

**Health Indicators and Risk Estimates by
Community Health Assessment Regions
&
Local Health Departments**

State of Michigan

Selected Tables

Michigan Behavioral Risk Factor Survey

2012-2014

Chronic Disease Epidemiology Section
Lifecourse Epidemiology and Genomics Division
Bureau of Disease Control, Prevention, and Epidemiology
Michigan Department of Health and Human Services

*Prepared by: Chris Fussman
August 18, 2015*

Table of Contents

Table of Contents.....	2
Introduction	3
Community Health Assessment and Improvement Regions.....	4
Local Health Departments	5
Table 1: General Health Status	6
Table 2: Poor Physical Health on at Least 14 Days in the Past Month.....	8
Table 3: Poor Mental Health on at Least 14 Days in the Past Month	10
Table 4: Activity Limitation on at Least 14 Days in the Past Month	12
Table 5: Disability.....	14
Table 6: Weight Status.....	16
Table 7: No Health Care Coverage Among Those Aged 18-64 Years	18
Table 8: Health Care Access	20
Table 9: No Leisure Time Physical Activity	22
Table 10: Cigarette Smoking	24
Table 11: Alcohol Consumption.....	26
Table 12: Seatbelt Use	28
Table 13: No Routine Checkup in Past Year.....	30
Table 14: Breast Cancer Screening Among Women Aged 40 Years and Older	32
Table 15: Cervical Cancer Screening Among Women Aged 18 Years and Older.....	34
Table 16: Prostate Cancer Screening Among Men Aged 50 Years and Older.....	36
Table 17: Colorectal Cancer Screening Among Adults 50 Years and Older	38
Table 18: Oral Health.....	40
Table 19: Immunizations Among Adults Aged 65 Years and Older	42
Table 20: HIV Testing Among Adults Aged 18-64 Years	44
Table 21: Asthma.....	46
Table 22: Chronic Obstructive Pulmonary Disease (COPD).....	48
Table 23: Arthritis.....	50
Table 24: Heart Attack	52
Table 25: Angina or Coronary Heart Disease.....	54
Table 26: Stroke.....	56
Table 27: Any Cardiovascular Disease.....	58
Table 28: Cancer.....	60
Table 29: Diabetes.....	62
Table 30: Kidney Disease	64
Table 31: Depression.....	66

Introduction

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 Health and Human Services. Michigan BRFSS data contribute to the national [Behavioral Risk Factor Surveillance System](#) that is managed by the PHSB at the CDC.

State-specific, population-based prevalence estimates (and asymmetric 95% confidence intervals) of health risk behaviors, preventive health practices, and chronic conditions are calculated using annual data sets (see Annual Tables at <http://www.michigan.gov/brfs>). However, region-specific and local health department-specific prevalence rates are usually computed using BRFSS data combined across years.

For this report, data from the 2012-2014 Michigan BRFSS were combined. The total sample sizes by year were: 10,499 in 2012, 12,759 in 2013, and 8,466 in 2014. Not all questions were included annually in the survey. The table subtitles indicate which years were used for that particular analysis.

For the 2012 through 2014 Michigan Behavioral Risk Factor Surveys, the sample of land line telephone numbers that were utilized for data collection 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 used within each survey year was randomly selected from dedicated cellular telephone banks sorted on the basis of area code and exchange within the State of Michigan.

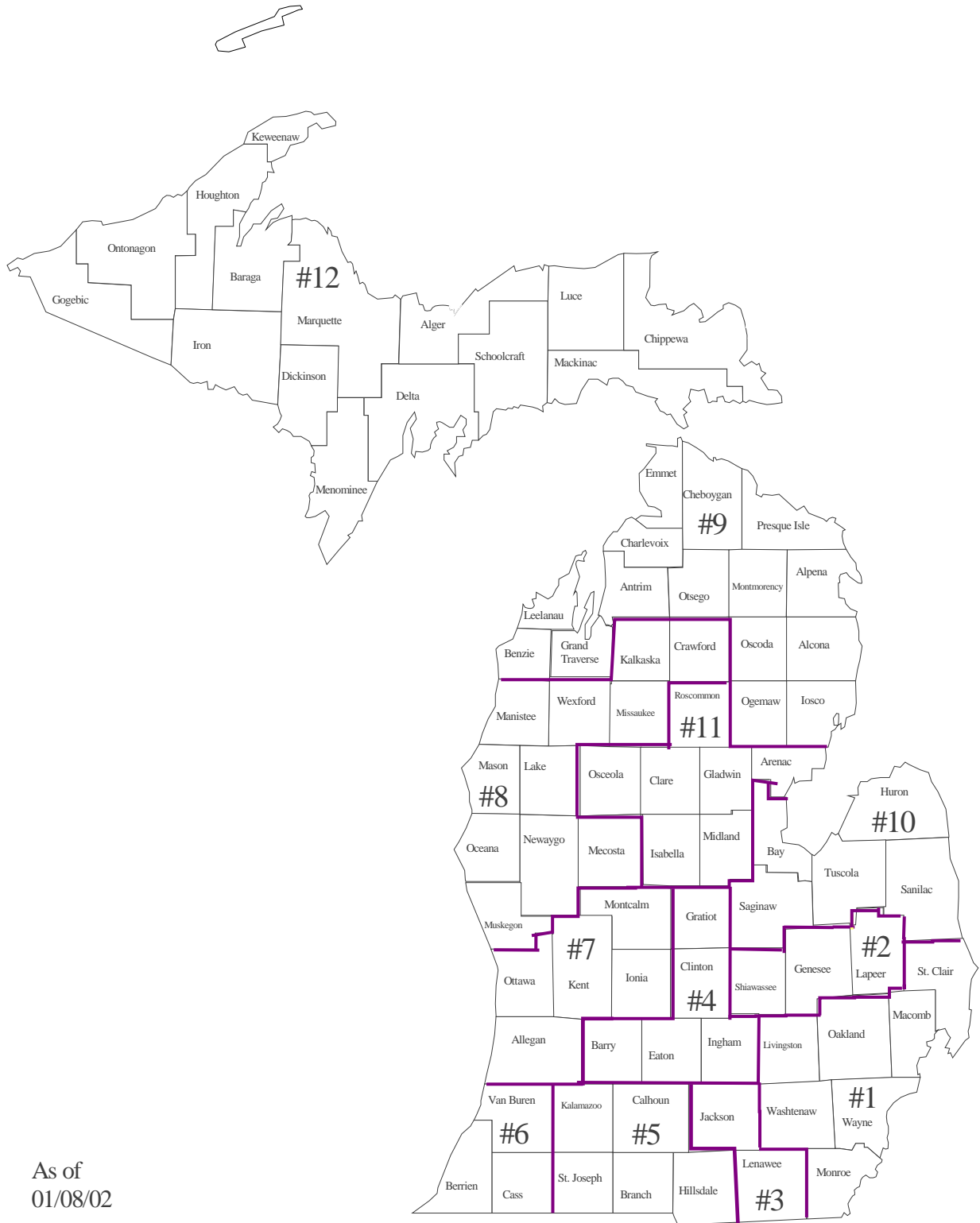
Iterative proportional fitting or raking was the weighting methodology used to make the 2012-2014 Michigan BRFSS data representative of the current Michigan adult population. Estimates based on this methodology were weighted to adjust for the probabilities of selection and a raking adjustment factor that adjusted for the distribution of Michigan adults by telephone source (land line vs. cell phone), detailed race/ethnicity, education level, marital status, age by gender, gender by race/ethnicity, age by race/ethnicity, and renter/owner status. No additional weighting factors were computed at the regional or local health department (LHD) level, thus the weights used might not always provide accurate regional and/or LHD estimates, particularly when regional and/or LHD demographic distributions vary greatly from that of the state.

Population-based prevalence estimates and asymmetric 95% confidence intervals were calculated for indicators of health status, health risk behaviors, clinical preventive practices, and chronic conditions among the overall adult population in Michigan, as well as at the regional and local health department level. All analyses were performed in SAS-Callable SUDAAN®, a statistical computing program that was designed for complex sample surveys. In an effort to provide the most reliable information possible, prevalence estimates are suppressed if they are based on a denominator of less than 50 respondents or have a relative standard error of greater than 30%. Comparisons between estimates with non-overlapping 95% confidence intervals should be considered significantly different.

Due to the BRFSS methodology changes that took place in 2011, the estimates provided within the following tables should not be compared to Michigan BRFSS estimates from years prior to 2011.

If you have any questions regarding any of the estimates within the following tables, please contact Chris Fussman at MDHHS, by phone, 517-335-8144, or by email, MIBRFSS@michigan.gov.

Community Health Assessment and Improvement Regions State of Michigan



As of
01/08/02

Local Health Departments State of Michigan

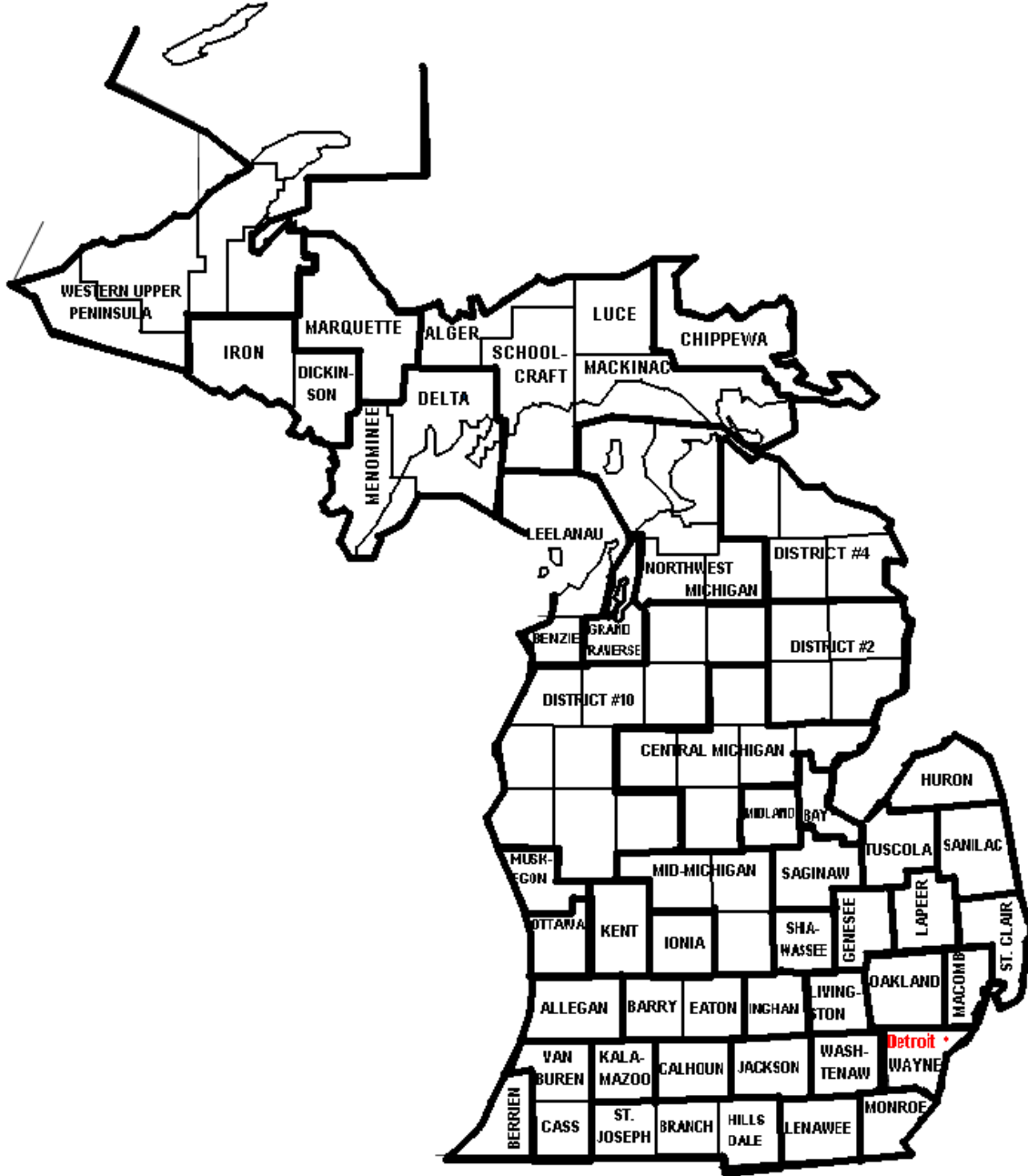


Table 1: Health Status Michigan BRFSS, 2012-2014 Combined		
Geographic Area	General Health, Fair or Poor^a	
	%	95% Confidence Interval
Michigan Total	17.2	(16.6-17.8)
Region 1	17.4	(16.6-18.3)
Livingston	11.1	(8.3-14.6)
Macomb	17.2	(15.3-19.4)
Monroe	20.3	(15.2-26.6)
Oakland	13.0	(11.5-14.6)
St. Clair	19.7	(15.1-25.3)
Washtenaw	11.9	(9.6-14.8)
City of Detroit	31.4	(28.3-34.6)
Wayne exc. Detroit	16.4	(14.7-18.1)
Region 2	18.2	(15.9-20.7)
Genesee	17.6	(15.0-20.6)
Lapeer	18.2	(12.9-25.0)
Shiawassee	21.1	(14.9-29.0)
Region 3	15.6	(12.6-19.2)
Jackson	16.9	(13.0-21.7)
Lenawee	13.3	(9.4-18.6)
Region 4	13.6	(11.8-15.5)
Barry-Eaton	17.2	(13.7-21.4)
Mid-Michigan ^b	14.3	(10.6-19.1)
Ingham	12.3	(10.0-15.0)
Region 5	19.3	(16.8-22.1)
Branch-Hillsdale-St. Joseph	19.0	(15.0-23.8)
Calhoun	24.9	(19.0-32.0)
Kalamazoo	16.4	(13.2-20.1)
Region 6	19.9	(16.6-23.5)
Van Buren-Cass	21.9	(17.0-27.9)
Berrien	18.1	(14.1-22.9)
Region 7	12.9	(11.4-14.6)
Allegan	14.6	(10.1-20.6)
Ionia	16.3	(10.7-24.0)
Kent	12.9	(10.9-15.2)
Mid-Michigan ^b	14.3	(10.6-19.1)
Ottawa	9.5	(7.3-12.4)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 1 Cont'd		
Geographic Area	General Health, Fair or Poor^a	
	%	95% Confidence Interval
Michigan Total	17.2	(16.6-17.8)
Region 8	19.6	(16.9-22.7)
District #10	18.1	(14.8-21.9)
Muskegon	22.1	(17.5-27.5)
Region 9	18.5	(16.1-21.1)
District #2	21.5	(16.6-27.3)
District #4	29.7	(23.2-37.1)
Northwest Michigan	14.5	(10.9-19.0)
Benzie-Leelanau	13.4	(7.9-21.7)
Grand Traverse	11.1	(8.1-15.0)
Region 10	17.7	(15.0-20.8)
Bay	18.7	(13.1-26.0)
Huron	21.0	(12.9-32.3)
Saginaw	17.8	(13.6-22.9)
Sanilac	12.0	(7.1-19.5)
Tuscola	18.0	(12.3-25.6)
Region 11	22.3	(19.0-26.0)
Central Michigan	23.2	(19.2-27.7)
Midland	20.2	(14.8-27.0)
Region 12	16.2	(13.8-18.9)
Luce-Mackinac-Alger-Schoolcraft	22.1	(13.3-34.2)
Western Upper Peninsula	13.8	(10.2-18.4)
Delta-Menominee	15.7	(10.6-22.5)
Chippewa	19.0	(12.9-27.2)
Dickinson-Iron	13.4	(8.2-21.0)
Marquette	16.0	(11.6-21.8)

^a The proportion of adults who reported that their health, in general, was either fair or poor.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 2: Poor Physical Health on at Least 14 Days in the Past Month Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Poor Physical Health^a	
	%	95% Confidence Interval
Michigan Total	12.9	(12.4-13.5)
Region 1	12.1	(11.4-12.9)
Livingston	8.8	(6.4-12.0)
Macomb	11.0	(9.5-12.7)
Monroe	13.3	(9.4-18.5)
Oakland	9.6	(8.4-11.0)
St. Clair	14.7	(10.8-19.8)
Washtenaw	10.2	(8.0-13.0)
City of Detroit	18.4	(15.9-21.2)
Wayne exc. Detroit	13.2	(11.7-14.9)
Region 2	15.2	(13.1-17.6)
Genesee	15.2	(12.7-18.0)
Lapeer	15.2	(10.4-21.5)
Shiawassee	15.3	(10.2-22.5)
Region 3	13.0	(10.1-16.4)
Jackson	15.0	(11.2-19.8)
Lenawee	9.3	(6.1-14.0)
Region 4	11.1	(9.5-12.9)
Barry-Eaton	9.7	(7.3-12.9)
Mid-Michigan ^b	10.8	(7.9-14.6)
Ingham	12.6	(10.2-15.4)
Region 5	12.9	(11.0-15.0)
Branch-Hillsdale-St. Joseph	13.8	(10.5-17.9)
Calhoun	13.3	(9.6-18.2)
Kalamazoo	12.0	(9.4-15.1)
Region 6	17.2	(13.9-21.1)
Van Buren-Cass	16.7	(12.2-22.3)
Berrien	17.7	(13.2-23.3)
Region 7	10.6	(9.4-12.0)
Allegan	10.7	(7.3-15.4)
Ionia	13.7	(9.1-20.1)
Kent	11.5	(9.8-13.5)
Mid-Michigan ^b	10.8	(7.9-14.6)
Ottawa	6.8	(5.0-9.3)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 2 Cont'd		
Geographic Area	Poor Physical Health^a	
	%	95% Confidence Interval
Michigan Total	12.9	(12.4-13.5)
Region 8	16.1	(13.7-18.9)
District #10	13.7	(11.2-16.7)
Muskegon	19.9	(15.4-25.3)
Region 9	14.1	(12.0-16.6)
District #2	14.4	(10.4-19.7)
District #4	24.3	(18.1-31.9)
Northwest Michigan	10.8	(7.8-14.8)
Benzie-Leelanau	10.8	(6.1-18.6)
Grand Traverse	8.8	(6.1-12.6)
Region 10	13.7	(11.1-16.6)
Bay	15.5	(10.2-22.9)
Huron	-- ^c	-- ^c
Saginaw	14.3	(10.3-19.4)
Sanilac	6.9	(3.7-12.5)
Tuscola	17.3	(11.7-24.9)
Region 11	19.0	(15.7-22.8)
Central Michigan	20.6	(16.6-25.4)
Midland	15.1	(10.4-21.3)
Region 12	13.4	(11.2-15.9)
Luce-Mackinac-Alger-Schoolcraft	10.0	(6.4-15.3)
Western Upper Peninsula	10.6	(7.3-15.0)
Delta-Menominee	14.7	(9.1-22.8)
Chippewa	19.0	(13.0-27.0)
Dickinson-Iron	11.1	(7.1-16.8)
Marquette	15.9	(11.0-22.4)

