunger
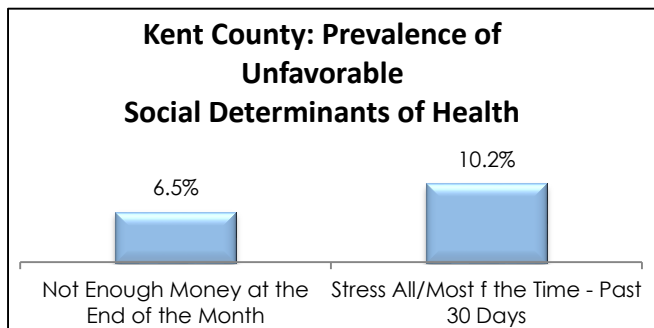
Healthy People 2020 highlights the importance of addressing SDOH by including "Create social and physical environments that promote good health for all" among the four overarching goals for the decade. This emphasis is also shared by other U.S. initiatives, such as the National Partnership for Action to End Health Disparities and the National Prevention and Health Promotion Strategy.[1]

In general, 6.5% of Kent County residents do not have enough money to make ends meet. Additionally, 10.2% claim that, within the last 30 days, they felt tense, restless, nervous or anxious, or were unable to sleep because their mind was troubled all of the time or most of the time.

Respondents most likely to not have enough money at the end of the month are age 35-64 and have either completed some high school or are high school graduates.

The likelihood of being stressed all/most of the time is inversely proportional to residents' age, with 18-24 year olds reporting stress most often. The prevalence of stress also peaks among high school graduates and those with some college.

Finally, females, and those making less than $35,000 per year are more likely than their counterparts to not have enough money and to feel stressed all or most of the time.

Percentage of respondents with unfavourable social determinants of health

Demographic Characteristics	Not Enough Money at the End of the Month	Stress All/Most of the Time - Past 30 Days
Total	6.5%	10.2%
Age		
18-24	5.2%	16.8%
25-34	5.1%	8.5%
35-44	9.4%	13.0%
45-54	6.9%	10.5%
55-64	7.4%	8.1%
65+	4.8%	5.0%
Gender		
Male	4.2%	7.3%
Female	8.7%	12.9%
Race		
White	6.4%	10.4%
Black	6.9%	7.6%
Hispanic	5.8%	6.7%
Non-Hispanic	6.6%	10.4%
Education		
< High School	13.1%	9.1%
High School Grad	9.7%	13.4%
Some College	6.5%	12.2%
College Graduate	3.7%	7.0%
Household Income		
<$20,000	14.1%	15.8%
$20,000-$34,999	13.1%	13.7%
$35,000-$$49,999	6.9%	8.5%
$50,000-$74,999	3.0%	8.3%
$75,000 or more	2.7%	4.1%

Kent County: Prevalence of Unfavorable Social Determinants of Health

Bar chart showing: Not Enough Money at the End of the Month 6.5%; Stress All/Most f the Time - Past 30 Days 10.2%

Note: No comparative data available.

Healthcare Access: No Health Care Coverage

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.[15] 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.
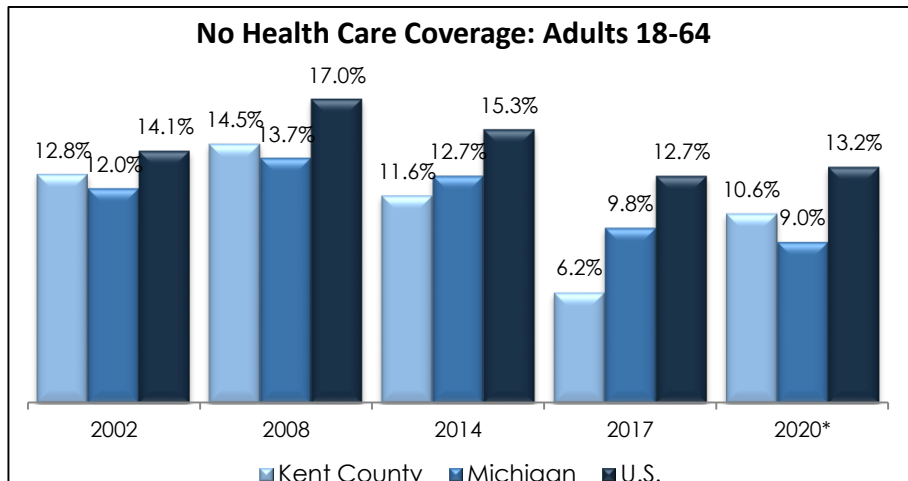
Estimated 10.6% of the Kent County residents between the ages of 18 and 64 do not have health insurance coverage – a rate above the state figure (9.0%) but well below the national score(13.2%).

While the current result remains lower than the figures noted in the period from 2002 to 2014, it represents a roughly 4-point uptick in comparison to 2017. This lift is attributable to rising rates of uninsured individuals among those with less than high school education, Hispanics, and those in the $20,000-$49,999 income bracket.

Access to health care is closely related to several socio-economic factors. Specifically, non-white segments of Kent County 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 is closely associated with health care insurance, as individuals over the age of 55 are more apt to be covered than those younger.

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

Demographic Characteristics	No Health Insurance
Total	10.6%
Age	
18-24	16.5%
25-34	12.3%
35-44	9.8%
45-54	11.0%
55-64	3.0%
Gender	
Male	11.5%
Female	9.7%
Race	
White	6.6%
Black	19.4%
Hispanic	31.7%
Non-Hispanic	7.9%
Education	
< High School	40.4%
High School Grad	11.5%
Some College	11.7%
College Graduate	5.0%
Household Income	
<$20,000	13.2%
$20,000-$34,999	20.1%
$35,000-$49,999	18.5%
$50,000-$74,999	6.0%
$75,000 or more	2.1%

No Health Care Coverage: Adults 18-64

Year	Kent County	Michigan	U.S.
2002	12.8%	12.0%	14.1%
2008	14.5%	13.7%	17.0%
2014	11.6%	12.7%	15.3%
2017	6.2%	9.8%	12.7%
2020*	10.6%	9.0%	13.2%

□ Kent County ■ Michigan ■ U.S.

Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Healthcare Access:
No Personal Health Care Provider

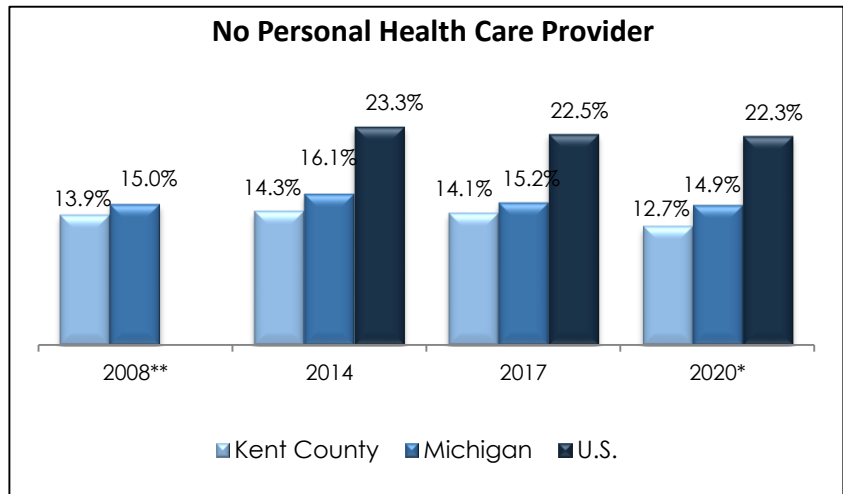**Healthy People 2020 objective AHS-3: Increase the proportion of persons with a usual primary care provider**

Improving access to health care services depends in part on ensuring that people have a usual and ongoing source of care (that is, a provider or facility where one regularly receives care). Having a primary health care provider who serves as the usual source of care is especially important, as these professionals can develop meaningful and sustained relationships with patients. Having a usual provider is associated with better health outcomes, reduced costs, and lower mortality from all causes.[1]

Estimated 12.7% of Kent County adults do not have a personal doctor or health care provider – the lowest figure noted since 2008 – which indicates progress toward meeting Healthy People 2020 objective AHS-3. This result is somewhat below Michigan's score of 14.9%, and nearly 10 points below the nationwide score of 22.3%.

As in the past, males and non-white residents are more likely than their counterparts to have no personal health care provider. Moreover, no access to a personal provider continues to be cited more often among younger, less educated and less affluent population segments.

Percentage of respondents with no personal health care provider

Demographic Characteristics	No Personal Health Care Provider
Total	12.7%
Age	
18-24	20.6%
25-34	27.1%
35-44	12.3%
45-54	9.9%
55-64	2.8%
65+	2.2%
Gender	
Male	17.1%
Female	8.5%
Race	
White	10.4%
Black	17.3%
Hispanic	27.1%
Non-Hispanic	11.3%
Education	
< High School	29.2%
High School Grad	20.0%
Some College	10.2%
College Graduate	7.6%
Household Income	
<$20,000	15.9%
$20,000-$34,999	14.4%
$35,000-$$49,999	23.0%
$50,000-$74,999	8.6%
$75,000 or more	8.1%

No Personal Health Care Provider

	2008**	2014	2017	2020*
Kent County	13.9%	14.3%	14.1%	12.7%
Michigan	15.0%	16.1%	15.2%	14.9%
U.S.		23.3%	22.5%	22.3%

■ Kent County ■ Michigan ■ U.S.

Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)
**National comparative data is not available for this category for year 2008.

2020 Behavioral Risk Factor Survey

Healthcare Access: No Health Care Access Due to Cost

Healthy People 2020 objective AHS-6: Reduce the proportion of persons who are unable to obtain or delay in obtaining necessary medical care, dental care, or prescription medicines
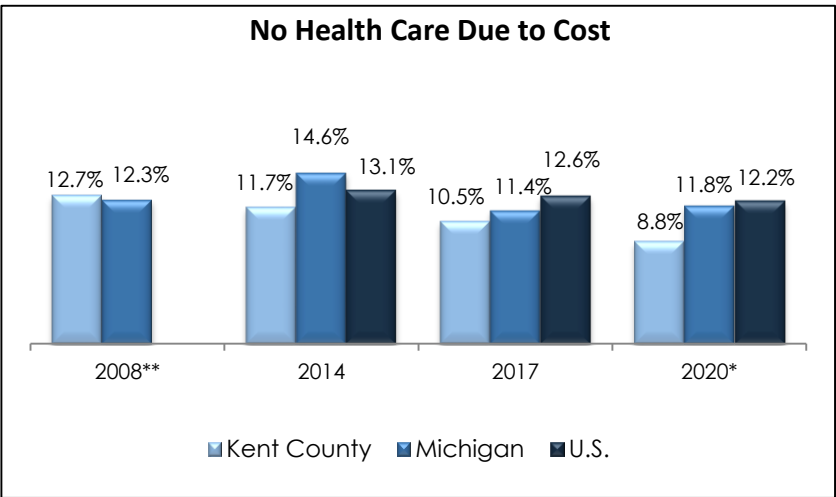
An additional indicator that addresses issues related to health care access is having had a time during the past 12 months when health care was needed but could not be obtained because of cost.

In the past 12 months, 8.8% of Kent County residents could not see a doctor when they needed to because of the cost. This result represents a nearly 2-point drop in comparison to 2017, and is the lowest result noted for the County to date. This positive change is attributable mostly to decreased incidence of reporting cost barriers among males, African Americans, and those with incomes below $35,000.

The current score observed for Kent County also remains well below both the state and nationwide figures (11.8% and 12.2%, respectively).

As in the past, cost barriers continue to be cited more often among less educated and less affluent population segments. Additionally, medical costs are most likely to be a problem for individuals under the age of 55.

Percentage of respondents who reported an instance of not obtaining care due to cost

Demographic Characteristics	No Health Care Access Due to Cost
Total	8.8%
Age	
18-24	11.4%
25-34	10.7%
35-44	7.4%
45-54	11.6%
55-64	6.4%
65+	4.2%
Gender	
Male	7.5%
Female	10.1%
Race	
White	8.5%
Black	6.9%
Hispanic	15.0%
Non-Hispanic	8.0%
Education	
< High School	24.0%
High School Grad	10.5%
Some College	8.4%
College Graduate	6.0%
Household Income	
<$20,000	16.3%
$20,000-$34,999	11.5%
$35,000-$$49,999	18.4%
$50,000-$74,999	6.9%
$75,000 or more	2.7%

No Health Care Due to Cost

	Kent County	Michigan	U.S.
2008**	12.7%	12.3%	
2014	11.7%	14.6%	13.1%
2017	10.5%	11.4%	12.6%
2020*	8.8%	11.8%	12.2%

■ Kent County ■ Michigan ■ U.S.

Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

28 **National comparative data is not available for this category for year 2008.*

Healthcare Access: No Routine Checkup

Healthy People 2020 objective AHS-7: Increase the proportion of persons who receive appropriate evidence-based clinical preventive services
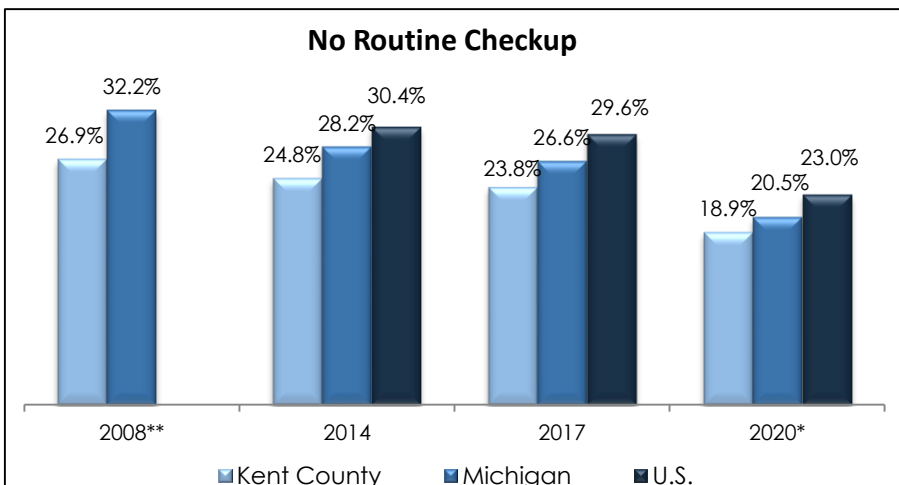
A yearly routine checkup with a health care professional provides an opportunity to raise awareness regarding adult preventive services, conduct individual risk assessments, promote informed decision-making, and potentially benefit from early detection.

Kent County residents are less likely than respondents state- and nationwide to report having no routine checkup within the past 12 months (18.9%, vs. 20.5% and 23.0%, respectively). The incidence of no check-up has been gradually decreasing in the County since 2008, with the current figure being the lowest noted to date. This positive trend is attributable mostly to lower incidence of no checkup among African Americans, as well as among those with some college coursework and college graduates.

Just as in the previous Kent BRFSS iterations, males and residents under the age of 55 are significantly more likely than their counterparts to have not had their routine checkup. The likelihood of a checkup is also at its lowest among those with incomes in the $35,000-$50,000 bracket, as well as among Caucasian and Hispanic residents of the County.

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

Demographic Characteristics	No Routine Checkup
Total	18.9%
Age	
18-24	19.5%
25-34	32.7%
35-44	23.0%
45-54	20.0%
55-64	10.3%
65+	5.1%
Gender	
Male	24.0%
Female	14.0%
Race	
White	19.4%
Black	6.6%
Hispanic	25.9%
Non-Hispanic	18.2%
Education	
< High School	28.7%
High School Grad	24.0%
Some College	15.8%
College Graduate	16.6%
Household Income	
<$20,000	18.1%
$20,000-$34,999	17.9%
$35,000-$$49,999	26.1%
$50,000-$74,999	15.6%
$75,000 or more	17.2%

No Routine Checkup

Year	Kent County	Michigan	U.S.
2008**	26.9%		32.2%
2014	24.8%	28.2%	30.4%
2017	23.8%	26.6%	29.6%
2020*	18.9%	20.5%	23.0%

■ Kent County   ■ Michigan   ■ U.S.

Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)
**National comparative data is not available for this category for year 2008.*

2020 Behavioral Risk Factor Survey
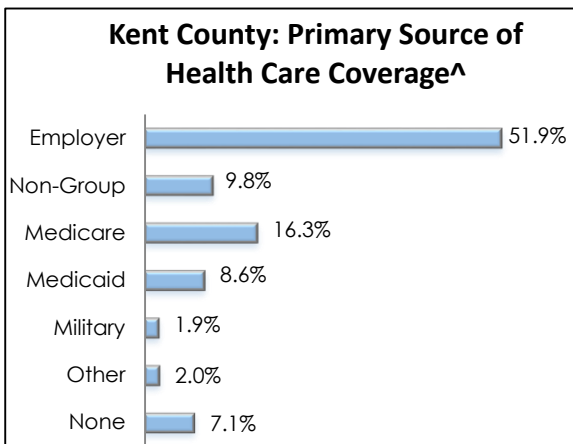
Medical Insurance Status

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

Health insurance is a critical factor in ensuring people receive the medical care they need to achieve and maintain good health, which, in turn, affects the overall quality of life. Uninsured people are less likely to receive medical care, and, more likely to have poor health status, to be diagnosed later, and to die prematurely.[1]

More than a half (51.9%) of Kent County residents indicate a plan purchased through an employer or union as their primary source of health care coverage. This response is driven by respondents under the age of 64, Caucasians and non-Hispanics, those with at least a high school diploma, and higher income earners (a minimum of $50,000 per year).

A quarter (24.9%) is covered via Medicare and/or Medicaid, with this response being most common among residents age 65+, African Americans, those with some high school or a high school diploma, and lower income earners (below $50,000).

A total of 7.1% of Kent County residents do not have any health coverage. The incidence of this response is inversely proportional to respondents' age. It is also more common among African Americans and Hispanics, as well as less educated and less affluent segments.

Primary source of health care coverage^

Demographic Characteristics	Employer	Non-Group	Medicare/Medicaid	TRICARE (CHAMPUS), VA or military	None
Total	51.9%	9.8%	24.9%	1.9%	7.1%
Age					
18-24	41.6%	19.8%	22.0%	1.4%	12.5%
25-34	63.3%	7.2%	12.4%	1.5%	10.1%
35-44	68.7%	9.0%	11.8%	-	6.9%
45-54	61.8%	6.6%	13.9%	3.5%	9.3%
55-64	60.1%	15.3%	16.8%	2.3%	2.4%
65+	10.4%	3.4%	79.0%	3.0%	0.2%
Gender					
Male	53.0%	9.6%	20.8%	3.3%	8.1%
Female	50.8%	10.0%	28.9%	0.7%	6.2%
Race					
White	56.6%	10.5%	23.5%	1.6%	4.5%
Black	33.0%	5.3%	38.5%	7.0%	12.0%
Hispanic	34.6%	11.4%	23.0%	0.1%	25.2%
Non-Hispanic	54.0%	9.8%	25.0%	2.2%	5.2%
Education					
< High School	14.6%	8.2%	38.7%	0.8%	31.5%
High School Grad	40.1%	11.2%	34.2%	1.4%	7.9%
Some College	50.3%	9.4%	26.9%	3.3%	6.2%
College Graduate	65.2%	9.7%	16.1%	1.4%	3.8%
Household Income					
<$20,000	32.8%	10.3%	37.8%	2.2%	11.5%
$20,000-$34,999	32.0%	10.9%	40.1%	3.8%	9.7%
$35,000-$$49,999	43.0%	6.0%	28.8%	5.6%	14.1%
$50,000-$74,999	68.3%	9.5%	12.2%	2.4%	3.2%
$75,000 or more	80.5%	8.9%	7.5%	-	0.9%

Kent County: Primary Source of Health Care Coverage^

Employer	51.9%
Non-Group	9.8%
Medicare	16.3%
Medicaid	8.6%
Military	1.9%
Other	2.0%
None	7.1%

Note: No comparative data available.   ^Other/don't know/refused responses not shown   2020 Behavioral Risk Factor Survey

Hypertension Awareness

HEALTH DEPARTMENT
Caring today for a healthy tomorrow

Healthy People 2020 objective HD S-5: Reduce the proportion of adults with hypertension

High blood pressure, also known as hypertension, is a major and modifiable risk factor for heart disease and stroke. In 2016, 82,735 deaths in the United States were primarily attributable to high blood pressure. As of 2017, nearly half of Americans (45.6%) were estimated to have high blood pressure,[16] but because it often has no sign or symptoms, only 54% of adults with the condition have it under control.[17] High blood pressure is influenced by factors such as smoking, obesity, physical inactivity, poor diet, and excessive alcohol use.[16]
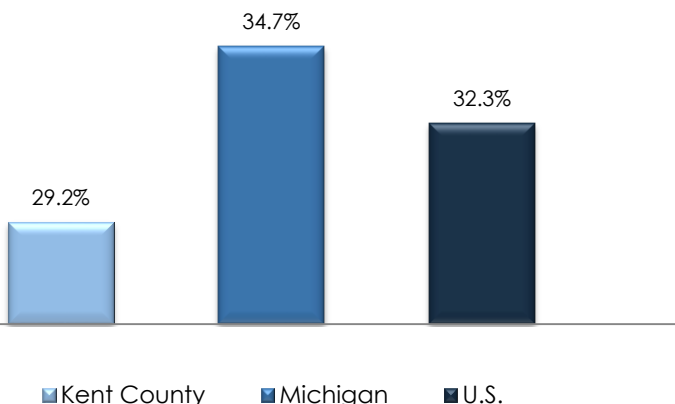
Approximately three-in-ten Kent County residents (29.2%) have ever been told by a doctor that they had high blood pressure. This is well below both the state figure (34.7%) and the nationwide result (32.3%).

The incidence of high blood pressure increases proportionately to age and is most prevalent among African American residents, those with less than high school education, and those in the bottom income segments (less than $35,000 per year).

Percentage of respondents who have ever been told by a doctor that they had high blood pressure

Demographic Characteristics	Ever Told Have High Blood Pressure
Total	29.2%
Age	
18-24	8.8%
25-34	10.1%
35-44	20.0%
45-54	30.7%
55-64	46.3%
65+	61.8%
Gender	
Male	29.7%
Female	28.8%
Race	
White	28.5%
Black	49.5%
Hispanic	17.8%
Non-Hispanic	30.5%
Education	
< High School	40.6%
High School Grad	32.2%
Some College	30.2%
College Graduate	25.0%
Household Income	
<$20,000	31.9%
$20,000-$34,999	37.1%
$35,000-$$49,999	30.8%
$50,000-$74,999	29.1%
$75,000 or more	23.0%

Prevalence of High Blood Pressure

	Kent County	Michigan	U.S.
	29.2%	34.7%	32.3%

Note: The 2020 comparative data is based on 2017 BRFSS of Michigan Residents and 2017 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Cholesterol Awareness

Healthy People 2020 objective HD S-6: Reduce the proportion of adults with who have had their blood cholesterol checked within the preceding 5 years
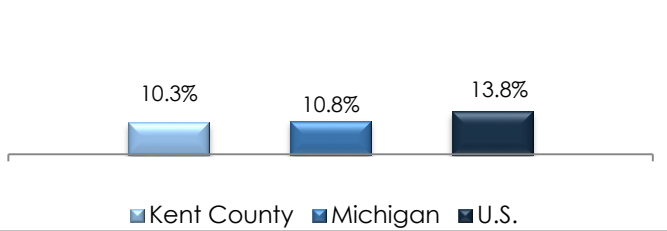
Healthy People 2020 objective HD S-7: Reduce the proportion of adults with high total blood cholesterol levels

High cholesterol is a major and modifiable risk factor for heart disease and stroke. The American Heart Association recommends adults aged 20+ have their cholesterol checked with a blood test every 4-to-6 years. At present, an estimated 28.5 million Americans have high cholesterol levels.[4]
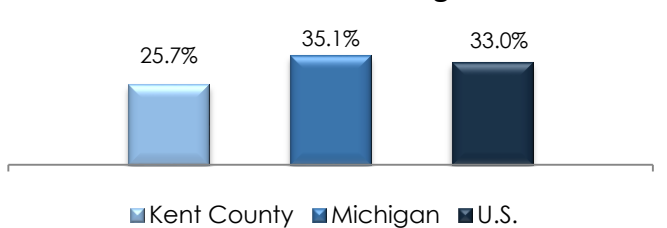
A total of 10.3% of Kent County residents have not had their blood cholesterol checked within the last 5 years. This result is on par with the figure noted for Michigan as a whole (10.8%) and below the U.S. result (13.8%). Respondents most likely not to have their cholesterol checked include the younger segments (under 44), Hispanics, those with less than high school education and those with incomes below the $50,000 threshold.

Additionally, just over a quarter (25.7%) has been told that their blood cholesterol was high. This is well below both the state- and nationwide figures (35.1% and 33%, respectively). High cholesterol levels increase proportionately to residents' age and are most prevalent among respondents earning $35,000-$49,999 per year.

