HEALTH RISK BEHAVIORS IN THE STATE OF MICHIGAN

2013 BEHAVIORAL RISK FACTOR SURVEY

27TH ANNUAL REPORT

Michigan Department
of Community Health

MDCH

Rick Snyder, Governor
Nick Lyon, Director

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2013 Behavioral Risk Factor Survey

Health Risk Behaviors in the State of Michigan

www.michigan.gov/brfs

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BRFSS Methods

The Michigan Behavioral Risk Factor Survey (MiBRFS) is an annual, statewide telephone survey of Michigan adults aged 18 years and older that is conducted through a collaborative effort among 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 Community Health (MDCH). Michigan Behavioral Risk Factor Surveillance System (MiBRFSS) data contribute to the CDC Behavioral Risk Factor Surveillance System (BRFSS) that is conducted within every state, the District of Columbia, and within several U.S. territories.

In 2013, the MiBRFS collected data from both landline and cell phone respondents. The sample of landline telephone numbers was selected using a list-assisted, random-digit-dialed methodology with a disproportionate stratification based on phone bank density, and whether or not the phone numbers were directory listed. The sample of cell phone numbers was randomly selected from dedicated cellular telephone banks sorted on the basis of area code and exchange.

A weighting methodology known as iterative proportional fitting or raking was used in 2013 to allow for the incorporation of cell phone data and to improve the accuracy of prevalence estimates based on MiBRFS data. Estimates based on this weighting methodology were weighted to adjust for the probabilities of selection and a raking adjustment factor that adjusted for the distribution of the Michigan adult population by telephone source (landline or cell phone), detailed race/ethnicity, education level, marital status, age by gender, gender by race/ethnicity, age by race/ethnicity, and renter/owner status.

Due to the BRFSS methodology changes that were implemented in 2011, the 2013 MiBRFS estimates provided within this report should only be compared to estimates from 2011 and 2012 and not to estimates from years prior to 2011.

Prevalence estimates and asymmetric 95% confidence intervals (95% CIs) were calculated using SAS-Callable SUDAAN (version 11.0.1), a statistical computing program that was designed for analyzing data from multistage sample surveys.[1] If the 95% CIs for two estimates from different subpopulations or survey years did not overlap, they were considered to be statistically different. Unless otherwise specified, respondents who answered that they did not know or refused to answer were not included in the calculation of estimates. For comparison purposes, the median estimates from all 50 states and the District of Columbia were used as national estimates.

In addition to this report, the MiBRFSS releases several additional publications each year. These publications provide statewide health estimates for Michigan adults as well as estimates among demographic and geographic subpopulations. MiBRFSS Surveillance Briefs are also published on a quarterly basis and highlight new topical data from the MiBRFSS, including data from MiBRFSS state-added questions. All of these publications can be found on the MiBRFSS website (www.michigan.gov/brfs).

Sample Results for the 2013 MiBRFS

The total sample size for the 2013 MiBRFS was 12,759 (landline = 8,762; cell phone = 3,997). The response rate for the landline portion of the 2013 MiBRFS was 48.2%, while the response rate for the cell phone portion of the survey was 33.6%. The overall weighted response rate (landline and cell phones combined) for the 2013 MiBRFS was 44.0%. The overall weighted U.S. median response rate for 2013 was 46.4%.[2]

Over the past several years, MDCH has been able to maintain or increase the annual number of completed interviews for the MiBRFS. A larger annual sample size increases the utility of the survey by providing more precise estimates, allowing for increased number of topics to be covered each year, and enabling the calculation of estimates for more demographic and geographic subpopulations.

Number of Interviews
Michigan BRFS 2000-2013
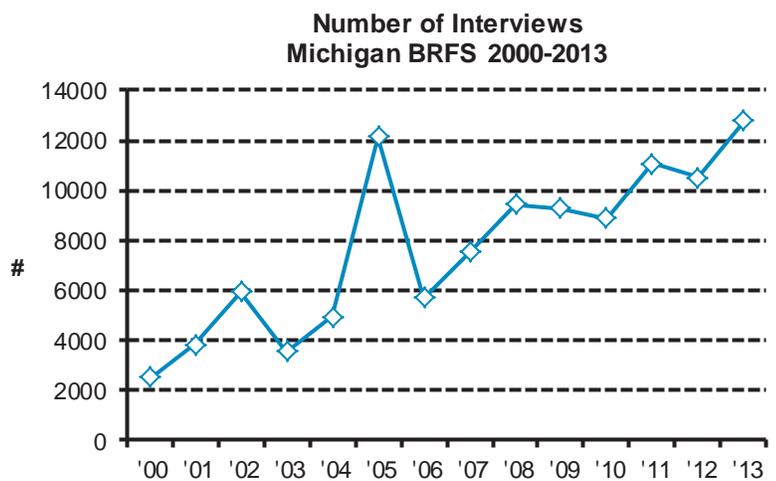
Summary

This report presents estimates from the 2013 MiBRFS, a statewide landline and cell phone survey of Michigan residents aged 18 years and older. It is the only source of state-specific, population-based estimates of the prevalence of various health behaviors, medical conditions, and preventive health care practices among Michigan adults. The survey findings are used by public health agencies, academic institutions, non-profit organizations, and others to develop programs that promote the health of Michigan citizens.

All of the results from the 2013 MiBRFS presented within this report have been weighted as described in the methods section and can be interpreted as prevalence estimates among the Michigan adult population. Due to the BRFSS methodology changes that took place in 2011, these estimates should only be compared to MiBRFS estimates from 2011 and 2012 and not to MiBRFS estimates from years prior to 2011.

Selected Risk Factors - 2013 CDC BRFSS
U.S. vs. Michigan
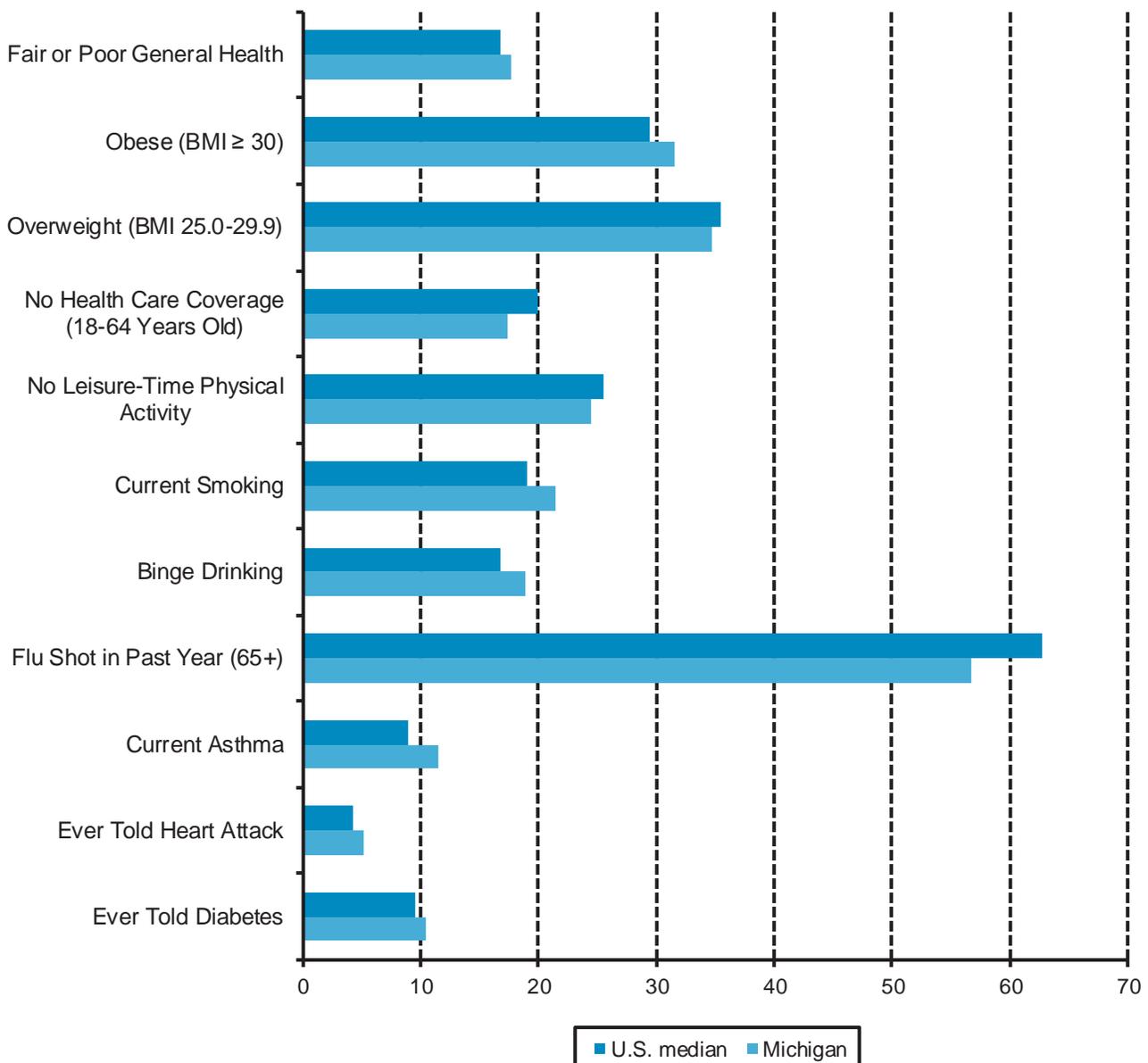
Summary, continued

Public Health Implications of Findings

A number of themes emerge from the findings of the 2013 MiBRFS that have implications for public health.

✖ Nearly 1 in 3 Michigan adults report having had multiple chronic conditions.

In 2013, an estimated 28.8% of Michigan adults reported that they had ever been told by a doctor that they had two or more of the following chronic health conditions: diabetes, cardiovascular disease, current asthma, COPD, cancer, arthritis, kidney disease, and/or depression. Furthermore, an additional 27.7% reported ever having only one of these chronic health conditions. The prevalence of multiple chronic conditions increased with age, and was significantly higher among females (32.3%) than males (25.1%). White, non-Hispanic adults (29.7%) reported a significantly higher prevalence of multiple chronic conditions than Hispanic adults (20.1%), while disabled adults (61.2%) were much more likely to have reported multiple chronic conditions than were non-disabled adults (17.9%). MDCH chronic disease programs continue to work collaboratively toward reducing the burden of these chronic conditions within the Michigan adult population.

✖ Low levels of nutrition and physical activity continue to fuel Michigan's obesity epidemic.

In 2013, an estimated 37.7% of Michigan adults reported consuming fruits less than one time per day, and 24.8% reported consuming vegetables less than once daily. In addition, only 19.5% of Michigan adults reported participating in the recommended levels of aerobic physical activity <u>and</u> muscle strengthening each week. These low levels of nutrition and physical activity are potential contributing factors to the continuing high prevalence of obesity among Michigan adults, which is currently estimated at 31.5%. Furthermore, an additional 34.7% of Michigan adults are classified as overweight. The Michigan Nutrition, Physical Activity and Obesity Program continues to develop programs that focus on improving nutrition and increasing physical activity among the entire Michigan population.

✖ Current smoking among Michigan adults appears to be on the decline.

In 2013, an estimated 21.4% of Michigan adults reported that they currently smoke cigarettes on a regular basis, which represents a significant decrease of 1.9 percentage points from the 2012 prevalence of 23.3% (p = 0.022). The largest decreases in smoking prevalence were reported for 18-24 year olds (2012: 24.9% vs. 2013: 19.7%) and in females (2012: 22.8% vs 2013: 18.3%). Some of this decrease in current smoking prevalence could be attributed to a larger number of cell phone respondents being included within the survey. By including more cell phone users within the survey, we end up with a more representative sample of the Michigan adult population which, in turn, leads to more accurate health estimates within this group. With a sustained emphasis on smoking cessation, the MDCH Tobacco Program anticipates that the prevalence of smoking will continue to decrease in the coming years.

✖ 3 out of every 10 Michigan adults do not obtain an annual health checkup.

In 2013, an estimated 30.1% of Michigan adults reported that they did not have a routine health checkup within the past year. The groups that reported the highest prevalences of no routine health checkup within the past year were 18-24 year olds (39.9%), 25-34 year olds (42.8%), males (35.0%), and adults with an annual household income of less than $20,000 (35.8%). Michigan adults who had a routine health checkup in the past year were more likely to have had their cholesterol checked within the past 5 years [88.6% vs. 59.2%], had a influenza vaccination within the past year (65+ years) [57.8% vs. 49.6%], and to have ever had a pneumonia shot (65+ years) [70.1% vs. 58.6%] when compared to adults who had not had a routine health checkup within the past year. The Michigan Health and Wellness 4 x 4 Plan contains several strategies for improving the health of Michigan residents, one of which focuses on increasing the number of Michigan residents who receive an annual physical examination.

Future of the Michigan Behavioral Risk Factor Survey

The target sample size for the 2014 MiBRFS is 9,000 total completed interviews. Of these 9,000 interviews, 5,400 will be completed with landline respondents, while the remaining 3,600 will be completed with cell phone respondents. The 2014 questionnaire will include approximately 35 state-added questions on numerous topics, including infertility treatment, drug use, gambling, alcohol screening, tobacco cessation, and cancer survivorship. The full 2014 MiBRFS questionnaire is available on the MiBRFSS website (www.michigan.gov/brfs).

The BRFSS continues to adapt to challenges and expand its utility. The representativeness and validity of MiBRFS estimates has been improved. For example, due the drastic increase in the utilization of cell phone communication, the BRFSS now collects data from cell phone respondents. Furthermore, the CDC has implemented a new raking weighting methodology so that BRFSS estimates are more representative than ever before. Michigan has also expanded the utility of the MiBRFS through the following projects:

- The maintenance of a larger MiBRFS sample size will allow for more precise estimates for Hispanics, especially when multiple years of data are combined.
- In 2014, a standalone BRFS-like oversample survey is being conducted among the Hispanic/Latino population within Michigan. This survey will provide new data to a population that is currently underrepresented within the state-wide Michigan BRFS.
- Results from the 2012 Michigan Hispanic/Latino standalone survey and the 2013 Michigan Arab/Chaldean stand-alone survey will be released in the near future.
- Since 2005, questions have been included that randomly select one child in each household and obtain demographic characteristics of that child. This information allows us to ask health-related questions about this child and then to calculate estimates for childhood conditions, such as asthma.
- An Asthma Call-Back survey that follows up on children and adults who were identified as having asthma during the BRFS interview has been conducted since 2005, allowing for collection of more detailed information on asthma management, clinical care, and impact of the disease on people's lives. It is anticipated that this methodology could be useful for other subpopulations in the future.
- The MiBRFSS is a main source of data for a number of the chronic disease indicators that are used to support Michigan's Coordinated Chronic Disease Prevention and Health Promotion State Plan.
- The MiBRFSS is the source for seven of the twenty indicators included within the Michigan Health and Wellness Dashboard. This project provides a quick assessment of the health and wellness of Michigan residents.
- Several BRFSS indicators are used in the Robert Wood Johnson County Health Rankings.

In conclusion, the MiBRFS continues to serve the needs of public health officials, health care providers, researchers and local and state level policy makers, while presenting a number of opportunities for expanding our understanding of the risk factors and preventive behaviors for the major causes of disease and disability in Michigan.

General Health Status

Self-assessed health is a measure of how a person perceives their own health. Self-assessed health status has been validated as a useful indicator of health among different populations and allows for broad comparisons across a variety of health conditions.[3]

♦ In 2013, an estimated 17.7% of Michigan adults reported that their general health was either fair or poor.

♦ Fair or poor general health increased with age and decreased with increasing household income level.

♦ The prevalence of fair or poor general health was similar by gender and health insurance status.

♦ White, non-Hispanic adults (16.0%) reported a significantly lower prevalence of fair or poor general health than Black, non-Hispanic (25.5%) and Hispanic adults (23.6%).

♦ Disabled adults (45.7%) reported a significantly higher prevalence of fair to poor health than non-disabled adults (8.0%).

♦ The BRFSS methodology changes that were implemented in 2011 resulted in a spike in the prevalence of fair or poor general health among Michigan adults, but since these changes, the prevalence of fair to poor general health has remained within the 17%-18% range.

♦ In 2013, the prevalence of fair or poor general health among Michigan adults (17.7%) was comparable to the U.S. median prevalence (16.7%).

General Health, Fair or Poor[a]

Demographic Characteristics	%	95% Confidence Interval
Total	**17.7**	**(16.8-18.7)**
Age		
18 - 24	9.2	(7.3-11.7)
25 - 34	10.2	(8.0-13.1)
35 - 44	14.9	(12.5-17.7)
45 - 54	19.8	(17.6-22.3)
55 - 64	24.2	(22.0-26.5)
65 - 74	22.1	(19.7-24.7)
75 +	25.7	(23.1-28.4)
Gender		
Male	17.3	(15.9-18.7)
Female	18.1	(16.9-19.4)
Race/Ethnicity		
White non-Hispanic	16.0	(15.0-16.9)
Black non-Hispanic	25.5	(22.0-29.3)
Other non-Hispanic	16.8	(13.2-21.1)
Hispanic	23.6	(17.7-30.7)
Household Income		
< $20,000	35.9	(32.9-39.0)
$20,000 - $34,999	23.0	(20.8-25.4)
$35,000 - $49,999	16.5	(14.0-19.3)
$50,000 - $74,999	10.4	(8.7-12.4)
≥ $75,000	5.5	(4.5-6.7)
Health Insurance		
Insured	17.2	(16.3-18.2)
Uninsured	21.0	(17.9-24.4)
Disability		
Disabled	45.7	(43.3-48.1)
Not disabled	8.0	(7.2-8.8)

[a] Among all adults, the proportion reporting that their health, in general, was either fair or poor.