^a The proportion of adults who reported 14 or more days, out of the previous 30, on which their physical health was not good, which includes physical illness and injury.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 3: Poor Mental Health on at Least 14 Days in the Past Month Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Poor Mental Health^a	
	%	95% Confidence Interval
Michigan Total	12.6	(12.1-13.2)
Region 1	13.2	(12.4-14.1)
Livingston	14.7	(10.5-20.3)
Macomb	12.0	(10.2-13.9)
Monroe	13.2	(8.8-19.2)
Oakland	11.4	(10.0-13.1)
St. Clair	15.2	(10.6-21.4)
Washtenaw	12.8	(10.2-16.0)
City of Detroit	18.0	(15.4-20.9)
Wayne exc. Detroit	12.3	(10.8-14.1)
Region 2	12.9	(10.9-15.2)
Genesee	13.3	(10.9-16.1)
Lapeer	14.2	(9.2-21.2)
Shiawassee	8.9	(5.3-14.7)
Region 3	11.3	(8.5-14.9)
Jackson	13.0	(9.2-18.1)
Lenawee	8.3	(5.0-13.4)
Region 4	10.8	(9.0-12.9)
Barry-Eaton	9.3	(6.4-13.3)
Mid-Michigan ^b	11.3	(7.8-16.1)
Ingham	12.3	(9.6-15.6)
Region 5	13.1	(11.0-15.6)
Branch-Hillsdale-St. Joseph	12.7	(9.4-17.0)
Calhoun	16.4	(11.3-23.1)
Kalamazoo	11.5	(8.9-14.8)
Region 6	14.4	(11.4-18.1)
Van Buren-Cass	15.6	(10.8-22.0)
Berrien	13.4	(9.9-18.0)
Region 7	11.8	(10.2-13.6)
Allegan	14.0	(9.6-20.0)
Ionia	10.5	(6.2-17.3)
Kent	11.1	(9.0-13.5)
Mid-Michigan ^b	11.3	(7.8-16.1)
Ottawa	11.9	(8.9-15.8)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 3 Cont'd		
Geographic Area	Poor Mental Health^a	
	%	95% Confidence Interval
Michigan Total	12.6	(12.1-13.2)
Region 8	13.5	(11.2-16.1)
District #10	13.5	(10.6-17.1)
Muskegon	13.4	(10.2-17.5)
Region 9	12.8	(10.8-15.1)
District #2	11.3	(7.8-16.1)
District #4	16.0	(10.8-22.9)
Northwest Michigan	11.2	(8.1-15.4)
Benzie-Leelanau	12.6	(7.4-20.7)
Grand Traverse	13.1	(9.2-18.3)
Region 10	12.0	(9.5-15.0)
Bay	11.7	(7.3-18.1)
Huron	-- ^c	-- ^c
Saginaw	14.7	(10.4-20.3)
Sanilac	-- ^c	-- ^c
Tuscola	12.2	(7.4-19.5)
Region 11	11.6	(9.1-14.7)
Central Michigan	13.6	(10.4-17.6)
Midland	6.6	(3.8-11.2)
Region 12	9.9	(7.9-12.3)
Luce-Mackinac-Alger-Schoolcraft	-- ^c	-- ^c
Western Upper Peninsula	8.9	(5.4-14.3)
Delta-Menominee	9.7	(5.7-16.0)
Chippewa	9.4	(5.5-15.6)
Dickinson-Iron	5.9	(3.3-10.3)
Marquette	12.0	(8.0-17.7)

^a The proportion of adults who reported 14 or more days, out of the previous 30, on which their mental health was not good, which includes stress, depression, and problems with emotions.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.
^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 4: Activity Limitations on at Least 14 Days in the Past Month Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Activity Limitations^a	
	%	95% Confidence Interval
Michigan Total	8.9	(8.4-9.3)
Region 1	8.6	(8.0-9.3)
Livingston	6.2	(4.3-8.9)
Macomb	7.0	(5.8-8.5)
Monroe	13.4	(9.0-19.6)
Oakland	6.8	(5.7-8.1)
St. Clair	12.1	(7.9-18.1)
Washtenaw	6.1	(4.4-8.2)
City of Detroit	14.1	(11.9-16.6)
Wayne exc. Detroit	8.7	(7.5-10.1)
Region 2	9.7	(8.0-11.7)
Genesee	10.1	(8.0-12.5)
Lapeer	8.2	(4.8-13.7)
Shiawassee	9.4	(5.5-15.7)
Region 3	8.3	(6.0-11.2)
Jackson	9.3	(6.3-13.5)
Lenawee	6.5	(3.8-10.8)
Region 4	6.7	(5.5-8.3)
Barry-Eaton	4.9	(3.3-7.2)
Mid-Michigan ^b	8.6	(6.0-12.2)
Ingham	7.6	(5.6-10.1)
Region 5	9.3	(7.6-11.3)
Branch-Hillsdale-St. Joseph	9.4	(6.6-13.0)
Calhoun	10.8	(7.3-15.7)
Kalamazoo	8.4	(6.2-11.3)
Region 6	13.3	(10.3-16.9)
Van Buren-Cass	13.6	(9.8-18.7)
Berrien	12.9	(8.8-18.6)
Region 7	7.5	(6.3-8.9)
Allegan	8.2	(5.4-12.3)
Ionia	9.5	(5.6-15.8)
Kent	7.3	(5.7-9.4)
Mid-Michigan ^b	8.6	(6.0-12.2)
Ottawa	5.9	(3.9-8.8)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 4 Cont'd		
Geographic Area	Activity Limitations^a	
	%	95% Confidence Interval
Michigan Total	8.9	(8.4-9.3)
Region 8	10.1	(8.3-12.3)
District #10	9.2	(7.0-11.9)
Muskegon	11.7	(8.7-15.6)
Region 9	10.0	(8.1-12.3)
District #2	9.6	(6.5-13.9)
District #4	17.7	(11.7-25.8)
Northwest Michigan	7.2	(4.8-10.5)
Benzie-Leelanau	7.7	(4.1-13.9)
Grand Traverse	6.9	(4.4-10.7)
Region 10	9.8	(7.8-12.4)
Bay	13.2	(7.8-21.4)
Huron	-- ^c	-- ^c
Saginaw	9.3	(6.6-12.9)
Sanilac	-- ^c	-- ^c
Tuscola	12.1	(7.4-19.1)
Region 11	11.0	(8.5-14.2)
Central Michigan	12.6	(9.4-16.6)
Midland	7.3	(4.0-12.8)
Region 12	7.9	(6.3-9.9)
Luce-Mackinac-Alger-Schoolcraft	-- ^c	-- ^c
Western Upper Peninsula	4.9	(3.0-8.0)
Delta-Menominee	9.0	(5.3-15.0)
Chippewa	10.5	(6.2-17.2)
Dickinson-Iron	6.7	(3.8-11.5)
Marquette	10.0	(6.5-15.0)

^a The proportion of adults who reported 14 or more days, out of the previous 30, on which either poor physical health or poor mental health kept them from doing their usual activities, such as self-care, work, and recreation.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 5: Disability Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Disability^a	
	%	95% Confidence Interval
Michigan Total	25.0	(24.4-25.6)
Region 1	24.7	(23.7-25.7)
Livingston	18.6	(14.6-23.5)
Macomb	23.6	(21.4-26.0)
Monroe	28.5	(22.9-34.9)
Oakland	22.1	(20.4-24.0)
St. Clair	29.9	(24.6-35.8)
Washtenaw	20.6	(17.7-23.9)
City of Detroit	33.3	(30.2-36.6)
Wayne exc. Detroit	25.3	(23.4-27.4)
Region 2	25.9	(23.3-28.7)
Genesee	27.5	(24.3-30.8)
Lapeer	22.6	(16.8-29.6)
Shiawassee	21.0	(14.9-28.8)
Region 3	25.9	(22.1-30.0)
Jackson	30.6	(25.6-36.1)
Lenawee	17.6	(13.0-23.5)
Region 4	22.7	(20.5-25.1)
Barry-Eaton	23.6	(19.8-27.9)
Mid-Michigan ^b	27.7	(22.9-33.2)
Ingham	21.4	(18.3-24.7)
Region 5	25.0	(22.6-27.6)
Branch-Hillsdale-St. Joseph	26.4	(21.8-31.5)
Calhoun	28.3	(23.0-34.2)
Kalamazoo	22.2	(19.0-25.8)
Region 6	26.1	(22.5-30.0)
Van Buren-Cass	25.2	(20.1-31.0)
Berrien	26.8	(21.9-32.3)
Region 7	22.9	(21.1-24.8)
Allegan	18.3	(14.1-23.4)
Ionia	23.2	(17.1-30.7)
Kent	23.3	(20.9-25.8)
Mid-Michigan ^b	27.7	(22.9-33.2)
Ottawa	21.1	(17.5-25.1)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 5 Cont'd		
Geographic Area	Disability^a	
	%	95% Confidence Interval
Michigan Total	25.0	(24.4-25.6)
Region 8	28.8	(25.9-31.8)
District #10	27.5	(24.1-31.1)
Muskegon	30.8	(25.9-36.2)
Region 9	26.3	(23.6-29.1)
District #2	28.9	(23.3-35.4)
District #4	36.9	(30.2-44.3)
Northwest Michigan	23.6	(19.0-29.0)
Benzie-Leelanau	24.2	(17.6-32.2)
Grand Traverse	17.0	(12.8-22.3)
Region 10	27.2	(24.0-30.6)
Bay	30.3	(23.5-38.2)
Huron	23.2	(14.9-34.3)
Saginaw	27.9	(23.1-33.3)
Sanilac	21.5	(14.0-31.5)
Tuscola	26.0	(19.2-34.2)
Region 11	28.2	(24.6-32.0)
Central Michigan	29.8	(25.5-34.5)
Midland	24.2	(18.5-30.9)
Region 12	25.7	(22.8-28.9)
Luce-Mackinac-Alger-Schoolcraft	24.7	(17.0-34.3)
Western Upper Peninsula	22.9	(17.0-30.1)
Delta-Menominee	24.9	(18.4-32.8)
Chippewa	33.5	(25.6-42.5)
Dickinson-Iron	21.3	(15.6-28.4)
Marquette	29.1	(22.5-36.6)

^a The proportion of adults who reported being limited in any activities because of physical, mental, or emotional problems, or reported that they required use of special equipment (such as a cane, a wheelchair, a special bed, or a special telephone) due to a health problem.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 6: Weight Status
Michigan BRFSS, 2012-2014 Combined

Geographic Area	Obese ^a		Overweight ^b		Healthy Weight ^c	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	31.1	(30.4-31.8)	34.7	(34.0-35.5)	32.6	(31.9-33.3)
Region 1	30.5	(29.4-31.6)	34.0	(32.9-35.1)	34.1	(33.0-35.2)
Livingston	27.8	(23.1-33.1)	36.9	(31.2-43.1)	33.3	(27.9-39.2)
Macomb	33.1	(30.5-35.9)	33.1	(30.6-35.8)	32.0	(29.3-34.7)
Monroe	35.2	(29.3-41.6)	36.4	(30.4-42.9)	27.0	(21.7-33.1)
Oakland	26.9	(24.9-29.1)	36.0	(33.8-38.2)	36.0	(33.8-38.3)
St. Clair	33.9	(27.9-40.4)	33.9	(28.2-40.1)	31.3	(25.7-37.5)
Washtenaw	25.4	(21.9-29.2)	34.4	(30.7-38.3)	39.4	(35.5-43.4)
City of Detroit	37.0	(33.7-40.4)	31.4	(28.3-34.6)	30.1	(26.9-33.6)
Wayne exc. Detroit	30.4	(28.3-32.6)	33.8	(31.6-36.2)	34.0	(31.7-36.3)
Region 2	31.9	(29.0-34.9)	36.4	(33.3-39.5)	30.3	(27.4-33.4)
Genesee	32.8	(29.4-36.4)	36.6	(33.0-40.3)	29.2	(25.9-32.9)
Lapeer	26.5	(20.2-33.8)	36.7	(29.1-45.0)	34.1	(26.6-42.5)
Shiawassee	33.8	(26.2-42.4)	34.6	(26.9-43.1)	31.2	(23.9-39.7)
Region 3	32.2	(28.1-36.7)	35.8	(31.4-40.4)	30.5	(26.2-35.3)
Jackson	33.8	(28.6-39.3)	32.2	(27.3-37.6)	32.2	(26.7-38.2)
Lenawee	29.5	(22.9-37.1)	42.1	(34.2-50.5)	27.7	(21.1-35.4)
Region 4	31.8	(29.1-34.7)	30.3	(27.7-33.0)	35.5	(32.6-38.5)
Barry-Eaton	34.6	(29.8-39.7)	31.8	(27.2-36.8)	31.9	(27.0-37.3)
Mid-Michigan ^d	31.7	(26.7-37.2)	33.7	(28.9-39.0)	32.4	(27.2-38.1)
Ingham	30.4	(26.5-34.6)	29.1	(25.4-33.0)	38.1	(33.9-42.5)
Region 5	33.4	(30.5-36.4)	34.9	(31.9-38.0)	29.7	(26.8-32.7)
Branch-Hillsdale-St. Joseph	36.5	(31.0-42.3)	37.8	(32.3-43.6)	24.0	(19.7-28.8)
Calhoun	33.0	(27.1-39.4)	35.6	(29.4-42.3)	28.9	(22.8-35.9)
Kalamazoo	31.5	(27.4-35.8)	32.5	(28.5-36.9)	34.0	(29.7-38.6)
Region 6	34.9	(30.8-39.3)	34.8	(30.7-39.1)	28.9	(25.1-33.1)
Van Buren-Cass	32.0	(26.2-38.5)	38.4	(31.8-45.4)	28.7	(22.8-35.5)
Berrien	37.2	(31.7-43.1)	31.8	(26.9-37.2)	29.1	(24.2-34.4)
Region 7	28.0	(26.1-30.1)	36.2	(34.1-38.4)	34.0	(31.9-36.2)
Allegan	30.0	(23.9-37.0)	36.5	(30.1-43.5)	29.1	(23.2-35.8)
Ionia	40.5	(32.0-49.6)	26.5	(19.9-34.4)	29.5	(21.6-38.8)
Kent	27.3	(24.8-30.0)	36.6	(33.7-39.6)	34.9	(32.1-37.9)
Mid-Michigan ^d	31.7	(26.7-37.2)	33.7	(28.9-39.0)	32.4	(27.2-38.1)
Ottawa	24.2	(20.5-28.4)	37.0	(32.6-41.6)	36.7	(32.2-41.4)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 6 Cont'd						
Geographic Area	Obese ^a		Overweight ^b		Healthy Weight ^c	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	31.1	(30.4-31.8)	34.7	(34.0-35.5)	32.6	(31.9-33.3)
Region 8	33.8	(30.8-37.0)	36.2	(33.1-39.5)	29.2	(26.1-32.4)
District #10	32.9	(29.0-37.0)	36.5	(32.6-40.7)	29.5	(25.6-33.7)
Muskegon	35.4	(30.5-40.6)	35.7	(30.6-41.2)	28.7	(24.0-33.9)
Region 9	29.5	(26.6-32.5)	37.8	(34.6-41.0)	31.5	(28.4-34.7)
District #2	34.0	(27.5-41.2)	37.3	(30.0-45.2)	27.6	(21.3-34.9)
District #4	32.7	(26.2-40.0)	36.4	(29.9-43.5)	27.6	(21.6-34.6)
Northwest Michigan	29.7	(24.2-35.9)	32.3	(26.8-38.3)	37.3	(30.7-44.5)
Benzie-Leelanau	25.9	(18.9-34.5)	43.6	(35.1-52.5)	29.7	(22.6-37.9)
Grand Traverse	22.7	(17.9-28.4)	43.8	(37.2-50.6)	33.0	(26.8-39.9)
Region 10	36.8	(33.3-40.5)	37.5	(33.9-41.2)	24.1	(21.2-27.3)
Bay	34.7	(27.7-42.4)	40.9	(33.0-49.2)	21.2	(15.9-27.7)
Huron	28.7	(18.8-41.2)	49.3	(36.9-61.8)	22.0	(14.5-32.0)
Saginaw	41.6	(36.0-47.3)	32.9	(27.7-38.5)	24.5	(20.2-29.5)
Sanilac	32.6	(22.8-44.2)	36.3	(26.5-47.4)	28.6	(19.2-40.3)
Tuscola	33.1	(25.2-42.0)	40.8	(31.8-50.4)	25.0	(17.6-34.3)
Region 11	33.2	(29.5-37.2)	34.5	(30.7-38.6)	30.0	(26.1-34.1)
Central Michigan	36.4	(31.8-41.3)	32.2	(27.9-36.8)	28.7	(24.1-33.9)
Midland	25.5	(20.2-31.7)	40.3	(33.0-48.1)	32.9	(26.3-40.2)
Region 12	29.5	(26.4-32.8)	35.0	(31.7-38.5)	33.4	(29.8-37.1)
Luce-Mackinac-Alger-Schoolcraft	30.4	(21.1-41.6)	39.4	(29.4-50.4)	29.5	(20.3-40.7)
Western Upper Peninsula	28.6	(22.3-35.8)	32.1	(26.0-39.0)	36.5	(29.2-44.4)
Delta-Menominee	29.1	(22.3-36.9)	34.8	(26.8-43.8)	31.8	(23.6-41.4)
Chippewa	39.9	(31.2-49.3)	32.9	(25.0-41.8)	27.1	(18.7-37.7)
Dickinson-Iron	25.4	(18.7-33.7)	37.4	(28.9-46.7)	36.8	(27.9-46.6)
Marquette	27.6	(21.4-34.7)	35.5	(28.6-43.1)	35.0	(27.9-42.8)

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 The proportion of adults whose BMI was greater than or equal to 30.0.