Percentage of respondents who have had blood cholesterol checked within the last 5 years, and percentage of respondents told it was high

Demographic Characteristics	Cholesterol Not Checked Within Last 5 Years	Cholesterol Checked and Told It Was High
Total	10.3%	25.7%
Age		
18-24	24.1%	10.2%
25-34	13.1%	3.9%
35-44	11.8%	21.6%
45-54	7.5%	31.9%
55-64	3.6%	38.1%
65+	2.1%	45.3%
Gender		
Male	10.3%	27.3%
Female	10.4%	24.1%
Race		
White	10.2%	27.3%
Black	6.5%	22.7%
Hispanic	21.2%	19.3%
Non-Hispanic	9.1%	26.1%
Education		
< High School	20.8%	27.4%
High School Grad	11.5%	23.9%
Some College	12.5%	24.6%
College Graduate	6.4%	27.3%
Household Income		
<$20,000	12.2%	27.8%
$20,000-$34,999	10.8%	26.4%
$35,000-$$49,999	13.6%	36.1%
$50,000-$74,999	7.0%	28.0%
$75,000 or more	7.6%	20.4%

Cholesterol Not Checked Within Last 5 Years

10.3% — 10.8% — 13.8%

Kent County ■ Michigan ■ U.S.

Had Cholesterol Checked and Told It Was High

25.7% — 35.1% — 33.0%

Kent County ■ Michigan ■ U.S.

32 *Note: The 2020 comparative data is based on 2017 BRFSS of Michigan Residents and 2017 Nationwide BRFSS (States, DC and Territories)*

2020 Behavioral Risk Factor Survey

Chronic Health Conditions: Heart Attack

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

Healthy People 2020 objective HDS-16: Increase the proportion of adults aged 20 years and older who are aware of the symptoms of and how to respond to a heart attack

In 2015, an estimated 114,023 deaths were attributable to heart attacks in the United States. An estimated 720,000 heart attacks and 335,000 recurrent heart attacks occur yearly among U.S. adults. The cost of heart attacks was $12.1 billion in 2013, which includes health care services, medication, and lost productivity. Many risk factors for heart attack are the same as those for coronary artery disease, including high blood pressure, high cholesterol, smoking, family history of heart disease, obesity, physical inactivity, diabetes, and excessive alcohol consumption.[4]
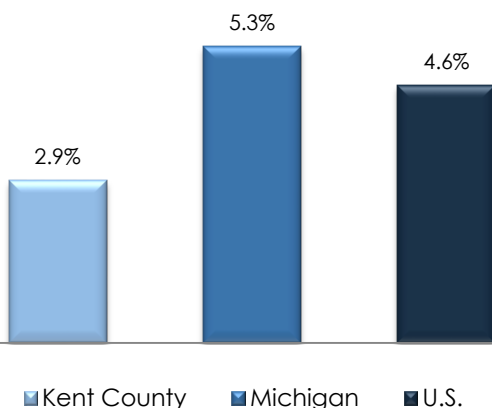
A total of 2.9% of Kent County residents have ever been told that they had a heart attack. This result is notably below the Michigan figure (5.3%) and the national result (4.6%).

Unsurprisingly, the prevalence of heart attacks is highest among residents age 65+.

Prevalence of Heart Attack

Kent County	2.9%
Michigan	5.3%
U.S.	4.6%

Percentage of respondents who were told by a doctor that they had a heart attack

Demographic Characteristics	Ever Told You Had Heart Attack
Total	2.9%
Age	
18-24	-
25-34	0.8%
35-44	1.5%
45-54	1.3%
55-64	3.1%
65+	10.9%
Gender	
Male	2.8%
Female	2.9%
Race	
White	3.2%
Black	2.9%
Hispanic	0.9%
Non-Hispanic	3.0%
Education	
< High School	2.6%
High School Grad	3.5%
Some College	3.3%
College Graduate	2.2%
Household Income	
<$20,000	3.9%
$20,000-$34,999	5.0%
$35,000-$$49,999**	4.9%
$50,000-$74,999	2.3%
$75,000 or more	0.6%

33 *Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Chronic Health Conditions: Heart Disease

HEALTH DEPARTMENT
Caring today for a healthy tomorrow

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 the leading causes of death in the United States for both genders and across all ethnic groups. In 2018, in Michigan, heart disease was the primary cause of 25,345 deaths.[18] Approximately 6.5 million people nationwide have heart failure, which costs the nation an estimated $31 billion annually.[19] Modifying cardiovascular disease risk factors offers the greatest potential for reducing death and disability.
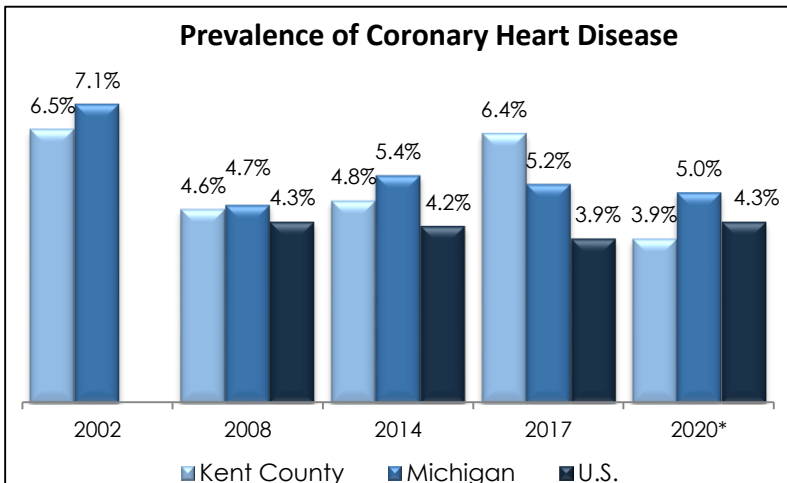
Among Kent County adults age 35 or older, 3.9% have been told at some point that they had angina or coronary heart disease. This figure has decreased by over 2 points in comparison to 2017 and is now at its lowest level since the initial wave of this study. This positive change is mostly a result of observable drops in the heart disease incidence reported in the lowest education and income segments.

The current prevalence of heart disease in Kent County is also minimally below the nationwide data (4.3%), and notably below Michigan's score (5.0%).

Unsurprisingly, residents over the age of 65 continue to report a notably higher rate of heart disease than younger individuals. Moreover, mirroring patterns uncovered in previous years, males, non-Hispanics, and those with lower incomes remain somewhat more likely than their counterparts to be diagnosed with heart disease.

Percentage of respondents 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	3.9%
Age	
18-24	-
25-34	-
35-44	0.8%
45-54	0.9%
55-64	1.6%
65+	13.6%
Gender	
Male	4.8%
Female	3.0%
Race	
White	4.0%
Black	4.6%
Hispanic	1.8%
Non-Hispanic	4.0%
Education	
< High School	1.2%
High School Grad	3.7%
Some College	6.7%
College Graduate	2.8%
Household Income	
<$20,000	4.9%
$20,000-$34,999	5.4%
$35,000-$$49,999	5.3%
$50,000-$74,999	3.9%
$75,000 or more	1.1%

Prevalence of Coronary Heart Disease

	2002	2008	2014	2017	2020*
Kent County	6.5%	4.6%	4.8%	6.4%	3.9%
Michigan	7.1%	4.7%	5.4%	5.2%	5.0%
U.S.		4.3%	4.2%	3.9%	4.3%

*Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Chronic Health Conditions: Stroke

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
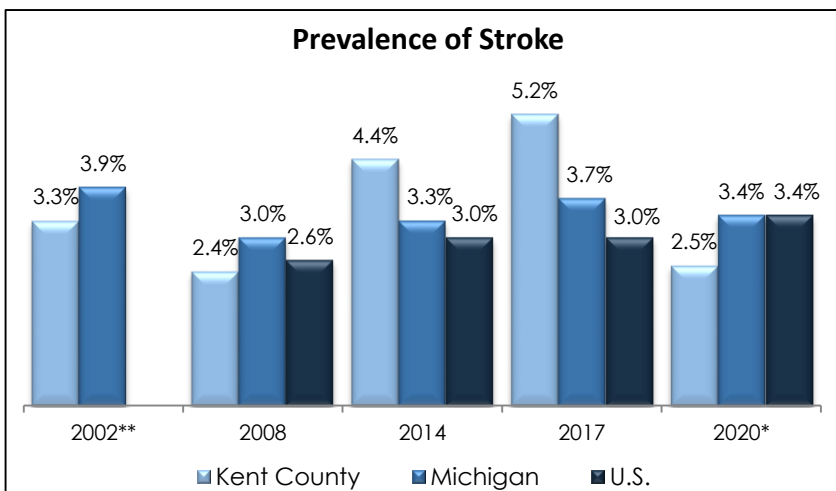
Stroke kills nearly 140,000 Americans each year – that's 1 of every 20 deaths. Stroke and Cardiovascular Heart Disease share many of the same risk factors. Although the health complications from stroke are severe, the risk of stroke can be greatly reduced by increasing physical activity, eating a balanced diet, avoiding drinking too much alcohol, and quitting smoking.[20]

The overall rate of stroke among Kent County adults age 35 or older is 2.5%. This figure represents a nearly 3-point decrease since 2017 and is below the statewide and national rates (3.4% each). The drop is attributable mainly to lower incidence of stroke noted this year among males, African Americans, and those in the very bottom income and education categories.

Again, predictably, stroke continues to be most common in the oldest age cohorts (at least 55 years old). Mirroring the patterns uncovered in earlier surveys, it is also more prevalent among those with annual incomes below $35,000 and non-college graduates.

Percentage of respondents who were told by a doctor that they had a stroke

Demographic Characteristics	Ever Told You Had a Stroke
Total	2.5%
Age	
18-24	-
25-34	-
35-44	0.5%
45-54	0.5%
55-64	2.9%
65+	6.9%
Gender	
Male	2.2%
Female	2.8%
Race	
White	2.4%
Black	4.1%
Hispanic	3.0%
Non-Hispanic	2.5%
Education	
< High School	3.0%
High School Grad	3.4%
Some College	3.2%
College Graduate	1.6%
Household Income	
<$20,000	4.1%
$20,000-$34,999	5.6%
$35,000-$$49,999	1.1%
$50,000-$74,999	1.4%
$75,000 or more	1.1%

Prevalence of Stroke

Year	Kent County	Michigan	U.S.
2002**	3.3%	3.9%	
2008	2.4%	3.0%	2.6%
2014	4.4%	3.3%	3.0%
2017	5.2%	3.7%	3.0%
2020*	2.5%	3.4%	3.4%

■ Kent County ■ Michigan ■ U.S.

Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)
**National comparative data is not available for this category for year 2002.

Healthy People 2020 objective 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, nighttime or early morning coughing, difficulty breathing, and chest tightness. Asthma attacks can be triggered by a variety of factors, such as pollution, tobacco smoke, dust mites, pets, mold, and/or respiratory infections. At present, close to 8% of Americans suffer from asthma.[21] The condition accounts for 188,968 hospitalizations, more than 1.8 million emergency department visits, and 9.8 million doctor visits.[22]
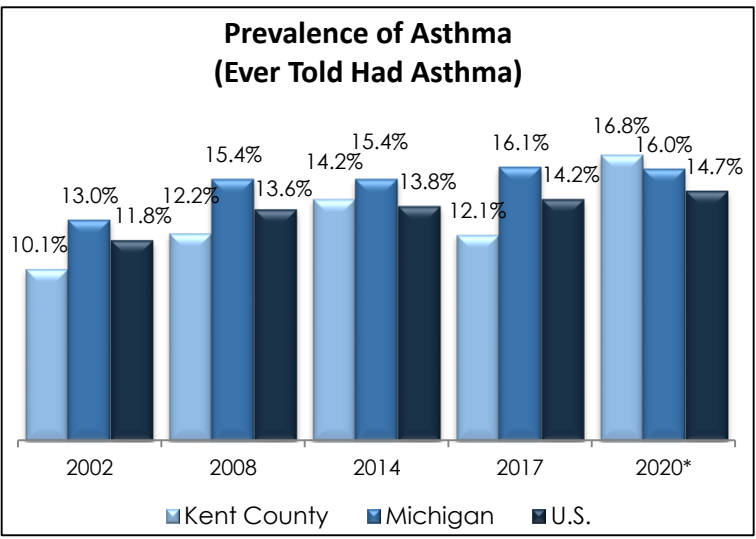
While the trends observed for Michigan and the U.S. in general remain consistent with the 2017 levels, the incidence of self-reported asthma among Kent County adults is now at 16.8% - nearly 5 points up. This result is slightly above the statewide rate (16.0%), and over 2 points above the national figure (14.7%). The recent lift is attributable mainly to higher incidence of self-reported asthma among females, individuals under the age of 54, as well as those in the lowest education and income segments.

Just as in the previous survey waves, asthma appears to be significantly more prevalent among females than males. Additionally, this year, asthma rates are inversely proportional to residents' age and peak among Caucasians, non-Hispanics, and those earning less than $20,000 in annual household incomes.