General Health, Fair or Poor
U.S. vs. Michigan, 2004-2013
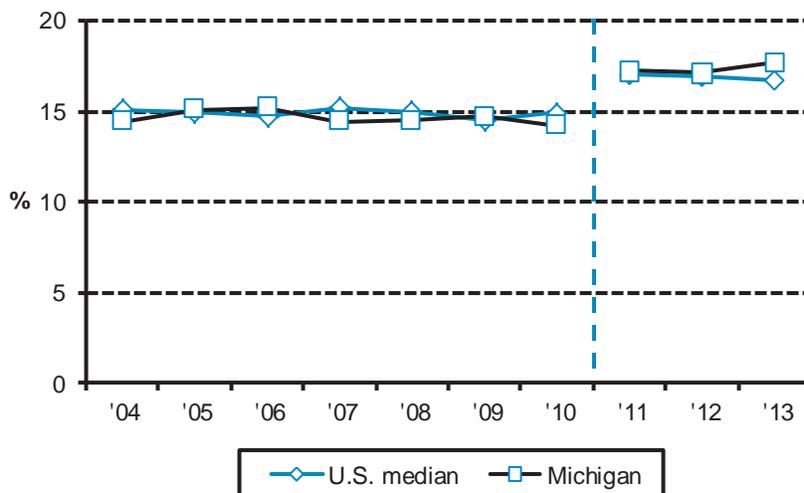
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

1

Physically and mentally unhealthy days measure the number of days within the past 30 days that individuals rate their physical and mental health as not good. Poor physical and mental health was defined as 14 or more days within the past 30 days in which the adult respondents rated their physical and mental health as not good.

♦ In 2013, an estimated 12.7% of Michigan adults reported poor physical health, and 12.0% reported poor mental health.

♦ Poor physical health increased with age, while poor mental health decreased with age.

♦ Both poor physical health and poor mental health decreased with increasing household income level.

♦ Females (13.2%) reported a higher prevalence of poor mental health than males (10.7%).

♦ Black, non-Hispanic adults reported higher prevalences of both poor physical health and poor mental health (16.7% and 15.8%, respectively) than White, non-Hispanic adults (11.8% and 11.5%, respectively).

♦ Uninsured adults (18.6%) were more likely to have reported poor mental health than insured adults (10.9%).

♦ Disabled adults (36.9% and 26.1%, respectively) were more likely to have reported both poor physical health and poor mental health than insured adults (4.5% and 7.1%, respectively).

♦ The BRFSS methodology changes that were implemented in 2011 resulted in a spike in the prevalence of poor physical and mental health among Michigan adults, but these prevalences have decreased slightly since 2011.

Demographic Characteristics	Poor Physical Health[a]		Poor Mental Health[b]	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**12.7**	**(12.0-13.6)**	**12.0**	**(11.2-12.8)**
Age				
18 - 24	6.1	(4.5-8.2)	11.8	(9.6-14.5)
25 - 34	7.6	(5.6-10.2)	12.5	(10.3-15.2)
35 - 44	10.2	(8.3-12.4)	13.5	(11.3-16.1)
45 - 54	15.4	(13.5-17.6)	14.8	(12.9-17.0)
55 - 64	18.1	(16.2-20.2)	13.3	(11.6-15.3)
65 - 74	16.0	(13.8-18.5)	7.7	(6.1-9.5)
75 +	17.0	(14.8-19.5)	5.5	(4.2-7.2)
Gender				
Male	13.0	(11.7-14.3)	10.7	(9.5-12.0)
Female	12.5	(11.6-13.6)	13.2	(12.1-14.3)
Race/Ethnicity				
White non-Hispanic	11.8	(11.0-12.6)	11.5	(10.6-12.4)
Black non-Hispanic	16.7	(13.8-20.1)	15.8	(13.0-19.1)
Other non-Hispanic	12.9	(9.7-16.8)	8.6	(6.4-11.5)
Hispanic	15.3	(10.3-22.1)	13.0	(8.5-19.4)
Household Income				
< $20,000	29.7	(26.8-32.7)	25.3	(22.6-28.2)
$20,000 - $34,999	14.3	(12.5-16.3)	13.2	(11.4-15.3)
$35,000 - $49,999	10.5	(8.6-12.7)	11.1	(9.1-13.5)
$50,000 - $74,999	6.9	(5.6-8.4)	6.7	(5.3-8.5)
≥ $75,000	4.9	(4.0-6.1)	5.1	(4.1-6.3)
Health Insurance				
Insured	12.9	(12.1-13.8)	10.9	(10.1-11.8)
Uninsured	12.1	(9.8-14.8)	18.6	(15.7-21.8)
Disability				
Disabled	36.9	(34.6-39.2)	26.1	(23.9-28.4)
Not Disabled	4.5	(3.9-5.1)	7.1	(6.4-8.0)

[a] Among all adults, the proportion reporting 14 or more days of poor physical health, which includes physical illness and injury, during the past 30 days.
[b] Among all adults, the proportion reporting 14 or more days of poor mental health, which includes stress, depression, and problems with emotions, during the past 30 days.

**Poor Physical and Mental Health
Michigan, 2004-2013**
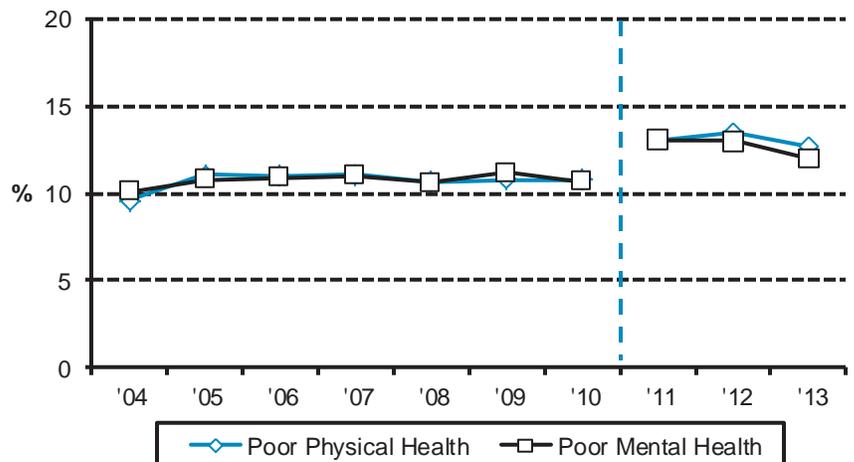
Legend: Poor Physical Health — Poor Mental Health

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

Through the Americans with Disabilities Act, an individual with a disability is defined as a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history of such an impairment, or a person who is perceived by others as having such an impairment.[4]

♦ In 2013, an estimated 25.5% of Michigan adults reported being disabled, which was defined as being limited in any activities because of physical, mental, or emotional problems or requiring the use of special equipment, such as a cane, a wheelchair, a special bed, or a special telephone due to a health problem.

♦ When looking at each component of the disability indicator, an estimated 23.0% of Michigan adults reported being limited in their activities, while 9.6% reported that they required the use of special equipment due to a health problem.

♦ The prevalence of disability increased with age and decreased with increasing household income level.

♦ The prevalence of disability was similar by gender and health insurance status.

♦ Black, non-Hispanic adults (30.0%) reported a higher prevalence of disability than White, non-Hispanic (25.0%) and Hispanic adults (18.9%).

Demographic Characteristics	Total Disability[a]	
	%	95% Confidence Interval
Total	**25.5**	**(24.5-26.6)**
Age		
18 - 24	11.2	(8.9-14.0)
25 - 34	15.1	(12.3-18.4)
35 - 44	20.5	(17.9-23.4)
45 - 54	26.5	(24.0-29.0)
55 - 64	35.1	(32.8-37.6)
65 - 74	34.4	(31.7-37.1)
75 +	42.5	(39.6-45.5)
Gender		
Male	25.8	(24.2-27.4)
Female	25.2	(23.9-26.6)
Race/Ethnicity		
White non-Hispanic	25.0	(23.9-26.1)
Black non-Hispanic	30.0	(26.3-34.0)
Other non-Hispanic	21.9	(17.8-26.6)
Hispanic	18.9	(13.5-26.0)
Household Income		
< $20,000	44.7	(41.5-47.9)
$20,000 - $34,999	30.3	(27.9-32.8)
$35,000 - $49,999	24.9	(22.1-27.9)
$50,000 - $74,999	18.4	(16.3-20.7)
≥ $75,000	12.2	(10.8-13.7)
Health Insurance		
Insured	26.1	(25.0-27.2)
Uninsured	22.2	(19.0-25.7)

[a] Among all adults, the proportion reporting being limited in any activities because of physical, mental, or emotional problems, or reporting that they required the use of special equipment (such as a cane, a wheelchair, a special bed, or a special telephone) due to a health problem.
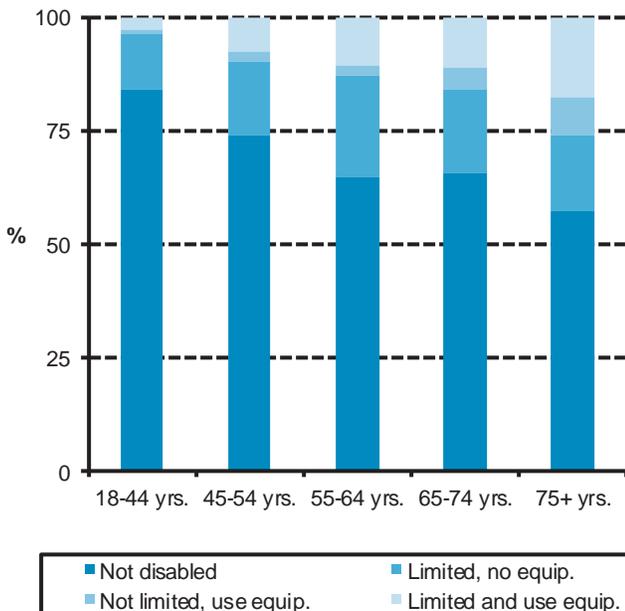
♦ When assessing disability by age group and severity, Michigan adults 75 years and older reported more severe disability (i.e., both activities limited and use of special equipment) when compared to all other age groups.

Disability by Age Group and Severity Michigan, 2013

Legend: Not disabled; Limited, no equip.; Not limited, use equip.; Limited and use equip.

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

3

Weight Status

Overweight and obesity have been proven to increase the risk of many diseases and health conditions such as high blood pressure, diabetes, coronary heart disease, stroke, gallbladder disease, high cholesterol, and some forms of cancer.[5] The medical care costs associated with adult obesity in the United States is projected to be in the $150 billion range.[6] Overweight is defined as having a body mass index (BMI) between 25.0 and 29.9, and obesity is defined as a BMI greater than or equal to 30.0.

♦ In 2013, an estimated 31.5% of Michigan adults were classified as obese, with an additional 34.7% of Michigan adults being classified as overweight. The prevalence of obesity in Michigan is slightly higher than the U.S. median prevalence (29.4%), while the prevalence of overweight is comparable to that of the U.S. median (35.4%).

♦ The prevalence of obesity increased through the 45-54 year age group, plateaued through the 65-74 year age group, and then dropped within the 75+ years age group.

♦ The prevalence of obesity was similar by gender and health insurance status.

♦ Black, non-Hispanic adults (39.2%) reported a significantly higher prevalence of obesity than White, non-Hispanic adults (30.6%). This disparity has persisted for several years.

♦ Disabled adults (42.6%) were more likely to be classified as obese than non-disabled adults (27.9%)

♦ Adults reporting no leisure time physical activity (39.2% [36.8 -41.8]) were more likely to report being obese than those who were physically active (29.4% [28.2-30.8]).

♦ The HP 2020 target for obesity among adults is set at 30.6%. In order to meet this target, the obesity prevalence among Michigan adults will need to decrease by 0.9 percentage points during the next seven years.[7]

Demographic Characteristics	Obese[a]	
	%	95% Confidence Interval
Total	**31.5**	**(30.4-32.6)**
Age		
18 - 24	16.5	(13.7-19.7)
25 - 34	30.4	(26.9-34.1)
35 - 44	33.6	(30.5-36.9)
45 - 54	37.3	(34.6-40.0)
55 - 64	37.7	(35.3-40.1)
65 - 74	35.5	(32.9-38.2)
75 +	22.2	(19.9-24.7)
Gender		
Male	31.1	(29.4-32.8)
Female	31.9	(30.4-33.5)
Race/Ethnicity		
White non-Hispanic	30.6	(29.4-31.8)
Black non-Hispanic	39.2	(35.2-43.4)
Other non-Hispanic	20.0	(16.0-24.7)
Hispanic	32.7	(26.1-40.0)
Household Income		
< $20,000	36.5	(33.4-39.7)
$20,000 - $34,999	35.2	(32.6-37.8)
$35,000 - $49,999	34.4	(31.2-37.7)
$50,000 - $74,999	31.0	(28.2-33.9)
≥ $75,000	27.8	(25.7-30.0)
Health Insurance		
Insured	31.8	(30.6-33.0)
Uninsured	29.9	(26.5-33.6)
Disability		
Disabled	42.6	(40.2-45.0)
Not disabled	27.9	(26.6-29.2)

Note: BMI, body mass index, is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)^2]. Weight and height were self-reported. Pregnant women were excluded.
[a] Among all adults, the proportion of respondents whose BMI was greater than or equal to 30.0.
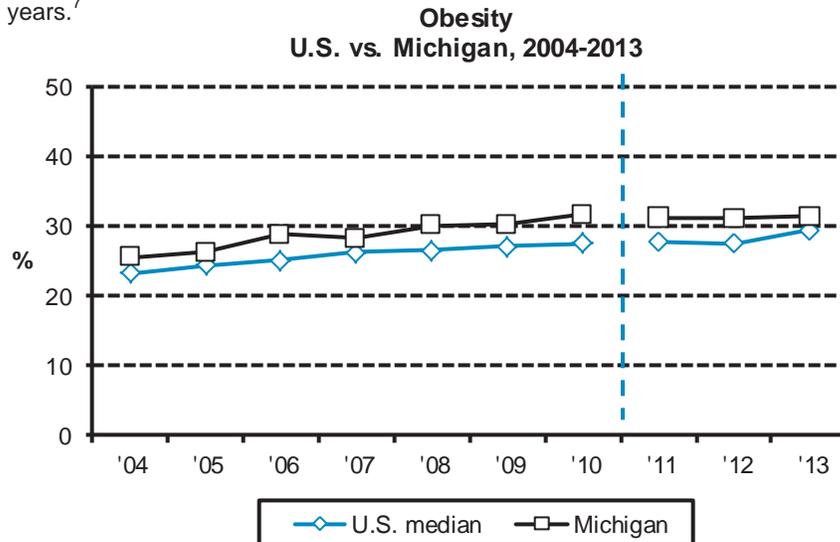
Obesity
U.S. vs. Michigan, 2004-2013

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

No Health Care Coverage

Adults who do not have health care coverage are less likely to access health care services and are more likely to delay getting needed medical attention.[8]

♦ In 2013, an estimated 17.4% of Michigan adults aged 18-64 years reported having no health care coverage. The prevalence of no health care coverage among Michigan adults 18-64 years of age is nearly three percentage points less than the U.S. median prevalence (20.0%).

♦ The prevalence of no health care coverage decreased with age and increasing household income level.

♦ Males (21.0%) reported a significantly higher prevalence of no health care coverage than females (13.8%), while Black, non-Hispanic adults (26.4%) reported a higher prevalence than White, non-Hispanic adults (15.4%).

♦ The prevalence of no health care coverage was similar by disability status.

♦ The HP 2020 target for health care coverage is to have 100% of adults insured by 2020. Since the prevalence of no health care coverage among Michigan adults 18-64 years of age is currently at 17.4%, this prevalence will need to decrease by nearly 2.5 percentage points each year in order to meet the HP 2020 goal.[7]

Demographic Characteristics	No Health Care Coverage Among Adults 18-64 Years[a]	
	%	95% Confidence Interval
Total	**17.4**	**(16.3-18.6)**
Age		
18 - 24	22.1	(19.0-25.6)
25 - 34	24.8	(21.5-28.5)
35 - 44	18.0	(15.3-21.0)
45 - 54	15.0	(13.0-17.3)
55 - 64	9.5	(8.2-11.0)
Gender		
Male	21.0	(19.2-23.0)
Female	13.8	(12.5-15.3)
Race/Ethnicity		
White non-Hispanic	15.4	(14.2-16.6)
Black non-Hispanic	26.4	(22.4-30.9)
Other non-Hispanic	16.9	(12.7-22.3)
Hispanic	23.8	(17.5-31.5)
Household Income		
< $20,000	37.6	(34.0-41.3)
$20,000 - $34,999	24.9	(21.9-28.1)
$35,000 - $49,999	18.1	(14.9-21.9)
$50,000 - $74,999	7.1	(5.4-9.4)
≥ $75,000	4.1	(2.9-5.6)
Disability		
Disabled	17.0	(14.5-19.8)
Not disabled	17.5	(16.2-18.9)

[a] Among adults aged 18-64 years, the proportion who reported having no health care coverage, including health insurance, prepaid plans such as HMOs, or government plans, such as Medicare or Indian Health Services.