^b The proportion of adults whose BMI was greater than or equal to 25.0, but less than 30.0.

^c The proportion of adults whose BMI was greater than or equal to 18.5, but less than 25.0.

^d The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 7: No Health Care Coverage Among Those Aged 18-64 Years Michigan BRFSS, 2012-2014 Combined		
Geographic Area	No Health Care Coverage^a	
	%	95% Confidence Interval
Michigan Total	15.6	(14.9-16.3)
Region 1	16.1	(15.0-17.2)
Livingston	12.3	(7.9-18.5)
Macomb	14.7	(12.3-17.4)
Monroe	11.4	(7.0-18.1)
Oakland	13.7	(11.7-16.0)
St. Clair	16.2	(11.1-22.9)
Washtenaw	10.7	(7.8-14.5)
City of Detroit	27.8	(24.4-31.5)
Wayne exc. Detroit	13.8	(11.9-16.1)
Region 2	13.8	(11.3-16.8)
Genesee	14.3	(11.3-17.9)
Lapeer	12.2	(7.2-19.8)
Shiawassee	13.3	(7.7-22.2)
Region 3	11.0	(7.9-15.2)
Jackson	9.5	(6.4-13.8)
Lenawee	13.8	(7.7-23.5)
Region 4	11.7	(9.5-14.3)
Barry-Eaton	9.6	(6.2-14.4)
Mid-Michigan ^b	15.5	(10.5-22.4)
Ingham	12.8	(9.8-16.6)
Region 5	14.4	(11.9-17.3)
Branch-Hillsdale-St. Joseph	18.1	(13.2-24.1)
Calhoun	10.2	(6.4-15.9)
Kalamazoo	14.1	(10.7-18.5)
Region 6	17.1	(13.4-21.6)
Van Buren-Cass	19.2	(13.3-26.9)
Berrien	15.3	(11.0-20.9)
Region 7	14.2	(12.3-16.4)
Allegan	17.2	(11.3-25.4)
Ionia	-- ^c	-- ^c
Kent	13.8	(11.4-16.6)
Mid-Michigan ^b	15.5	(10.5-22.4)
Ottawa	12.4	(9.1-16.7)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 7 Cont'd		
Geographic Area	No Health Care Coverage^a	
	%	95% Confidence Interval
Michigan Total	15.6	(14.9-16.3)
Region 8	16.2	(13.4-19.5)
District #10	18.1	(14.3-22.7)
Muskegon	13.4	(9.7-18.2)
Region 9	22.1	(18.9-25.7)
District #2	30.0	(21.4-40.4)
District #4	22.6	(15.9-31.1)
Northwest Michigan	16.0	(11.6-21.7)
Benzie-Leelanau	22.7	(15.0-32.7)
Grand Traverse	21.7	(15.6-29.2)
Region 10	18.3	(14.9-22.3)
Bay	15.1	(9.7-22.9)
Huron	-- ^c	-- ^c
Saginaw	16.2	(11.2-22.9)
Sanilac	29.0	(18.5-42.4)
Tuscola	21.3	(13.8-31.4)
Region 11	15.5	(12.0-19.8)
Central Michigan	17.2	(12.8-22.6)
Midland	11.3	(6.4-19.4)
Region 12	15.0	(12.0-18.8)
Luce-Mackinac-Alger-Schoolcraft	-- ^c	-- ^c
Western Upper Peninsula	21.2	(14.0-30.8)
Delta-Menominee	16.5	(10.4-25.2)
Chippewa	10.2	(5.7-17.6)
Dickinson-Iron	-- ^c	-- ^c
Marquette	-- ^c	-- ^c

^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.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.
^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 8: Health Care Access Michigan BRFSS, 2012-2014 Combined				
Geographic Area	No Personal Health Care Provider ^a		No Health Care Access During Past 12 Months Due to Cost ^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	16.3	(15.7-16.9)	15.0	(14.5-15.6)
Region 1	16.9	(16.0-17.9)	15.4	(14.5-16.3)
Livingston	14.4	(10.7-19.0)	12.8	(8.5-18.8)
Macomb	14.2	(12.2-16.4)	16.1	(14.0-18.4)
Monroe	11.0	(7.4-16.2)	14.9	(9.9-21.9)
Oakland	14.3	(12.6-16.1)	12.6	(11.0-14.4)
St. Clair	10.1	(6.9-14.6)	14.6	(10.5-20.1)
Washtenaw	15.1	(12.1-18.6)	10.6	(8.2-13.4)
City of Detroit	25.3	(22.4-28.6)	24.9	(21.9-28.1)
Wayne exc. Detroit	14.8	(13.1-16.8)	13.6	(11.9-15.4)
Region 2	15.4	(13.0-18.3)	16.5	(14.2-19.1)
Genesee	16.4	(13.4-20.0)	16.7	(14.0-19.8)
Lapeer	14.2	(9.3-21.1)	14.5	(9.2-22.2)
Shiawassee	11.3	(6.8-18.1)	18.0	(11.9-26.5)
Region 3	13.2	(10.2-17.0)	10.9	(8.3-14.1)
Jackson	12.3	(8.6-17.2)	11.1	(8.0-15.3)
Lenawee	14.9	(10.0-21.6)	10.5	(6.6-16.1)
Region 4	15.3	(13.1-17.8)	13.9	(11.9-16.3)
Barry-Eaton	10.0	(7.0-14.1)	15.0	(11.2-19.9)
Mid-Michigan ^c	11.5	(7.7-16.9)	16.2	(12.0-21.5)
Ingham	20.2	(16.7-24.2)	14.3	(11.4-17.8)
Region 5	19.2	(16.6-22.1)	14.6	(12.4-17.0)
Branch-Hillsdale-St. Joseph	21.2	(16.4-26.9)	17.4	(13.0-22.9)
Calhoun	19.3	(14.0-26.0)	12.2	(8.7-16.7)
Kalamazoo	17.8	(14.3-21.9)	14.0	(11.2-17.3)
Region 6	17.1	(13.9-20.9)	16.9	(13.7-20.7)
Van Buren-Cass	16.2	(11.8-21.8)	18.1	(13.4-24.1)
Berrien	17.9	(13.5-23.4)	15.9	(11.9-20.9)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 8 Cont'd				
Geographic Area	No Personal Health Care Provider^a		No Health Care Access During Past 12 Months Due to Cost^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	16.3	(15.7-16.9)	15.0	(14.5-15.6)
Region 7	13.6	(11.9-15.5)	14.5	(12.8-16.2)
Allegan	15.7	(10.4-23.0)	12.6	(9.1-17.2)
Ionia	11.1	(6.6-18.1)	8.3	(4.6-14.7)
Kent	13.9	(11.6-16.4)	14.9	(12.8-17.3)
Mid-Michigan ^c	11.5	(7.7-16.9)	16.2	(12.0-21.5)
Ottawa	13.0	(9.8-17.1)	13.0	(10.1-16.7)
Region 8	14.8	(12.2-17.8)	17.1	(14.5-20.0)
District #10	17.9	(14.3-22.1)	17.6	(14.3-21.5)
Muskegon	9.9	(7.0-13.8)	16.2	(12.5-20.9)
Region 9	16.5	(13.9-19.4)	14.7	(12.5-17.2)
District #2	19.7	(13.9-27.1)	14.9	(10.4-20.7)
District #4	17.3	(12.3-23.7)	21.3	(15.6-28.5)
Northwest Michigan	15.7	(10.8-22.3)	13.4	(9.7-18.3)
Benzie-Leelanau	12.4	(6.9-21.3)	11.4	(7.2-17.5)
Grand Traverse	15.4	(10.8-21.4)	10.8	(7.2-15.8)
Region 10	15.4	(12.7-18.5)	13.2	(10.8-15.9)
Bay	15.8	(10.7-22.7)	9.8	(6.2-15.1)
Huron	-- ^d	-- ^d	-- ^d	-- ^d
Saginaw	16.4	(12.1-21.7)	15.0	(11.2-19.7)
Sanilac	14.9	(8.0-25.9)	-- ^d	-- ^d
Tuscola	12.2	(7.5-19.2)	15.4	(10.1-22.8)
Region 11	18.0	(14.7-21.7)	17.7	(14.6-21.4)
Central Michigan	18.6	(14.7-23.2)	20.1	(16.1-24.8)
Midland	16.5	(11.2-23.7)	11.9	(7.7-18.0)
Region 12	15.4	(12.6-18.8)	12.3	(10.0-15.2)
Luce-Mackinac-Alger-Schoolcraft	24.7	(15.4-37.0)	20.0	(11.0-33.6)
Western Upper Peninsula	14.6	(10.0-21.0)	13.7	(8.6-21.1)
Delta-Menominee	23.4	(15.2-34.3)	13.1	(8.5-19.7)
Chippewa	11.6	(7.2-18.1)	12.4	(7.9-19.2)
Dickinson-Iron	-- ^d	-- ^d	10.7	(7.0-16.2)
Marquette	10.1	(6.4-15.6)	6.4	(3.8-10.6)

^a The proportion of adults who reported that they did not have anyone that they thought of as their personal doctor or health care provider.
^b The proportion of adults who reported that in the past 12 months there was a time when they needed to see a doctor but could not due to the cost.
^c The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.
^d Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 9: No Leisure Time Physical Activity Michigan BRFSS, 2012-2014 Combined		
Geographic Area	No Leisure Time Physical Activity^a	
	%	95% Confidence Interval
Michigan Total	24.4	(23.7-25.1)
Region 1	24.0	(23.0-25.1)
Livingston	17.3	(13.6-21.9)
Macomb	24.4	(22.0-26.8)
Monroe	26.3	(20.6-32.8)
Oakland	20.2	(18.3-22.1)
St. Clair	25.0	(20.1-30.5)
Washtenaw	14.9	(12.2-18.0)
City of Detroit	37.5	(34.1-41.0)
Wayne exc. Detroit	23.0	(21.1-25.0)
Region 2	26.8	(24.0-29.8)
Genesee	29.0	(25.6-32.7)
Lapeer	21.7	(15.9-28.7)
Shiawassee	20.5	(14.6-28.0)
Region 3	24.8	(20.9-29.3)
Jackson	24.6	(19.9-30.1)
Lenawee	25.2	(18.6-33.2)
Region 4	21.4	(19.1-23.8)
Barry-Eaton	23.6	(19.6-28.3)
Mid-Michigan ^b	22.5	(18.3-27.3)
Ingham	20.6	(17.4-24.2)
Region 5	28.4	(25.5-31.4)
Branch-Hillsdale-St. Joseph	36.7	(31.2-42.5)
Calhoun	29.0	(23.0-35.8)
Kalamazoo	22.2	(18.5-26.5)
Region 6	28.8	(24.9-33.1)
Van Buren-Cass	26.9	(21.3-33.3)
Berrien	30.4	(25.1-36.3)
Region 7	21.8	(20.0-23.8)
Allegan	28.4	(22.3-35.5)
Ionia	20.8	(14.6-28.8)
Kent	21.5	(19.0-24.2)
Mid-Michigan ^b	22.5	(18.3-27.3)
Ottawa	18.4	(15.2-22.1)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 9 Cont'd		
Geographic Area	No Leisure Time Physical Activity^a	
	%	95% Confidence Interval
Michigan Total	24.4	(23.7-25.1)
Region 8	25.9	(23.0-29.0)
District #10	24.8	(21.1-28.9)
Muskegon	27.6	(23.1-32.7)
Region 9	22.3	(19.8-25.0)
District #2	24.8	(19.6-31.0)
District #4	28.9	(22.7-36.1)
Northwest Michigan	17.7	(13.6-22.6)
Benzie-Leelanau	22.6	(16.3-30.6)
Grand Traverse	18.2	(13.9-23.5)
Region 10	27.6	(24.3-31.0)
Bay	30.9	(23.9-38.8)
Huron	35.5	(24.0-48.9)
Saginaw	23.3	(18.9-28.3)
Sanilac	27.5	(18.4-39.0)
Tuscola	31.8	(23.9-40.9)
Region 11	28.4	(24.8-32.3)
Central Michigan	30.8	(26.4-35.7)
Midland	22.3	(17.0-28.8)
Region 12	21.7	(19.0-24.7)
Luce-Mackinac-Alger-Schoolcraft	21.6	(14.0-31.7)
Western Upper Peninsula	18.4	(14.0-23.8)
Delta-Menominee	22.4	(16.0-30.5)
Chippewa	28.5	(21.5-36.8)
Dickinson-Iron	23.6	(16.6-32.4)
Marquette	20.1	(14.6-27.0)