Prevalence of Asthma (Ever Told Had Asthma)

	Kent County	Michigan	U.S.
2002	10.1%	13.0%	11.8%
2008	12.2%	15.4%	13.6%
2014	14.2%	15.4%	13.8%
2017	12.1%	16.1%	14.2%
2020*	16.8%	16.0%	14.7%

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 Had Asthma	Still Have Asthma
Total	16.8%	10.4%
Age		
18-24	20.6%	11.6%
25-34	22.6%	13.8%
35-44	18.2%	12.2%
45-54	16.1%	9.5%
55-64	14.3%	10.0%
65+	8.5%	5.6%
Gender		
Male	13.4%	7.4%
Female	20.0%	13.3%
Race		
White	17.6%	11.3%
Black	16.1%	10.1%
Hispanic	10.6%	5.8%
Non-Hispanic	17.4%	11.0%
Education		
< High School	17.3%	11.6%
High School Grad	18.1%	12.9%
Some College	17.7%	8.7%
College Graduate	15.4%	10.1%
Household Income		
<$20,000	25.2%	15.8%
$20,000-$34,999	17.5%	11.3%
$35,000-$$49,999	17.5%	12.1%
$50,000-$74,999	13.3%	7.1%
$75,000 or more	13.9%	8.9%

36 *Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)*

2020 Behavioral Risk Factor Survey

Chronic Health Conditions: COPD, Emphysema or Bronchitis

Healthy People 2020 objective RD-10: Reduce deaths from chronic obstructive pulmonary disease (COPD)

Healthy People 2020 objective RD-11: Reduce hospitalizations from chronic obstructive pulmonary disease (COPD)

People with chronic obstructive pulmonary disease (COPD) experience persistent breathing problems and low respiratory function. Three-quarters of COPD cases are linked to a history of smoking, with genetics and exposure to environmental irritants also contributing to the disease. A total of 16 million of Americans have been diagnosed with this condition, while 12 million more may have undiagnosed COPD.[4]

A total of 4.0% of Kent County residents has ever been told that they had COPD, emphysema, or chronic bronchitis. This figure is notably below the state- and nationwide prevalence data (8.6% and 6.4%, respectively).

Like many other conditions, COPD is notably more prevalent among residents over the age of 55. It is also more frequent among Caucasian and non-Hispanic population of the County. Finally, residents making under $50,000 per year are more apt to report this diagnosis than their more affluent counterparts.

Percentage of respondents who were told by a doctor that they had COPD, emphysema or chronic bronchitis

Demographic Characteristics	Ever Told Had COPD, Emphysema or Chronic Bronchitis
Total	4.0%
Age	
18-24	1.3%
25-34	0.7%
35-44	2.6%
45-54	3.3%
55-64	5.6%
65+	11.3%
Gender	
Male	2.8%
Female	5.0%
Race	
White	4.5%
Black	4.3%
Hispanic	1.1%
Non-Hispanic	4.2%
Education	
< High School	4.9%
High School Grad	5.6%
Some College	5.3%
College Graduate	1.9%
Household Income	
<$20,000	4.9%
$20,000-$34,999	7.4%
$35,000-$$49,999	7.8%
$50,000-$74,999	2.7%
$75,000 or more	1.1%

Prevalence of COPD

4.0%	8.6%	6.4%
■ Kent County	■ Michigan	■ U.S.

*Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Chronic Health Conditions: Depressive Disorder

Healthy People 2020 objective MHMD-11: Increase depression screening by primary care workers

Healthy People 2020 objective MHMD-4: Reduce the proportion of persons who experience major depressive episodes (MDEs)

Depression is a common and treatable mental disorder characterized by changes in mood, and cognitive and physical symptoms over a period of time. It is the leading cause of disability in the U.S., associated with high societal costs and greater functional impairment than many other chronic diseases, including diabetes and arthritis.[23] The most commonly diagnosed form of depression is major depressive disorder. In 2015, approximately 16.1 million Americans had experienced at least one major depressive episode in the past year. [24]

Nearly a quarter (23.7%) of Kent County residents has ever been told that they had a depressive disorder (depression, major depression, dysthymia) or minor depression. This rate is on par with the state prevalence data (23.2%), but above the national figure (19.6%).

The likelihood of this diagnosis is inversely proportional to residents' age and income level, with younger and less affluent individuals being most likely to suffer from depression. Moreover, females, non-college graduates, as well as Caucasian and non-Hispanic residents are more apt to be depressed than their counterparts.

Percentage of respondents who were told by a doctor that they had a depressive disorder, or minor depression

Demographic Characteristics	Ever Told Had Depressive Disorder
Total	23.7%
Age	
18-24	36.7%
25-34	22.0%
35-44	23.5%
45-54	22.3%
55-64	24.8%
65+	16.9%
Gender	
Male	18.4%
Female	28.8%
Race	
White	25.5%
Black	16.0%
Hispanic	16.4%
Non-Hispanic	24.5%
Education	
< High School	23.2%
High School Grad	23.0%
Some College	28.0%
College Graduate	21.2%
Household Income	
<$20,000	30.3%
$20,000-$34,999	30.5%
$35,000-$$49,999	28.1%
$50,000-$74,999	25.6%
$75,000 or more	14.0%

Prevalence of Depressive Disorder
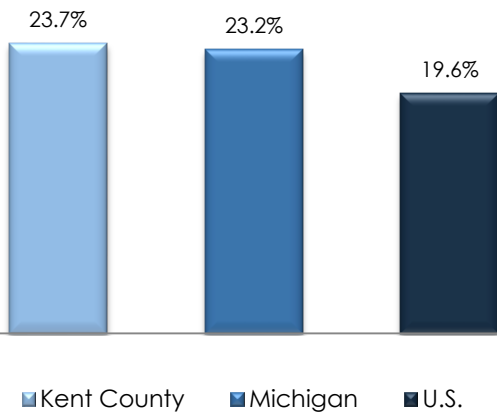
Kent County 23.7% | Michigan 23.2% | U.S. 19.6%

Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Chronic Health Conditions: Kidney Disease

Healthy People 2020 objective CKD-1: Reduce the proportion of the U.S. population with chronic kidney disease

Healthy People 2020 objective CKD-7: Reduce the number of deaths among persons with chronic kidney disease

Chronic kidney disease (CKD) is a condition in which kidneys are damaged and cannot filter blood the way they should. In early stages, CKD may go undetected, and the only way to diagnose the condition is through specific blood and urine tests. Adults with diabetes, high blood pressure, heart disease, obesity, lupus, and a family history of CKD have a higher risk of developing the condition.[25] If untreated, the disease may progress to kidney failure – a condition currently affecting more than 661,000 Americans. Each year, kidney disease kills more people than breast and prostate cancer.[26] Eating more fruit and vegetables, staying physically active, and getting regular checkups are the best prevention methods.[25]
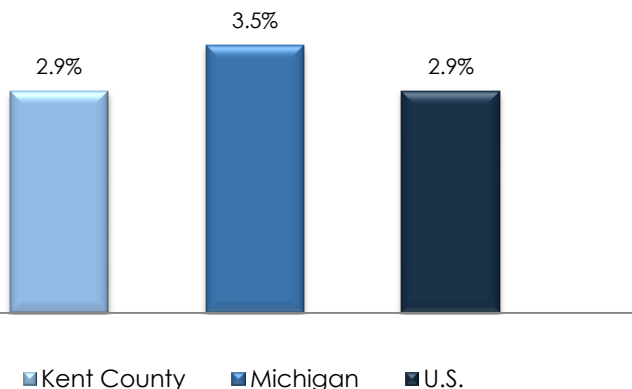
At 2.9%, the incidence of kidney disease in Kent County is on par with the nationwide rate (2.9%) and slightly below the figure noted for Michigan as a whole (3.5%).

Residents over the age of 55 are the highest risk of this condition.

Percentage of respondents who were told by a doctor that they had kidney disease

Demographic Characteristics	Ever Told Had Kidney Disease
Total	2.9%
Age	
18-24	1.3%
25-34	1.2%
35-44	1.3%
45-54	2.4%
55-64	5.0%
65+	6.7%
Gender	
Male	1.8%
Female	3.9%
Race	
White	2.5%
Black	4.8%
Hispanic	3.4%
Non-Hispanic	2.6%
Education	
< High School	3.5%
High School Grad	2.4%
Some College	3.9%
College Graduate	2.4%
Household Income	
<$20,000	2.4%
$20,000-$34,999	5.3%
$35,000-$$49,999	4.4%
$50,000-$74,999	3.6%
$75,000 or more	1.1%

Prevalence of Kidney Disease

Kent County 2.9% · Michigan 3.5% · U.S. 2.9%

■ Kent County ■ Michigan ■ U.S.

*Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Chronic Health Conditions: Skin Cancer

Healthy People 2020 objective C-8: Reduce the melanoma cancer death rate

Healthy People 2020 objective C-20: Increase the proportion of persons who participate in behaviors that reduce their exposure to harmful ultraviolet (UV) irradiation and avoid sunburn

In the U.S., more than 9,500 people are diagnosed with skin cancer every day. On an annual basis, that is more than all other cancers combined.[27] In 2016, the melanoma type of skin cancer was the 6th most common cancer as measured by new cases nationwide. In the same year, 2,391 melanoma cases were reported in Michigan.[28] The annual cost of treating skin cancers in the U.S. is estimated at $8.1 billion.[27]

The overall rate of skin cancer among Kent County adults is 4.6%. This figure is below both the state rate (6.4%) and the national prevalence data (6.3%).

The incidence of skin cancer peaks in the 55+ age segments. Caucasian and non-Hispanic respondents, as well as those who have at least high school diplomas are also notably more likely to have skin cancer than their counterparts.

Percentage of respondents who were told by a doctor that they had skin cancer

Demographic Characteristics	Ever Told Had Skin Cancer
Total	4.6%
Age	
18-24	1.4%
25-34	1.4%
35-44	0.6%
45-54	3.4%
55-64	7.9%
65+	14.3%
Gender	
Male	3.7%
Female	5.5%
Race	
White	5.5%
Black	0.3%
Hispanic	-
Non-Hispanic	5.0%
Education	
< High School	1.0%
High School Grad	5.4%
Some College	3.5%
College Graduate	5.5%
Household Income	
<$20,000	3.9%
$20,000-$34,999	3.0%
$35,000-$$49,999	8.2%
$50,000-$74,999	3.3%
$75,000 or more	4.5%

Prevalence of Skin Cancer
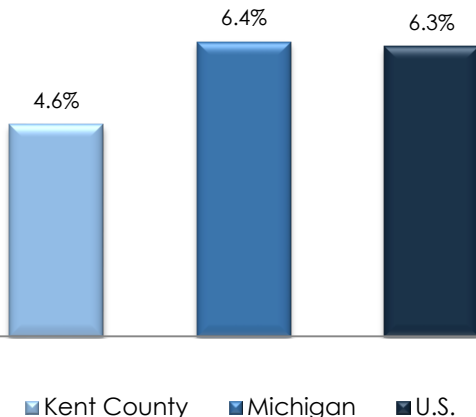
Kent County 4.6%, Michigan 6.4%, U.S. 6.3%

Chronic Health Conditions: Other Types of Cancer

Healthy People 2020 objective C-1: Reduce the overall cancer death rate

Cancer is the second-leading cause of death in the United States, behind heart disease. The most common cancers in the nation – breast, prostate, lungs and bronchus, and colorectal cancer – are responsible for the most deaths. Smoking is a factor in 30% of cancer deaths, and avoiding tobacco use is the best way to reduce that rate.[4] In 2017, in Michigan, cancer was the cause of 20,671 deaths.[29] The cost of cancer care is expected to increase to nearly $158 billion by 2020.[30] The estimated cost of lost productivity from cancer mortality is $146.7 billion in 2020.[31]
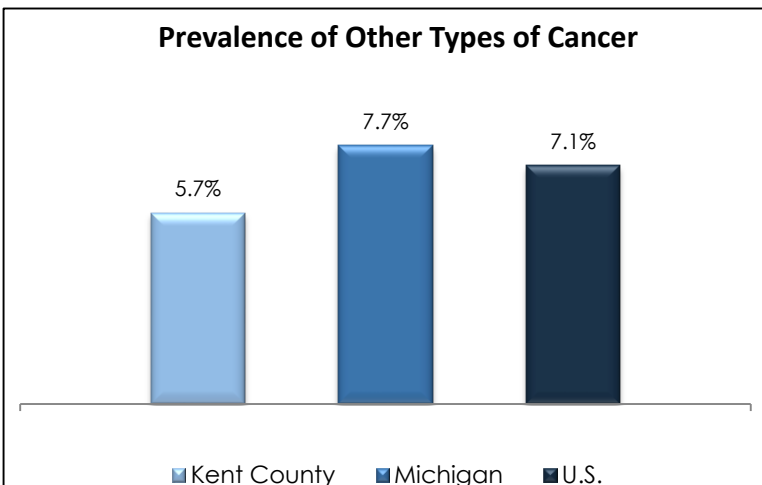
The overall rate of cancer (other than skin cancer) among Kent County adults is 5.7%. This figure is lower than both the state rate (7.7%) and the national prevalence data (7.1%).

Residents age 65+ are more likely than those younger to develop other types of cancer. Females are also more likely than males to have been diagnosed with cancer.