No Health Care Coverage
Among Adults Aged 18 to 64 Years
U.S. vs. Michigan, 2004-2013
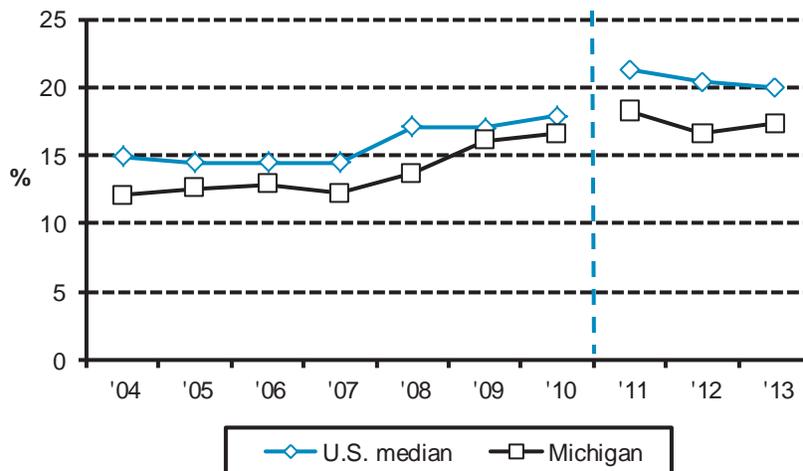
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.
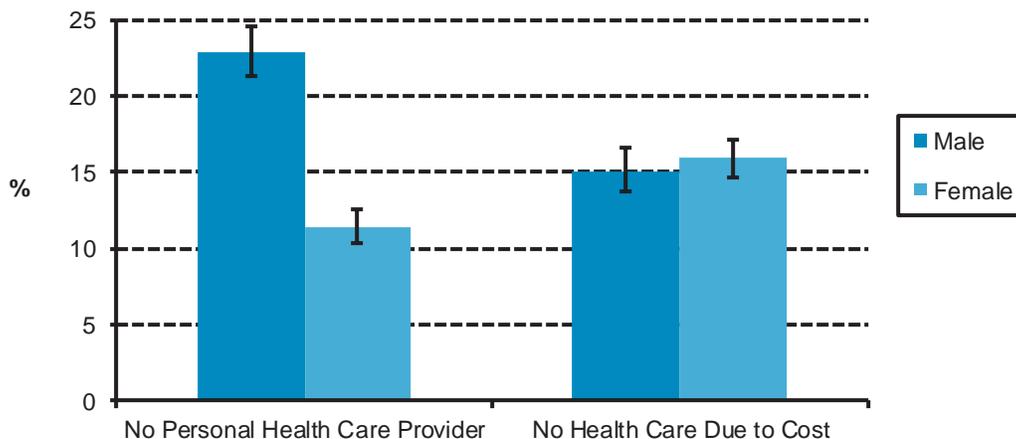
Limited Health Care Coverage

Two additional indicators related to health care access are: 1) not having a personal doctor or health care provider and 2) having had a time during the past 12 months when you needed to see a doctor but could not because of the cost. Increases in access to primary care have been shown to substantially improve health-related outcomes.[9]

♦ In 2013, an estimated 17.0% of Michigan adults reported not having a personal health care provider, while 15.5% reported not seeing the doctor within the past 12 months due to cost.

♦ The prevalences of both of these indicators decreased with age and increasing household income level.

♦ Males (22.9%) were more likely than females (11.4%) to not have a personal health care provider.

♦ Both Black, non-Hispanic (23.2% and 22.5%, respectively) and Hispanic adults (22.4% and 22.8%, respectively) were more likely than White, non-Hispanic adults (14.8% and 13.7%, respectively) to not have a personal health care provider and to not have seen a doctor within the past 12 months due to cost.

♦ Uninsured adults (51.6% and 45.4%, respectively) were more likely to not have a personal health care provider and to not have seen a doctor within the past 12 months due to cost when compared to insured adults (11.3% and 10.6%, respectively).

Demographic Characteristics	No Personal Health Care Provider[a]		No Health Care Access Due to Cost[b]	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**17.0**	**(16.0-18.0)**	**15.5**	**(14.5-16.4)**
Age				
18 - 24	32.4	(28.9-36.1)	13.5	(11.2-16.2)
25 - 34	32.3	(28.9-36.0)	24.1	(20.9-27.7)
35 - 44	21.2	(18.4-24.2)	18.2	(15.7-21.0)
45 - 54	12.7	(11.0-14.8)	18.9	(16.7-21.4)
55 - 64	8.3	(6.9-9.9)	13.6	(11.9-15.5)
65 - 74	3.0	(2.3-4.0)	7.6	(6.0-9.5)
75 +	3.3	(2.4-4.6)	4.4	(3.4-5.8)
Gender				
Male	22.9	(21.3-24.6)	15.1	(13.7-16.6)
Female	11.4	(10.3-12.6)	15.9	(14.6-17.1)
Race/Ethnicity				
White non-Hispanic	14.8	(13.9-15.9)	13.7	(12.7-14.7)
Black non-Hispanic	23.2	(19.7-27.0)	22.5	(19.2-26.3)
Other non-Hispanic	25.9	(20.7-32.0)	15.7	(11.9-20.5)
Hispanic	22.4	(16.8-29.2)	22.8	(17.0-29.9)
Household Income				
< $20,000	28.4	(25.5-31.5)	33.0	(30.0-36.3)
$20,000 - $34,999	19.5	(17.3-21.9)	21.6	(19.4-24.0)
$35,000 - $49,999	15.5	(12.9-18.5)	16.6	(14.0-19.5)
$50,000 - $74,999	12.3	(10.3-14.7)	7.4	(5.9-9.3)
≥ $75,000	9.9	(8.5-11.6)	4.2	(3.3-5.4)
Health Insurance				
Insured	11.3	(10.4-12.2)	10.6	(9.8-11.5)
Uninsured	51.6	(47.7-55.4)	45.4	(41.6-49.2)
Disability				
Disabled	9.7	(8.2-11.6)	25.6	(23.4-28.0)
Not disabled	19.5	(18.3-20.8)	12.0	(11.1-13.1)

[a] Among all adults, the proportion reporting that they did not have anyone that they thought of as their personal doctor or health care provider
[b] Among all adults, the proportion reporting that in the past 12 months, they could not see a doctor when they needed to due to the cost.

Health Care Access Indicators by Gender Michigan, 2013

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

6

No Leisure Time Physical Activity

Regular physical activity among adults has been shown to reduce the risk of many diseases including cardiovascular disease, diabetes, colon and breast cancers, and osteoporosis. Keeping physically active also helps to control weight, maintain healthy bones, muscles, and joints, and relieve symptoms of depression.[10]

♦ In 2013, an estimated 24.4% of Michigan adults reported no leisure time physical activity within the past month. The prevalence of no leisure time physical activity among Michigan adults is currently comparable to the U.S. median prevalence (25.5%) for this indicator.

♦ The prevalence of no leisure time physical activity increased with age and decreased with increasing household income level.

♦ White, non-Hispanic adults (23.2%) reported a significantly lower prevalence of no leisure time physical activity than Black, non-Hispanic adults (30.7%), while disabled adults (35.7%) reported a higher prevalence than non-disabled adults (20.5%).

♦ The prevalence of no leisure time physical activity was similar by gender.

♦ The HP 2020 target for no leisure time physical activity among adults is set at 32.6%. The prevalence of no leisure time physical activity among Michigan adults is currently more than eight percentage points below this goal, so if Michigan can maintain the current prevalence for this indicator the healthy people target will easily be met by 2020.[7]

Demographic Characteristics	No Leisure Time Physical Activity[a]	
	%	95% Confidence Interval
Total	**24.4**	**(23.4-25.5)**
Age		
18 - 24	15.9	(13.2-19.2)
25 - 34	22.1	(18.9-25.8)
35 - 44	22.6	(19.9-25.5)
45 - 54	24.5	(22.2-26.9)
55 - 64	27.2	(25.0-29.4)
65 - 74	27.1	(24.6-29.7)
75 +	35.7	(32.9-38.7)
Gender		
Male	23.8	(22.2-25.4)
Female	25.0	(23.7-26.4)
Race/Ethnicity		
White non-Hispanic	23.2	(22.1-24.3)
Black non-Hispanic	30.7	(27.0-34.7)
Other non-Hispanic	24.2	(19.1-30.3)
Hispanic	26.1	(19.7-33.8)
Household Income		
< $20,000	33.6	(30.6-36.8)
$20,000 - $34,999	29.7	(27.3-32.3)
$35,000 - $49,999	24.1	(21.4-27.0)
$50,000 - $74,999	20.9	(18.5-23.5)
≥ $75,000	16.1	(14.3-18.0)
Health Insurance		
Insured	24.1	(23.1-25.2)
Uninsured	26.5	(23.1-30.2)
Disability		
Disabled	35.7	(33.5-38.0)
Not disabled	20.5	(19.3-21.7)

[a] Among all adults, the proportion reporting they had not participated in any leisure time physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise during the past month.

No Leisure Time Physical Activity
U.S. vs. Michigan, 2004-2013
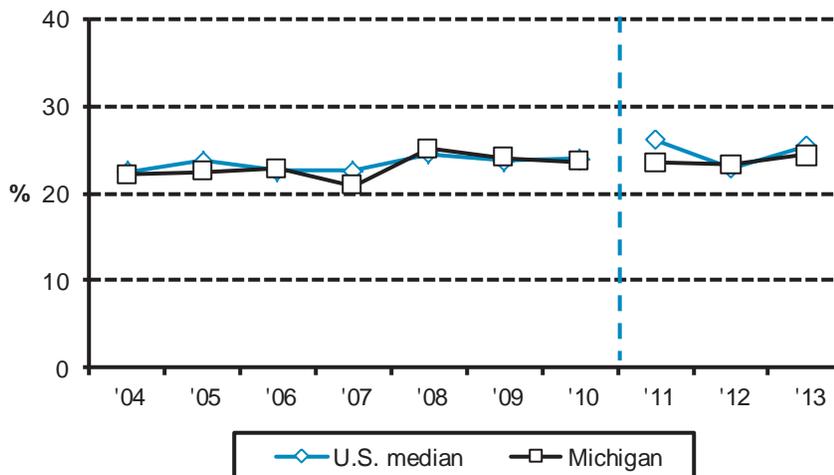
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.
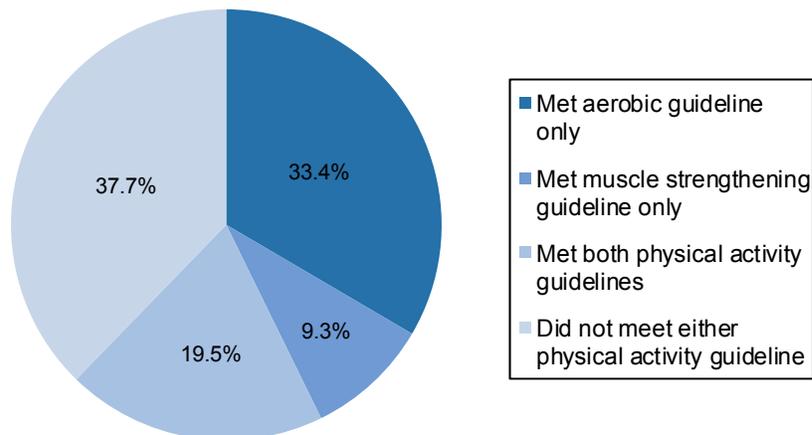
Adequate Physical Activity

In 2008, The U.S. Department of Health and Human Services released the new physical activity guidelines for Americans. These guidelines recommend that adults participate in moderate physical activities for at least 150 minutes per week, vigorous physical activities for at least 75 minutes per week, or an equivalent combination of moderate and vigorous physical activities **and** also participate in muscle strengthening activities on two or more days per week.[11]

♦ In 2013, an estimated 19.5% of Michigan adults met both the aerobic and muscle strengthening components of the new physical activity guidelines (i.e., adequate physical activity).

♦ When assessing each component individually, an estimated 53.1% (95% CI: 51.8-54.3) of Michigan adults met the aerobic physical activity component, while 28.8% (95% CI: 27.7-30.0) met the muscle strengthening component.

♦ Adequate physical activity decreased with increasing age and increased with increasing household income level.

♦ Males (22.1%) reported a significantly higher prevalence of adequate physical activity than females (17.1%), while disabled adults (14.5%) were less likely to have reported adequate physical activity than non-disabled adults (21.2%).

♦ Michigan is currently above the HP 2020 targets for the aerobic (MI: 53.1% vs. HP 2020: 47.9%) and muscle strengthening (MI: 28.8% vs. HP 2020: 24.1%) components, but is below the combined aerobic and muscle strengthening target (MI: 19.5% vs. HP 2020: 20.1%).[7]

♦ 62.2% of Michigan adults reported participating in at least one component of the physical activity guidelines (Aerobic only = 33.4%; Muscle strengthening only = 9.3%; Both aerobic and muscle strengthening = 19.5%).

Demographic Characteristics	Adequate Physical Activity[a]	
	%	95% Confidence Interval
Total	**19.5**	**(18.6-20.5)**
Age		
18 - 24	28.9	(25.3-32.8)
25 - 34	18.4	(15.7-21.5)
35 - 44	23.2	(20.3-26.5)
45 - 54	17.6	(15.7-19.7)
55 - 64	16.2	(14.5-18.0)
65 - 74	18.3	(16.4-20.4)
75 +	13.5	(11.5-15.8)
Gender		
Male	22.1	(20.6-23.8)
Female	17.1	(15.9-18.4)
Race/Ethnicity		
White non-Hispanic	19.2	(18.2-20.3)
Black non-Hispanic	21.2	(17.7-25.2)
Other non-Hispanic	19.0	(14.8-24.0)
Hispanic	20.5	(15.1-27.2)
Household Income		
< $20,000	15.6	(13.3-18.2)
$20,000 - $34,999	17.3	(15.3-19.5)
$35,000 - $49,999	17.6	(15.3-20.1)
$50,000 - $74,999	19.5	(17.2-22.1)
≥ $75,000	25.2	(23.2-27.4)
Health Insurance		
Insured	19.6	(18.6-20.7)
Uninsured	18.5	(15.6-21.8)
Disability		
Disabled	14.5	(12.8-16.3)
Not disabled	21.2	(20.1-22.5)

[a] Among all adults, the proportion reporting that they do either moderate physical activities for at least 150 minutes per week, vigorous physical activities for at least 75 minutes per week, or an equivalent combination of moderate and vigorous physical activities and also participate in muscle strengthening activities on two or more days per week.

Adequate Physical Activity Guidelines
Michigan, 2013

- ■ Met aerobic guideline only
- ■ Met muscle strengthening guideline only
- ■ Met both physical activity guidelines
- ■ Did not meet either physical activity guideline

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

Fruit and Vegetable Consumption

A healthy diet rich in fruits and vegetables may reduce the risk of cancer and other chronic conditions.[12] In 2011, the Centers for Disease Control and Prevention moved away from the 5 or more servings per day indicator and now uses the fruits less than one time per day and vegetables less than one time per day indicators.

♦ In 2013, an estimated 37.7% of Michigan adults reported consuming fruits less than one time per day, while 24.8% reported consuming vegetables less than one time per day.

♦ Only 15.3% (95% CI: 14.5-16.2) of Michigan adults reported consuming fruits and vegetables 5 or more times per day.

♦ Both fruit and vegetable consumption improved with increasing age and household income level, and males were more likely than females to eat less fruits and vegetables.

♦ White, non-Hispanic and Black, non-Hispanic adults reported similar prevalences of fruit consumption, while Black, non-Hispanic adults (36.5%) were more likely to eat vegetables less than once a day than White, non-Hispanic adults (22.6%).

♦ White, non-Hispanic males were more likely to report low fruit (42.4% vs. 32.7%) and vegetable (26.0% vs. 19.4%) consumption than were White, non-Hispanic females.

♦ Black, non-Hispanic males (42.9%) were more likely to report low vegetable consumption than were Black, non-Hispanic females (31.0%).