^a The proportion of adults who reported not participating in any leisure time physical activities or exercises such as running, calisthenics, golf, gardening, or walking during the past month.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 10: Cigarette Smoking Michigan BRFSS, 2012-2014 Combined						
Geographic Area	Current Smoking^a		Former Smoking^b		Never Smoked	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	22.0	(21.3-22.7)	26.5	(25.9-27.1)	51.5	(50.8-52.3)
Region 1	22.0	(20.9-23.1)	25.1	(24.2-26.1)	52.9	(51.7-54.1)
Livingston	20.4	(15.4-26.5)	27.1	(22.7-32.2)	52.5	(46.6-58.3)
Macomb	25.3	(22.8-28.0)	26.0	(23.8-28.4)	48.7	(45.9-51.5)
Monroe	24.8	(19.0-31.7)	30.0	(24.7-35.8)	45.2	(38.9-51.6)
Oakland	17.8	(15.8-19.9)	29.1	(27.1-31.1)	53.2	(50.9-55.4)
St. Clair	28.2	(22.3-35.0)	26.4	(21.7-31.7)	45.4	(39.3-51.7)
Washtenaw	11.3	(8.8-14.4)	22.3	(19.3-25.5)	66.4	(62.6-70.1)
City of Detroit	30.7	(27.5-34.2)	17.7	(15.5-20.2)	51.5	(48.1-55.0)
Wayne exc. Detroit	20.9	(18.9-23.1)	26.1	(24.2-28.1)	53.0	(50.6-55.3)
Region 2	24.3	(21.5-27.2)	25.1	(22.6-27.8)	50.6	(47.5-53.8)
Genesee	24.2	(21.0-27.7)	24.8	(21.9-27.9)	51.1	(47.3-54.8)
Lapeer	29.5	(22.6-37.5)	23.0	(16.8-30.6)	47.5	(39.5-55.7)
Shiawassee	18.0	(11.9-26.4)	29.8	(22.6-38.1)	52.1	(43.6-60.5)
Region 3	21.3	(17.6-25.7)	30.3	(26.2-34.7)	48.4	(43.8-53.0)
Jackson	24.1	(19.2-29.7)	27.5	(23.0-32.5)	48.4	(42.8-54.1)
Lenawee	16.5	(11.2-23.4)	35.2	(27.7-43.5)	48.3	(40.5-56.3)
Region 4	17.9	(15.6-20.4)	28.9	(26.4-31.6)	53.2	(50.2-56.1)
Barry-Eaton	16.7	(13.0-21.1)	36.0	(31.2-41.1)	47.3	(42.1-52.6)
Mid-Michigan ^c	23.3	(18.3-29.3)	25.9	(21.7-30.5)	50.8	(45.3-56.3)
Ingham	18.3	(15.2-22.0)	25.0	(21.6-28.9)	56.6	(52.3-60.9)
Region 5	22.2	(19.5-25.1)	25.8	(23.3-28.5)	52.0	(48.9-55.2)
Branch-Hillsdale-St. Joseph	24.5	(19.8-29.9)	27.2	(22.5-32.5)	48.3	(42.7-54.0)
Calhoun	28.7	(22.6-35.8)	24.6	(19.6-30.5)	46.6	(40.0-53.3)
Kalamazoo	16.8	(13.5-20.6)	25.5	(22.0-29.3)	57.7	(53.3-62.1)
Region 6	25.9	(21.8-30.6)	27.0	(23.7-30.7)	47.0	(42.7-51.4)
Van Buren-Cass	32.0	(25.4-39.4)	25.7	(20.9-31.0)	42.3	(35.9-49.0)
Berrien	20.8	(16.0-26.7)	28.2	(23.6-33.4)	51.0	(45.2-56.7)
Region 7	18.9	(17.0-20.9)	25.0	(23.3-26.9)	56.1	(53.8-58.3)
Allegan	17.8	(12.8-24.1)	28.9	(23.5-35.1)	53.3	(46.4-60.1)
Ionia	16.9	(11.1-24.8)	24.6	(18.2-32.4)	58.5	(49.7-66.8)
Kent	18.6	(16.2-21.2)	25.5	(23.1-28.0)	56.0	(53.0-58.9)
Mid-Michigan ^c	23.3	(18.3-29.3)	25.9	(21.7-30.5)	50.8	(45.3-56.3)
Ottawa	17.0	(13.3-21.4)	23.5	(19.8-27.6)	59.6	(54.8-64.2)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 10 Cont'd						
Geographic Area	Current Smoking ^a		Former Smoking ^b		Never Smoked	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	22.0	(21.3-22.7)	26.5	(25.9-27.1)	51.5	(50.8-52.3)
Region 8	24.2	(21.2-27.6)	30.3	(27.6-33.2)	45.4	(42.2-48.7)
District #10	24.5	(20.7-28.8)	32.0	(28.5-35.9)	43.4	(39.3-47.7)
Muskegon	23.8	(19.0-29.3)	27.6	(23.4-32.2)	48.7	(43.4-53.9)
Region 9	24.6	(21.7-27.8)	30.4	(27.6-33.3)	45.0	(41.8-48.2)
District #2	28.2	(22.0-35.5)	28.3	(21.7-35.9)	43.5	(36.3-50.8)
District #4	32.5	(25.8-40.1)	31.4	(25.7-37.7)	36.1	(29.8-42.9)
Northwest Michigan	21.3	(15.9-28.0)	33.3	(27.9-39.3)	45.3	(38.9-51.8)
Benzie-Leelanau	15.3	(9.9-22.8)	34.8	(27.4-43.0)	49.9	(41.4-58.4)
Grand Traverse	21.7	(16.4-28.2)	25.5	(20.3-31.4)	52.8	(46.1-59.4)
Region 10	22.4	(19.2-26.0)	28.4	(25.3-31.7)	49.2	(45.5-52.9)
Bay	25.4	(18.4-33.8)	25.0	(19.4-31.7)	49.6	(41.8-57.5)
Huron	20.1	(11.6-32.5)	32.7	(22.4-45.0)	47.2	(35.1-59.7)
Saginaw	18.0	(13.7-23.4)	29.5	(24.7-34.7)	52.5	(46.8-58.1)
Sanilac	27.5	(18.0-39.4)	30.3	(21.3-41.1)	42.3	(31.9-53.4)
Tuscola	29.0	(20.8-38.8)	26.8	(19.7-35.3)	44.2	(35.4-53.4)
Region 11	25.4	(21.6-29.6)	29.4	(25.9-33.2)	45.2	(41.1-49.3)
Central Michigan	27.9	(23.2-33.1)	29.3	(25.1-33.8)	42.8	(38.0-47.8)
Midland	19.3	(13.7-26.6)	29.7	(23.6-36.7)	50.9	(43.5-58.3)
Region 12	21.2	(18.1-24.8)	31.2	(28.1-34.5)	47.6	(43.9-51.2)
Luce-Mackinac-Alger-Schoolcraft	30.2	(19.8-43.2)	31.4	(22.5-41.9)	38.4	(29.0-48.7)
Western Upper Peninsula	18.0	(12.1-26.0)	35.8	(29.2-42.9)	46.2	(38.9-53.7)
Delta-Menominee	23.5	(16.5-32.2)	24.1	(18.3-31.0)	52.5	(43.4-61.3)
Chippewa	16.5	(10.9-24.2)	29.9	(22.5-38.7)	53.5	(44.4-62.5)
Dickinson-Iron	20.3	(13.2-29.9)	35.5	(27.1-45.0)	44.2	(35.2-53.5)
Marquette	20.2	(14.4-27.6)	31.2	(24.7-38.6)	48.5	(41.0-56.1)

^a The proportion of adults who reported that they had ever smoked at least 100 cigarettes (five packs) in their life and that they smoke cigarettes now, either every day or on some days.

^b The proportion of adults who reported that they had ever smoked at least 100 cigarettes (five packs) in their life, but they do not smoke cigarettes now.

^c The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 11: Alcohol Consumption Michigan BRFSS, 2012-2014 Combined						
Geographic Area	Any Alcohol in Past Month^a		Heavy Drinking^b		Binge Drinking^c	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	56.7	(55.9-57.4)	6.4	(6.0-6.8)	19.0	(18.4-19.6)
Region 1	58.8	(57.6-59.9)	5.9	(5.4-6.5)	19.2	(18.3-20.2)
Livingston	70.6	(65.2-75.5)	8.0	(5.4-11.8)	23.0	(18.3-28.5)
Macomb	58.2	(55.4-61.0)	6.2	(5.0-7.7)	20.7	(18.5-23.2)
Monroe	59.6	(53.1-65.8)	8.8	(5.8-13.1)	22.7	(17.2-29.2)
Oakland	62.0	(59.7-64.2)	5.6	(4.6-6.8)	18.3	(16.5-20.2)
St. Clair	52.3	(46.0-58.5)	8.7	(5.3-13.9)	17.9	(13.3-23.7)
Washtenaw	66.1	(62.1-69.9)	5.4	(3.8-7.6)	19.0	(15.9-22.6)
City of Detroit	51.5	(48.0-54.9)	4.9	(3.5-6.8)	17.4	(14.7-20.4)
Wayne exc. Detroit	57.0	(54.6-59.3)	6.0	(4.9-7.3)	18.5	(16.6-20.6)
Region 2	51.4	(48.2-54.5)	5.2	(4.0-6.7)	16.6	(14.3-19.2)
Genesee	49.7	(45.9-53.4)	5.5	(4.0-7.4)	15.7	(13.1-18.6)
Lapeer	54.9	(46.7-62.9)	-- ^e	-- ^e	18.1	(12.1-26.2)
Shiawassee	56.4	(47.9-64.5)	-- ^e	-- ^e	19.7	(13.6-27.6)
Region 3	54.5	(49.8-59.1)	5.1	(3.3-7.6)	18.2	(14.7-22.2)
Jackson	55.6	(49.8-61.2)	5.1	(3.0-8.6)	17.7	(13.6-22.7)
Lenawee	52.4	(44.4-60.3)	-- ^e	-- ^e	18.9	(13.3-26.3)
Region 4	58.0	(55.0-60.9)	6.6	(5.2-8.4)	21.5	(19.0-24.3)
Barry-Eaton	53.9	(48.6-59.2)	6.5	(4.0-10.4)	15.7	(12.0-20.3)
Mid-Michigan ^d	56.2	(50.6-61.6)	-- ^e	-- ^e	17.5	(13.3-22.6)
Ingham	58.7	(54.3-62.9)	7.4	(5.4-10.2)	26.1	(22.3-30.3)
Region 5	53.0	(49.9-56.2)	6.7	(5.3-8.5)	17.7	(15.3-20.5)
Branch-Hillsdale-St. Joseph	46.0	(40.4-51.6)	5.6	(3.3-9.3)	15.7	(11.9-20.4)
Calhoun	51.3	(44.6-58.0)	8.0	(5.0-12.3)	18.4	(13.1-25.2)
Kalamazoo	59.0	(54.4-63.5)	6.8	(4.9-9.5)	18.8	(15.4-22.7)
Region 6	48.6	(44.3-53.0)	7.4	(5.3-10.3)	16.3	(13.2-19.9)
Van Buren-Cass	47.8	(41.2-54.6)	9.3	(5.7-14.7)	17.8	(13.0-23.7)
Berrien	49.3	(43.6-55.0)	5.9	(3.7-9.2)	15.0	(11.4-19.7)
Region 7	58.9	(56.6-61.1)	5.9	(4.8-7.1)	19.2	(17.4-21.2)
Allegan	49.5	(42.7-56.3)	4.8	(2.8-8.0)	15.0	(10.9-20.3)
Ionia	48.3	(39.5-57.1)	-- ^e	-- ^e	9.3	(5.3-15.7)
Kent	62.5	(59.6-65.3)	5.9	(4.6-7.5)	21.8	(19.2-24.6)
Mid-Michigan ^d	56.2	(50.6-61.6)	-- ^e	-- ^e	17.5	(13.3-22.6)
Ottawa	61.4	(56.7-65.9)	7.6	(5.2-10.8)	18.8	(15.2-23.0)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 11 Cont'd						
Geographic Area	Any Alcohol in Past Month ^a		Heavy Drinking ^b		Binge Drinking ^c	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	56.7	(55.9-57.4)	6.4	(6.0-6.8)	19.0	(18.4-19.6)
Region 8	50.0	(46.7-53.3)	7.1	(5.2-9.5)	16.2	(13.7-19.2)
District #10	48.0	(43.8-52.3)	7.4	(5.2-10.4)	16.0	(12.9-19.7)
Muskegon	53.2	(47.9-58.4)	6.5	(3.7-11.2)	16.6	(12.4-21.9)
Region 9	59.4	(56.1-62.5)	8.4	(6.7-10.6)	19.7	(17.1-22.5)
District #2	51.7	(44.2-59.1)	-- ^e	-- ^e	16.1	(11.3-22.4)
District #4	57.3	(50.2-64.1)	6.6	(4.2-10.3)	20.9	(15.9-27.0)
Northwest Michigan	58.5	(51.8-64.9)	9.2	(5.4-15.3)	16.4	(11.5-22.9)
Benzie-Leelanau	66.1	(57.6-73.7)	8.8	(5.3-14.4)	17.5	(11.7-25.3)
Grand Traverse	67.0	(60.5-72.8)	12.1	(8.1-17.7)	27.3	(21.4-34.0)
Region 10	53.8	(50.0-57.4)	7.2	(5.5-9.4)	21.5	(18.3-25.2)
Bay	50.9	(43.0-58.8)	8.0	(4.7-13.1)	15.8	(11.1-22.0)
Huron	56.1	(43.5-68.0)	-- ^e	-- ^e	21.0	(12.5-33.1)
Saginaw	55.6	(50.0-61.2)	7.4	(4.9-11.1)	23.4	(18.1-29.7)
Sanilac	49.3	(38.4-60.3)	-- ^e	-- ^e	25.1	(16.2-36.7)
Tuscola	54.2	(45.1-63.1)	-- ^e	-- ^e	22.5	(14.6-33.1)
Region 11	50.8	(46.6-54.9)	8.2	(6.0-11.0)	16.9	(13.9-20.5)
Central Michigan	50.2	(45.2-55.2)	7.7	(5.3-11.2)	18.2	(14.4-22.7)
Midland	52.2	(44.8-59.5)	9.4	(5.7-15.0)	13.8	(9.6-19.6)
Region 12	58.3	(54.6-61.9)	8.6	(6.8-10.8)	21.1	(18.1-24.6)
Luce-Mackinac-Alger-Schoolcraft	66.4	(56.6-75.0)	9.1	(5.5-14.6)	32.1	(21.5-45.1)
Western Upper Peninsula	54.4	(46.8-61.9)	11.0	(6.8-17.5)	18.3	(13.1-25.0)
Delta-Menominee	59.2	(49.6-68.2)	8.5	(5.0-14.0)	22.7	(16.3-30.7)
Chippewa	51.5	(42.3-60.6)	-- ^e	-- ^e	22.0	(14.0-32.8)
Dickinson-Iron	56.1	(46.3-65.3)	-- ^e	-- ^e	13.1	(8.0-20.7)
Marquette	61.4	(53.9-68.3)	-- ^e	-- ^e	20.3	(14.3-28.1)

^a Among all adults, the proportion who reported consuming at least one drink of any alcoholic beverage in the previous month.

^b Among all adults, the proportion who reported consuming an average of more than two alcoholic drinks per day for men or more than one per day for women in the previous month.

^c Among all adults, the proportion who reported consuming five or more drinks per occasion (for men) or 4 or more drinks per occasion (for women) at least once in the previous month.

^d The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^e Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 12: Seatbelt Use Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Always Uses a Seatbelt^a	
	%	95% Confidence Interval
Michigan Total	88.5	(88.0-89.1)
Region 1	89.4	(88.6-90.2)
Livingston	90.8	(86.5-93.8)
Macomb	89.6	(87.5-91.3)
Monroe	89.0	(84.0-92.5)
Oakland	90.1	(88.4-91.6)
St. Clair	91.0	(86.9-94.0)
Washtenaw	89.0	(85.8-91.5)
City of Detroit	86.4	(83.7-88.8)
Wayne exc. Detroit	90.3	(88.5-91.9)
Region 2	88.3	(86.0-90.2)
Genesee	89.7	(87.1-91.8)
Lapeer	89.0	(82.6-93.2)
Shiawassee	79.1	(70.4-85.8)
Region 3	90.0	(86.6-92.6)
Jackson	89.1	(84.2-92.6)
Lenawee	91.5	(87.0-94.5)
Region 4	87.6	(85.3-89.7)
Barry-Eaton	88.6	(84.4-91.8)
Mid-Michigan ^b	86.1	(81.7-89.6)
Ingham	88.3	(84.9-91.1)
Region 5	88.3	(85.9-90.3)
Branch-Hillsdale-St. Joseph	86.3	(81.9-89.8)
Calhoun	87.4	(80.9-91.9)
Kalamazoo	90.1	(86.9-92.6)
Region 6	87.8	(84.1-90.7)
Van Buren-Cass	87.5	(81.8-91.6)
Berrien	88.0	(82.9-91.8)
Region 7	89.3	(87.8-90.7)
Allegan	88.6	(83.5-92.3)
Ionia	93.1	(87.9-96.1)
Kent	89.1	(86.8-91.0)
Mid-Michigan ^b	86.1	(81.7-89.6)
Ottawa	89.5	(86.0-92.1)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 12 Cont'd		
Geographic Area	Always Uses a Seatbelt^a	
	%	95% Confidence Interval
Michigan Total	88.5	(88.0-89.1)
Region 8	86.2	(83.6-88.5)
District #10	85.0	(81.4-88.0)
Muskegon	88.2	(84.3-91.2)
Region 9	87.9	(85.3-90.1)
District #2	81.7	(73.5-87.8)
District #4	88.3	(83.0-92.1)
Northwest Michigan	86.8	(81.5-90.7)
Benzie-Leelanau	92.6	(87.5-95.7)
Grand Traverse	93.0	(88.1-95.9)
Region 10	87.0	(83.9-89.7)
Bay	-- ^c	-- ^c
Huron	75.8	(61.6-85.9)
Saginaw	90.8	(85.7-94.2)
Sanilac	79.1	(68.3-86.9)
Tuscola	80.2	(70.3-87.4)
Region 11	87.8	(84.5-90.5)
Central Michigan	86.2	(82.0-89.6)
Midland	91.8	(86.3-95.2)
Region 12	85.1	(82.3-87.6)
Luce-Mackinac-Alger-Schoolcraft	82.1	(70.2-89.9)
Western Upper Peninsula	86.6	(81.0-90.8)
Delta-Menominee	88.8	(82.8-92.8)
Chippewa	84.4	(76.8-89.8)
Dickinson-Iron	80.8	(70.5-88.1)
Marquette	84.6	(77.6-89.7)