Percentage of respondents who were told by a doctor that they had any other types of cancer	
Demographic Characteristics	**Ever Told Had Any Other Types of Cancer**
Total	5.7%
Age	
18-24	-
25-34	-
35-44	4.0%
45-54	7.0%
55-64	6.1%
65+	18.0%
Gender	
Male	3.8%
Female	7.6%
Race	
White	6.1%
Black	5.4%
Hispanic	2.5%
Non-Hispanic	6.0%
Education	
< High School	4.9%
High School Grad	4.8%
Some College	6.3%
College Graduate	6.0%
Household Income	
<$20,000	5.2%
$20,000-$34,999	9.7%
$35,000-$$49,999	7.3%
$50,000-$74,999	4.1%
$75,000 or more	4.3%

Prevalence of Other Types of Cancer

Kent County 5.7% · Michigan 7.7% · U.S. 7.1%

■ Kent County ■ Michigan ■ U.S.

41 *Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Chronic Health Conditions: Diabetes

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 2,824 deaths in 2018. It was the primary cause of nearly 3% of deaths statewide.[18] Obesity, physical inactivity, being 45 years or older, and/or having a family history of diabetes are just a few of the known risk factors that are associated with the development of diabetes.[32]
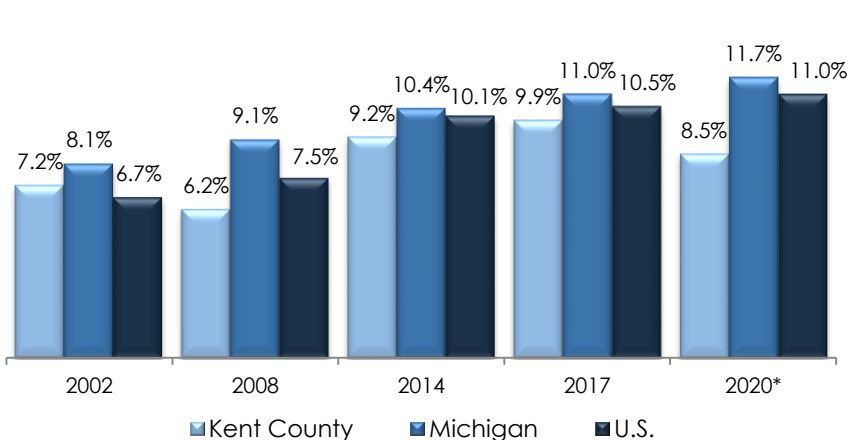
At 8.5%, the incidence of diabetes among Kent County residents is at its lowest since 2014. At present, this figure is well below the state- and nationwide rates (11.7% and 11.0%, respectively). The observed drop is attributable mainly to lower prevalence of diabetes noted this year among residents under the age of 65, males, African American and Hispanics, and those in the lower income and education cohorts.

Mirroring the patterns uncovered in earlier surveys, incidence of diabetes increases substantially with the age of residents. It also remains higher among non-college graduates, individuals with lower income levels (up to $34,999 per year), and African Americans.

Percentage of respondents who had ever been told by a doctor that they have diabetes (excluding gestational diabetes)	
Demographic Characteristics	**Ever Told Had Diabetes**
Total	8.5%
Age	
18-24	2.7%
25-34	-
35-44	3.4%
45-54	10.1%
55-64	13.4%
65+	23.2%
Gender	
Male	7.6%
Female	9.3%
Race	
White	7.6%
Black	15.9%
Hispanic	8.1%
Non-Hispanic	8.5%
Education	
< High School	14.9%
High School Grad	9.5%
Some College	11.1%
College Graduate	5.0%
Household Income	
<$20,000	11.8%
$20,000-$34,999	13.6%
$35,000-$$49,999	9.5%
$50,000-$74,999	6.6%
$75,000 or more	4.8%

Prevalence of Diabetes

	Kent County	Michigan	U.S.
2002	7.2%	8.1%	6.7%
2008	6.2%	9.1%	7.5%
2014	9.2%	10.4%	10.1%
2017	9.9%	11.0%	10.5%
2020*	8.5%	11.7%	11.0%

*Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

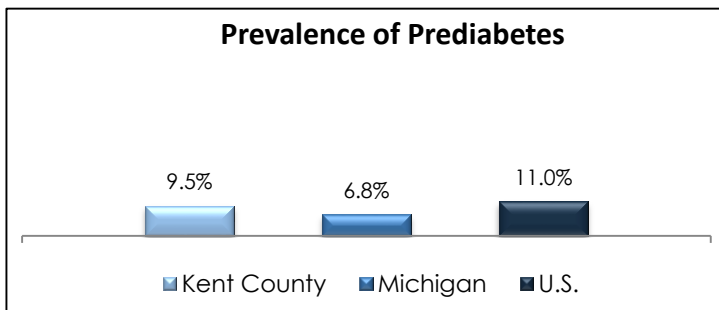2020 Behavioral Risk Factor Survey

Prediabetes

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

Healthy People 2020 objective D-15: Increase the proportion of persons with diabetes whose condition has been diagnosed
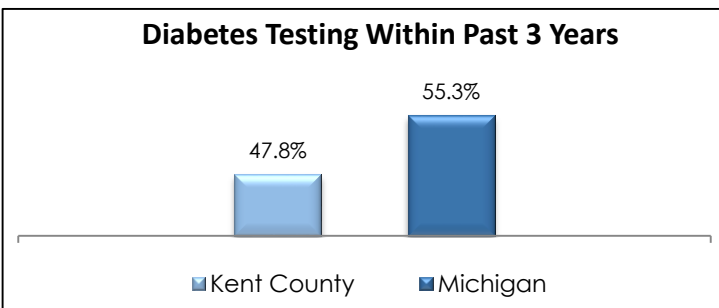
Prediabetes, or borderline diabetes, is a potentially reversible condition that occurs when blood sugar levels are higher than normal, but not high enough to be classified as diabetes. In 2014, the U.S. Department of Health and Human Services reported that at least 86 million of U.S. adults ages 20 and older had prediabetes.[33,35] In Michigan, this number is estimated at 2.6 million, or 37% of adult population. [34, 36]

At 9.5%, the prevalence of prediabetes among Kent County residents is nearly 3 points above Michigan's rate (6.8%) but below the nationwide figure (11.0%). Residents most likely to have prediabetes are typically age 45+.

Within the past 3 years, close to a half (47.8%) of Kent County residents have had a test for high blood sugar or diabetes. This is below the statewide rate of 55.3%. The likelihood of having had the test is directly proportional to residents' age and peaks among African Americans and those in the $20,000-$35,000 income segment.

Prevalence of Prediabetes

9.5%   6.8%   11.0%

■ Kent County   ■ Michigan   ■ U.S.

Note: The 2020 comparative data is based on 2015 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

Diabetes Testing Within Past 3 Years

55.3%

47.8%

■ Kent County   ■ Michigan

Demographic Characteristics	Diabetes Test Within Past 3 Years	Ever Told Had Prediabetes
Total	47.8%	9.5%
Age		
18-24	25.9%	9.0%
25-34	35.6%	1.5%
35-44	44.9%	7.5%
45-54	53.1%	13.5%
55-64	63.1%	13.8%
65+	69.5%	15.5%
Gender		
Male	45.2%	9.5%
Female	50.3%	9.6%
Race		
White	45.5%	9.1%
Black	61.4%	17.4%
Hispanic	47.5%	9.8%
Non-Hispanic	47.6%	9.5%
Education		
< High School	56.0%	5.7%
High School Grad	45.5%	10.4%
Some College	44.5%	10.7%
College Graduate	50.7%	8.8%
Household Income		
<$20,000	48.0%	12.3%
$20,000-$34,999	55.9%	11.8%
$35,000-$$49,999	42.8%	10.5%
$50,000-$74,999	42.0%	9.7%
$75,000 or more	49.2%	5.5%

Percentage of respondents tested for high blood sugar/diabetes within the past 3 years, and percentage told they had prediabetes

43 *Note: The 2020 comparative data is based on combined 2012-2014 BRFSS of Michigan Residents. No national comparative data available*

2020 Behavioral Risk Factor Survey

HEALTH DEPARTMENT
Caring today for a healthy tomorrow

Healthy People 2020 objective AOCBC-1: Reduce the mean level of joint pain among adults with doctor-diagnosed arthritis

Healthy People 2020 objective AOCBC-7: Increase the proportion of adults with doctor-diagnosed arthritis who receive health care provider counseling

Over 54 million Americans have arthritis, a condition that can cause severe, chronic joint pain. Arthritis is a leading cause of disability, and over half of people living with this condition says it interferes with their daily activities.[4] Arthritis can take many forms such as rheumatoid arthritis (an autoimmune disease causing painful swelling,) gout (a form of inflammatory arthritis affecting one joint at a time) fibromyalgia (a condition causing abnormal pain perception processing)[37] or lupus (an autoimmune disease that can damage any part of the body.)[38]

Close to a quarter (23.1%) of Kent County residents have been diagnosed with some form of arthritis. This result is considerably lower than the statewide figure (32.1%) and the national data (26.1%).

The incidence of arthritis generally increases in proportion to residents' age. It is also more prevalent among females, non-Hispanic respondents, and individuals earning less than $75,000 per year.

Percentage of respondents who were told by a doctor that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia

Demographic Characteristics	Ever Told Had Arthritis, Rheumatoid Arthritis, Gout, Lupus or Fibromyalgia
Total	23.1%
Age	
18-24	3.9%
25-34	2.6%
35-44	14.3%
45-54	31.5%
55-64	35.0%
65+	53.1%
Gender	
Male	18.9%
Female	27.0%
Race	
White	24.8%
Black	24.8%
Hispanic	13.0%
Non-Hispanic	24.1%
Education	
< High School	17.8%
High School Grad	22.6%
Some College	26.3%
College Graduate	21.7%
Household Income	
<$20,000	25.0%
$20,000-$34,999	32.2%
$35,000-$$49,999	30.4%
$50,000-$74,999	26.6%
$75,000 or more	15.5%

Incidence of Arthritis
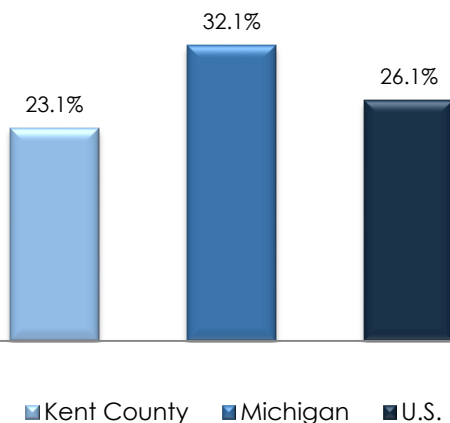
Bar chart showing: Kent County 23.1%, Michigan 32.1%, U.S. 26.1%

■ Kent County ■ Michigan ■ U.S.

*Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Tobacco Use

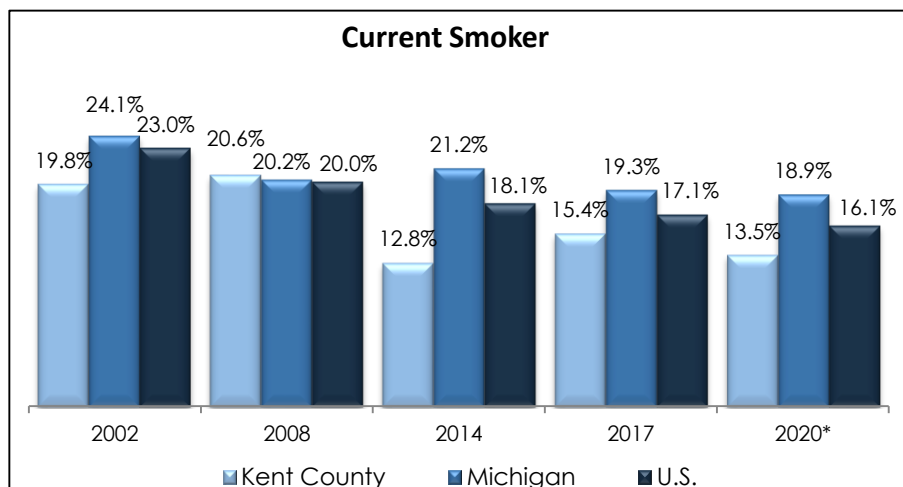## Healthy People 2020 objective TU-1: Reduce tobacco use by adults

Smoking contributes to the development of many kinds of chronic conditions, including cancers, respiratory diseases, diabetes, and cardiovascular diseases. It is "the leading cause of preventable death"[39] and "one of the biggest public health threats the world has ever faced, killing more than 8 million people a year around the world."[40] It has been estimated that smoking costs the United States nearly $170 billion in annual medical costs and another $156 billion in lost economic productivity,[41] as well as over 5 million years of potential life lost each year.[42] Current smoking status is defined as ever having smoked 100 cigarettes (five packs) and smoking cigarettes now, either every day or on some days.