Demographic Characteristics	Fruits (< 1 Time / Day)[a]		Vegetables (< 1 Time / Day)[b]	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**37.7**	**(36.5-38.9)**	**24.8**	**(23.6-25.9)**
Age				
18 - 24	45.6	(41.5-49.7)	36.2	(32.3-40.3)
25 - 34	39.8	(36.1-43.6)	27.9	(24.4-31.7)
35 - 44	39.3	(36.0-42.7)	23.8	(20.9-27.0)
45 - 54	38.0	(35.3-40.7)	22.7	(20.4-25.2)
55 - 64	38.2	(35.8-40.6)	21.5	(19.5-23.7)
65 - 74	34.1	(31.4-36.8)	21.5	(19.2-24.0)
75 +	23.3	(20.7-26.2)	20.0	(17.6-22.6)
Gender				
Male	42.4	(40.6-44.3)	28.6	(26.9-30.4)
Female	33.4	(31.8-34.9)	21.1	(19.8-22.6)
Race/Ethnicity				
White non-Hispanic	37.4	(36.1-38.7)	22.6	(21.4-23.7)
Black non-Hispanic	37.7	(33.7-41.9)	36.5	(32.4-40.8)
Other non-Hispanic	41.5	(35.3-48.0)	26.2	(20.9-32.4)
Hispanic	39.9	(32.7-47.6)	29.5	(22.7-37.5)
Household Income				
< $20,000	41.8	(38.6-45.0)	34.3	(31.2-37.6)
$20,000 - $34,999	41.8	(39.1-44.6)	27.1	(24.6-29.7)
$35,000 - $49,999	36.4	(33.1-39.7)	23.7	(20.8-26.8)
$50,000 - $74,999	36.2	(33.3-39.3)	19.2	(16.8-21.8)
≥ $75,000	32.4	(30.1-34.7)	17.0	(15.2-19.0)
Health Insurance				
Insured	36.6	(35.4-37.9)	24.0	(22.9-25.2)
Uninsured	43.7	(39.8-47.6)	28.8	(25.2-32.7)
Disability				
Disabled	40.6	(38.2-43.0)	26.6	(24.4-28.9)
Not Disabled	36.6	(35.2-38.0)	24.1	(22.8-25.4)

[a] Among all adults, the proportion whose total reported consumption of fruits (including juice) was less than one time per day.
[b] Among all adults, the proportion whose total reported consumption of vegetables was less than one time per day.

Fruit Consumption (< 1 Time / Day) by Race and Gender Michigan, 2013
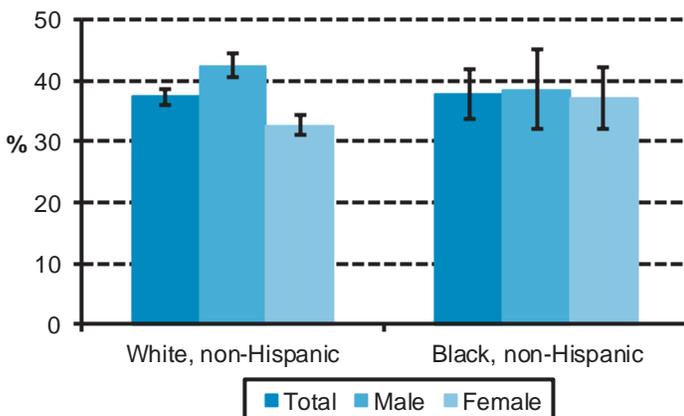
Vegetable Consumption (< 1 Time / Day) by Race and Gender Michigan, 2013
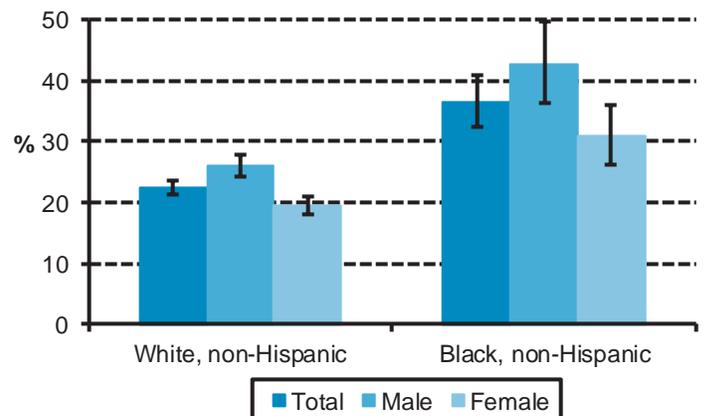
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

Cigarette Smoking

Cigarette smoking is the leading cause of preventable death in the United States, accounting for more than 480,000 deaths each year.[13]

♦ In 2013, an estimated 21.4% of Michigan adults reported that they currently smoke cigarettes on a regular basis.

♦ Current smoking decreased with both increasing age and household income level.

♦ Males (24.7%) reported a higher prevalence of current smoking than females (18.3%), and White, non-Hispanic adults (20.6%) reported a lower prevalence than Black, non-Hispanic adults (25.9%).

♦ Disabled adults (28.7%) were more likely to have reported current smoking than non-disabled adults (18.8%).

♦ Uninsured adults (40.7%) were more likely to have reported current smoking than insured adults (18.3%).

♦ The HP 2020 target for current smoking among adults is set at 12.0%. In order to meet this target, the current smoking prevalence among Michigan adults will need to decrease by 9.4 percentage points over the next seven years.[7]

♦ The BRFSS methodology changes that were implemented in 2011 resulted in a spike in the prevalence of current smoking among Michigan adults, but the prevalence of current smoking has declined since 2011.

♦ In 2013, the prevalence of current smoking among Michigan adults (21.4%) was higher than the U.S. median prevalence (19.0%).

Demographic Characteristics	Current Smoking[a]	
	%	95% Confidence Interval
Total	**21.4**	**(20.3-22.5)**
Age		
18 - 24	19.7	(16.8-23.0)
25 - 34	33.3	(29.6-37.1)
35 - 44	25.0	(22.2-28.1)
45 - 54	24.0	(21.7-26.6)
55 - 64	20.7	(18.6-22.9)
65 - 74	12.9	(10.9-15.2)
75 +	4.9	(3.6-6.6)
Gender		
Male	24.7	(23.0-26.5)
Female	18.3	(17.0-19.7)
Race/Ethnicity		
White non-Hispanic	20.6	(19.5-21.7)
Black non-Hispanic	25.9	(22.2-30.1)
Other non-Hispanic	22.7	(18.2-28.0)
Hispanic	20.0	(14.4-27.0)
Household Income		
< $20,000	37.5	(34.3-40.8)
$20,000 - $34,999	25.7	(23.2-28.2)
$35,000 - $49,999	21.6	(18.7-24.9)
$50,000 - $74,999	17.1	(14.8-19.7)
≥ $75,000	10.9	(9.3-12.6)
Health Insurance		
Insured	18.3	(17.2-19.4)
Uninsured	40.7	(36.9-44.7)
Disability		
Disabled	28.7	(26.4-31.1)
Not disabled	18.8	(17.6-20.0)

[a] Among all adults, the proportion reporting that they had ever smoked at least 100 cigarettes (5 packs) in their life and that they smoke cigarettes now, either every day or on some days.

Current Cigarette Smoking
U.S. vs. Michigan, 2004-2013
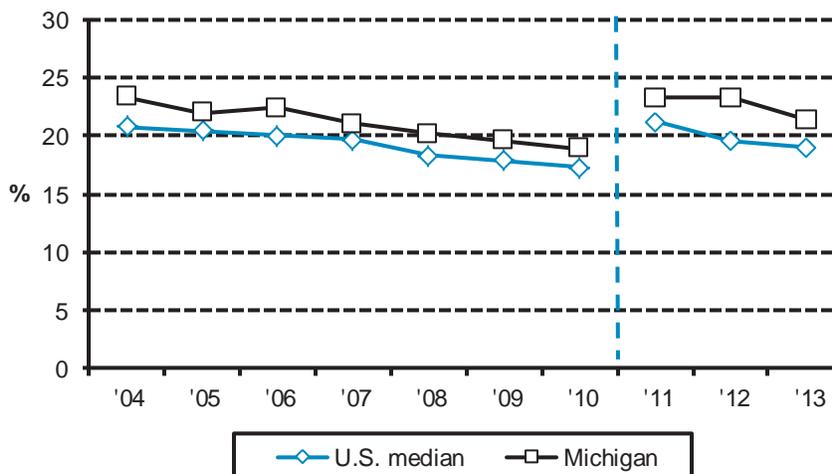
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.
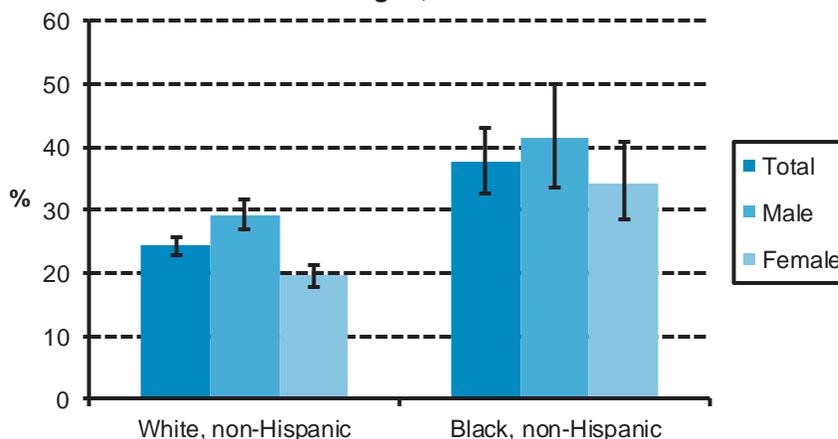
Secondhand Smoke Exposure

Among adults who have never smoked, secondhand smoke exposure causes an estimated 34,000 heart disease deaths and 7,300 lung cancer deaths within the United States each year.[13]

♦ In 2013, an estimated 26.7% of Michigan adults reported that they were exposed to secondhand smoke in their home or car within the past seven days.

♦ 13.7% (95% CI: 11.3-15.7) of Michigan adults with children living in their households reported being exposed to second-hand smoke in their home within the past seven days.

♦ Secondhand smoke exposure decreased with both increasing age and household income level.

♦ Males (31.6%) were more likely than females (22.0%) to report recent secondhand smoke exposure.

♦ Black, non-Hispanic adults (37.7%) reported a significantly higher prevalence of secondhand smoke exposure than White, non-Hispanic adults (24.3%).

♦ Uninsured and disabled adults (46.9% and 33.3%, respectively) were more likely to have reported recent secondhand smoke exposure than insured and non-disabled adults (23.2% and 24.4%, respectively).

♦ White, non-Hispanic females reported the lowest prevalence of recent secondhand smoke exposure at 19.6%. White, non-Hispanic males and females (29.2% and 19.6%, respectively) reported lower prevalences of recent secondhand smoke exposure than Black, non-Hispanic males (41.6%).

Demographic Characteristics	Secondhand Smoke Exposure[a]	
	%	95% Confidence Interval
Total	**26.7**	**(25.3-28.1)**
Age		
18 - 24	42.9	(38.1-48.0)
25 - 34	36.0	(31.5-40.8)
35 - 44	26.2	(22.4-30.5)
45 - 54	25.6	(22.7-28.7)
55 - 64	23.2	(20.6-26.0)
65 - 74	17.0	(14.4-20.0)
75 +	10.5	(8.4-13.0)
Gender		
Male	31.6	(29.4-33.9)
Female	22.0	(20.4-23.8)
Race/Ethnicity		
White non-Hispanic	24.3	(22.8-25.8)
Black non-Hispanic	37.7	(32.7-42.9)
Other non-Hispanic	32.9	(26.6-39.8)
Hispanic	32.2	(23.0-43.1)
Household Income		
< $20,000	46.8	(43.1-50.6)
$20,000 - $34,999	31.7	(28.5-35.1)
$35,000 - $49,999	26.6	(22.7-30.8)
$50,000 - $74,999	17.9	(15.0-21.2)
≥ $75,000	13.9	(11.7-16.5)
Health Insurance		
Insured	23.2	(21.8-24.7)
Uninsured	46.9	(42.3-51.7)
Disability		
Disabled	33.3	(30.5-36.2)
Not disabled	24.4	(22.8-26.0)

[a] Among all adults, the proportion reporting being exposed to secondhand smoke in their home or a car within the past seven days.

Secondhand Smoke Exposure by Race and Gender Michigan, 2013

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

11

Excessive alcohol use contributes to approximately 88,000 deaths each year within the United States.[14] Binge drinking is defined as consuming five or more alcoholic drinks per occasion (for men) or four or more alcoholic drinks per occasion (for women) at least once in the past month, while heavy drinking is defined as consuming an average of more than two alcoholic drinks per day for men or more than one alcoholic drink per day for women in the past month.

♦ In 2013, an estimated 56.6% (95% CI: 55.3-57.8) of Michigan adults reported some form of alcohol consumption within the past month. Furthermore, an estimated 18.9% of Michigan adults reported binge drinking on at least one occasion within the past month, and 6.2% (95% CI: 5.7-6.9) reported heavy drinking over the past month.

♦ Both binge drinking and heavy drinking are more prevalent within the younger age groups and decrease significantly within the older age groups.

♦ Males (24.1%) reported a significantly higher prevalence of binge drinking than females (13.9%).

♦ Black, non-Hispanic adults (14.9%) reported a significantly lower prevalence of binge drinking than White, non-Hispanic adults (19.5%).

♦ Uninsured and disabled adults (25.2% and 20.7%, respectively) reported higher prevalences of binge drinking than their insured and non-disabled counterparts (17.9% and 13.6%, respectively).

♦ The prevalence of binge drinking among Michigan adults has decreased slightly since the BRFSS methodology changes in 2011, but remains higher than the U.S. median prevalence.

Demographic Characteristics	Binge Drinking[a]	
	%	95% Confidence Interval
Total	18.9	(17.9-19.9)
Age		
18 - 24	27.9	(24.7-31.4)
25 - 34	29.2	(25.9-32.7)
35 - 44	20.6	(18.1-23.4)
45 - 54	21.1	(18.9-23.4)
55 - 64	13.2	(11.6-15.0)
65 - 74	9.0	(7.4-10.9)
75 +	4.1	(2.9-5.8)
Gender		
Male	24.1	(22.6-25.7)
Female	13.9	(12.8-15.2)
Race/Ethnicity		
White non-Hispanic	19.5	(18.5-20.6)
Black non-Hispanic	14.9	(12.0-18.2)
Other non-Hispanic	17.0	(13.0-22.0)
Hispanic	23.3	(17.6-30.0)
Household Income		
< $20,000	18.5	(16.1-21.1)
$20,000 - $34,999	16.6	(14.7-18.7)
$35,000 - $49,999	16.4	(14.1-19.1)
$50,000 - $74,999	20.4	(18.0-23.1)
≥ $75,000	24.2	(22.1-26.4)
Health Insurance		
Insured	17.9	(16.9-18.9)
Uninsured	25.2	(22.0-28.6)
Disability		
Disabled	13.6	(12.0-15.5)
Not disabled	20.7	(19.6-21.9)

[a] Among all adults, the proportion reporting consumption of five or more drinks per occasion (for males) or four or more drinks per occasion (for women) at least once in the previous month.
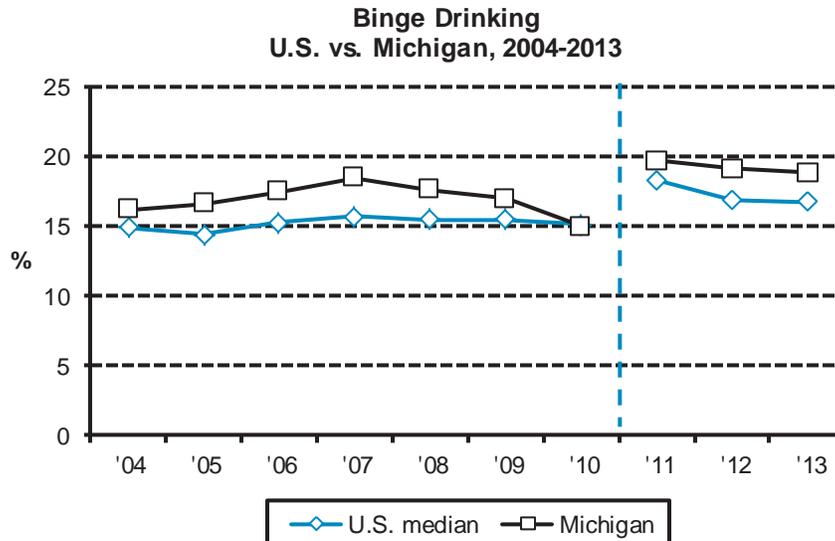
Binge Drinking
U.S. vs. Michigan, 2004-2013

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

Seatbelt Use

Seatbelt use has been proven to save lives and prevent injuries. In 2012, 21,667 people died in the United States in motor vehicle traffic crashes, of which only 52% were restrained. In 2012, seat belts saved an estimated 12,174 lives among motor vehicle occupants 5 years of age and older within the United States.[15]

♦ In 2013, an estimated 89.6% of Michigan adults reported always using their seat belt when driving or riding in a car.

♦ Seatbelt use increased slightly with both age and household income level.

♦ Males (86.8%) reported a significantly lower prevalence of seatbelt use than females (92.2%).

♦ The prevalence of seatbelt use was similar by race/ethnicity and disability status.

♦ Uninsured adults (86.2%) reported a significantly lower prevalence of seatbelt use than insured adults (90.1%).