^a The proportion of adults who reported always using a seatbelt when driving or riding in a car.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.
^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 13: No Routine Checkup in Past Year Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Had No Routine Checkup in Past Year^a	
	%	95% Confidence Interval
Michigan Total	30.6	(29.9-31.3)
Region 1	29.4	(28.4-30.5)
Livingston	30.7	(25.4-36.6)
Macomb	29.6	(27.1-32.4)
Monroe	28.5	(22.8-35.1)
Oakland	28.8	(26.7-30.9)
St. Clair	33.4	(27.6-39.7)
Washtenaw	32.1	(28.4-35.9)
City of Detroit	25.8	(22.9-29.0)
Wayne exc. Detroit	29.2	(27.1-31.5)
Region 2	30.6	(27.7-33.6)
Genesee	29.8	(26.4-33.4)
Lapeer	32.7	(25.7-40.6)
Shiawassee	32.2	(24.9-40.6)
Region 3	33.0	(28.6-37.7)
Jackson	28.7	(23.8-34.2)
Lenawee	40.5	(32.6-48.9)
Region 4	30.3	(27.5-33.1)
Barry-Eaton	25.0	(20.4-30.2)
Mid-Michigan ^b	32.7	(27.6-38.1)
Ingham	33.2	(29.2-37.4)
Region 5	34.5	(31.5-37.6)
Branch-Hillsdale-St. Joseph	40.6	(35.0-46.4)
Calhoun	32.8	(26.6-39.7)
Kalamazoo	31.2	(27.2-35.5)
Region 6	32.5	(28.4-36.9)
Van Buren-Cass	37.1	(30.7-43.9)
Berrien	28.7	(23.6-34.5)
Region 7	32.0	(29.8-34.2)
Allegan	35.0	(28.4-42.2)
Ionia	34.4	(26.5-43.2)
Kent	30.6	(27.7-33.5)
Mid-Michigan ^b	32.7	(27.6-38.1)
Ottawa	31.8	(27.4-36.6)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 13 Cont'd		
Geographic Area	Had No Routine Checkup in Past Year^a	
	%	95% Confidence Interval
Michigan Total	30.6	(29.9-31.3)
Region 8	30.8	(27.8-34.1)
District #10	32.9	(28.9-37.2)
Muskegon	27.5	(23.0-32.5)
Region 9	31.8	(28.6-35.0)
District #2	32.6	(25.9-40.1)
District #4	28.4	(22.2-35.4)
Northwest Michigan	33.7	(27.2-40.9)
Benzie-Leelanau	33.8	(25.7-43.0)
Grand Traverse	30.9	(24.8-37.7)
Region 10	29.9	(26.5-33.5)
Bay	26.3	(19.5-34.5)
Huron	39.1	(27.0-52.6)
Saginaw	27.6	(22.8-33.1)
Sanilac	38.9	(28.5-50.3)
Tuscola	31.1	(23.4-40.1)
Region 11	32.3	(28.4-36.5)
Central Michigan	33.6	(28.8-38.7)
Midland	29.3	(22.8-36.8)
Region 12	31.9	(28.4-35.5)
Luce-Mackinac-Alger-Schoolcraft	37.9	(27.1-50.0)
Western Upper Peninsula	33.1	(26.2-40.8)
Delta-Menominee	32.4	(24.5-41.5)
Chippewa	32.9	(24.2-42.9)
Dickinson-Iron	29.0	(20.9-38.7)
Marquette	27.6	(21.1-35.2)

^a The proportion of adults who reported that they did not have a routine checkup in the past year.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

Table 14: Breast Cancer Screening Among Women Aged 40 Years and Older Michigan BRFSS, 2012 and 2014 Combined		
Geographic Area	Had Clinical Breast Exam and Mammogram in Past Year^a	
	%	95% Confidence Interval
Michigan Total	49.1	(47.8-50.5)
Region 1	47.4	(45.4-49.5)
Livingston	42.6	(33.5-52.3)
Macomb	46.7	(41.8-51.8)
Monroe	48.1	(37.4-58.9)
Oakland	50.8	(46.7-54.8)
St. Clair	48.5	(36.8-60.2)
Washtenaw	51.6	(44.5-58.6)
City of Detroit	43.1	(37.3-49.0)
Wayne exc. Detroit	47.5	(43.4-51.5)
Region 2	54.2	(48.7-59.6)
Genesee	55.5	(49.3-61.6)
Lapeer	45.8	(32.1-60.1)
Shiawassee	59.6	(43.4-74.0)
Region 3	53.9	(45.8-61.8)
Jackson	52.8	(43.2-62.3)
Lenawee	55.8	(41.5-69.1)
Region 4	53.4	(48.0-58.7)
Barry-Eaton	58.4	(49.0-67.2)
Mid-Michigan ^b	51.8	(42.7-60.8)
Ingham	48.6	(40.8-56.4)
Region 5	45.2	(39.8-50.7)
Branch-Hillsdale-St. Joseph	45.7	(36.1-55.7)
Calhoun	42.4	(32.0-53.7)
Kalamazoo	46.4	(38.4-54.6)
Region 6	41.6	(34.5-49.1)
Van Buren-Cass	35.0	(24.9-46.8)
Berrien	46.2	(36.8-55.9)
Region 7	54.5	(50.6-58.4)
Allegan	46.7	(34.4-59.4)
Ionia	-- ^c	-- ^c
Kent	57.1	(51.8-62.3)
Mid-Michigan ^b	51.8	(42.7-60.8)
Ottawa	55.4	(47.2-63.3)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 14 Cont'd		
Geographic Area	Had Clinical Breast Exam and Mammogram in Past Year^a	
	%	95% Confidence Interval
Michigan Total	49.1	(47.8-50.5)
Region 8	47.8	(42.0-53.6)
District #10	43.5	(36.5-50.7)
Muskegon	56.8	(47.0-66.1)
Region 9	48.7	(42.8-54.6)
District #2	46.8	(34.0-60.0)
District #4	49.7	(37.1-62.3)
Northwest Michigan	46.8	(36.0-58.0)
Benzie-Leelanau	51.4	(35.5-67.1)
Grand Traverse	51.2	(37.4-64.9)
Region 10	47.3	(41.5-53.2)
Bay	63.8	(51.1-74.9)
Huron	-- ^c	-- ^c
Saginaw	43.7	(35.1-52.8)
Sanilac	-- ^c	-- ^c
Tuscola	37.1	(25.0-51.0)
Region 11	57.0	(49.8-63.9)
Central Michigan	54.4	(46.0-62.6)
Midland	62.9	(49.5-74.6)
Region 12	50.9	(44.5-57.3)
Luce-Mackinac-Alger-Schoolcraft	-- ^c	-- ^c
Western Upper Peninsula	44.1	(31.0-58.1)
Delta-Menominee	55.1	(41.0-68.5)
Chippewa	-- ^c	-- ^c
Dickinson-Iron	-- ^c	-- ^c
Marquette	56.7	(42.0-70.3)

Note: Data included diagnostic tests.
^a Among women aged 40 years and older, the proportion who had both a clinical breast exam and mammogram in the previous year.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.
^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 15: Cervical Cancer Screening Among Women Aged 18 Years and Older Michigan BRFSS, 2012 and 2014 Combined		
Geographic Area	Had Appropriately Timed Pap Test^a	
	%	95% Confidence Interval
Michigan Total	77.2	(75.8-78.5)
Region 1	77.5	(75.5-79.4)
Livingston	74.1	(60.8-84.1)
Macomb	74.9	(69.7-79.5)
Monroe	83.9	(74.6-90.2)
Oakland	79.4	(75.4-82.9)
St. Clair	72.4	(59.6-82.3)
Washtenaw	76.2	(69.3-82.0)
City of Detroit	81.7	(76.4-86.0)
Wayne exc. Detroit	76.0	(71.4-80.2)
Region 2	77.4	(71.7-82.2)
Genesee	80.7	(74.4-85.8)
Lapeer	65.0	(48.3-78.6)
Shiawassee	-- ^c	-- ^c
Region 3	76.8	(67.0-84.3)
Jackson	71.6	(58.8-81.8)
Lenawee	-- ^c	-- ^c
Region 4	81.3	(75.5-86.0)
Barry-Eaton	82.7	(70.9-90.3)
Mid-Michigan ^b	82.2	(69.9-90.2)
Ingham	77.8	(68.8-84.8)
Region 5	74.3	(68.3-79.5)
Branch-Hillsdale-St. Joseph	73.1	(62.5-81.6)
Calhoun	66.6	(52.1-78.5)
Kalamazoo	79.2	(70.8-85.6)
Region 6	71.5	(63.3-78.5)
Van Buren-Cass	68.0	(53.7-79.6)
Berrien	74.0	(64.0-82.0)
Region 7	81.6	(77.5-85.2)
Allegan	-- ^c	-- ^c
Ionia	-- ^c	-- ^c
Kent	81.7	(76.2-86.1)
Mid-Michigan ^b	82.2	(69.9-90.2)
Ottawa	87.3	(80.9-91.8)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 15 Cont'd		
Geographic Area	Had Appropriately Timed Pap Test^a	
	%	95% Confidence Interval
Michigan Total	77.2	(75.8-78.5)
Region 8	74.7	(67.1-81.1)
District #10	71.1	(60.7-79.7)
Muskegon	80.0	(68.6-88.0)
Region 9	76.5	(69.7-82.2)
District #2	69.9	(50.9-83.9)
District #4	72.1	(56.3-83.8)
Northwest Michigan	79.4	(68.1-87.4)
Benzie-Leelanau	-- ^c	-- ^c
Grand Traverse	-- ^c	-- ^c
Region 10	72.3	(64.2-79.1)
Bay	73.7	(55.8-86.1)
Huron	-- ^c	-- ^c
Saginaw	75.2	(59.8-86.0)
Sanilac	-- ^c	-- ^c
Tuscola	-- ^c	-- ^c
Region 11	81.6	(74.1-87.3)
Central Michigan	79.7	(70.5-86.6)
Midland	-- ^c	-- ^c
Region 12	69.7	(61.0-77.1)
Luce-Mackinac-Alger-Schoolcraft	-- ^c	-- ^c
Western Upper Peninsula	66.6	(47.8-81.3)
Delta-Menominee	-- ^c	-- ^c
Chippewa	-- ^c	-- ^c
Dickinson-Iron	-- ^c	-- ^c
Marquette	65.5	(45.4-81.3)

Note: Data includes diagnostic tests and excludes women who have had a hysterectomy.

^a Among women aged 18 years and older, the proportion who had a Pap test within the previous three years.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 16: Prostate Cancer Screening Among Men Aged 50 Years and Older Michigan BRFSS, 2012 and 2014 Combined		
Geographic Area	Had PSA Test in Past Year^a	
	%	95% Confidence Interval
Michigan Total	46.3	(44.6-48.1)
Region 1	48.1	(45.2-50.9)
Livingston	40.7	(28.3-54.3)
Macomb	59.6	(52.6-66.3)
Monroe	56.4	(42.0-69.8)
Oakland	51.7	(46.8-56.7)
St. Clair	43.9	(31.6-56.9)
Washtenaw	34.2	(25.7-43.7)
City of Detroit	33.6	(26.0-42.1)
Wayne exc. Detroit	47.4	(41.4-53.5)
Region 2	49.5	(42.3-56.6)
Genesee	51.5	(43.0-59.9)
Lapeer	-- ^c	-- ^c
Shiawassee	-- ^c	-- ^c
Region 3	48.6	(37.7-59.6)
Jackson	50.7	(37.5-63.9)
Lenawee	-- ^c	-- ^c
Region 4	41.9	(35.5-48.7)
Barry-Eaton	40.1	(29.2-52.1)
Mid-Michigan ^b	40.3	(30.0-51.5)
Ingham	41.9	(32.3-52.1)
Region 5	43.8	(36.7-51.1)
Branch-Hillsdale-St. Joseph	41.0	(29.5-53.6)
Calhoun	42.9	(28.7-58.3)
Kalamazoo	46.8	(36.0-57.9)
Region 6	43.0	(32.6-54.0)
Van Buren-Cass	34.6	(21.3-50.8)
Berrien	53.1	(38.7-67.0)
Region 7	43.9	(38.5-49.5)
Allegan	31.6	(20.0-46.2)
Ionia	-- ^c	-- ^c
Kent	49.2	(41.5-57.0)
Mid-Michigan ^b	40.3	(30.0-51.5)
Ottawa	43.3	(32.4-55.0)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 16 Cont'd		
Geographic Area	Had PSA Test in Past Year^a	
	%	95% Confidence Interval
Michigan Total	46.3	(44.6-48.1)
Region 8	40.1	(33.7-46.9)
District #10	38.8	(30.8-47.4)
Muskegon	42.4	(31.9-53.6)
Region 9	49.4	(42.4-56.4)
District #2	48.3	(32.7-64.3)
District #4	45.4	(30.9-60.8)
Northwest Michigan	52.5	(39.1-65.5)
Benzie-Leelanau	-- ^c	-- ^c
Grand Traverse	55.2	(39.7-69.8)
Region 10	54.5	(46.4-62.5)
Bay	-- ^c	-- ^c
Huron	-- ^c	-- ^c
Saginaw	55.0	(42.1-67.2)
Sanilac	-- ^c	-- ^c
Tuscola	-- ^c	-- ^c
Region 11	34.0	(26.2-42.7)
Central Michigan	34.4	(24.5-45.8)
Midland	33.4	(21.8-47.3)
Region 12	46.7	(38.4-55.2)
Luce-Mackinac-Alger-Schoolcraft	-- ^c	-- ^c
Western Upper Peninsula	-- ^c	-- ^c
Delta-Menominee	-- ^c	-- ^c
Chippewa	-- ^c	-- ^c
Dickinson-Iron	-- ^c	-- ^c
Marquette	-- ^c	-- ^c

Note: Men who had been diagnosed with prostate cancer were excluded.
^a Among men aged 50 years and older, the proportion who reported having a PSA in the past year.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.
^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 17: Colorectal Cancer Screening Among Adults Aged 50 Years and Older Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Had Sigmoidoscopy in Past 5 Years or Colonoscopy in Past 10 Years^a	
	%	95% Confidence Interval
Michigan Total	68.6	(67.7-69.4)
Region 1	68.2	(66.8-69.6)
Livingston	68.1	(61.2-74.3)
Macomb	71.5	(68.2-74.7)
Monroe	66.7	(59.4-73.2)
Oakland	70.0	(67.4-72.6)
St. Clair	69.8	(62.8-75.9)
Washtenaw	74.4	(69.7-78.6)
City of Detroit	61.2	(56.4-65.7)
Wayne exc. Detroit	66.4	(63.6-69.2)
Region 2	70.0	(66.3-73.4)
Genesee	69.3	(64.9-73.4)
Lapeer	72.5	(63.5-79.9)
Shiawassee	70.0	(58.7-79.3)
Region 3	64.2	(58.7-69.3)
Jackson	69.3	(62.4-75.5)
Lenawee	55.6	(46.6-64.3)
Region 4	73.0	(69.7-76.1)
Barry-Eaton	75.1	(69.4-80.0)
Mid-Michigan ^b	69.2	(63.2-74.7)
Ingham	71.9	(66.7-76.6)
Region 5	67.4	(63.7-70.8)
Branch-Hillsdale-St. Joseph	58.9	(52.1-65.3)
Calhoun	67.3	(60.2-73.7)
Kalamazoo	74.5	(69.1-79.2)
Region 6	58.9	(53.5-64.2)
Van Buren-Cass	58.9	(50.4-67.0)
Berrien	58.9	(51.9-65.6)
Region 7	70.8	(68.2-73.3)
Allegan	63.5	(54.1-72.0)
Ionia	73.0	(62.4-81.5)
Kent	71.4	(67.8-74.7)
Mid-Michigan ^b	69.2	(63.2-74.7)
Ottawa	74.2	(68.7-79.1)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 17 Cont'd		
Geographic Area	Had Sigmoidoscopy in Past 5 Years or Colonoscopy in Past 10 Years^a	
	%	95% Confidence Interval
Michigan Total	68.6	(67.7-69.4)
Region 8	72.1	(68.7-75.3)
District #10	70.0	(65.7-74.1)
Muskegon	75.7	(70.1-80.5)
Region 9	68.3	(64.7-71.6)
District #2	62.5	(53.9-70.4)
District #4	67.0	(59.6-73.6)
Northwest Michigan	67.7	(60.8-73.8)
Benzie-Leelanau	74.2	(64.7-81.9)
Grand Traverse	74.1	(66.4-80.6)
Region 10	69.5	(65.3-73.5)
Bay	68.1	(58.7-76.2)
Huron	67.8	(53.1-79.7)
Saginaw	74.2	(67.5-79.9)
Sanilac	59.1	(46.6-70.5)
Tuscola	66.7	(56.0-75.9)
Region 11	66.4	(61.5-70.9)
Central Michigan	65.2	(59.4-70.6)
Midland	69.3	(60.2-77.1)
Region 12	68.2	(64.4-71.7)
Luce-Mackinac-Alger-Schoolcraft	72.8	(60.6-82.4)
Western Upper Peninsula	65.8	(57.4-73.4)
Delta-Menominee	67.2	(57.9-75.2)
Chippewa	65.5	(54.9-74.8)
Dickinson-Iron	59.4	(49.2-68.8)
Marquette	76.3	(68.4-82.7)
^a Among adults aged 50 years and older, the proportion who had a sigmoidoscopy within the past five years or a colonoscopy within the past ten years. ^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.		