A total of 13.5% of Kent County adult residents are current smokers, based on the definition cited above. This figure is considerably lower than the state- and nationwide prevalence data (18.9% and 16.1%, respectively) and represents a nearly 2-point drop in comparison to the 2017 Kent County BRFSS. This positive change is driven mostly by a decrease in the proportion of current smokers among residents younger than 35, males, Hispanics, and those with at least some college education.

Prevalence of smoking continues to be least common among respondents over the age of 65, as well as college graduates and individuals with household incomes of at least $50,000 per year.

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

Demographic Characteristics	Current Smoker
Total	13.5%
Age	
18-24	10.9%
25-34	12.2%
35-44	19.4%
45-54	16.2%
55-64	13.7%
65+	8.2%
Gender	
Male	14.7%
Female	12.3%
Race	
White	13.5%
Black	17.3%
Hispanic	9.9%
Non-Hispanic	13.8%
Education	
< High School	23.0%
High School Grad	20.7%
Some College	15.8%
College Graduate	5.6%
Household Income	
<$20,000	14.3%
$20,000-$34,999	20.5%
$35,000-$$49,999	28.8%
$50,000-$74,999	9.1%
$75,000 or more	7.2%

Current Smoker

Bar chart showing Current Smoker percentages for Kent County, Michigan, and U.S.:

- 2002: Kent County 19.8%, Michigan 24.1%, U.S. 23.0%
- 2008: Kent County 20.6%, Michigan 20.2%, U.S. 20.0%
- 2014: Kent County 12.8%, Michigan 21.2%, U.S. 18.1%
- 2017: Kent County 15.4%, Michigan 19.3%, U.S. 17.1%
- 2020*: Kent County 13.5%, Michigan 18.9%, U.S. 16.1%

■ Kent County ■ Michigan ■ U.S.

45 *Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

Marijuana Use

KENT COUNTY MICHIGAN

HEALTH DEPARTMENT
Caring today for a healthy tomorrow

Healthy People 2020 objective SA-13: Reduce past-month use of illicit substances

While legalized in many states, marijuana is still considered an illicit substance in others. Its use is on the rise, with over 24 million current users in the U.S. in 2017.[43,47] Only from 2002 to 2014, the prevalence of past month marijuana use went up by 35% among persons age 12+, with the increases being greatest among adults age 55+.[44] Heavy or frequent marijuana use has a negative effect on attention, memory, and learning, and has been linked to depression and anxiety.[45] Smoked marijuana also includes many of the same substances found in tobacco smoke, which are harmful to the lungs and cardiovascular system, and could lead to increased risk of stroke and heart disease.[46]

A total of 16.1% of Kent County residents used marijuana at least once within the past 30 days. This is considerably above the figure noted for U.S. as a whole (8.6%.)

This result is driven mostly by respondents in the younger age categories (up to 44 years old), males, and non-Hispanics. The likelihood of having smoked marijuana in the past month also peaks among non-college graduates and those earning less than $75,000 per year.

Percentage of respondents who used marijuana/cannabis 1+ day within past 30 days

Demographic Characteristics	Used Marijuana 1+ Day Within Past 30 Days
Total	16.1%
Age	
18-24	31.7%
25-34	26.7%
35-44	15.0%
45-54	9.2%
55-64	10.4%
65+	6.1%
Gender	
Male	19.2%
Female	13.2%
Race	
White	16.9%
Black	20.4%
Hispanic	10.0%
Non-Hispanic	16.9%
Education	
< High School	19.5%
High School Grad	22.2%
Some College	18.4%
College Graduate	10.1%
Household Income	
<$20,000	19.4%
$20,000-$34,999	19.6%
$35,000-$$49,999	19.3%
$50,000-$74,999	18.7%
$75,000 or more	9.6%

Smoked Marijuana in Past Month

Kent County: 16.1%
U.S.: 8.6%

■ Kent County ■ U.S.
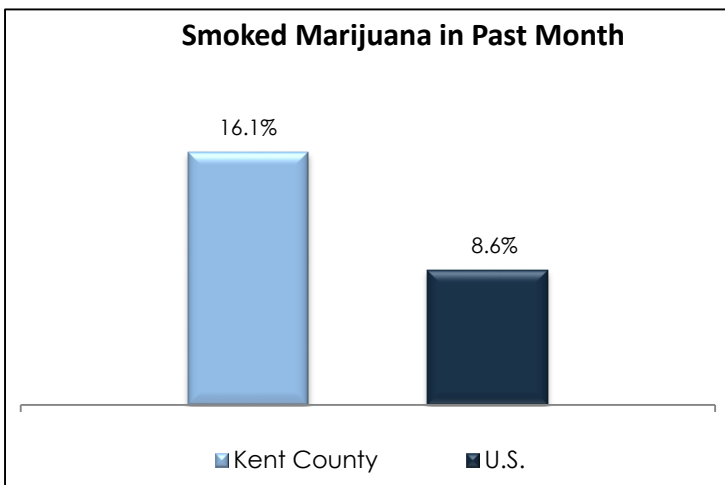
Note: The 2020 comparative data is based on combined 2016-2017 Nationwide BRFSS (States, DC and Territories). No state comparative data available

2020 Behavioral Risk Factor Survey

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
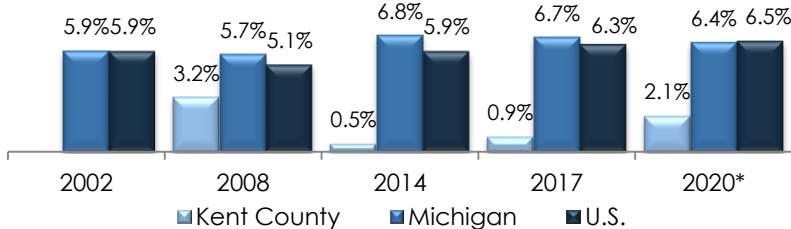
Alcohol abuse has been associated with serious health problems such as cirrhosis of the liver, high blood pressure, stroke, and cancer, and can increase the risk for motor vehicle accidents, injuries, violence, and suicide. In Michigan, the percent of fatal motor vehicle crashes that involved alcohol was 3.1% in 2018.[48] 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.

At 2.1%, the rate of heavy drinking among Kent County residents has increased to its highest level since 2008 but remains significantly below state- and nationwide figures (6.4% and 6.5%, respectively). Additionally, at 15.8%, the percentage of binge drinkers is only marginally above the 2017 score, showing consistency with the U.S. figure (16.2%) and remaining below the Michigan data (18.2%). The highest rate of binge drinking continues to be observed among respondents under the age of 54, as well as Caucasian males. Residents in the $35,000-$74,999 income bracket are also among the most likely binge drinkers.
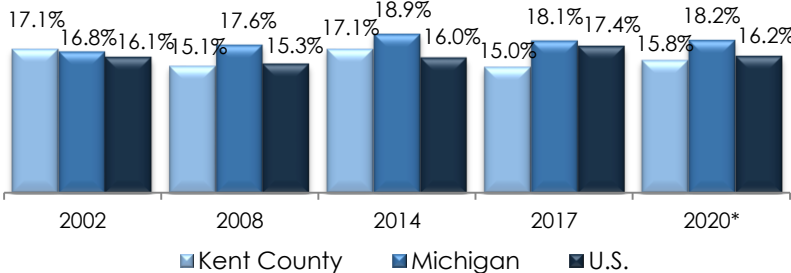
Heavy Drinking

5.9% 5.9%	3.2% 5.7% 5.1%	0.5% 6.8% 5.9%	0.9% 6.7% 6.3%	2.1% 6.4% 6.5%
2002	2008	2014	2017	2020*

■Kent County ■Michigan ■U.S.

Binge Drinking

17.1% 16.8% 16.1%	15.1% 17.6% 15.3%	17.1% 18.9% 16.0%	15.0% 18.1% 17.4%	15.8% 18.2% 16.2%
2002	2008	2014	2017	2020*

■Kent County ■Michigan ■U.S.

Percentage of respondents reporting heavy drinking and percentage of respondents reporting binge drinking

Demographic Characteristics	Heavy Drinking	Binge Drinking
Total	2.1%	15.8%
Age		
18-24	1.4%	18.2%
25-34	2.1%	20.5%
35-44	3.0%	24.2%
45-54	1.5%	17.5%
55-64	1.7%	8.8%
65+	3.4%	5.1%
Gender		
Male	3.0%	19.9%
Female	1.3%	11.9%
Race		
White	2.4%	17.2%
Black	1.7%	8.5%
Hispanic	0.8%	10.4%
Non-Hispanic	2.3%	16.5%
Education		
< High School	2.1%	13.9%
High School Grad	2.1%	16.1%
Some College	3.1%	16.3%
College Graduate	1.4%	15.7%
Household Income		
<$20,000	3.6%	12.2%
$20,000-$34,999	1.2%	12.5%
$35,000-$$49,999	1.4%	21.7%
$50,000-$74,999	4.8%	21.8%
$75,000 or more	1.8%	18.0%

*Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

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 cancer, 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 anxiety and depression, and improve sleep.[49] The Healthy People target for no leisure-time physical activity is set at 32.6%.

Approximately a quarter (25.4%) of Kent County residents report no leisure-time physical activity. This is the highest proportion to date, exceeding the state- and nationwide figures (23.9% and 23.8%, respectively). However, it is still comfortably below the Healthy People 2020 target rate set for this indicator.
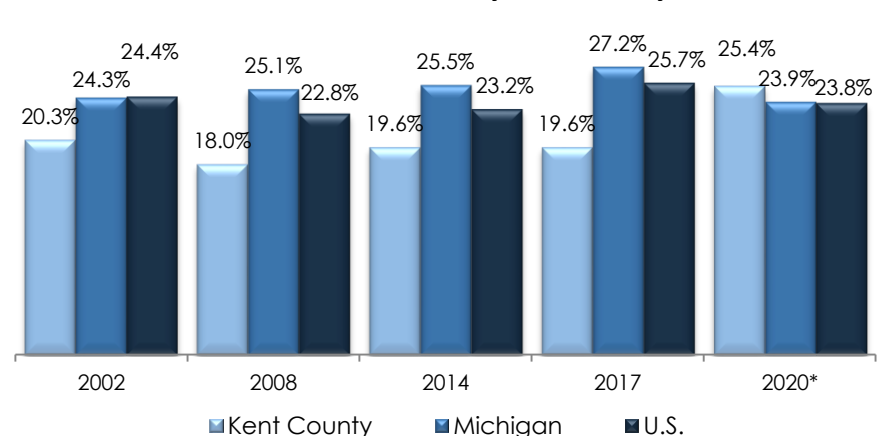
The increase in self-reported lack of physical activity is driven by the youngest residents (age 18-24), males, Hispanics, and residents with less than high school education, who are now much more likely to say they do not participate in any physical activities for exercise.

Just as in previous surveys, leisure-time physical activity is least prevalent among the oldest respondent segment (age 65+), as well as among Hispanics. Moreover, mirroring the patterns observed since 2008, college graduates and higher income earners (at least $50,000 per year) are significantly more likely to report some type of leisure-time physical activity than their counterparts.