Demographic Characteristics	Always Uses a Seatbelt[a]	
	%	95% Confidence Interval
Total	**89.6**	**(88.8-90.4)**
Age		
18 - 24	81.6	(78.2-84.5)
25 - 34	87.1	(84.1-89.6)
35 - 44	90.9	(88.6-92.7)
45 - 54	91.1	(89.4-92.6)
55 - 64	92.0	(90.4-93.4)
65 - 74	92.5	(91.0-93.7)
75 +	91.4	(89.6-92.9)
Gender		
Male	86.8	(85.4-88.1)
Female	92.2	(91.2-93.0)
Race/Ethnicity		
White non-Hispanic	90.1	(89.2-90.9)
Black non-Hispanic	89.0	(86.0-91.4)
Other non-Hispanic	87.1	(82.2-90.9)
Hispanic	87.3	(80.7-91.9)
Household Income		
< $20,000	87.6	(85.1-89.7)
$20,000 - $34,999	88.3	(86.4-90.0)
$35,000 - $49,999	89.6	(87.3-91.6)
$50,000 - $74,999	89.4	(87.1-91.4)
≥ $75,000	91.7	(90.0-93.0)
Health Insurance		
Insured	90.1	(89.3-90.9)
Uninsured	86.2	(83.0-88.9)
Disability		
Disabled	90.2	(88.7-91.5)
Not disabled	89.3	(88.3-90.3)

[a] Among all adults, the proportion reporting that they always used a seatbelt within driving or riding in a car.
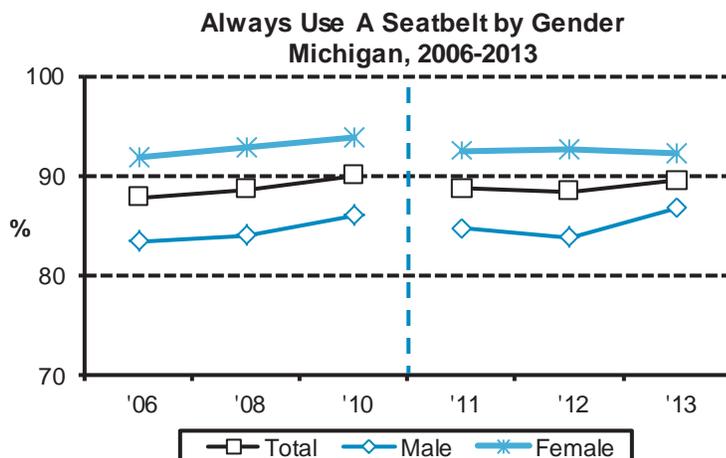
Always Use A Seatbelt by Gender
Michigan, 2006-2013

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

13

Adults with high blood pressure are at a higher risk for heart disease, stroke, congestive heart failure, and kidney disease.[16]

- In 2013, an estimated 34.6% of Michigan adults reported ever being told by a doctor that they had high blood pressure (HBP). Furthermore, 75.7% (95% CI: 73.8-77.5) of Michigan adults with HBP were currently taking medications for their HBP.

- The prevalence of HBP increased significantly with age and decreased with increasing household income level.

- Males (37.2%) reported a significantly higher prevalence of HBP than females (32.2%),

- Males (71.0% [95%CI: 68.2-73.8]) reported a significantly lower prevalence of HBP medication use than females (80.8% [95% CI: 78.5-82.9]).

- Hispanic adults (23.5%) reported a significantly lower prevalence of high blood pressure than both White, non-Hispanic (34.3%) and Black, non-Hispanic adults (42.0%).

- Disabled adults (54.9%) were more likely to have reported high blood pressure than non-disabled adults (27.9%), and insured adults (36.4%) were more likely to have reported high blood pressure than uninsured adults (24.2%).

- Insured adults with HBP (79.9% [95% CI: 78.2-81.6]) were more likely to report current HBP medication use than uninsured adults with HBP (38.6% [95% CI: 31.7-46.1]).

- In 2013, the prevalence of high blood pressure in Michigan (34.6%) was higher than the U.S. median prevalence (31.4%).

Demographic Characteristics	Ever Told HBP[a]	
	%	95% Confidence Interval
Total	**34.6**	**(33.5-35.7)**
Age		
18 - 24	8.8	(6.9-11.2)
25 - 34	14.3	(11.6-17.5)
35 - 44	20.8	(18.2-23.7)
45 - 54	36.5	(33.9-39.2)
55 - 64	48.0	(45.6-50.4)
65 - 74	62.6	(59.9-65.1)
75 +	69.4	(66.5-72.1)
Gender		
Male	37.2	(35.5-38.9)
Female	32.2	(30.9-33.6)
Race/Ethnicity		
White non-Hispanic	34.3	(33.2-35.5)
Black non-Hispanic	42.0	(38.1-46.0)
Other non-Hispanic	24.8	(20.3-29.9)
Hispanic	23.5	(17.9-30.2)
Household Income		
< $20,000	40.8	(37.7-43.9)
$20,000 - $34,999	39.4	(36.9-42.0)
$35,000 - $49,999	36.4	(33.3-39.6)
$50,000 - $74,999	32.7	(30.0-35.4)
≥ $75,000	27.6	(25.6-29.7)
Health Insurance		
Insured	36.4	(35.3-37.6)
Uninsured	24.2	(21.1-27.7)
Disability		
Disabled	54.9	(52.5-57.3)
Not disabled	27.9	(26.7-29.1)

[a] Among all adults, the proportion reporting that they were ever told by a doctor that they had high blood pressure (HBP). Women who had HBP only during pregnancy and adults who were borderline hypertensive were considered to not have been diagnosed.

Ever Told High Blood Pressure
U.S. vs. Michigan, 2003-2013
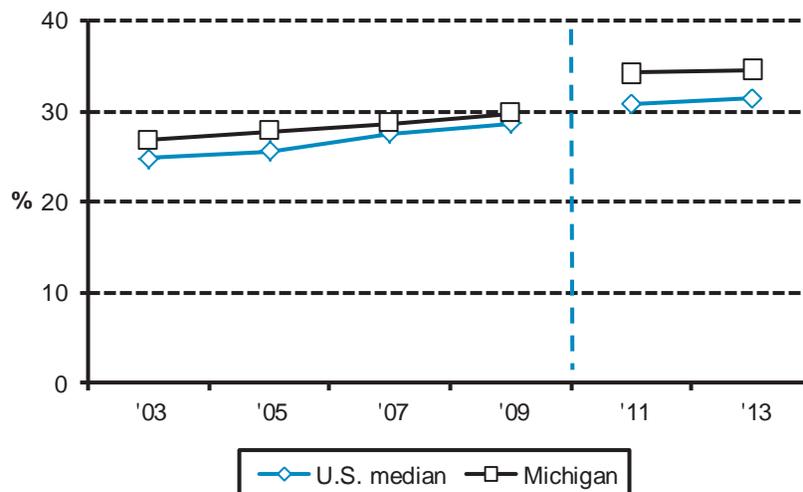
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

Routine Checkup in Past Year

A yearly routine checkup is a great way to remain proactive about one's health. The benefits of having an annual checkup include early diagnosis and treatment of existing conditions and prevention of future medical problems.[17]

♦ In 2013, an estimated 69.9% of Michigan adults reported having a routine medical checkup within the past year.

♦ The prevalence of having a routine checkup within the past year increased with age.

♦ Males (65.0%) reported a significantly lower prevalence of having a routine checkup within the past year than females (74.4%).

♦ White, non-Hispanic adults (69.5%) reported a significantly lower prevalence of having had a routine checkup within the past year than did Black, non-Hispanic adults (77.4%).

♦ Insured and disabled adults (74.9% and 78.1%, respectively) were more likely to have had a routine checkup within the past year than uninsured and non-disabled adults (39.0% and 66.9%, respectively).

♦ Michigan adults who had a routine check up within the past year were more likely to have had their cholesterol checked within the past 5 years [88.6% vs. 59.2%], a flu vaccine within the past year (65+ years) [57.8% vs. 49.6%], and to have ever had a pneumonia vaccine (65+ years) [70.1% vs. 58.6%] when compared to adults who had not had a routine checkup within the past year.

Demographic Characteristics	Had a Routine Checkup Within The Past Year[a]	
	%	95% Confidence Interval
Total	**69.9**	**(68.7-71.0)**
Age		
18 - 24	60.1	(56.2-63.9)
25 - 34	57.2	(53.4-60.9)
35 - 44	62.2	(58.8-65.4)
45 - 54	68.7	(66.1-71.1)
55 - 64	75.5	(73.3-77.5)
65 - 74	87.2	(85.3-88.9)
75 +	88.5	(86.4-90.3)
Gender		
Male	65.0	(63.2-66.8)
Female	74.4	(73.0-75.8)
Race/Ethnicity		
White non-Hispanic	69.5	(68.3-70.7)
Black non-Hispanic	77.4	(73.8-80.5)
Other non-Hispanic	59.4	(53.1-65.3)
Hispanic	63.6	(56.3-70.2)
Household Income		
< $20,000	64.2	(61.1-67.2)
$20,000 - $34,999	67.5	(64.8-70.1)
$35,000 - $49,999	68.4	(65.1-71.5)
$50,000 - $74,999	72.9	(70.1-75.6)
≥ $75,000	72.5	(70.3-74.6)
Health Insurance		
Insured	74.9	(73.8-76.0)
Uninsured	39.0	(35.2-43.0)
Disability		
Disabled	78.1	(76.0-80.0)
Not disabled	66.9	(65.5-68.3)

[a] Among all adults, the proportion reporting a routine medical checkup within the past year.

Health Screenings and Immunizations by Routine Checkup Status Michigan, 2013
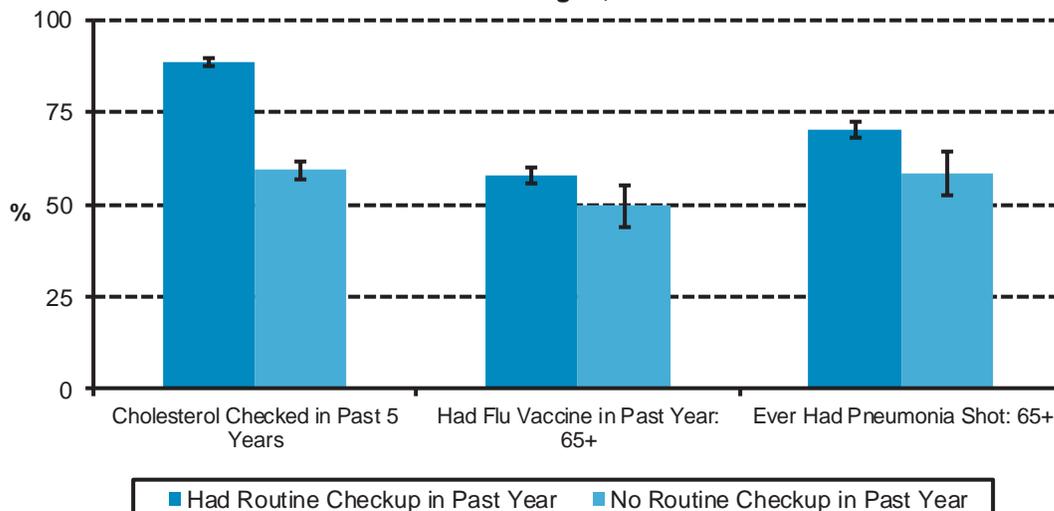
Legend: ■ Had Routine Checkup in Past Year   ■ No Routine Checkup in Past Year

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

15

Cholesterol Screening and Awareness

High blood cholesterol is a major risk factor for coronary heart disease, the leading cause of death in the United States.[18]

- In 2013, an estimated 79.4% of Michigan adults reported having their cholesterol checked within the past five years.

- Among Michigan adults who have ever had their cholesterol checked, an estimated 40.6% have been told by a doctor that they had high blood cholesterol.

- The prevalence of cholesterol screening within the past five years increased with increasing age and household income level.

- Females (81.7%) were more likely than males (76.9%) to have had a cholesterol screening within the past five years, but were less likely to have been told they had high cholesterol (38.0% vs. 43.5%).

- White, non-Hispanic adults (42.2%) reported a significantly higher prevalence of high cholesterol than Black, non-Hispanic adults (36.1%).

- Insured and disabled adults (42.0% and 54.4%, respectively) were more likely to have been diagnosed with high cholesterol than uninsured and non-disabled adults (28.1% and 35.3%, respectively).

- The HP 2020 target for cholesterol screening within the past five years is set at 82.1%. In order to meet this target, the cholesterol screening prevalence among Michigan adults will need to increase by 2.7 percentage points over the next seven years.[7]

- The BRFSS methodology changes that were implemented in 2011 did not have much impact on the prevalence of high cholesterol among Michigan adults.

- In 2013, the prevalence of high cholesterol among Michigan adults (40.6%) was slightly higher than the U.S. median prevalence (38.5%).

Demographic Characteristics	Cholesterol Checked Within the Past 5 Years[a]		Ever Told High Cholesterol[b]	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**79.4**	**(78.3-80.5)**	**40.6**	**(39.4-41.8)**
Age				
18 - 24	43.7	(39.6-47.8)	9.7	(6.7-13.9)
25 - 34	60.1	(56.1-63.9)	16.4	(13.4-19.9)
35 - 44	79.4	(76.4-82.2)	26.2	(23.1-29.5)
45 - 54	87.5	(85.5-89.2)	42.5	(39.7-45.3)
55 - 64	92.5	(91.1-93.8)	53.4	(51.0-55.9)
65 - 74	96.8	(95.8-97.6)	61.4	(58.6-64.0)
75 +	96.5	(95.3-97.3)	55.9	(52.9-59.0)
Gender				
Male	76.9	(75.1-78.5)	43.5	(41.6-45.4)
Female	81.7	(80.3-83.1)	38.0	(36.4-39.6)
Race/Ethnicity				
White non-Hispanic	80.2	(79.0-81.3)	42.2	(40.9-43.5)
Black non-Hispanic	79.0	(75.1-82.5)	36.1	(32.0-40.3)
Other non-Hispanic	72.9	(66.6-78.4)	31.7	(26.0-38.0)
Hispanic	71.0	(63.7-77.4)	33.3	(25.9-41.5)
Household Income				
< $20,000	69.6	(66.4-72.7)	42.8	(39.3-46.3)
$20,000 - $34,999	77.0	(74.4-79.4)	44.5	(41.7-47.4)
$35,000 - $49,999	82.2	(79.0-84.9)	43.0	(39.6-46.5)
$50,000 - $74,999	83.6	(80.9-85.9)	40.4	(37.4-43.4)
≥ $75,000	86.9	(84.9-88.6)	35.1	(32.9-37.3)
Health Insurance				
Insured	84.1	(83.1-85.2)	42.0	(40.8-43.3)
Uninsured	51.2	(47.3-55.2)	28.1	(24.0-32.5)
Disability				
Disabled	87.8	(85.7-89.7)	54.4	(52.0-56.8)
Not Disabled	76.6	(75.2-77.9)	35.3	(34.0-36.7)

[a] Among all adults, the proportion reporting that they have had their blood cholesterol checked within the past five years.
[b] Among adults who have had their blood cholesterol checked, the proportion reporting that a doctor, nurse, or other health professional had told them that their cholesterol was high.

Ever Told High Cholesterol U.S. vs. Michigan, 2003-2013
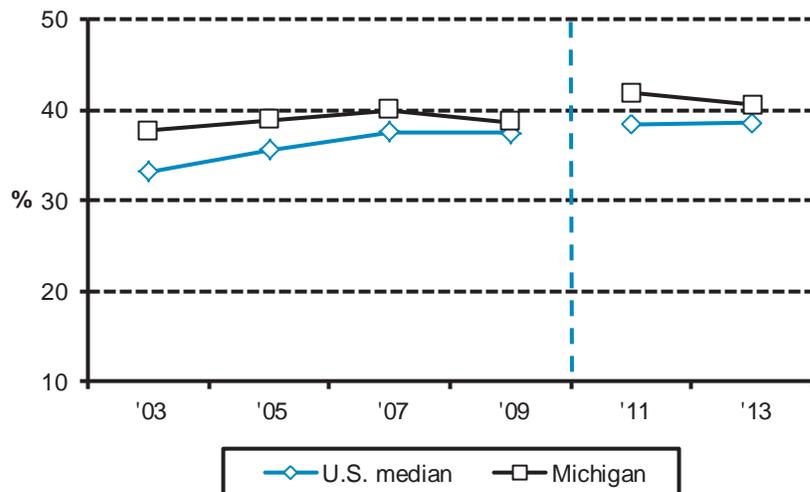
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

Colorectal Cancer Screening

In 2012, colorectal cancer was the second leading cause of cancer-related deaths in Michigan with 1,721 deaths.[19] Fecal occult blood tests, sigmoidoscopy, and colonoscopy are screening procedures that are performed to detect colorectal cancer in the early stages. Appropriate colorectal cancer screening consists of a fecal occult blood test within the past year, a sigmoidoscopy within the past five years, or a colonoscopy within the past ten years.

♦ In 2013, an estimated 56.4% of Michigan adults aged 50 years and older reported having a sigmoidoscopy or colonoscopy within the past five years, while 71.0% reported appropriate colorectal cancer screening.