Table 18: Oral Health Michigan BRFSS, 2012 and 2014 Combined				
Geographic Area	No Dental Visit in Past Year^a		Lost 6+ Teeth^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	31.7	(30.8-32.6)	15.6	(15.0-16.3)
Region 1	31.3	(29.9-32.7)	14.4	(13.5-15.4)
Livingston	21.1	(15.2-28.6)	9.1	(6.0-13.7)
Macomb	25.6	(22.7-28.8)	15.6	(13.2-18.2)
Monroe	28.4	(21.4-36.5)	14.7	(10.2-20.9)
Oakland	26.4	(23.9-29.0)	10.6	(9.1-12.4)
St. Clair	29.7	(23.1-37.3)	10.7	(6.8-16.3)
Washtenaw	23.7	(19.5-28.5)	8.6	(6.1-12.1)
City of Detroit	52.3	(48.2-56.4)	26.5	(23.2-30.2)
Wayne exc. Detroit	30.8	(28.0-33.7)	13.1	(11.4-15.0)
Region 2	32.1	(28.4-36.0)	18.9	(16.2-21.9)
Genesee	31.3	(27.0-35.9)	19.5	(16.2-23.1)
Lapeer	34.6	(25.4-45.2)	16.3	(10.8-23.8)
Shiawassee	33.4	(23.6-44.9)	19.3	(12.6-28.3)
Region 3	37.2	(31.3-43.4)	13.3	(10.2-17.3)
Jackson	34.2	(27.3-41.9)	14.6	(10.7-19.6)
Lenawee	42.2	(32.1-53.0)	11.2	(6.6-18.3)
Region 4	25.8	(22.5-29.4)	14.6	(12.3-17.2)
Barry-Eaton	28.7	(22.6-35.7)	19.7	(15.1-25.3)
Mid-Michigan ^c	25.6	(19.9-32.3)	15.3	(11.5-20.2)
Ingham	24.7	(20.1-29.9)	11.3	(8.4-14.9)
Region 5	32.7	(29.1-36.7)	17.6	(14.9-20.7)
Branch-Hillsdale-St. Joseph	36.0	(29.4-43.3)	21.5	(16.2-27.9)
Calhoun	34.6	(26.8-43.3)	21.4	(15.9-28.3)
Kalamazoo	29.4	(24.4-35.1)	12.8	(9.5-17.1)
Region 6	35.4	(30.0-41.1)	20.8	(16.6-25.7)
Van Buren-Cass	38.2	(30.2-46.8)	25.9	(19.1-34.0)
Berrien	32.8	(25.8-40.6)	16.2	(11.5-22.3)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 18 Cont'd				
Geographic Area	No Dental Visit in Past Year^a		Lost 6+ Teeth^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	31.7	(30.8-32.6)	15.6	(15.0-16.3)
Region 7	28.6	(26.0-31.5)	11.5	(10.0-13.3)
Allegan	37.5	(28.9-47.0)	12.8	(8.6-18.8)
Ionia	39.3	(28.9-50.6)	15.6	(9.8-24.0)
Kent	27.6	(24.0-31.5)	11.1	(9.1-13.5)
Mid-Michigan ^c	25.6	(19.9-32.3)	15.3	(11.5-20.2)
Ottawa	24.8	(19.9-30.6)	9.9	(7.0-13.9)
Region 8	38.6	(34.5-42.9)	22.3	(19.2-25.7)
District #10	39.4	(34.2-44.9)	22.6	(18.7-26.9)
Muskegon	37.2	(30.8-44.1)	21.8	(16.8-27.8)
Region 9	32.8	(28.7-37.1)	17.7	(14.7-21.1)
District #2	31.7	(23.6-41.0)	24.3	(17.6-32.5)
District #4	45.4	(36.3-54.8)	24.7	(17.0-34.4)
Northwest Michigan	30.7	(23.3-39.2)	16.5	(11.4-23.4)
Benzie-Leelanau	26.1	(16.3-39.1)	13.6	(7.7-23.1)
Grand Traverse	24.9	(17.4-34.3)	5.7	(3.3-9.6)
Region 10	31.0	(26.7-35.8)	16.9	(13.9-20.4)
Bay	27.1	(19.4-36.5)	10.7	(6.3-17.7)
Huron	41.2	(26.4-57.8)	21.9	(11.9-36.8)
Saginaw	28.1	(21.4-36.0)	19.3	(14.5-25.2)
Sanilac	31.2	(20.0-45.0)	17.9	(9.8-30.6)
Tuscola	40.0	(29.3-51.9)	16.1	(10.1-24.7)
Region 11	36.2	(31.2-41.6)	23.1	(18.9-27.9)
Central Michigan	39.3	(33.1-45.9)	25.5	(20.2-31.5)
Midland	28.7	(20.6-38.3)	17.2	(11.4-25.2)
Region 12	33.0	(28.4-37.9)	16.8	(13.7-20.3)
Luce-Mackinac-Alger-Schoolcraft	44.8	(29.8-60.7)	-- ^d	-- ^d
Western Upper Peninsula	35.1	(25.8-45.6)	14.5	(9.6-21.4)
Delta-Menominee	31.9	(22.5-43.0)	13.7	(8.7-21.0)
Chippewa	27.6	(18.0-39.9)	20.0	(11.9-31.6)
Dickinson-Iron	34.3	(23.2-47.5)	22.6	(14.6-33.3)
Marquette	26.9	(18.4-37.4)	16.2	(10.3-24.6)

^a The proportion of adults who reported that they did not visit a dentist or dental clinic for any reason in the previous year.
^b The proportion of adults who reported that they were missing 6+ teeth due to tooth decay or gum disease. This excludes teeth lost for other reasons, such as injury or orthodontics.
^c The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.
^d Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 19: Immunizations Among Adults 65 Years and Older Michigan BRFSS, 2012-2014 Combined				
Geographic Area	Had Flu Vaccine in Past Year^a		Ever Had Pneumonia Vaccine^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	56.6	(55.4-57.9)	68.2	(67.0-69.4)
Region 1	54.8	(52.8-56.7)	66.0	(64.0-67.9)
Livingston	59.7	(49.2-69.3)	62.8	(52.3-72.2)
Macomb	56.2	(51.6-60.7)	71.2	(66.9-75.3)
Monroe	62.4	(53.3-70.8)	67.5	(58.3-75.6)
Oakland	57.9	(54.1-61.6)	67.5	(63.8-71.0)
St. Clair	43.9	(34.7-53.6)	60.6	(50.6-69.8)
Washtenaw	63.5	(55.4-70.9)	79.9	(71.9-86.0)
City of Detroit	40.4	(34.5-46.6)	49.5	(43.1-55.9)
Wayne exc. Detroit	56.0	(52.0-59.9)	66.8	(62.7-70.7)
Region 2	55.0	(49.9-60.0)	66.2	(61.1-71.0)
Genesee	55.1	(49.3-60.9)	66.8	(60.9-72.3)
Lapeer	51.9	(38.2-65.3)	68.6	(54.6-80.0)
Shiawassee	57.7	(43.1-71.1)	60.0	(43.8-74.2)
Region 3	63.3	(56.5-69.6)	70.5	(63.6-76.5)
Jackson	65.4	(56.8-73.2)	73.5	(64.8-80.7)
Lenawee	60.0	(48.9-70.2)	66.0	(54.5-75.9)
Region 4	60.5	(55.8-65.0)	70.6	(66.0-74.8)
Barry-Eaton	67.1	(59.2-74.1)	79.5	(72.4-85.1)
Mid-Michigan ^c	51.8	(43.8-59.6)	64.1	(55.8-71.6)
Ingham	61.0	(53.8-67.7)	66.7	(59.3-73.2)
Region 5	57.7	(52.5-62.7)	73.2	(68.2-77.6)
Branch-Hillsdale-St. Joseph	48.1	(39.2-57.1)	66.3	(56.9-74.5)
Calhoun	67.1	(57.5-75.4)	75.5	(65.9-83.1)
Kalamazoo	58.7	(50.6-66.4)	76.9	(69.1-83.2)
Region 6	55.0	(47.7-62.1)	65.7	(57.9-72.8)
Van Buren-Cass	55.1	(43.7-66.0)	69.3	(57.5-78.9)
Berrien	54.8	(45.4-64.0)	62.9	(52.4-72.4)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 19 Cont'd				
Geographic Area	Had Flu Vaccine in Past Year^a		Ever Had Pneumonia Vaccine^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	56.6	(55.4-57.9)	68.2	(67.0-69.4)
Region 7	60.4	(56.8-64.0)	73.5	(70.0-76.8)
Allegan	70.3	(59.5-79.3)	72.1	(59.6-82.0)
Ionia	60.6	(46.1-73.4)	69.5	(54.8-81.1)
Kent	61.2	(56.0-66.2)	76.7	(71.8-81.1)
Mid-Michigan ^c	51.8	(43.8-59.6)	64.1	(55.8-71.6)
Ottawa	56.5	(49.3-63.5)	72.4	(65.4-78.4)
Region 8	59.4	(54.4-64.2)	72.4	(67.5-76.7)
District #10	58.1	(51.9-64.1)	68.7	(62.5-74.4)
Muskegon	62.2	(53.8-69.8)	80.4	(73.2-85.9)
Region 9	58.0	(53.2-62.6)	72.5	(67.6-76.8)
District #2	46.7	(36.9-56.8)	70.9	(60.4-79.6)
District #4	59.5	(49.2-69.0)	72.6	(62.1-81.1)
Northwest Michigan	65.7	(57.0-73.5)	72.6	(62.2-81.0)
Benzie-Leelanau	54.6	(42.5-66.1)	62.4	(49.6-73.7)
Grand Traverse	64.5	(51.7-75.5)	-- ^d	-- ^d
Region 10	55.0	(49.2-60.8)	63.8	(57.8-69.4)
Bay	49.9	(37.1-62.7)	64.9	(51.6-76.2)
Huron	-- ^d	-- ^d	-- ^d	-- ^d
Saginaw	53.4	(44.6-62.0)	62.3	(52.9-70.9)
Sanilac	-- ^d	-- ^d	-- ^d	-- ^d
Tuscola	64.8	(49.8-77.4)	66.7	(51.8-78.9)
Region 11	52.1	(46.1-58.1)	67.9	(62.1-73.2)
Central Michigan	52.9	(45.8-59.9)	66.4	(59.6-72.6)
Midland	50.1	(39.0-61.1)	72.1	(60.3-81.4)
Region 12	61.2	(56.1-66.0)	68.4	(63.4-73.0)
Luce-Mackinac-Alger-Schoolcraft	45.2	(32.2-58.8)	67.4	(52.8-79.3)
Western Upper Peninsula	63.5	(53.3-72.7)	62.6	(51.9-72.2)
Delta-Menominee	62.9	(49.6-74.6)	68.7	(54.9-79.7)
Chippewa	51.8	(37.6-65.7)	61.5	(46.7-74.5)
Dickinson-Iron	57.0	(43.6-69.5)	72.6	(59.9-82.5)
Marquette	75.2	(65.1-83.2)	76.6	(65.7-84.8)

^a Among adults aged 65 years and older, the proportion who reported that they had a flu vaccine, either by an injection in the arm or sprayed in the nose during the past 12 months.

^b Among adults aged 65 years and older, the proportion who reported that they ever had a pneumococcal vaccine.

^c The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^d Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 20: HIV Testing Among Adults Aged 18-64 Years Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Ever Had an HIV Test^a	
	%	95% Confidence Interval
Michigan Total	40.6	(39.7-41.5)
Region 1	44.7	(43.3-46.1)
Livingston	37.5	(31.1-44.4)
Macomb	39.3	(36.1-42.7)
Monroe	33.9	(26.6-42.0)
Oakland	42.8	(40.1-45.6)
St. Clair	34.7	(27.9-42.2)
Washtenaw	41.0	(36.5-45.7)
City of Detroit	68.6	(64.8-72.1)
Wayne exc. Detroit	41.4	(38.6-44.3)
Region 2	43.1	(39.3-47.0)
Genesee	46.3	(41.7-50.9)
Lapeer	33.0	(24.2-43.0)
Shiawassee	38.1	(28.9-48.3)
Region 3	35.0	(29.8-40.5)
Jackson	35.6	(29.3-42.5)
Lenawee	33.8	(25.3-43.5)
Region 4	38.9	(35.4-42.4)
Barry-Eaton	38.5	(32.4-45.0)
Mid-Michigan ^b	36.0	(29.3-43.2)
Ingham	40.7	(35.8-45.7)
Region 5	38.8	(35.1-42.6)
Branch-Hillsdale-St. Joseph	30.4	(24.4-37.2)
Calhoun	47.7	(39.3-56.2)
Kalamazoo	39.8	(34.6-45.2)
Region 6	40.3	(35.1-45.8)
Van Buren-Cass	38.9	(31.1-47.3)
Berrien	41.6	(34.7-48.7)
Region 7	36.5	(34.0-39.1)
Allegan	35.4	(28.3-43.1)
Ionia	33.3	(24.1-43.9)
Kent	40.2	(36.9-43.7)
Mid-Michigan ^b	36.0	(29.3-43.2)
Ottawa	28.9	(24.2-34.1)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 20 Cont'd		
Geographic Area	Ever Had an HIV Test^a	
	%	95% Confidence Interval
Michigan Total	40.6	(39.7-41.5)
Region 8	38.3	(34.3-42.6)
District #10	35.2	(30.1-40.7)
Muskegon	43.0	(36.6-49.6)
Region 9	32.7	(29.0-36.8)
District #2	28.2	(19.6-38.7)
District #4	29.8	(22.1-38.8)
Northwest Michigan	34.4	(27.3-42.4)
Benzie-Leelanau	38.3	(27.1-50.8)
Grand Traverse	35.5	(28.4-43.3)
Region 10	34.0	(29.7-38.6)
Bay	29.2	(21.2-38.7)
Huron	21.8	(11.5-37.3)
Saginaw	40.6	(33.7-47.8)
Sanilac	22.5	(13.3-35.4)
Tuscola	35.4	(25.3-47.0)
Region 11	34.7	(29.8-39.8)
Central Michigan	34.9	(29.0-41.2)
Midland	34.1	(26.0-43.3)
Region 12	31.1	(27.0-35.5)
Luce-Mackinac-Alger-Schoolcraft	24.6	(15.2-37.2)
Western Upper Peninsula	28.5	(20.7-37.8)
Delta-Menominee	30.4	(21.3-41.3)
Chippewa	42.4	(31.2-54.3)
Dickinson-Iron	29.7	(19.1-43.0)
Marquette	34.5	(25.8-44.3)

Note: "Don't know" was considered a valid response.

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

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 21: Asthma Michigan BRFSS, 2012-2014 Combined				
Geographic Area	Ever Told Asthma^a		Current Asthma^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	15.8	(15.3-16.4)	11.0	(10.5-11.4)
Region 1	17.0	(16.1-17.9)	11.8	(11.0-12.6)
Livingston	10.3	(7.7-13.7)	7.0	(4.9-10.0)
Macomb	17.2	(15.1-19.6)	11.4	(9.7-13.5)
Monroe	14.0	(9.7-19.9)	11.3	(7.3-16.9)
Oakland	15.8	(14.2-17.6)	10.7	(9.4-12.3)
St. Clair	16.6	(11.9-22.5)	13.1	(9.2-18.5)
Washtenaw	20.3	(17.2-23.9)	13.4	(10.7-16.6)
City of Detroit	20.1	(17.6-22.9)	15.5	(13.2-18.1)
Wayne exc. Detroit	16.1	(14.4-18.0)	11.2	(9.7-12.8)
Region 2	15.2	(13.1-17.6)	11.5	(9.7-13.7)
Genesee	14.8	(12.4-17.6)	10.7	(8.7-13.1)
Lapeer	15.1	(10.3-21.6)	12.3	(8.0-18.5)
Shiawassee	17.5	(11.7-25.4)	15.4	(9.9-23.1)
Region 3	18.7	(15.2-22.9)	11.4	(8.7-14.7)
Jackson	22.5	(17.7-28.1)	13.9	(10.3-18.4)
Lenawee	12.1	(8.0-17.9)	7.0	(3.9-12.3)
Region 4	16.0	(13.9-18.3)	10.6	(8.9-12.5)
Barry-Eaton	14.0	(10.9-17.8)	10.5	(7.9-13.8)
Mid-Michigan ^c	13.7	(10.4-17.9)	7.6	(5.5-10.5)
Ingham	17.5	(14.4-21.1)	11.8	(9.2-14.9)
Region 5	15.3	(13.2-17.6)	10.6	(8.8-12.6)
Branch-Hillsdale-St. Joseph	12.5	(9.2-16.9)	8.4	(5.6-12.4)
Calhoun	16.2	(12.1-21.4)	10.7	(7.5-15.1)
Kalamazoo	16.6	(13.5-20.3)	12.0	(9.4-15.3)
Region 6	13.7	(11.1-16.8)	9.8	(7.6-12.6)
Van Buren-Cass	12.7	(8.8-17.8)	8.7	(5.6-13.5)
Berrien	14.6	(11.3-18.7)	10.7	(7.9-14.3)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 21 Cont'd				
Geographic Area	Ever Told Asthma^a		Current Asthma^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	15.8	(15.3-16.4)	11.0	(10.5-11.4)
Region 7	14.0	(12.6-15.5)	9.6	(8.5-10.9)
Allegan	14.0	(9.9-19.4)	11.5	(7.7-16.8)
Ionia	16.0	(10.8-23.1)	11.4	(7.1-17.9)
Kent	14.2	(12.3-16.3)	9.7	(8.2-11.4)
Mid-Michigan ^c	13.7	(10.4-17.9)	7.6	(5.5-10.5)
Ottawa	13.8	(11.1-17.1)	8.9	(6.7-11.6)
Region 8	15.6	(13.0-18.5)	12.7	(10.3-15.6)
District #10	13.1	(10.3-16.5)	10.7	(8.1-14.0)
Muskegon	19.5	(15.0-25.0)	16.0	(11.7-21.5)
Region 9	12.6	(10.5-15.0)	9.3	(7.4-11.5)
District #2	16.5	(10.8-24.3)	12.9	(7.7-20.8)
District #4	12.2	(8.4-17.5)	8.7	(5.7-13.2)
Northwest Michigan	11.9	(8.8-15.8)	8.7	(6.1-12.2)
Benzie-Leelanau	9.8	(6.0-15.5)	6.1	(3.3-10.7)
Grand Traverse	11.2	(7.4-16.7)	8.5	(5.1-14.0)
Region 10	11.6	(9.6-14.1)	6.6	(5.1-8.5)
Bay	13.3	(9.0-19.3)	8.7	(5.2-14.2)
Huron	-- ^d	-- ^d	-- ^d	-- ^d
Saginaw	14.0	(10.6-18.1)	7.4	(5.2-10.5)
Sanilac	-- ^d	-- ^d	-- ^d	-- ^d
Tuscola	8.9	(5.1-15.1)	-- ^d	-- ^d
Region 11	16.7	(13.7-20.2)	10.5	(8.2-13.2)
Central Michigan	16.8	(13.4-21.0)	11.1	(8.4-14.5)
Midland	16.5	(11.3-23.4)	8.9	(5.6-14.0)
Region 12	17.5	(14.7-20.8)	11.8	(9.6-14.5)
Luce-Mackinac-Alger-Schoolcraft	12.6	(7.1-21.4)	-- ^d	-- ^d
Western Upper Peninsula	15.6	(10.6-22.4)	13.0	(8.3-19.9)
Delta-Menominee	21.8	(13.7-32.8)	14.2	(8.7-22.3)
Chippewa	15.8	(10.5-23.2)	8.4	(4.8-14.3)
Dickinson-Iron	15.2	(10.2-22.1)	8.2	(4.6-14.2)
Marquette	20.5	(15.3-27.0)	12.9	(8.9-18.3)

^a The proportion of adults who reported that they were ever told by a doctor, nurse, or other health care professional that they had asthma.