Percentage of respondents who reported no leisure-time physical activity

Demographic Characteristics	No Physical Activity
Total	25.4%
Age	
18-24	21.8%
25-34	21.6%
35-44	20.4%
45-54	27.2%
55-64	28.7%
65+	34.0%
Gender	
Male	23.8%
Female	27.0%
Race	
White	23.8%
Black	24.4%
Hispanic	41.9%
Non-Hispanic	23.8%
Education	
< High School	56.3%
High School Grad	35.6%
Some College	23.7%
College Graduate	16.2%
Household Income	
<$20,000	29.2%
$20,000-$34,999	35.6%
$35,000-$$49,999	35.9%
$50,000-$74,999	19.7%
$75,000 or more	14.9%

No Leisure-Time Physical Activity

	2002	2008	2014	2017	2020*
Kent County	20.3%	18.0%	19.6%	19.6%	25.4%
Michigan	24.3%	25.1%	25.5%	27.2%	23.9%
U.S.	24.4%	22.8%	23.2%	25.7%	23.8%

Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey
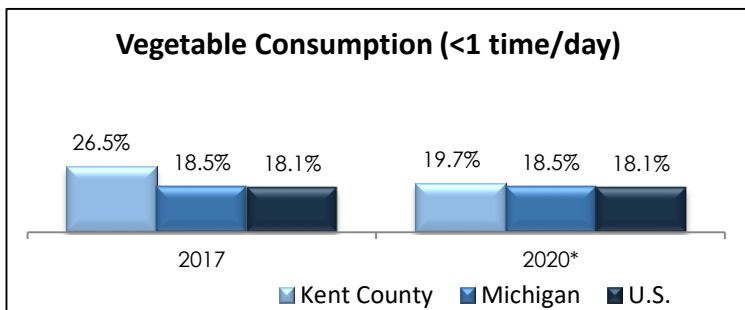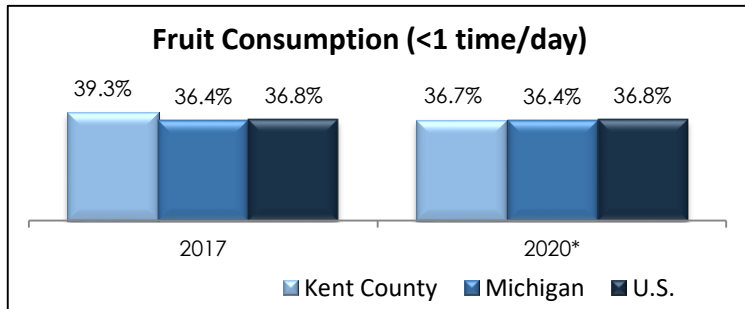
Fruits & Vegetables

Healthy People 2020 objective NWS-14: Increase the contribution of fruits to the diets of the population aged 2 years and older

Healthy People 2020 objective NWS-15: Increase the variety and contribution of vegetables to the diets of the population aged 2 years and older

Eating a diet rich in fruits and vegetables can help reduce the risk of developing many chronic diseases, including heart disease, diabetes, some cancers and obesity.[50] Fruits and vegetables are also major contributors of a number of nutrients (such as potassium, dietary fiber, magnesium, as well as vitamins A, C, and K) that are currently under-consumed in the United States.[51] Currently, only 12.2% of adults meet their daily fruit recommendation (2 cups daily), and only 9.3% meet the vegetable recommendation (2.5 cups).[52]

More than a third of Kent County residents (36.7%) consumes fruit less than 1 time per day, and nearly a fifth (19.7%) consumes vegetables less than 1 time per day. Fruit consumption is in line with the figures reported in state- and nationwide BRFSS studies (36.4% and 36.8%) and represents an improvement over the 2017 figure. Vegetable consumption has improved immensely since 2017 and is now only slightly above the prevalence data reported for Michigan (18.5%) and U.S. in general (18.1%). A more in-depth analysis shows that the lowest fruit and vegetable consumption continues to be reported by individuals with a high school diploma or less, as well as by those with lower incomes.

Percentage of respondents who reported limited fruit and vegetable consumption

Demographic Characteristics	Fruits (<1 time/day)	Vegetables (<1 time /day)
Total	36.7%	19.7%
Age		
18-24	31.1%	27.5%
25-34	41.1%	17.3%
35-44	41.7%	17.5%
45-54	41.4%	20.8%
55-64	36.6%	15.6%
65+	26.0%	20.3%
Gender		
Male	38.3%	23.0%
Female	35.2%	16.5%
Race		
White	35.5%	17.9%
Black	42.8%	24.8%
Hispanic	41.6%	28.9%
Non-Hispanic	36.1%	18.8%
Education		
< High School	45.9%	29.6%
High School Grad	46.2%	29.6%
Some College	36.9%	18.9%
College Graduate	29.8%	13.2%
Household Income		
<$20,000	38.9%	21.0%
$20,000-$34,999	40.0%	28.6%
$35,000-$$49,999	46.7%	19.7%
$50,000-$74,999	36.3%	15.8%
$75,000 or more	33.9%	16.4%

Fruit Consumption (<1 time/day)

	2017			2020*		
	39.3%	36.4%	36.8%	36.7%	36.4%	36.8%

Legend: ■ Kent County ■ Michigan ■ U.S.

Vegetable Consumption (<1 time/day)

	2017			2020*		
	26.5%	18.5%	18.1%	19.7%	18.5%	18.1%

Legend: ■ Kent County ■ Michigan ■ U.S.

*Note: The 2020 comparative data is based on 2017 BRFSS of Michigan Residents and 2017 Nationwide BRFSS (States, DC and Territories)

2020 Behavioral Risk Factor Survey

Sugar Sweetened Beverages

HEALTH DEPARTMENT
Caring today for a healthy tomorrow

Healthy People 2020 objective NWS-17.2: Reduce consumption of calories from added sugars
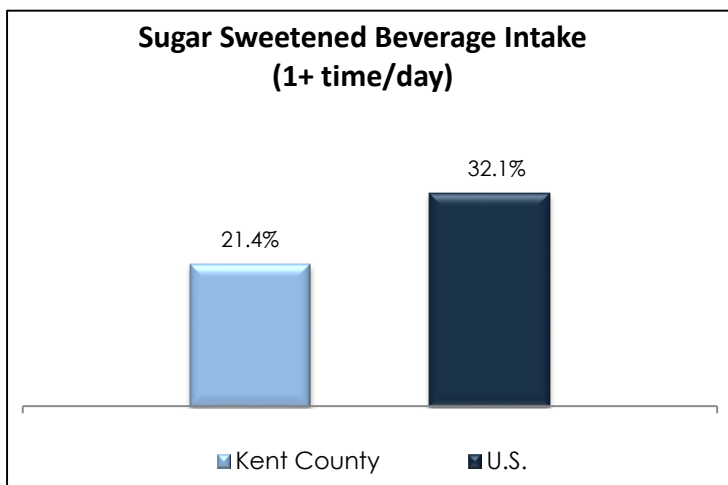**Healthy People 2020 objective NWS-19: Reduce consumption of sodium in the population aged 2 years and older**

Sugary drinks or sugar-sweetened beverages, including regular soda, fruit drinks, sports drinks, energy drinks, and caloric sweetened water are the largest source of added sugars in the diets of Americans.[53, 54] The 2015-2020 Dietary Guidelines for Americans recommend consuming less than 10% of calories from added sugars.[51] Frequent drinking of sugar-sweetened beverages is associated with obesity, diabetes, heart disease, kidney diseases, tooth decay, and gout.[53]

More than a fifth (21.4%) of Kent County residents consume regular soda that contains sugar and/or sugar-sweetened fruit drinks (such as Kool-aid and lemonade), sweet tea, and sports or energy drinks (such as Gatorade and Red Bull) at least once a day. This figure is considerably below the national prevalence data, indicating that nearly a third (32.1%) of Americans drink such beverages once a day or more often.

Consumption of sugar-sweetened drinks in the County is driven by residents under the age of 55, males, African Americans and Hispanics, and lower income earners (i.e., those making less than $50,000 per annum). It is also inversely proportional to respondent's educational attainment level.

Percentage of respondents frequently consuming sugar sweetened beverages (regular soda and/or sugar sweetened fruit drinks, sweet tea, and sports/energy drinks)

Demographic Characteristics	Sugar Sweetened Beverage Intake (1+ time /day)
Total	21.4%
Age	
18-24	29.7%
25-34	21.9%
35-44	25.9%
45-54	21.0%
55-64	16.6%
65+	14.6%
Gender	
Male	27.0%
Female	16.0%
Race	
White	19.4%
Black	28.5%
Hispanic	32.5%
Non-Hispanic	20.4%
Education	
< High School	43.7%
High School Grad	26.6%
Some College	24.6%
College Graduate	12.4%
Household Income	
<$20,000	25.1%
$20,000-$34,999	29.4%
$35,000-$$49,999	28.6%
$50,000-$74,999	16.6%
$75,000 or more	16.2%

Sugar Sweetened Beverage Intake (1+ time/day)

Kent County 21.4%
U.S. 32.1%

■ Kent County   ■ U.S.

Note: The 2020 comparative data is based on 2016 Nationwide BRFSS (States, DC and Territories). No state comparative data available

2020 Behavioral Risk Factor Survey

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
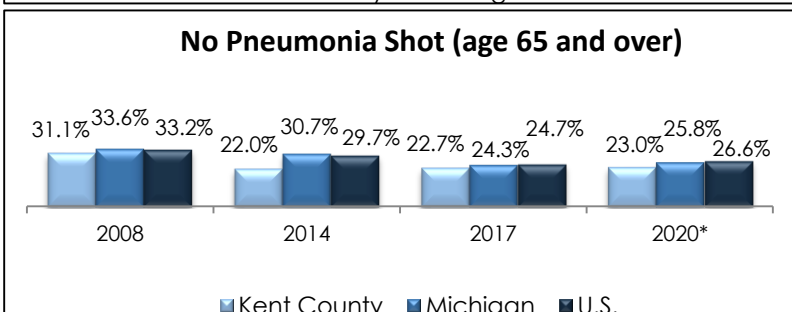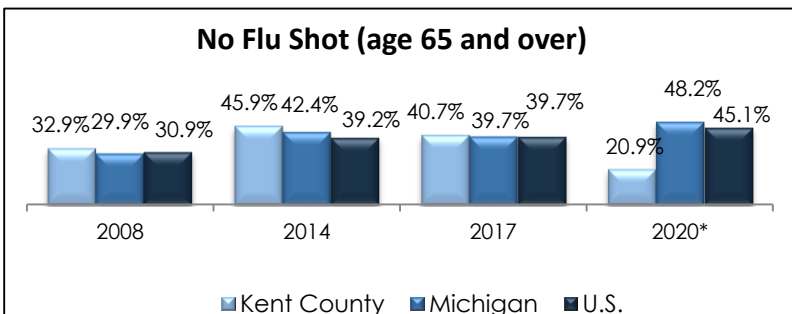
Currently, the Advisory Committee on Immunization Practices recommends immunizing adults against 15 infectious diseases, including influenza and pneumonia. However, the adult coverage rates for these vaccines remain substantially below the target levels.[55] Influenza and pneumonia were the 9th leading cause of death in 2018 in Michigan, attributing to just under 1,900 deaths.[18] 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 a fifth (20.9%) of Kent County residents over the age of 65 have not had a flu shot in the past 12 months; this figure is significantly below the state- and nationwide rates (48.2% and 45.1%, respectively). It is also the lowest result noted in the County to date, representing a dramatic 20-point drop since 2017. The Kent County Health Department has made laudable progress on this Focus Area, essentially meeting the Healthy People 2020 objective.

The percentage of Kent County residents who have never been vaccinated against pneumonia remains virtually unchanged (23.0%). This result continues to be lower than the state and national figures (25.8% and 26.6%).

No Flu Shot (age 65 and over)

	2008	2014	2017	2020*
Kent County	32.9%	45.9%	40.7%	20.9%
Michigan	29.9%	42.4%	39.7%	48.2%
U.S.	30.9%	39.2%	39.7%	45.1%

No Pneumonia Shot (age 65 and over)

	2008	2014	2017	2020*
Kent County	31.1%	22.0%	22.7%	23.0%
Michigan	33.6%	30.7%	24.3%	25.8%
U.S.	33.2%	29.7%	24.7%	26.6%

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
Total	20.9%	23.0%
Age		
65-74	21.1%	27.4%
75+	20.7%	18.4%
Gender		
Male	19.7%	25.2%
Female	22.1%	20.9%
Race		
White	19.0%	22.0%
Black**	34.8%	29.4%
Hispanic**	30.6%	30.6%
Non-Hispanic	20.9%	23.1%
Education		
< High School**	27.2%	21.8%
High School Grad	25.6%	22.4%
Some College	22.0%	27.2%
College Graduate	16.4%	20.9%
Household Income		
<$20,000**	32.3%	35.2%
$20,000-$34,999	33.3%	22.8%
$35,000-$$49,999	20.5%	24.3%
$50,000-$74,999**	11.8%	19.3%
$75,000 or more**	11.0%	15.4%

*Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories) **Caution: Fewer than 30 respondents*

2020 Behavioral Risk Factor Survey

HIV / AIDS

Healthy People 2020 objective HIV-1: Reduce new HIV diagnoses

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 16,306 people are living with HIV/AIDS in Michigan,[56] 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.

Almost four in ten Kent County residents aged 18-64 (37.6%) have ever been tested for HIV, apart from blood donations. This percentage represents a nearly 2-point drop as compared to 3 years ago. It is also on par with the nationwide figure (37.8%) and slightly below the Michigan-wide figure (39.9%).

The decrease in HIV testing, as reported by the County residents this year, is attributable to lower incidence of tests in the youngest cohorts (18-34) and in the bottom income bracket (less than $20,000 per year).

A segment analysis reveals that respondents age 35-54 are significantly more likely to indicate they have ever been tested than those younger and those older. Similarly, respondents in the lower income categories (under $35,000 per year) are much more likely to have been tested than their more affluent counterparts. Finally, just as in previous years, women and African Americans are substantially more likely than their counterparts to have been tested for HIV.