♦ The prevalence of appropriate colorectal cancer screening was similar by gender and race/ethnicity, but increased with household income level.

♦ Insured adults (73.8%) were more likely than uninsured adults (36.1%) to have reported receiving appropriate colorectal cancer screening.

♦ The BRFSS methodology changes that were implemented in 2011 did not significantly impact the prevalence of appropriate colorectal cancer screening among Michigan adults 50 years and older.

Demographic Characteristics	Had Sigmoidoscopy or Colonoscopy in Past 5 Years[a]		Had Appropriate Colorectal Cancer Screening[b]	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	56.4	(54.9-57.8)	71.0	(69.6-72.4)
Age				
50 - 59	50.7	(48.1-53.3)	62.8	(60.2-65.3)
60 - 69	59.5	(56.9-62.0)	76.7	(74.3-78.9)
70 +	61.3	(58.9-63.7)	77.0	(74.9-79.1)
Gender				
Male	57.5	(55.1-59.8)	70.2	(67.9-72.3)
Female	55.4	(53.4-57.3)	71.8	(70.0-73.5)
Race/Ethnicity				
White non-Hispanic	56.3	(54.8-57.9)	71.8	(70.3-73.2)
Black non-Hispanic	58.9	(53.0-64.6)	68.9	(63.1-74.2)
Other non-Hispanic	44.3	(35.2-53.8)	59.6	(49.4-69.1)
Hispanic	62.1	(49.2-73.5)	71.4	(58.5-81.6)
Household Income				
< $20,000	45.3	(41.1-49.5)	57.7	(53.3-61.9)
$20,000 - $34,999	55.7	(52.6-58.9)	70.5	(67.4-73.3)
$35,000 - $49,999	59.0	(54.9-62.9)	73.3	(69.4-76.9)
$50,000 - $74,999	61.7	(58.0-65.3)	75.7	(72.1-79.0)
≥ $75,000	58.6	(55.5-61.7)	75.1	(72.2-77.8)
Health Insurance				
Insured	58.7	(57.2-60.2)	73.8	(72.4-75.2)
Uninsured	26.4	(20.8-32.8)	36.1	(29.9-42.7)
Disability				
Disabled	60.1	(57.4-62.6)	73.8	(71.3-76.2)
Not disabled	54.5	(52.7-56.3)	69.6	(67.8-71.3)

[a] Among adults aged 50 years and older, the proportion reporting having a sigmoidoscopy or colonoscopy within the past five years.
[b] Among adults aged 50 years and older, the proportion reporting having a fecal occult blood test within the past year, a sigmoidoscopy within the past five years, or a colonoscopy within the past ten years.

Appropriate Colorectal Cancer Screening Among Adults Aged 50 Years and Older Michigan, 2004-2013
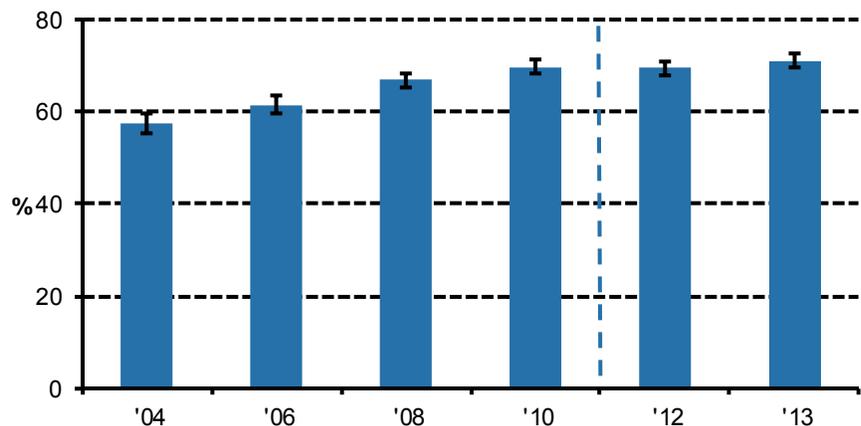
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

17

Immunizations Among Adults 65 Years of Age and Older

Adult immunizations against influenza and pneumococcal disease are important health indicators that need to be routinely monitored since morbidity and mortality are associated with both of these diseases within different demographic groups.[20]

♦ In 2013, an estimated 56.8% of Michigan adults ages 65 years and older reported receiving a flu vaccine within the past year, while an estimated 68.6% of this population reported ever receiving a pneumonia vaccine.

♦ The prevalence of receiving these vaccines among the 65+ year old age group was similar by gender.

♦ White, non-Hispanic adults were more likely than Black, non-Hispanic adults to have received a flu vaccine within the past year (59.0% vs. 40.0%) and a pneumonia vaccine ever (70.6% vs. 52.5%).

♦ Disabled adults (73.1%) were more likely to have ever received a pneumonia vaccine than non-disabled adults (65.7%).

♦ The prevalence of ever having had a pneumonia vaccine among Michigan adults 65 years and older has remained relatively stable over the past couple years.

♦ In 2013, the prevalence of ever having had a pneumonia vaccine among Michigan adults (68.6%) was similar to the U.S. median prevalence (69.5%).

Demographic Characteristics	Had Flu Vaccine in Past Year[a]		Ever Had Pneumonia Vaccine[b]	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**56.8**	**(54.8-58.9)**	**68.6**	**(66.5-70.5)**
Age				
65 - 74	53.6	(50.8-56.3)	63.0	(60.2-65.7)
75 +	61.1	(58.0-64.1)	75.9	(73.0-78.5)
Gender				
Male	57.6	(54.2-60.8)	66.5	(63.1-69.7)
Female	56.2	(53.6-58.8)	70.1	(67.6-72.5)
Race/Ethnicity				
White non-Hispanic	59.0	(56.9-61.1)	70.6	(68.6-72.5)
Black non-Hispanic	40.0	(32.0-48.5)	52.5	(43.2-61.6)
Other non-Hispanic	46.2	(32.9-60.0)	61.8	(47.0-74.6)
Hispanic	--[c]	--[c]	--[c]	--[c]
Household Income				
< $20,000	55.0	(48.9-60.9)	63.8	(57.5-69.7)
$20,000 - $34,999	55.8	(51.8-59.7)	69.8	(65.8-73.5)
$35,000 - $49,999	56.7	(51.4-61.9)	67.4	(62.0-72.5)
$50,000 - $74,999	57.2	(51.7-62.5)	67.8	(62.4-72.7)
≥ $75,000	60.3	(54.7-65.7)	69.5	(63.9-74.5)
Disability				
Disabled	59.1	(55.7-62.5)	73.1	(69.6-76.4)
Not disabled	55.2	(52.7-57.8)	65.7	(63.2-68.2)

[a] Among adults aged 65 years and older, the proportion reporting that they had a flu vaccine, either by injection in the arm or sprayed in the nose during the past 12 months.
[b] Among adults aged 65 years and older, the proportion reporting that they ever had a pneumococcal vaccine.
[c] Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Ever Had a Pneumococcal Vaccination Among Adults Aged 65 Years and Older U.S. vs. Michigan, 2004-2013
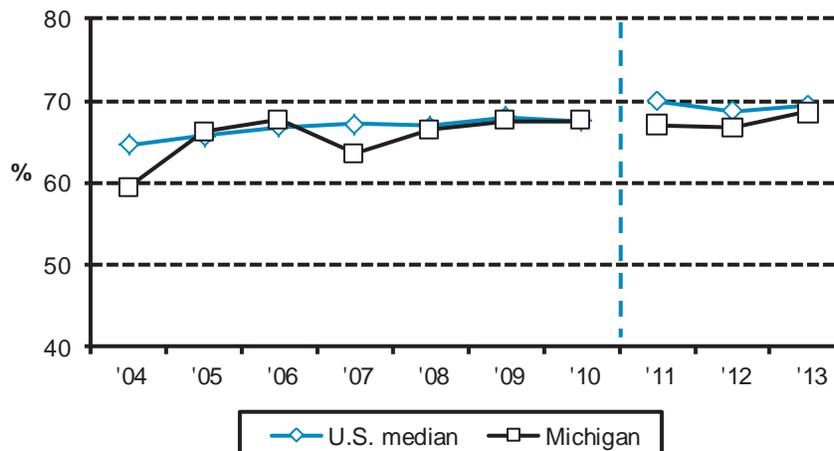
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

HIV Testing

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.[21]

- In 2013, an estimated 41.2% of Michigan adults reported ever being tested for HIV.

- Females (44.4%) reported a significantly higher prevalence of HIV testing than males (37.9%).

- Black, non-Hispanic adults (71.2%) reported a significantly higher prevalence of HIV testing than both White, non-Hispanic (36.1%) and Hispanic adults (40.8%).

- The prevalence of HIV testing decreased with increasing household income level.

- Disabled adults (50.0%) were more likely to have been tested for HIV than non-disabled adults (38.6%).

- Since the BRFSS methodology changes that were implemented in 2011, the prevalence of HIV testing among Michigan adult has remained stable over time.

Demographic Characteristics	Ever Had an HIV Test[a]	
	%	95% Confidence Interval
Total	**41.2**	**(39.8-42.7)**
Age		
18 - 24	27.0	(23.5-30.8)
25 - 34	53.5	(49.6-57.5)
35 - 44	57.2	(53.8-60.6)
45 - 54	41.7	(39.0-44.5)
55 - 64	27.5	(25.2-29.8)
Gender		
Male	37.9	(35.8-40.1)
Female	44.4	(42.5-46.4)
Race/Ethnicity		
White non-Hispanic	36.1	(34.6-37.7)
Black non-Hispanic	71.2	(66.8-75.2)
Other non-Hispanic	38.4	(32.0-45.1)
Hispanic	40.8	(32.8-49.3)
Household Income		
< $20,000	50.7	(46.9-54.6)
$20,000 - $34,999	44.2	(40.7-47.7)
$35,000 - $49,999	40.2	(36.1-44.5)
$50,000 - $74,999	40.7	(37.2-44.2)
≥ $75,000	36.5	(34.0-39.1)
Health Insurance		
Insured	40.6	(39.1-42.2)
Uninsured	45.1	(41.1-49.2)
Disability		
Disabled	50.0	(46.9-53.2)
Not disabled	38.6	(37.0-40.2)

[a] Among adults aged 18-64 years, the proportion reporting that they ever had been tested for HIV, apart from tests that were part of a blood donation.

Ever Tested for HIV
Among Adults Aged 18-64 Years
Michigan, 2004-2013
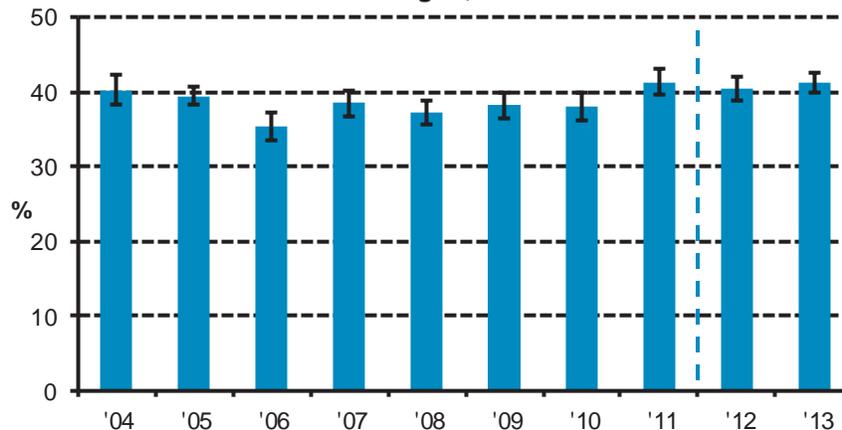
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

Asthma in Adults

Asthma is a chronic inflammatory disorder of the lungs, characterized by wheezing, coughing, difficulty breathing, and chest tightness. Allergies, a family history of asthma or allergy, low birth weight, and exposure to tobacco smoke are just a few of the potential risk factors that are associated with the development of asthma.[22]

- In 2013, an estimated 16.6% of Michigan adults reported that they were ever diagnosed with asthma and 11.5% reported that they currently have asthma.

- The prevalence of both lifetime and current asthma decreased with age and increasing household income level.

- Females reported a significantly higher prevalence than males for both lifetime (18.7% vs. 14.3%) and current asthma (14.2% and 8.6%).

- Black, non-Hispanic adults reported significantly higher prevalences of lifetime (19.4% vs. 16.0%) and current asthma (14.3% vs. 10.9%) than White, non-Hispanic adults.

- Disabled adults reported a significantly higher prevalence than non-disabled adults for both life-time (24.9% vs. 13.8%) and current asthma (19.3% vs. 8.9%).

- In 2013, the prevalence of ever being diagnosed with asthma among Michigan adults (16.6%) was higher than the U.S. median prevalence (14.1%).

Demographic Characteristics	Lifetime Asthma[a]		Current Asthma[b]	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**16.6**	**(15.7-17.5)**	**11.5**	**(10.7-12.3)**
Age				
18 - 24	22.8	(19.7-26.3)	14.1	(11.5-17.2)
25 - 34	18.3	(15.6-21.3)	10.6	(8.6-13.2)
35 - 44	16.9	(14.5-19.6)	12.5	(10.4-14.9)
45 - 54	14.4	(12.6-16.5)	10.8	(9.1-12.6)
55 - 64	16.9	(15.1-18.9)	12.3	(10.7-14.1)
65 - 74	14.9	(13.0-17.0)	12.0	(10.2-13.9)
75 +	10.2	(8.5-12.2)	7.0	(5.6-8.6)
Gender				
Male	14.3	(13.0-15.8)	8.6	(7.6-9.8)
Female	18.7	(17.5-20.0)	14.2	(13.1-15.3)
Race/Ethnicity				
White non-Hispanic	16.0	(15.0-17.0)	10.9	(10.1-11.8)
Black non-Hispanic	19.4	(16.4-22.7)	14.3	(11.7-17.4)
Other non-Hispanic	19.0	(14.8-24.2)	11.7	(8.9-15.2)
Hispanic	18.3	(12.8-25.5)	13.4	(8.7-20.2)
Household Income				
< $20,000	23.6	(21.0-26.4)	18.2	(15.9-20.8)
$20,000 - $34,999	16.9	(14.9-19.1)	11.4	(9.8-13.4)
$35,000 - $49,999	15.4	(13.0-18.2)	10.5	(8.5-13.0)
$50,000 - $74,999	12.6	(10.7-14.6)	8.5	(7.0-10.2)
≥ $75,000	13.8	(12.2-15.6)	9.1	(7.8-10.6)
Health Insurance				
Insured	16.4	(15.4-17.4)	11.5	(10.7-12.3)
Uninsured	17.7	(14.9-20.9)	11.4	(9.1-14.0)
Disability				
Disabled	24.9	(22.8-27.1)	19.3	(17.4-21.4)
Not disabled	13.8	(12.8-14.8)	8.9	(8.1-9.7)

[a] Among all adults, the proportion reporting that they were ever told by a doctor, nurse, or other health care professional that they had asthma
[b] Among all adults, the proportion reporting that they still have asthma.

Lifetime Adult Asthma
U.S. vs. Michigan, 2004-2013
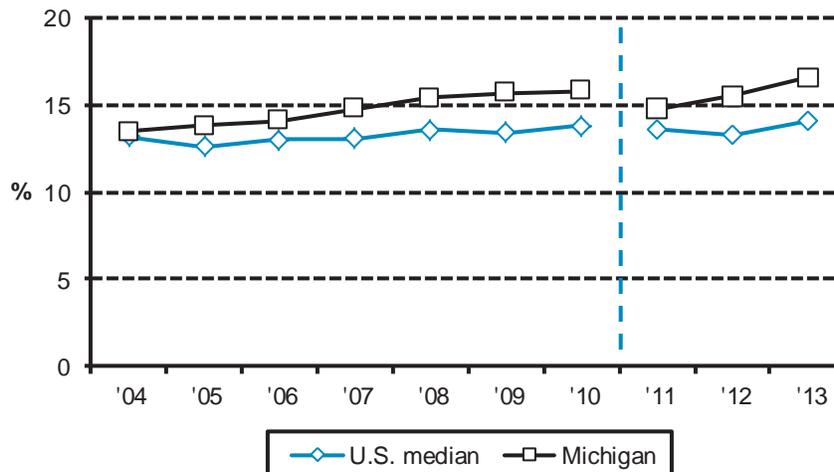
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

Asthma in Children

Although asthma can affect people of all ages, in most cases it begins during childhood. More than 25 million people in the United States are known to have asthma, and about 7 million of these people are children. Children with a family history of asthma and allergy are at a higher risk of developing asthma during childhood.[23]

♦ Based on proxy information provided by the adult respondent, the estimated proportion of Michigan children aged 0-17 years who were ever told by a doctor that they had asthma for 2013 was 15.2%, and an estimated 10.9% currently have asthma.

♦ The prevalences of both lifetime and current asthma increased with age until 10-14 years of age and then dropped slightly within the 15-17 year-old age group.

♦ Boys were more likely than girls to report both lifetime (18.4% vs. 11.6%) and current asthma (13.5% vs. 8.5%).

♦ The prevalences of both lifetime and current asthma among children decreased with increasing household income level.