^b Among all adults, the proportion who reported that they still had asthma.

^c The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^d Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 22: Chronic Obstructive Pulmonary Disease (COPD) Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Ever Told COPD, Emphysema, or Chronic Bronchitis^a	
	%	95% Confidence Interval
Michigan Total	8.3	(7.9-8.8)
Region 1	8.5	(7.9-9.2)
Livingston	3.6	(2.3-5.7)
Macomb	10.0	(8.4-11.8)
Monroe	17.7	(12.9-23.9)
Oakland	6.6	(5.5-7.8)
St. Clair	12.0	(8.3-17.2)
Washtenaw	4.0	(2.9-5.5)
City of Detroit	12.1	(10.1-14.5)
Wayne exc. Detroit	8.5	(7.4-9.7)
Region 2	10.4	(8.7-12.4)
Genesee	10.6	(8.6-13.0)
Lapeer	9.6	(5.9-15.3)
Shiawassee	10.3	(6.0-17.0)
Region 3	9.4	(7.3-11.9)
Jackson	11.2	(8.5-14.8)
Lenawee	6.0	(3.8-9.3)
Region 4	6.4	(5.3-7.8)
Barry-Eaton	8.6	(6.3-11.6)
Mid-Michigan ^b	7.2	(5.1-10.0)
Ingham	5.5	(4.1-7.3)
Region 5	7.7	(6.3-9.4)
Branch-Hillsdale-St. Joseph	8.2	(6.0-11.1)
Calhoun	9.2	(6.0-13.7)
Kalamazoo	6.6	(4.8-9.1)
Region 6	8.5	(6.5-11.1)
Van Buren-Cass	9.4	(6.1-14.2)
Berrien	7.8	(5.6-10.8)
Region 7	6.6	(5.6-7.7)
Allegan	9.3	(6.4-13.3)
Ionia	7.9	(4.6-13.2)
Kent	6.4	(5.1-7.9)
Mid-Michigan ^b	7.2	(5.1-10.0)
Ottawa	4.7	(3.0-7.3)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 22 Cont'd		
Geographic Area	Ever Told COPD, Emphysema, or Chronic Bronchitis^a	
	%	95% Confidence Interval
Michigan Total	8.3	(7.9-8.8)
Region 8	9.5	(7.6-11.8)
District #10	8.9	(6.9-11.4)
Muskegon	10.4	(7.0-15.3)
Region 9	9.5	(7.7-11.7)
District #2	13.7	(8.6-21.2)
District #4	13.8	(9.4-19.8)
Northwest Michigan	8.3	(5.8-11.6)
Benzie-Leelanau	6.3	(3.5-11.1)
Grand Traverse	3.8	(2.4-6.0)
Region 10	8.6	(6.8-10.7)
Bay	6.3	(4.0-10.0)
Huron	-- ^c	-- ^c
Saginaw	9.3	(6.5-13.0)
Sanilac	-- ^c	-- ^c
Tuscola	12.1	(6.9-20.4)
Region 11	9.4	(7.4-11.8)
Central Michigan	9.6	(7.4-12.3)
Midland	9.0	(5.3-14.9)
Region 12	7.8	(6.2-9.6)
Luce-Mackinac-Alger-Schoolcraft	-- ^c	-- ^c
Western Upper Peninsula	-- ^c	-- ^c
Delta-Menominee	8.7	(5.2-14.4)
Chippewa	13.3	(8.4-20.3)
Dickinson-Iron	9.5	(5.9-14.9)
Marquette	8.1	(5.2-12.4)

^a Among all adults, the proportion who reported ever being told by a doctor that they had chronic obstructive pulmonary disease (COPD), emphysema or chronic bronchitis.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 23: Arthritis		
Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Ever Told Arthritis^a	
	%	95% Confidence Interval
Michigan Total	31.7	(31.0-32.3)
Region 1	29.3	(28.3-30.3)
Livingston	28.3	(23.8-33.3)
Macomb	29.8	(27.4-32.2)
Monroe	41.0	(34.9-47.4)
Oakland	27.7	(25.9-29.6)
St. Clair	32.0	(26.9-37.4)
Washtenaw	23.7	(20.8-26.9)
City of Detroit	32.4	(29.4-35.4)
Wayne exc. Detroit	31.7	(29.7-33.8)
Region 2	39.1	(36.2-42.1)
Genesee	39.3	(35.8-42.9)
Lapeer	36.9	(29.9-44.6)
Shiawassee	41.1	(33.2-49.5)
Region 3	33.7	(29.7-38.0)
Jackson	33.3	(28.5-38.6)
Lenawee	34.3	(27.5-41.9)
Region 4	30.7	(28.3-33.3)
Barry-Eaton	35.3	(30.7-40.1)
Mid-Michigan ^b	34.8	(30.1-39.8)
Ingham	27.1	(23.8-30.7)
Region 5	30.9	(28.3-33.6)
Branch-Hillsdale-St. Joseph	33.9	(29.2-39.0)
Calhoun	29.5	(24.3-35.2)
Kalamazoo	29.6	(26.0-33.4)
Region 6	33.0	(29.3-36.9)
Van Buren-Cass	32.4	(26.9-38.5)
Berrien	33.4	(28.6-38.7)
Region 7	27.8	(26.0-29.6)
Allegan	26.8	(21.8-32.6)
Ionia	33.7	(26.5-41.9)
Kent	26.5	(24.1-28.9)
Mid-Michigan ^b	34.8	(30.1-39.8)
Ottawa	26.8	(23.2-30.8)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 23 Cont'd		
Geographic Area	Ever Told Arthritis^a	
	%	95% Confidence Interval
Michigan Total	31.7	(31.0-32.3)
Region 8	38.4	(35.4-41.6)
District #10	39.2	(35.2-43.2)
Muskegon	37.3	(32.5-42.3)
Region 9	37.1	(34.2-40.2)
District #2	42.3	(35.4-49.5)
District #4	39.7	(33.0-46.8)
Northwest Michigan	36.9	(31.3-43.0)
Benzie-Leelanau	36.8	(29.4-45.0)
Grand Traverse	29.5	(24.1-35.6)
Region 10	35.3	(32.0-38.7)
Bay	32.3	(25.6-39.8)
Huron	45.4	(33.7-57.6)
Saginaw	34.3	(29.3-39.8)
Sanilac	34.3	(25.2-44.6)
Tuscola	38.1	(30.0-46.8)
Region 11	40.9	(37.0-44.9)
Central Michigan	43.1	(38.3-48.0)
Midland	35.3	(29.0-42.3)
Region 12	37.3	(34.0-40.7)
Luce-Mackinac-Alger-Schoolcraft	34.3	(25.5-44.4)
Western Upper Peninsula	35.8	(29.2-42.9)
Delta-Menominee	39.8	(31.5-48.6)
Chippewa	41.7	(33.3-50.6)
Dickinson-Iron	46.3	(37.2-55.6)
Marquette	30.9	(24.8-37.8)

^a Among all adults, the proportion who reported ever being told by a health care professional that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates

Table 24: Heart Attack Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Ever Told Heart Attack^a	
	%	95% Confidence Interval
Michigan Total	5.2	(4.9-5.5)
Region 1	4.7	(4.3-5.2)
Livingston	2.9	(1.8-4.9)
Macomb	5.3	(4.3-6.4)
Monroe	6.0	(3.9-9.0)
Oakland	4.0	(3.3-4.8)
St. Clair	4.7	(3.1-7.2)
Washtenaw	3.8	(2.7-5.3)
City of Detroit	5.3	(4.1-6.9)
Wayne exc. Detroit	5.5	(4.6-6.7)
Region 2	6.1	(4.8-7.7)
Genesee	5.9	(4.5-7.7)
Lapeer	-- ^c	-- ^c
Shiawassee	-- ^c	-- ^c
Region 3	6.2	(4.6-8.3)
Jackson	6.0	(4.2-8.5)
Lenawee	6.6	(4.0-10.7)
Region 4	4.1	(3.3-5.2)
Barry-Eaton	6.7	(4.6-9.7)
Mid-Michigan ^b	3.1	(2.1-4.7)
Ingham	3.4	(2.4-4.8)
Region 5	5.7	(4.6-7.2)
Branch-Hillsdale-St. Joseph	5.6	(3.9-8.1)
Calhoun	7.4	(5.0-10.9)
Kalamazoo	4.9	(3.3-7.1)
Region 6	5.5	(4.0-7.5)
Van Buren-Cass	5.2	(3.0-8.8)
Berrien	5.8	(4.0-8.3)
Region 7	3.7	(3.1-4.4)
Allegan	3.5	(1.9-6.1)
Ionia	-- ^c	-- ^c
Kent	3.6	(2.8-4.6)
Mid-Michigan ^b	3.1	(2.1-4.7)
Ottawa	3.6	(2.5-5.1)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 24 Cont'd		
Geographic Area	Ever Told Heart Attack^a	
	%	95% Confidence Interval
Michigan Total	5.2	(4.9-5.5)
Region 8	6.9	(5.5-8.5)
District #10	7.4	(5.7-9.5)
Muskegon	6.0	(4.0-8.9)
Region 9	6.1	(4.9-7.7)
District #2	8.0	(5.3-11.8)
District #4	9.6	(6.0-15.0)
Northwest Michigan	3.8	(2.4-5.8)
Benzie-Leelanau	-- ^c	-- ^c
Grand Traverse	2.9	(1.7-5.0)
Region 10	6.3	(4.9-8.3)
Bay	3.7	(2.0-6.5)
Huron	-- ^c	-- ^c
Saginaw	7.4	(4.9-11.0)
Sanilac	-- ^c	-- ^c
Tuscola	8.0	(4.5-13.9)
Region 11	9.2	(7.0-11.9)
Central Michigan	8.3	(5.9-11.6)
Midland	11.1	(7.1-16.9)
Region 12	6.6	(5.2-8.3)
Luce-Mackinac-Alger-Schoolcraft	2.6	(1.6-4.3)
Western Upper Peninsula	7.3	(4.6-11.4)
Delta-Menominee	-- ^c	-- ^c
Chippewa	6.3	(3.6-10.9)
Dickinson-Iron	9.6	(5.6-15.8)
Marquette	7.6	(4.7-12.1)
^a Among all adults, the proportion who had ever been told by a doctor that they had a heart attack or myocardial infarction. ^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates. ^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.		

Table 25: Angina or Coronary Heart Disease Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Ever Told Angina or Coronary Heart Disease^a	
	%	95% Confidence Interval
Michigan Total	5.2	(4.9-5.5)
Region 1	4.7	(4.3-5.1)
Livingston	2.1	(1.3-3.4)
Macomb	5.9	(4.9-7.2)
Monroe	7.0	(4.7-10.1)
Oakland	4.7	(4.0-5.6)
St. Clair	4.4	(3.0-6.5)
Washtenaw	4.3	(3.1-6.0)
City of Detroit	4.6	(3.6-5.8)
Wayne exc. Detroit	4.4	(3.7-5.2)
Region 2	5.4	(4.3-6.8)
Genesee	5.8	(4.4-7.5)
Lapeer	-- ^c	-- ^c
Shiawassee	6.0	(3.3-10.7)
Region 3	6.0	(4.5-8.0)
Jackson	6.3	(4.4-8.8)
Lenawee	5.6	(3.3-9.4)
Region 4	4.6	(3.7-5.8)
Barry-Eaton	5.6	(3.7-8.5)
Mid-Michigan ^b	5.7	(3.9-8.2)
Ingham	3.7	(2.7-5.2)
Region 5	5.6	(4.5-7.0)
Branch-Hillsdale-St. Joseph	4.7	(3.1-7.2)
Calhoun	7.3	(4.9-10.8)
Kalamazoo	5.3	(3.7-7.5)
Region 6	6.9	(5.1-9.3)
Van Buren-Cass	7.0	(4.5-10.8)
Berrien	6.9	(4.6-10.2)
Region 7	4.0	(3.4-4.8)
Allegan	4.2	(2.5-7.0)
Ionia	-- ^c	-- ^c
Kent	3.8	(3.0-4.8)
Mid-Michigan ^b	5.7	(3.9-8.2)
Ottawa	3.6	(2.3-5.7)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 25 Cont'd		
Geographic Area	Ever Told Angina or Coronary Heart Disease^a	
	%	95% Confidence Interval
Michigan Total	5.2	(4.9-5.5)
Region 8	5.7	(4.5-7.2)
District #10	6.6	(5.0-8.6)
Muskegon	4.3	(2.8-6.7)
Region 9	6.0	(4.8-7.5)
District #2	6.5	(4.3-9.9)
District #4	9.0	(5.5-14.3)
Northwest Michigan	5.6	(3.7-8.5)
Benzie-Leelanau	-- ^c	-- ^c
Grand Traverse	3.7	(2.2-6.1)
Region 10	6.4	(5.0-8.3)
Bay	6.9	(4.1-11.4)
Huron	-- ^c	-- ^c
Saginaw	6.6	(4.4-9.9)
Sanilac	-- ^c	-- ^c
Tuscola	8.1	(4.6-14.0)
Region 11	10.8	(8.4-13.7)
Central Michigan	10.5	(7.7-14.1)
Midland	11.5	(7.5-17.2)
Region 12	6.7	(5.5-8.3)
Luce-Mackinac-Alger-Schoolcraft	-- ^c	-- ^c
Western Upper Peninsula	7.0	(4.6-10.5)
Delta-Menominee	4.9	(2.7-8.5)
Chippewa	9.9	(5.7-16.5)
Dickinson-Iron	9.2	(5.5-14.8)
Marquette	7.0	(4.4-11.0)

^a Among all adults, the proportion who had ever been told by a doctor that they had angina or coronary heart disease.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.
^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 26: Stroke		
Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Ever Told Stroke^a	
	%	95% Confidence Interval
Michigan Total	3.4	(3.2-3.7)
Region 1	3.6	(3.2-4.0)
Livingston	-- ^c	-- ^c
Macomb	4.7	(3.7-6.0)
Monroe	3.9	(2.4-6.4)
Oakland	3.2	(2.5-4.1)
St. Clair	-- ^c	-- ^c
Washtenaw	2.3	(1.4-3.7)
City of Detroit	5.1	(4.0-6.5)
Wayne exc. Detroit	3.1	(2.5-3.9)
Region 2	3.8	(2.8-5.0)
Genesee	3.9	(2.7-5.5)
Lapeer	-- ^c	-- ^c
Shiawassee	-- ^c	-- ^c
Region 3	3.6	(2.4-5.4)
Jackson	4.4	(2.8-6.9)
Lenawee	-- ^c	-- ^c
Region 4	3.0	(2.2-4.1)
Barry-Eaton	5.3	(3.3-8.5)
Mid-Michigan ^b	2.7	(1.5-4.6)
Ingham	2.1	(1.3-3.3)
Region 5	3.4	(2.6-4.4)
Branch-Hillsdale-St. Joseph	3.2	(2.1-5.0)
Calhoun	4.5	(2.6-7.7)
Kalamazoo	2.9	(1.9-4.4)
Region 6	4.6	(3.0-7.0)
Van Buren-Cass	-- ^c	-- ^c
Berrien	4.5	(3.0-6.8)
Region 7	2.5	(1.9-3.2)
Allegan	-- ^c	-- ^c
Ionia	-- ^c	-- ^c
Kent	2.3	(1.6-3.2)
Mid-Michigan ^b	2.7	(1.5-4.6)
Ottawa	-- ^c	-- ^c

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 26 Cont'd		
Geographic Area	Ever Told Stroke^a	
	%	95% Confidence Interval
Michigan Total	3.4	(3.2-3.7)
Region 8	4.1	(3.1-5.4)
District #10	4.4	(3.1-6.3)
Muskegon	3.6	(2.3-5.6)
Region 9	2.7	(2.0-3.6)
District #2	3.3	(1.7-6.0)
District #4	3.5	(2.1-5.6)
Northwest Michigan	-- ^c	-- ^c
Benzie-Leelanau	-- ^c	-- ^c
Grand Traverse	-- ^c	-- ^c
Region 10	3.4	(2.3-4.9)
Bay	-- ^c	-- ^c
Huron	-- ^c	-- ^c
Saginaw	5.0	(3.0-8.2)
Sanilac	-- ^c	-- ^c
Tuscola	-- ^c	-- ^c
Region 11	3.7	(2.6-5.2)
Central Michigan	3.6	(2.4-5.3)
Midland	-- ^c	-- ^c
Region 12	3.1	(2.3-4.3)
Luce-Mackinac-Alger-Schoolcraft	-- ^c	-- ^c
Western Upper Peninsula	4.3	(2.4-7.3)
Delta-Menominee	-- ^c	-- ^c
Chippewa	-- ^c	-- ^c
Dickinson-Iron	-- ^c	-- ^c
Marquette	-- ^c	-- ^c