Ever Had HIV Test

Note: The 2020 comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

**National comparative data is not available for this category for years 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	37.6%
Age	
18-24	25.8%
25-34	30.9%
35-44	55.7%
45-54	41.4%
55-64	31.0%
Gender	
Male	32.9%
Female	42.1%
Race	
White	35.0%
Black	56.9%
Hispanic	37.8%
Non-Hispanic	37.5%
Education	
< High School	29.0%
High School Grad	42.9%
Some College	37.1%
College Graduate	35.9%
Household Income	
<$20,000	43.7%
$20,000-$34,999	52.7%
$35,000-$$49,999	37.8%
$50,000-$74,999	32.4%
$75,000 or more	31.0%

2020 Behavioral Risk Factor Survey

Sexual Orientation & Gender Identity

Healthy People 2020 objective LGBT-1.2: Increase the number of population-based data systems used to monitor Healthy People 2020 objectives which collect standardized data that identify lesbian, gay, and bisexual populations
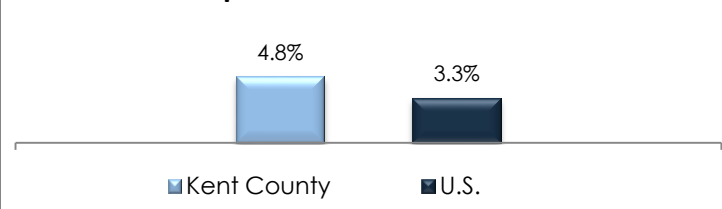
Healthy People 2020 objective LGBT-1.4: Increase the number of population-based data systems used to monitor Healthy People 2020 objectives which collect standardized data that identify transgender populations

Lesbian, gay, bisexual and transgender people experience interpersonal, structural, and cultural discrimination and stigma that has significant negative effects on their physical and mental health.[57,58] Healthy People 2020 highlights the need for more research to document, understand, and address the factors that contribute to these health disparities, and to eliminate them in order to ensure that LGBT individuals can lead long, healthy lives.[1]
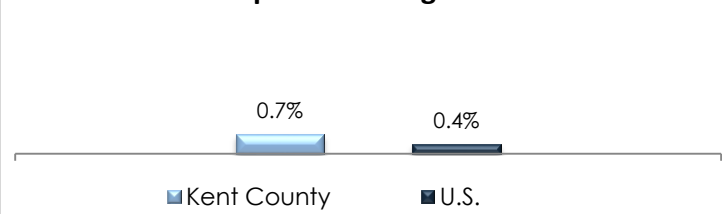
A total of 4.8% of Kent County residents consider themselves to be lesbian, gay, bisexual, or something else. This figure is driven by respondents under the age of 34. The incidence of LGBO self-identification in the County is somewhat higher than in U.S. as a whole (3.3%).

Additionally, 0.7% of Kent County residents considers themselves to be transgender (male-to-female, female-to-male, or gender non-conforming). The proportion of transgender people peaks in the lowest income segment (under $20,000 per year). This figure is only minimally above the nationwide result (0.4%).

Self-Reported LGBO Sexual Orientation

4.8% 3.3%

■ Kent County   ■ U.S.

Self-Reported Transgender Status

0.7% 0.4%

■ Kent County   ■ U.S.

Note: The 2020 comparative data is based on 2016 Nationwide BRFSS (States, DC and Territories). No state comparative data available.

Percentage of respondents who consider themselves Lesbian, Gay, Bisexual, Other Sexual Orientation or Transgender		
Demographic Characteristics	**LGBO**	**Transgender**
Total	4.8%	0.7%
Age		
18-24	7.6%	1.4%
25-34	7.7%	0.7%
35-44	4.1%	0.7%
45-54	3.8%	0.5%
55-64	3.2%	0.5%
65+	3.1%	0.7%
Gender		
Male	4.3%	0.9%
Female	5.3%	0.5%
Race		
White	4.5%	0.8%
Black	4.0%	0.7%
Hispanic	5.8%	-
Non-Hispanic	4.6%	0.8%
Education		
< High School	0.8%	1.2%
High School Grad	5.2%	-
Some College	4.6%	1.1%
College Graduate	5.4%	0.8%
Household Income		
<$20,000	6.5%	4.4%
$20,000-$34,999	6.8%	0.6%
$35,000-$$49,999	5.3%	-
$50,000-$74,999	5.0%	0.3%
$75,000 or more	3.1%	-

2020 Behavioral Risk Factor Survey

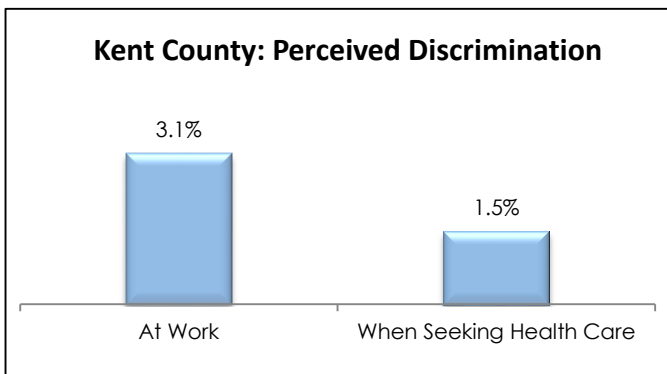# Reactions to Race: Perceived Discrimination

An individual's health can be affected by all of his or her daily experiences, including perceptions of reactions to race.[59] While race is a social construct and not a biological descriptor, it acts on health through race-associated differences in life experiences and life opportunities in our race-conscious society. A "socially assigned race" can be understood as the social interpretation of our physical appearance and can vary from self-identified ethnicity.[60]

Within the past 12 months, 3.1% of Kent County residents felt they were treated worse at work than people of other races. This perception is most common among African Americans, college non-graduates, and those who earn less than $20,000 in annual household incomes.

Additionally, 1.5% of Kent County residents felt their experiences were worse than for people of other races when seeking health care within the past year.

Percentage of respondents who feel their experiences at work/when seeking health care within the past 12 months were worse than for people of other races

Demographic Characteristics	Experiences were worse at work	Experiences were worse when seeking health care
Total	3.1%	1.5%
Age		
18-24	4.3%	1.9%
25-34	4.3%	2.7%
35-44	2.3%	1.5%
45-54	2.5%	0.6%
55-64	2.6%	0.6%
65+	3.4%	1.0%
Gender		
Male	3.7%	1.9%
Female	2.4%	0.9%
Race		
White	1.5%	0.6%
Black	10.2%	5.1%
Hispanic	7.3%	3.9%
Non-Hispanic	2.7%	1.2%
Education		
< High School	9.5%	-
High School Grad	5.0%	2.4%
Some College	4.7%	2.1%
College Graduate	0.6%	0.8%
Household Income		
<$20,000	8.3%	4.9%
$20,000-$34,999	3.8%	-
$35,000-$$49,999	1.5%	-
$50,000-$74,999	0.5%	1.2%
$75,000 or more	1.0%	1.6%

Kent County: Perceived Discrimination

At Work: 3.1%
When Seeking Health Care: 1.5%

Note: No comparative data available.

2020 Behavioral Risk Factor Survey

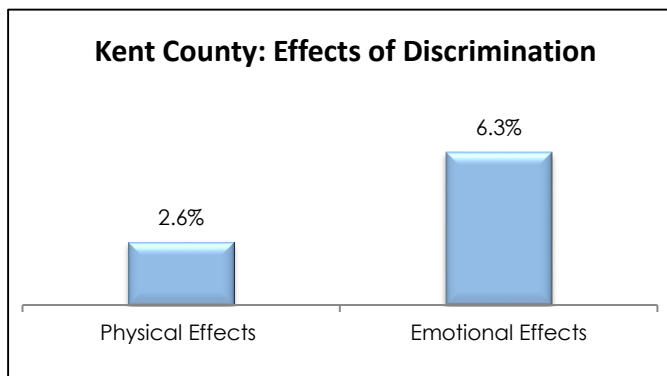# Reactions to Race:
Effects of Discrimination

The internal experiences of racism and survival strategies employed by individuals to cope with overt and covert forms of racism have received little attention. They are, however, a contributing factor to health outcomes and health disparities, including factors such as sleep difficulties, obesity or hypertension.[61]

Within the past month, 2.6% of Kent County residents have experienced physical symptoms, such as a headache, an upset stomach, tensing of muscles, or a pounding heart due to how they were treated based on their race. These symptoms are reported most often by respondents age 25-34 and African Americans.

Moreover, 6.3% of Kent County residents have felt emotionally upset, e.g., angry, sad, or frustrated as a result of how they were treated based on their race. This response is driven by residents age 18-34 and 45-54, as well as Hispanics.

Percentage of respondents who have experienced physical symptoms/felt emotionally upset within the past 30 days as a result of how they were treated based on their race		
Demographic Characteristics	**Physical Effects**	**Emotional Effects**
Total	2.6%	6.3%
Age		
18-24	3.8%	11.1%
25-34	4.8%	9.2%
35-44	0.6%	3.9%
45-54	2.8%	7.0%
55-64	2.2%	4.2%
65+	1.6%	2.7%
Gender		
Male	2.0%	6.7%
Female	3.1%	5.8%
Race		
White	1.7%	4.1%
Black	7.4%	9.4%
Hispanic	5.7%	14.3%
Non-Hispanic	2.3%	5.4%
Education		
< High School	3.8%	5.9%
High School Grad	3.0%	7.1%
Some College	3.5%	7.2%
College Graduate	1.5%	5.2%
Household Income		
<$20,000	2.6%	8.0%
$20,000-$34,999	3.6%	7.0%
$35,000-$$49,999	4.9%	7.8%
$50,000-$74,999	1.6%	3.7%
$75,000 or more	2.0%	5.3%

Kent County: Effects of Discrimination

2.6% Physical Effects
6.3% Emotional Effects

Note: No comparative data available.

2020 Behavioral Risk Factor Survey

Demographics

The following is a comparison of the demographic characteristics of the Kent County BRFSS respondents to those of the state and national BRFSS participants.

Demographic Characteristics	Kent County	Michigan	U.S.
Age			
18-24	13.9%	12.7%	12.5%
25-34	18.4%	16.1%	17.0%
35-44	17.0%	14.8%	16.0%
45-54	19.2%	16.3%	16.1%
55-64	14.5%	17.9%	16.8%
65+	14.9%	22.2%	21.5%
Gender			
Male	49.0%	48.7%	48.8%
Female	51.0%	51.3%	51.3%
Race			
White	75.8%	77.4%	72.1%
Black	9.3%	13.0%	6.4%
Hispanic	9.7%	4.2%	8.2%
American Indian or Alaskan Native	0.4%	1.4%	1.0%
Asian	1.4%	2.3%	2.3%
Native Hawaiian or Other Pacific Islander	-	-	-
Other race	0.6%	0.4%	-
Multiracial, non-Hispanic	1.3%	1.3%	1.2%
Education			
< High School	6.1%	10.2%	11.0%
High School Grad	23.4%	29.4%	28.8%
Some Post High School / Some College	30.1%	34.9%	31.6%
College Graduate	40.1%	25.6%	26.7%

Note: The comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

**"Refused" and "Don't Know" responses not shown / percentages may not add up to 100%

2020 Behavioral Risk Factor Survey

Demographics – cont'd.

Demographic Characteristics	Kent County	Michigan	U.S.
Household Income			
<$15,000	10.4%	8.9%	8.7%
$15,000-$24,999	8.5%	15.6%	15.6%
$25,000-$34,999	7.5%	9.8%	10.3%
$35,000-$49,999	9.0%	14.3%	13.7%
$50,000 or more	41.8%	51.4%	51.4%
Employment Status			
Employed	57.4%	46.2%	49.3%
Self-employed	7.4%	8.9%	9.0%
No work < year	2.0%	2.6%	2.4%
No work > year	1.9%	2.2%	2.2%
Homemaker	6.1%	5.6%	5.1%
Student	4.6%	5.6%	5.1%
Retired	15.0%	20.9%	19.4%
Unable to work	4.8%	8.1%	6.7%
Marital Status			
Married	52.0%	50.4%	51.5%
Divorced	10.3%	11.6%	11.1%
Widowed	5.3%	6.9%	6.9%
Separated	1.2%	1.6%	2.1%
Never married	26.2%	25.4%	23.8%
Partnered	4.0%	4.2%	4.4%

Note: The comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)
**"Refused" and "Don't Know" responses not shown / percentages may not add up to 100%*

2020 Behavioral Risk Factor Survey

Demategraphics – cont'd.

Demographic Characteristics	Kent County	Michigan	U.S.
Number of Children Under 18 Years of Age in Household			
5+ children	1.2%	1.2%	1.1%
4 children	2.6%	2.2%	2.0%
3 children	6.7%	5.6%	5.5%
2 children	13.3%	11.6%	12.3%
1 child	13.9%	13.4%	13.9%
None	61.6%	66.1%	65.1%
Home Ownership			
Own	63.8%	73.8%	69.4%
Rent	28.2%	20.8%	24.7%
Other	6.9%	5.4%	6.2%
Veteran Status			
Served on Active Duty in the US Armed Forces	7.4%	9.2%	11.9%
Never served on Active Duty in the US Armed Forces	92.3%	90.8%	88.1%

Note: The comparative data is based on 2018 BRFSS of Michigan Residents and 2018 Nationwide BRFSS (States, DC and Territories)

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**"Refused" and "Don't Know" responses not shown / percentages may not add up to 100%

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