♦ White, non-Hispanic boys (16.1%) reported a higher prevalence of lifetime asthma than White, non-Hispanic girls (9.3%)

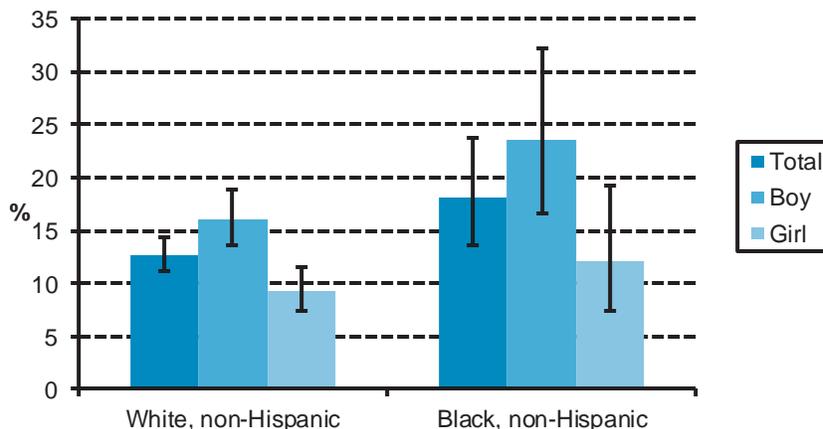♦ The prevalence of lifetime asthma was similar among Black, non-Hispanic boys and girls.

Demographic Characteristics	Lifetime Asthma[a]		Current Asthma[b]	
	%	95% Confidence Interval	%	95% Confidence Interval
Total	**15.2**	**(13.6-17.0)**	**10.9**	**(9.5-12.5)**
Age				
0 - 4	7.2	(4.7-11.1)	5.8	(3.5-9.3)
5 - 9	15.0	(12.0-18.8)	11.4	(8.7-14.8)
10 - 14	19.8	(16.6-23.4)	13.6	(10.8-16.8)
15 - 17	16.1	(12.9-19.7)	11.3	(8.6-14.8)
Gender				
Boy	18.4	(16.0-21.1)	13.5	(11.3-15.9)
Girl	11.6	(9.6-13.9)	8.5	(6.7-10.6)
Race/Ethnicity				
White non-Hispanic	12.7	(11.1-14.4)	8.8	(7.5-10.4)
Black non-Hispanic	18.2	(13.7-23.7)	15.2	(11.1-20.5)
Other non-Hispanic	18.5	(11.4-28.7)	--[c]	--[c]
Hispanic	23.2	(16.1-32.3)	19.2	(12.7-28.1)
Household Income				
< $20,000	22.1	(16.8-28.4)	16.9	(12.1-23.1)
$20,000 - $34,999	18.5	(14.2-23.8)	13.1	(9.4-18.1)
$35,000 - $49,999	14.2	(10.0-19.8)	11.7	(7.8-17.3)
$50,000 - $74,999	14.1	(10.8-18.1)	9.0	(6.5-12.4)
≥ $75,000	11.5	(9.2-14.2)	8.2	(6.4-10.5)

[a] Estimated proportion of Michigan children aged 0-17 years ever told by a doctor, nurse, or other health care professional that they had asthma, using proxy information from the adult respondent.
[b] Estimated proportion of Michigan children aged 0-17 years who still have asthma, using proxy information from the adult respondent.
[c] Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Lifetime Child Asthma by Race and Gender Michigan, 2013

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

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Chronic Obstructive Pulmonary Disease (COPD)

Chronic obstructive pulmonary disease (COPD) is a progressive disease that usually results in coughing, wheezing, shortness of breath, chest tightness, and other symptoms. Cigarette smoking is the leading cause of COPD.[24]

♦ In 2013, an estimated 8.8% of Michigan adults reported ever being told by a doctor that they had COPD.

♦ The prevalence of COPD increased with age and decreased with increasing household income level.

♦ The prevalence of COPD was similar by both gender and race/ethnicity.

♦ Disabled adults (21.3%) were more likely to have been diagnosed with COPD than non-disabled adults (4.4%).

♦ Current smokers (16.3% [14.3-18.5]) reported a significantly higher lifetime prevalence of COPD than their non-smoking counterparts (6.7% [6.1-7.4]).

♦ White, non-Hispanic men and women reported similar prevalences of COPD. Prevalence was also similar among Black, non-Hispanic men and women.

♦ In 2013, the prevalence of COPD among Michigan adults (8.8%) was higher than the U.S. median prevalence (6.5%).

Demographic Characteristics	Ever Told COPD, Emphysema, or Chronic Bronchitis[a]	
	%	95% Confidence Interval
Total	**8.8**	**(8.1-9.5)**
Age		
18 - 24	2.8	(1.7-4.6)
25 - 34	3.4	(2.4-4.9)
35 - 44	5.0	(3.7-6.8)
45 - 54	9.1	(7.5-11.1)
55 - 64	14.5	(12.7-16.6)
65 - 74	14.7	(12.8-16.8)
75 +	14.1	(12.1-16.5)
Gender		
Male	7.9	(7.0-9.0)
Female	9.5	(8.6-10.5)
Race/Ethnicity		
White non-Hispanic	8.6	(7.9-9.3)
Black non-Hispanic	10.7	(8.4-13.6)
Other non-Hispanic	8.5	(5.8-12.4)
Hispanic	--[b]	--[b]
Household Income		
< $20,000	18.0	(15.8-20.5)
$20,000 - $34,999	11.9	(10.3-13.6)
$35,000 - $49,999	7.4	(5.6-9.7)
$50,000 - $74,999	4.7	(3.6-6.1)
≥ $75,000	2.8	(2.2-3.6)
Health Insurance		
Insured	8.9	(8.2-9.6)
Uninsured	8.2	(6.3-10.7)
Disability		
Disabled	21.3	(19.4-23.4)
Not disabled	4.4	(3.9-5.0)

[a] Among all adults, the proportion reporting ever being told by a doctor that they had chronic obstructive pulmonary disease (COPD), emphysema or chronic bronchitis.
[b] Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

COPD by Race and Gender
Michigan, 2013
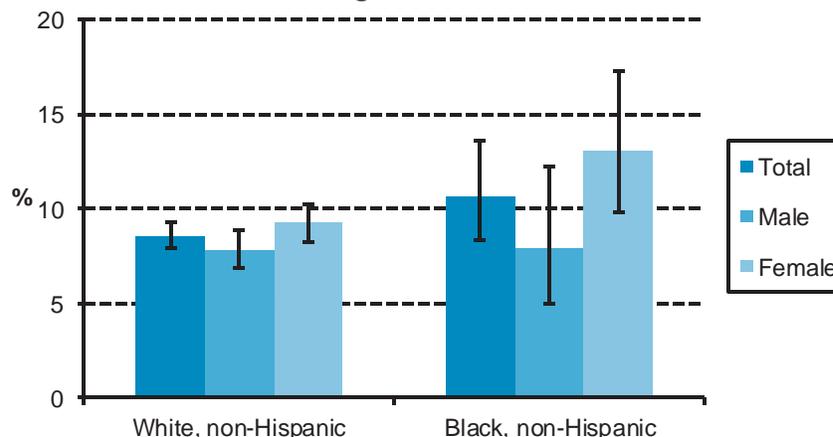
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

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Arthritis and rheumatism are the leading causes of disability within the United States. These conditions have been diagnosed in an estimated 50 million U.S. adults.[25]

- In 2013, an estimated 31.3% of Michigan adults reported ever being told by a doctor that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

- Females (34.6%) reported a significantly higher prevalence of arthritis than males (27.9%).

- Hispanic adults (22.0%) reported a significantly lower prevalence of arthritis than both White, non-Hispanic (32.9%) and Black, non-Hispanic adults (29.1%).

- The prevalence of arthritis increased with age and decreased with increasing household income level.

- Uninsured adults (19.9%) were less likely to have been diagnosed with arthritis than insured adults (33.4%), while disabled adults (62.4%) were more likely to be have been diagnosed than non-disabled adults (20.9%).

- In 2013, the prevalence of arthritis among Michigan adults (31.3%) was significantly higher than the U.S. median prevalence (25.3%).

Demographic Characteristics	Ever Told Arthritis[a]	
	%	95% Confidence Interval
Total	**31.3**	**(30.3-32.4)**
Age		
18 - 24	5.4	(3.9-7.3)
25 - 34	10.2	(8.1-12.8)
35 - 44	17.9	(15.5-20.6)
45 - 54	30.5	(28.0-33.0)
55 - 64	51.2	(48.7-53.6)
65 - 74	57.3	(54.7-60.0)
75 +	62.8	(59.9-65.7)
Gender		
Male	27.9	(26.4-29.4)
Female	34.6	(33.2-36.0)
Race/Ethnicity		
White non-Hispanic	32.9	(31.8-34.1)
Black non-Hispanic	29.1	(25.8-32.6)
Other non-Hispanic	19.7	(15.7-24.3)
Hispanic	22.0	(16.6-28.7)
Household Income		
< $20,000	38.3	(35.4-41.4)
$20,000 - $34,999	39.7	(37.1-42.3)
$35,000 - $49,999	35.7	(32.7-38.8)
$50,000 - $74,999	28.0	(25.6-30.6)
≥ $75,000	20.1	(18.4-21.8)
Health Insurance		
Insured	33.4	(32.3-34.5)
Uninsured	19.9	(17.1-22.9)
Disability		
Disabled	62.4	(60.0-64.8)
Not disabled	20.9	(19.9-21.9)

[a] Among all adults, the proportion reporting ever being told by a doctor that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

Ever Told Arthritis
U.S. vs. Michigan, 2005-2013
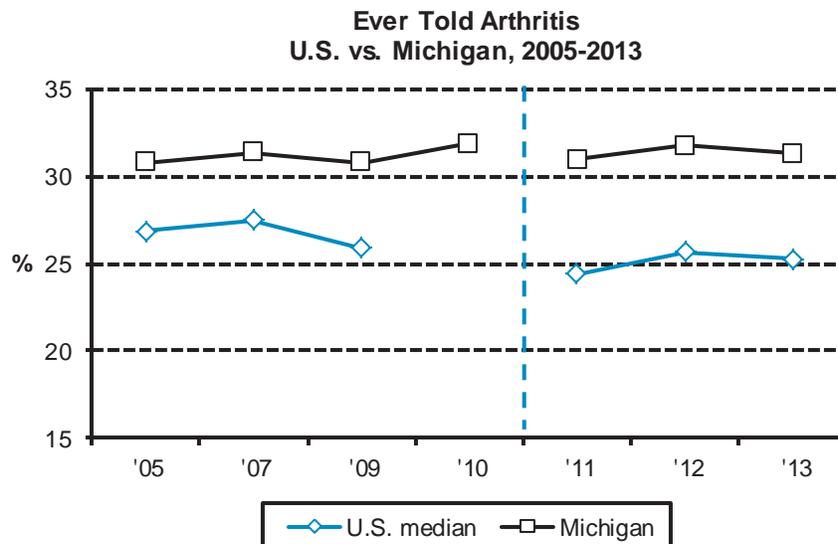
Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

Cardiovascular Disease

Heart disease and stroke are the first and fourth leading causes of death, respectively, in both Michigan and the United States.[26]

- In 2013, an estimated 5.2% of Michigan adults had ever been told by a doctor that they had a heart attack, 5.2% had ever been told they had angina or coronary heart disease, and 3.6% had ever been told they had a stroke.

- When combining all three measures into one indicator, an estimated 10.1% of Michigan adults have ever been told by a doctor that they had some form of cardiovascular disease.

- The prevalence of all three diseases increased with age and decreased with increasing household income level.

- Males reported higher prevalences than females for heart attack and coronary heart disease, but not stroke.

- The prevalences of all three diseases were similar by race/ethnicity.

- Insured adults were more likely to have been diagnosed with heart attack or coronary heart disease when compared to uninsured adults.

- Disabled adults were also more likely to have been diagnosed with each of the three diseases when compared to non-disabled adults.

- In 2013, the prevalence of heart attack (5.2%), coronary heart disease (5.2%), and stroke (3.6%) among Michigan adults were all comparable to the U.S. median prevalence (heart attack: 4.2%; coronary heart disease: 4.1%; and stroke: 2.8%).

Demographic Characteristics	Ever Told Heart Attack[a]		Ever Told Angina or Coronary Heart Disease[b]		Ever Told Stroke[c]	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	**5.2**	**(4.7-5.7)**	**5.2**	**(4.8-5.7)**	**3.6**	**(3.2-4.0)**
Age						
18 - 34	--[d]	--[d]	--[d]	--[d]	--[d]	--[d]
35 - 44	1.4	(0.8-2.5)	--[d]	--[d]	2.5	(1.6-3.9)
45 - 54	3.6	(2.7-4.8)	3.9	(2.9-5.3)	2.9	(2.1-4.1)
55 - 64	7.1	(5.9-8.5)	8.8	(7.5-10.4)	5.3	(4.2-6.6)
65 - 74	11.2	(9.5-13.1)	12.8	(11.0-14.7)	6.4	(5.1-8.1)
75 +	17.9	(15.7-20.4)	15.9	(13.8-18.3)	10.8	(9.0-12.8)
Gender						
Male	6.8	(6.0-7.7)	6.9	(6.1-7.8)	3.7	(3.1-4.4)
Female	3.6	(3.1-4.2)	3.7	(3.2-4.2)	3.5	(3.0-4.1)
Race/Ethnicity						
White non-Hispanic	5.4	(4.9-6.0)	5.6	(5.1-6.1)	3.3	(2.9-3.7)
Black non-Hispanic	3.6	(2.5-5.1)	4.8	(3.5-6.6)	5.1	(3.7-6.8)
Other non-Hispanic	4.2	(2.7-6.6)	4.0	(2.6-6.3)	4.7	(2.5-8.4)
Hispanic	--[d]	--[d]	--[d]	--[d]	--[d]	--[d]
Household Income						
< $20,000	8.2	(6.7-10.0)	7.6	(6.3-9.2)	6.5	(5.3-8.1)
$20,000 - $34,999	7.4	(6.4-8.7)	7.1	(6.0-8.4)	5.5	(4.3-6.9)
$35,000 - $49,999	5.6	(4.3-7.2)	5.0	(3.8-6.5)	4.3	(3.1-5.9)
$50,000 - $74,999	3.6	(2.7-4.8)	4.4	(3.3-5.7)	1.8	(1.3-2.5)
≥ $75,000	1.9	(1.4-2.6)	2.7	(2.1-3.4)	1.1	(0.8-1.6)
Health Insurance						
Insured	5.6	(5.1-6.1)	5.7	(5.2-6.2)	3.8	(3.4-4.3)
Uninsured	2.7	(1.8-4.3)	2.7	(1.7-4.2)	2.6	(1.6-4.0)
Disability						
Disabled	11.7	(10.4-13.2)	12.6	(11.2-14.2)	8.5	(7.4-9.8)
Not disabled	2.9	(2.5-3.4)	2.7	(2.3-3.1)	1.9	(1.6-2.3)

Among all adults, the proportion ever told by a doctor that: [a] they had a heart attack or myocardial infarction, [b] they had angina or coronary heart disease, or [c] they had a stroke.
[d] Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Cardiovascular Disease by Gender Michigan, 2013
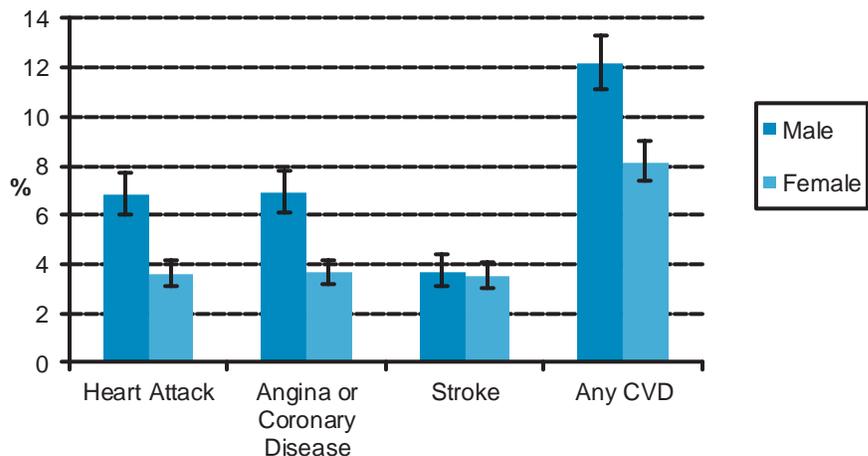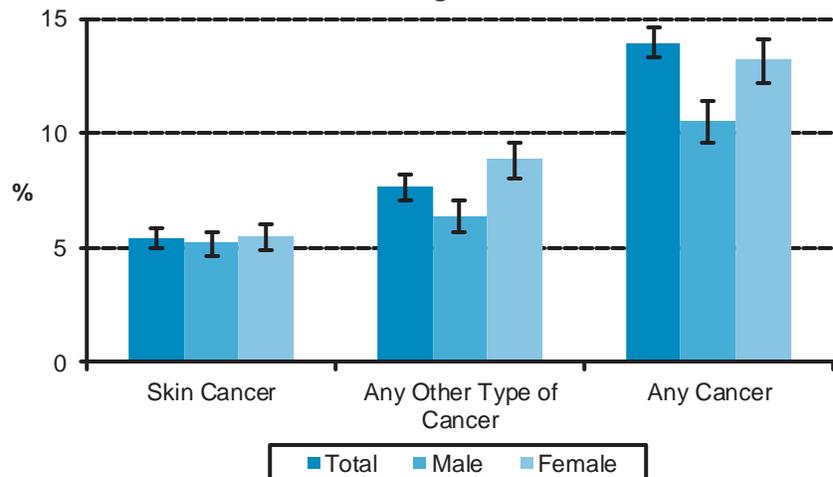
Cancer

2013 MiBRFS

Cancer is the second leading cause of death in both Michigan and the United States.[26] There are more than 100 different types of cancer and it is estimated that there will be nearly 1.7 million new cases of cancer within the following year.[27]

♦ In 2013, an estimated 5.4% of Michigan adults had ever been told by a doctor that they had skin cancer, and 7.7% reported ever being diagnosed with a type of cancer other than skin cancer.