^a Among all adults, the proportion who had ever been told by a doctor that they had a stroke.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.
^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 27: Cardiovascular Disease Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Ever Told Any Cardiovascular Disease^a	
	%	95% Confidence Interval
Michigan Total	10.0	(9.6-10.4)
Region 1	9.6	(9.0-10.2)
Livingston	5.4	(3.7-7.7)
Macomb	10.8	(9.3-12.4)
Monroe	11.6	(8.7-15.4)
Oakland	9.1	(8.0-10.3)
St. Clair	8.8	(6.4-11.9)
Washtenaw	7.3	(5.6-9.3)
City of Detroit	11.5	(9.8-13.6)
Wayne exc. Detroit	10.1	(8.9-11.5)
Region 2	10.6	(9.0-12.6)
Genesee	10.7	(8.8-13.0)
Lapeer	9.8	(6.3-14.8)
Shiawassee	11.3	(6.9-18.0)
Region 3	10.8	(8.7-13.4)
Jackson	10.8	(8.3-14.0)
Lenawee	10.8	(7.3-15.6)
Region 4	8.2	(6.9-9.7)
Barry-Eaton	12.2	(9.2-16.0)
Mid-Michigan ^b	8.7	(6.4-11.6)
Ingham	6.3	(4.9-8.0)
Region 5	10.7	(9.1-12.5)
Branch-Hillsdale-St. Joseph	9.7	(7.3-12.8)
Calhoun	13.9	(10.3-18.4)
Kalamazoo	9.5	(7.4-12.2)
Region 6	12.2	(9.6-15.3)
Van Buren-Cass	12.7	(8.8-18.2)
Berrien	11.7	(8.7-15.4)
Region 7	7.5	(6.6-8.6)
Allegan	6.7	(4.5-9.8)
Ionia	8.2	(5.0-13.0)
Kent	7.4	(6.2-8.7)
Mid-Michigan ^b	8.7	(6.4-11.6)
Ottawa	7.1	(5.2-9.6)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 27 Cont'd		
Geographic Area	Ever Told Any Cardiovascular Disease^a	
	%	95% Confidence Interval
Michigan Total	10.0	(9.6-10.4)
Region 8	11.8	(10.0-13.9)
District #10	13.4	(11.1-16.2)
Muskegon	9.2	(6.7-12.4)
Region 9	10.6	(9.0-12.4)
District #2	13.5	(9.9-18.0)
District #4	15.1	(10.8-20.7)
Northwest Michigan	8.8	(6.3-12.2)
Benzie-Leelanau	9.8	(5.9-15.7)
Grand Traverse	5.6	(3.8-8.2)
Region 10	11.8	(9.8-14.1)
Bay	10.5	(7.0-15.3)
Huron	-- ^c	-- ^c
Saginaw	13.1	(9.8-17.3)
Sanilac	7.0	(3.8-12.5)
Tuscola	13.5	(8.9-20.0)
Region 11	15.6	(12.9-18.8)
Central Michigan	15.3	(12.1-19.2)
Midland	16.4	(11.6-22.5)
Region 12	11.3	(9.6-13.4)
Luce-Mackinac-Alger-Schoolcraft	5.8	(3.5-9.5)
Western Upper Peninsula	12.7	(9.1-17.3)
Delta-Menominee	9.3	(5.7-14.6)
Chippewa	14.1	(9.3-20.8)
Dickinson-Iron	13.2	(8.6-19.7)
Marquette	12.7	(9.0-17.6)

^a Among all adults, the proportion who had ever been told by a doctor that they had a heart attack, coronary heart disease or a stroke.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 28: Cancer Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Ever Told Cancer^a	
	%	95% Confidence Interval
Michigan Total	12.2	(11.7-12.6)
Region 1	11.2	(10.6-11.8)
Livingston	10.9	(8.4-14.1)
Macomb	12.4	(11.0-14.0)
Monroe	17.2	(12.7-22.9)
Oakland	12.1	(11.0-13.4)
St. Clair	11.0	(8.4-14.3)
Washtenaw	9.9	(8.2-11.8)
City of Detroit	6.5	(5.3-8.0)
Wayne exc. Detroit	13.2	(11.9-14.6)
Region 2	12.5	(10.8-14.5)
Genesee	11.8	(9.9-14.1)
Lapeer	13.6	(9.5-19.3)
Shiawassee	15.1	(10.2-21.7)
Region 3	13.6	(11.2-16.4)
Jackson	14.2	(11.1-17.9)
Lenawee	12.6	(9.1-17.1)
Region 4	11.5	(10.0-13.2)
Barry-Eaton	14.0	(11.2-17.3)
Mid-Michigan ^b	13.0	(9.7-17.1)
Ingham	9.9	(7.9-12.2)
Region 5	13.8	(12.0-15.8)
Branch-Hillsdale-St. Joseph	13.6	(10.6-17.2)
Calhoun	17.6	(13.3-22.9)
Kalamazoo	11.7	(9.4-14.4)
Region 6	15.1	(12.4-18.3)
Van Buren-Cass	15.0	(11.0-20.1)
Berrien	15.3	(11.7-19.6)
Region 7	12.5	(11.2-14.0)
Allegan	11.8	(8.6-15.9)
Ionia	14.9	(9.7-22.3)
Kent	12.2	(10.4-14.2)
Mid-Michigan ^b	13.0	(9.7-17.1)
Ottawa	12.4	(10.1-15.2)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 28 Cont'd		
Geographic Area	Ever Told Cancer^a	
	%	95% Confidence Interval
Michigan Total	12.2	(11.7-12.6)
Region 8	13.9	(12.0-16.0)
District #10	15.3	(12.7-18.3)
Muskegon	11.6	(9.1-14.7)
Region 9	14.0	(12.3-15.9)
District #2	12.8	(9.4-17.3)
District #4	15.5	(11.9-20.1)
Northwest Michigan	13.7	(10.6-17.4)
Benzie-Leelanau	17.8	(12.9-24.1)
Grand Traverse	12.1	(8.8-16.4)
Region 10	12.8	(10.8-15.0)
Bay	12.9	(9.2-17.9)
Huron	-- ^c	-- ^c
Saginaw	13.7	(10.7-17.4)
Sanilac	-- ^c	-- ^c
Tuscola	13.8	(9.4-19.9)
Region 11	15.1	(12.8-17.8)
Central Michigan	14.4	(11.8-17.5)
Midland	16.9	(12.6-22.3)
Region 12	12.0	(10.3-13.9)
Luce-Mackinac-Alger-Schoolcraft	9.0	(5.8-13.7)
Western Upper Peninsula	13.5	(9.8-18.2)
Delta-Menominee	10.3	(6.9-14.9)
Chippewa	14.1	(9.3-21.0)
Dickinson-Iron	14.9	(10.0-21.6)
Marquette	11.2	(8.1-15.3)

^a Among all adults, the proportion who reported ever being told by a doctor that they had skin cancer or any other type of cancer.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 29: Diabetes		
Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Ever Told Diabetes^a	
	%	95% Confidence Interval
Michigan Total	10.4	(10.0-10.8)
Region 1	9.9	(9.3-10.6)
Livingston	6.0	(4.1-8.6)
Macomb	8.5	(7.3-10.0)
Monroe	10.9	(8.0-14.6)
Oakland	9.4	(8.3-10.7)
St. Clair	10.8	(7.8-14.9)
Washtenaw	8.5	(6.6-11.0)
City of Detroit	14.6	(12.5-17.1)
Wayne exc. Detroit	10.1	(8.9-11.4)
Region 2	11.9	(10.2-13.9)
Genesee	11.8	(9.9-14.1)
Lapeer	10.8	(7.0-16.4)
Shiawassee	14.0	(8.8-21.5)
Region 3	12.5	(10.0-15.6)
Jackson	11.8	(9.1-15.3)
Lenawee	13.7	(9.2-19.9)
Region 4	9.9	(8.6-11.5)
Barry-Eaton	10.2	(7.9-13.3)
Mid-Michigan ^b	10.2	(7.9-13.1)
Ingham	9.7	(7.8-12.1)
Region 5	10.2	(8.7-12.0)
Branch-Hillsdale-St. Joseph	10.5	(7.9-13.9)
Calhoun	11.5	(8.5-15.4)
Kalamazoo	9.3	(7.2-12.1)
Region 6	12.0	(9.5-15.0)
Van Buren-Cass	12.4	(8.9-17.1)
Berrien	11.6	(8.5-15.7)
Region 7	8.6	(7.6-9.7)
Allegan	8.3	(5.7-11.9)
Ionia	12.0	(7.7-18.1)
Kent	9.0	(7.7-10.5)
Mid-Michigan ^b	10.2	(7.9-13.1)
Ottawa	6.5	(4.9-8.4)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 29 Cont'd		
Geographic Area	Ever Told Diabetes^a	
	%	95% Confidence Interval
Michigan Total	10.4	(10.0-10.8)
Region 8	12.6	(10.6-15.0)
District #10	12.7	(9.9-16.0)
Muskegon	12.5	(9.8-15.8)
Region 9	10.7	(9.0-12.5)
District #2	11.3	(8.2-15.4)
District #4	14.0	(10.1-19.0)
Northwest Michigan	8.9	(6.1-12.9)
Benzie-Leelanau	15.0	(9.7-22.4)
Grand Traverse	6.4	(4.3-9.4)
Region 10	11.9	(10.0-14.1)
Bay	10.1	(6.9-14.6)
Huron	-- ^c	-- ^c
Saginaw	13.3	(10.3-17.1)
Sanilac	7.7	(4.2-13.7)
Tuscola	15.4	(10.3-22.4)
Region 11	12.1	(10.0-14.6)
Central Michigan	13.6	(10.9-16.8)
Midland	8.5	(5.7-12.4)
Region 12	11.5	(9.6-13.7)
Luce-Mackinac-Alger-Schoolcraft	9.4	(5.5-15.6)
Western Upper Peninsula	7.3	(4.9-10.8)
Delta-Menominee	13.4	(8.8-19.7)
Chippewa	16.9	(11.4-24.3)
Dickinson-Iron	14.1	(9.4-20.6)
Marquette	11.2	(7.1-17.1)

^a The proportion of adults who reported that they were ever told by a doctor that they have diabetes. Women who had diabetes only during pregnancy and adults who were diagnosed with pre-diabetes were considered to not have been diagnosed with diabetes.

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 30: Kidney Disease Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Ever Told Kidney Disease^a	
	%	95% Confidence Interval
Michigan Total	3.2	(3.0-3.5)
Region 1	3.1	(2.7-3.5)
Livingston	1.9	(1.0-3.3)
Macomb	3.1	(2.3-4.1)
Monroe	3.5	(2.2-5.7)
Oakland	2.8	(2.2-3.6)
St. Clair	2.4	(1.3-4.2)
Washtenaw	2.2	(1.3-3.9)
City of Detroit	4.0	(2.8-5.7)
Wayne exc. Detroit	3.6	(2.9-4.5)
Region 2	4.3	(3.2-5.8)
Genesee	4.9	(3.5-6.8)
Lapeer	-- ^c	-- ^c
Shiawassee	-- ^c	-- ^c
Region 3	3.0	(1.8-5.0)
Jackson	-- ^c	-- ^c
Lenawee	-- ^c	-- ^c
Region 4	3.0	(2.3-4.0)
Barry-Eaton	4.0	(2.6-6.1)
Mid-Michigan ^b	2.9	(1.7-4.9)
Ingham	2.2	(1.4-3.4)
Region 5	2.7	(1.9-3.7)
Branch-Hillsdale-St. Joseph	2.7	(1.6-4.5)
Calhoun	-- ^c	-- ^c
Kalamazoo	2.0	(1.3-3.2)
Region 6	5.2	(3.4-7.7)
Van Buren-Cass	-- ^c	-- ^c
Berrien	6.3	(4.0-9.9)
Region 7	3.1	(2.4-4.1)
Allegan	2.5	(1.4-4.5)
Ionia	-- ^c	-- ^c
Kent	3.5	(2.4-5.2)
Mid-Michigan ^b	2.9	(1.7-4.9)
Ottawa	2.5	(1.6-3.7)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 30 Cont'd		
Geographic Area	Ever Told Kidney Disease^a	
	%	95% Confidence Interval
Michigan Total	3.2	(3.0-3.5)
Region 8	4.0	(3.0-5.2)
District #10	3.3	(2.3-4.8)
Muskegon	5.0	(3.3-7.5)
Region 9	4.2	(3.0-5.9)
District #2	3.3	(2.0-5.3)
District #4	-- ^c	-- ^c
Northwest Michigan	-- ^c	-- ^c
Benzie-Leelanau	-- ^c	-- ^c
Grand Traverse	-- ^c	-- ^c
Region 10	2.3	(1.6-3.2)
Bay	-- ^c	-- ^c
Huron	-- ^c	-- ^c
Saginaw	2.1	(1.2-3.5)
Sanilac	-- ^c	-- ^c
Tuscola	-- ^c	-- ^c
Region 11	2.8	(1.9-4.0)
Central Michigan	2.6	(1.7-4.0)
Midland	-- ^c	-- ^c
Region 12	3.0	(2.1-4.4)
Luce-Mackinac-Alger-Schoolcraft	-- ^c	-- ^c
Western Upper Peninsula	-- ^c	-- ^c
Delta-Menominee	-- ^c	-- ^c
Chippewa	-- ^c	-- ^c
Dickinson-Iron	-- ^c	-- ^c
Marquette	-- ^c	-- ^c

^a Among all adults, the proportion who reported ever being told by a doctor that they had kidney disease.
^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.
^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 31: Depression		
Michigan BRFSS, 2012-2014 Combined		
Geographic Area	Ever Told Depression^a	
	%	95% Confidence Interval
Michigan Total	20.8	(20.2-21.4)
Region 1	19.9	(18.9-20.8)
Livingston	24.4	(19.2-30.5)
Macomb	18.6	(16.4-20.9)
Monroe	25.3	(19.8-31.7)
Oakland	18.2	(16.4-20.1)
St. Clair	19.1	(14.3-25.1)
Washtenaw	23.7	(20.3-27.3)
City of Detroit	21.8	(19.0-24.8)
Wayne exc. Detroit	19.2	(17.4-21.1)
Region 2	21.1	(18.6-23.7)
Genesee	22.6	(19.6-25.9)
Lapeer	14.5	(10.0-20.5)
Shiawassee	20.5	(14.3-28.5)
Region 3	21.1	(17.7-25.0)
Jackson	22.5	(18.1-27.6)
Lenawee	18.7	(13.6-25.2)
Region 4	22.4	(19.9-25.0)
Barry-Eaton	21.0	(17.0-25.7)
Mid-Michigan ^b	20.1	(16.1-24.9)
Ingham	23.7	(20.2-27.7)
Region 5	21.8	(19.4-24.4)
Branch-Hillsdale-St. Joseph	23.0	(18.7-28.0)
Calhoun	24.0	(18.8-30.1)
Kalamazoo	19.7	(16.5-23.2)
Region 6	21.8	(18.4-25.8)
Van Buren-Cass	25.4	(19.8-32.1)
Berrien	18.9	(14.9-23.6)
Region 7	20.8	(19.0-22.7)
Allegan	20.7	(15.9-26.5)
Ionia	24.5	(17.7-32.9)
Kent	21.1	(18.7-23.7)
Mid-Michigan ^b	20.1	(16.1-24.9)
Ottawa	19.7	(16.2-23.8)

2012-2014 Michigan BRFSS Regional & Local Health Department Estimates
August 18, 2015

Table 31 Cont'd		
Geographic Area	Ever Told Depression^a	
	%	95% Confidence Interval
Michigan Total	20.8	(20.2-21.4)
Region 8	24.6	(21.8-27.6)
District #10	23.0	(19.7-26.7)
Muskegon	27.2	(22.4-32.5)
Region 9	22.8	(20.2-25.6)
District #2	22.0	(16.9-28.3)
District #4	28.5	(21.9-36.1)
Northwest Michigan	21.8	(17.2-27.3)
Benzie-Leelanau	21.4	(15.4-29.0)
Grand Traverse	19.5	(15.1-24.9)
Region 10	21.5	(18.5-24.8)
Bay	25.4	(19.0-33.0)
Huron	12.3	(6.8-21.1)
Saginaw	22.8	(18.1-28.2)
Sanilac	11.4	(6.5-19.1)
Tuscola	23.5	(16.6-32.1)
Region 11	22.4	(19.1-26.2)
Central Michigan	22.9	(19.0-27.4)
Midland	21.2	(15.6-28.3)
Region 12	20.8	(17.9-24.0)
Luce-Mackinac-Alger-Schoolcraft	20.2	(12.3-31.4)
Western Upper Peninsula	17.3	(12.0-24.3)
Delta-Menominee	24.9	(17.6-33.9)
Chippewa	16.3	(11.2-23.1)
Dickinson-Iron	21.9	(15.0-30.8)
Marquette	22.5	(16.8-29.4)

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

^b The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.