♦ When combining these two measures into one indicator, an estimated 11.9% of Michigan adults had ever been told by a doctor that they had some form of cancer.

♦ The prevalence of cancer increased with age.

♦ Males (10.5%) reported a significantly lower prevalence of cancer than females (13.2%).

♦ White, non-Hispanic adults (13.7%) reported a significantly higher prevalence of cancer than both Black, non-Hispanic (5.7%) and Hispanic adults (4.2%).

♦ Insured adults and disabled adults reported higher cancer prevalences than uninsured and non-disabled adults, respectively.

♦ In 2013, the prevalence for skin cancer (5.4%) and other types of cancer (7.7%) were comparable to the U.S. median prevalence (skin cancer: 6.0% and other cancers: 6.7%).

Demographic Characteristics	Ever Told Skin Cancer[a]		Ever Told Any Other Types of Cancer[b]		Ever Told Cancer[c]	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Total	**5.4**	**(5.0-5.8)**	**7.7**	**(7.2-8.3)**	**11.9**	**(11.2-12.5)**
Age						
18 - 34	--[d]	--[d]	2.1	(1.5-3.0)	2.2	(1.5-3.1)
35 - 44	1.1	(0.6-1.9)	2.6	(1.8-3.8)	3.5	(2.6-4.8)
45 - 54	3.4	(2.6-4.4)	5.7	(4.6-7.0)	8.8	(7.4-10.3)
55 - 64	7.4	(6.3-8.6)	9.2	(7.9-10.7)	15.7	(14.0-17.4)
65 - 74	12.4	(10.9-14.2)	17.4	(15.4-19.7)	27.0	(24.7-29.5)
75 +	21.6	(19.4-24.1)	24.3	(21.9-27.0)	38.4	(35.5-41.3)
Gender						
Male	5.2	(4.7-5.8)	6.4	(5.7-7.2)	10.5	(9.6-11.4)
Female	5.5	(5.0-6.1)	8.9	(8.2-9.8)	13.2	(12.3-14.2)
Race/Ethnicity						
White non-Hispanic	6.7	(6.2-7.2)	8.5	(7.9-9.1)	13.7	(13.0-14.5)
Black non-Hispanic	--[d]	--[d]	5.5	(4.1-7.4)	5.7	(4.3-7.6)
Other non-Hispanic	--[d]	--[d]	4.6	(3.1-6.9)	5.3	(3.7-7.6)
Hispanic	--[d]	--[d]	--[d]	--[d]	4.2	(2.4-7.3)
Household Income						
< $20,000	3.8	(2.9-4.8)	8.8	(7.3-10.5)	11.2	(9.6-13.0)
$20,000 - $34,999	5.9	(5.0-6.9)	10.1	(8.8-11.5)	14.6	(13.1-16.3)
$35,000 - $49,999	5.5	(4.4-6.8)	8.7	(7.1-10.6)	13.2	(11.3-15.3)
$50,000 - $74,999	5.8	(4.8-7.0)	6.5	(5.4-7.9)	11.4	(9.9-13.1)
≥ $75,000	5.0	(4.2-5.8)	5.0	(4.2-6.0)	9.1	(8.0-10.3)
Health Insurance						
Insured	6.0	(5.6-6.5)	8.4	(7.9-9.1)	13.1	(12.4-13.8)
Uninsured	1.4	(0.8-2.4)	3.6	(2.5-5.2)	4.6	(3.4-6.3)
Disability						
Disabled	8.0	(7.1-9.1)	12.9	(11.6-14.4)	18.7	(17.1-20.4)
Not disabled	4.5	(4.1-4.9)	6.0	(5.4-6.6)	9.6	(8.9-10.3)

Among all adults, the proportion ever told by a doctor that: [a] they had skin cancer, [b] they had a form of cancer other than skin cancer, or [c] they had skin cancer or any other type of cancer.
[d] Suppressed due to a denominator < 50 and/or a relative standard error > 30%.
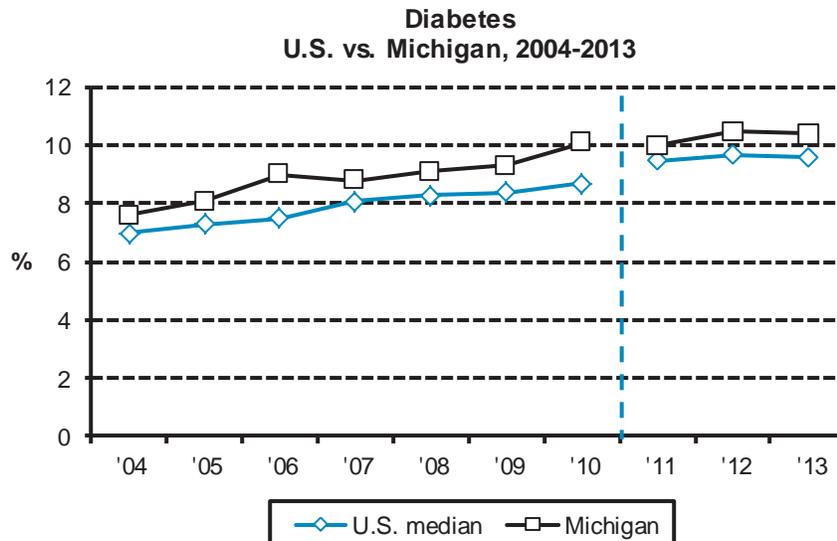
Ever Told Cancer by Race/Ethnicity Michigan, 2013

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

Diabetes

In 2011, diabetes was the seventh leading cause of death in both Michigan and the United States.[26] Obesity, poor diet, physical inactivity, and high blood pressure are just a few of the known risk factors that are associated with the development of diabetes.[28]

♦ In 2013, an estimated 10.4% of Michigan adults reported ever being told by a doctor that they had diabetes.

♦ The prevalence of diabetes increased with age and decreased with increasing household income level.

♦ The prevalence of diabetes was similar by race/ethnicity.

♦ Uninsured adults (5.8%) were less likely to have been diagnosed with diabetes than insured adults (11.2%), while disabled adults (20.4%) were more likely to be have been diagnosed than non-disabled adults (6.9%).

♦ Obese (18.3% [16.8-19.9]) and overweight (9.0% [8.0-10.1]) adults reported significantly higher lifetime prevalences of diabetes than healthy weight adults (3.8% [3.1-4.6]).

♦ Prior to the BRFSS methodology changes that were implemented in 2011, the prevalence of diabetes among Michigan adults was increasing slightly over time. This trend seems to have stabilized a bit since 2011.

♦ In 2013, the prevalence of diabetes among Michigan adults (10.4%) was comparable to the U.S. median prevalence (9.6%).

Demographic Characteristics	Ever Told Diabetes[a]	
	%	95% Confidence Interval
Total	**10.4**	**(9.7-11.0)**
Age		
18 - 24	1.8	(1.0-3.2)
25 - 34	2.0	(1.2-3.5)
35 - 44	5.0	(3.7-6.7)
45 - 54	10.0	(8.4-11.8)
55 - 64	16.1	(14.4-18.0)
65 - 74	21.6	(19.4-23.9)
75 +	22.4	(20.0-25.1)
Gender		
Male	11.0	(10.1-12.1)
Female	9.7	(8.9-10.6)
Race/Ethnicity		
White non-Hispanic	10.1	(9.4-10.8)
Black non-Hispanic	11.7	(9.6-14.2)
Other non-Hispanic	8.8	(6.2-12.2)
Hispanic	10.8	(7.3-15.6)
Household Income		
< $20,000	13.2	(11.3-15.3)
$20,000 - $34,999	13.6	(12.1-15.3)
$35,000 - $49,999	13.6	(11.5-16.0)
$50,000 - $74,999	8.2	(6.8-9.8)
≥ $75,000	5.3	(4.5-6.3)
Health Insurance		
Insured	11.2	(10.5-11.9)
Uninsured	5.8	(4.4-7.6)
Disability		
Disabled	20.4	(18.7-22.2)
Not disabled	6.9	(6.3-7.5)

[a] Among all adults, the proportion reporting that they were ever told by a doctor that they had diabetes. Adults told they have prediabetes and women who had diabetes only during pregnancy were classified as not having been diagnosed.

Diabetes
U.S. vs. Michigan, 2004-2013

Legend: U.S. median, Michigan

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.
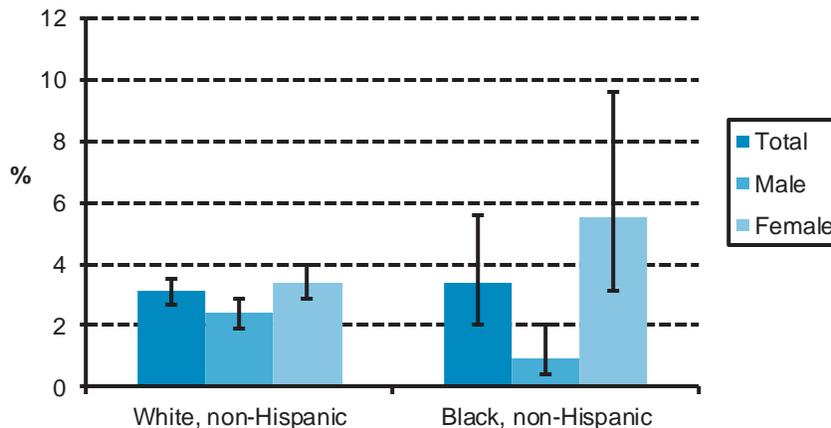
Kidney Disease

Kidney disease is a condition in which the kidneys are damaged and cannot filter blood properly. Adults with diabetes or hypertension are at increased risk of kidney disease. Kidney disease is also a risk factor for the development of cardiovascular disease.[29]

♦ In 2013, an estimated 3.0% of Michigan adults reported ever being told by a doctor that they had kidney disease.

♦ The prevalence of kidney disease increased with age and decreased with increasing household income level.

♦ Females (3.8%) reported a significantly higher prevalence of kidney disease than males (2.1%).

♦ Disabled and insured adults (6.8% and 3.2%, respectively) were more likely to have been diagnosed with kidney disease than their non-disabled and uninsured counterparts (1.7% and 1.4%, respectively).

♦ Michigan adults with diabetes (8.1% [95% CI: 6.6-9.8]) were nearly four times as likely to have being diagnosed with kidney disease than adults without diabetes (2.4% [95% CI: 2.0-2.8]).

♦ White, non-Hispanic females (3.4%) reported a higher prevalence of kidney disease than White, non-Hispanic males (2.4%).

♦ Black, non-Hispanic females (5.5%) also reported a higher prevalence of kidney disease than Black, non-Hispanic males (0.9%).

♦ In 2013, the prevalence of kidney disease among Michigan adults (3.0%) was similar to the U.S. median prevalence (2.5%).

Demographic Characteristics	Ever Told Kidney Disease[a]	
	%	95% Confidence Interval
Total	**3.0**	**(2.6-3.4)**
Age		
18 - 24	--[b]	--[b]
25 - 34	--[b]	--[b]
35 - 44	1.8	(1.1-2.8)
45 - 54	3.0	(2.0-4.3)
55 - 64	3.3	(2.7-4.2)
65 - 74	5.1	(4.2-6.2)
75 +	8.2	(6.7-10.2)
Gender		
Male	2.1	(1.8-2.6)
Female	3.8	(3.2-4.4)
Race/Ethnicity		
White non-Hispanic	3.1	(2.7-3.5)
Black non-Hispanic	3.4	(2.0-5.6)
Other non-Hispanic	1.0	(0.5-1.9)
Hispanic	--[b]	--[b]
Household Income		
< $20,000	3.7	(3.0-4.7)
$20,000 - $34,999	4.1	(3.2-5.1)
$35,000 - $49,999	3.2	(2.1-4.8)
$50,000 - $74,999	2.2	(1.6-3.1)
≥ $75,000	1.7	(1.2-2.4)
Health Insurance		
Insured	3.2	(2.8-3.7)
Uninsured	1.4	(0.9-2.2)
Disability		
Disabled	6.8	(5.7-8.1)
Not disabled	1.7	(1.4-2.0)

[a] Among all adults, the proportion reporting ever being told by a doctor that they had kidney disease.
[b] Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Kidney Disease by Race and Gender
Michigan, 2013

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

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Depression
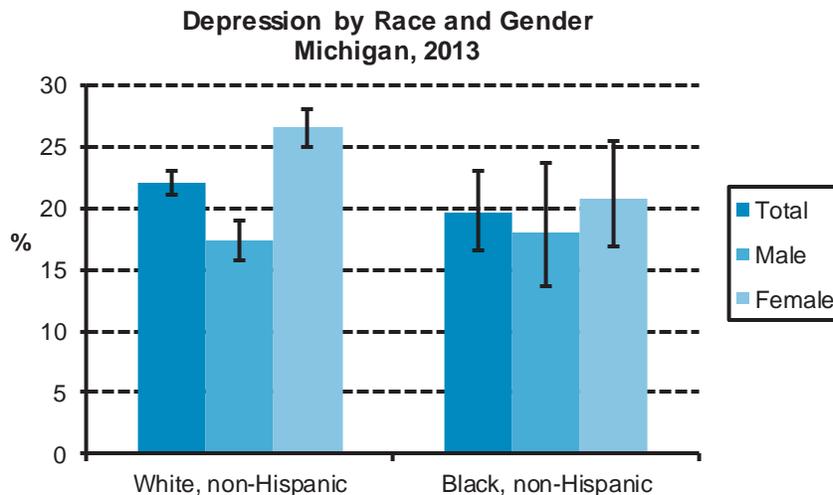
Depression is a common and treatable medical disorder that is more common among individuals with chronic conditions such as obesity, diabetes, and arthritis.[30]

♦ In 2013, an estimated 21.3% of Michigan adults reported ever being told by a doctor that they had a depressive disorder including depression, major depression, dysthymia, or minor depression.

♦ The prevalence of depression was highest in the middle age groups and decreased with increasing household income level.

♦ Females (25.1%) reported a significantly higher prevalence of depression than males (17.3%).

♦ The prevalence of depression was similar by race/ethnicity and insurance status.

♦ Disabled adults (41.7%) were more likely to have been diagnosed with depression than non-disabled adults (14.3%).

♦ White, non-Hispanic females (26.5%) reported a significantly higher prevalence of depression than White, non-Hispanic males (17.3%), Black, non-Hispanic males (18.0%), and Black, non-Hispanic females (20.8%).

♦ In 2013, the prevalence of depression among Michigan adults (21.3%) was higher than the U.S. median prevalence (18.7%).

Demographic Characteristics	Ever Told Depression[a]	
	%	95% Confidence Interval
Total	**21.3**	**(20.4-22.3)**
Age		
18 - 24	15.5	(12.9-18.4)
25 - 34	22.3	(19.3-25.5)
35 - 44	24.0	(21.2-27.0)
45 - 54	23.2	(20.9-25.5)
55 - 64	26.5	(24.3-28.8)
65 - 74	19.7	(17.6-22.0)
75 +	13.3	(11.4-15.4)
Gender		
Male	17.3	(16.0-18.8)
Female	25.1	(23.8-26.5)
Race/Ethnicity		
White non-Hispanic	22.0	(21.0-23.1)
Black non-Hispanic	19.6	(16.5-23.1)
Other non-Hispanic	18.9	(14.9-23.6)
Hispanic	18.9	(13.4-26.0)
Household Income		
< $20,000	36.6	(33.6-39.7)
$20,000 - $34,999	23.2	(21.0-25.6)
$35,000 - $49,999	19.9	(17.4-22.7)
$50,000 - $74,999	16.8	(14.7-19.1)
≥ $75,000	13.5	(11.9-15.1)
Health Insurance		
Insured	20.9	(19.9-22.0)
Uninsured	24.6	(21.5-28.1)
Disability		
Disabled	41.7	(39.4-44.1)
Not disabled	14.3	(13.4-15.3)

[a] Among all adults, the proportion reporting ever being told by a doctor that they had a depressive disorder including depression, major depression, dysthymia, or minor depression.

Depression by Race and Gender Michigan, 2013

Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.

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Acknowledgements

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