

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

**State of Michigan**

**Selected Tables**

**Michigan Behavioral Risk Factor Surveillance System  
(Michigan BRFSS)**

**2018 - 2020**

Lifecourse Epidemiology and Genomics Division  
Bureau of Epidemiology and Population Health  
Michigan Department of Health and Human Services

*Prepared by: Yan Tian  
September 2021*

**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 40 Years and Older.....	32
Table 15: Cervical Cancer Screening Among Women 18 Years and Older .....	34
Table 16: Prostate Cancer Screening Among Men 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 the [MiBRFSS website](http://www.michigan.gov/brfs) [<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 2018-2020 Michigan BRFSS were combined. The total sample sizes by year were: 10,322 in 2018, 10,518 in 2019, and 7,269 in 2020. Not all questions were included annually in the survey. The table subtitles indicate which years were used for that particular analysis.

For the 2018 through 2020 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.

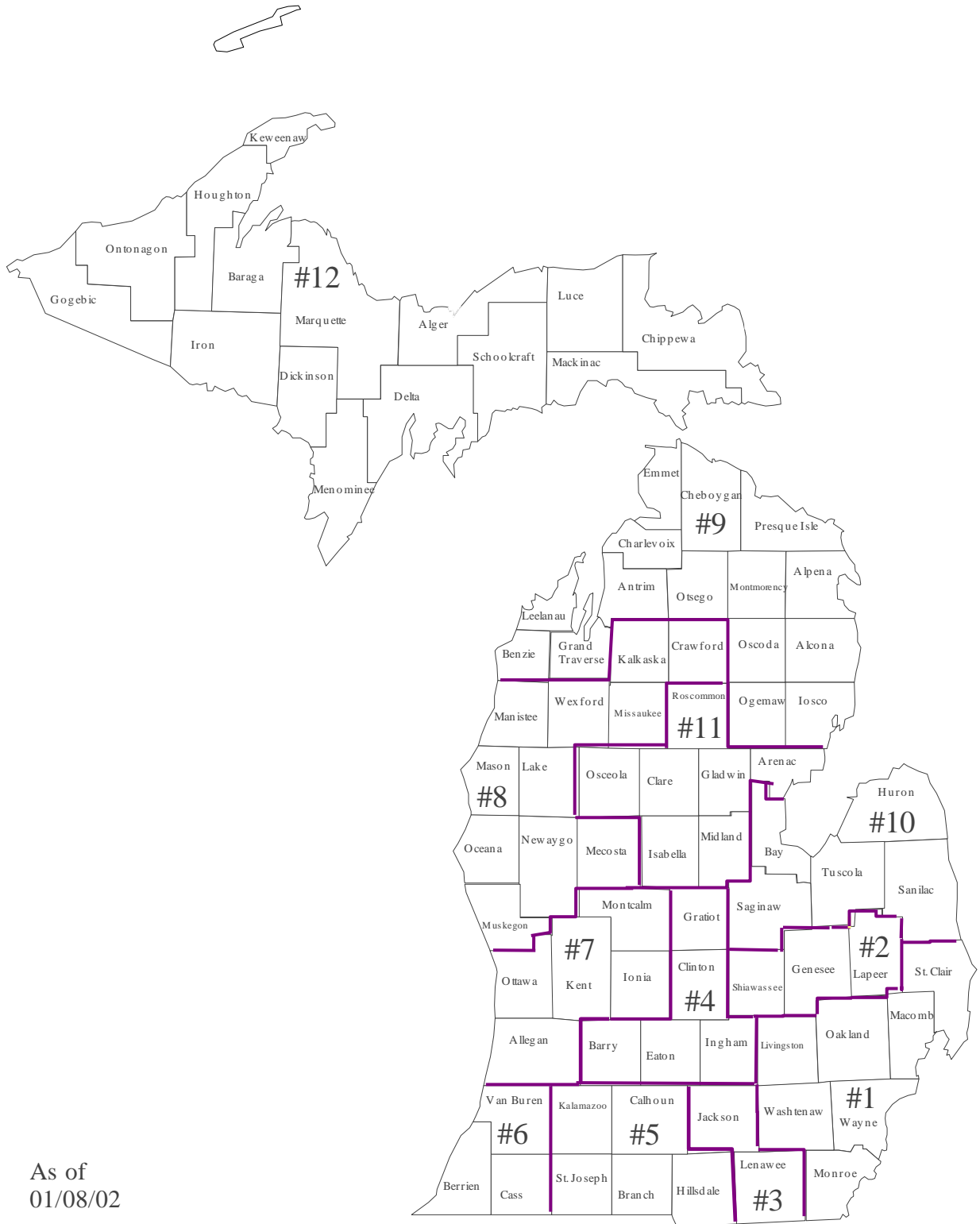
Iterative proportional fitting or raking was the weighting methodology used to make the 2018-2020 Michigan BRFSS data representative of the current Michigan adult population. Estimates based on this methodology were weighted to adjust for the probabilities of selection and a raking adjustment factor 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 Yan Tian at [TianY@michigan.gov](mailto:TianY@michigan.gov).

## Community Health Assessment and Improvement Regions State of Michigan



As of  
01/08/02

### Local Health Departments State of Michigan



2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 1: Health Status Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>General Health, Fair or Poor<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>28,058</b>	<b>17.9</b>	<b>(17.3-18.5)</b>
<b>Region 1</b>	11,563	17.7	(16.8-18.7)
Livingston	1,276	9.5	(7.6-11.9)
Macomb	1,638	17.2	(15.0-19.7)
Monroe	344	20.0	(15.2-25.8)
Oakland	2,833	14.2	(12.7-15.9)
St. Clair	337	18.7	(14.1-24.2)
Washtenaw	1,528	12.6	(10.5-15.1)
City of Detroit	1,198	27.9	(25.0-31.1)
Wayne exc. Detroit	2,318	19.2	(17.2-21.4)
<b>Region 2</b>	1,858	21.3	(19.0-23.9)
Genesee	1,368	22.7	(19.8-25.7)
Lapeer	225	22.4	(16.7-29.3)
Shiawassee	239	15.3	(10.0-22.8)
<b>Region 3</b>	1,529	18.4	(15.9-21.4)
Jackson	1,144	17.8	(15.0-21.1)
Lenawee	308	21.3	(16.1-27.5)
<b>Region 4</b>	1,674	15.4	(13.3-17.7)
Barry-Eaton	419	16.7	(12.7-21.6)
Mid-Michigan <sup>b</sup>	480	18.1	(14.3-22.7)
Ingham	890	14.5	(11.6-17.9)
<b>Region 5</b>	1,403	18.8	(16.1-21.8)
Branch-Hillsdale-St. Joseph	404	22.4	(17.3-28.5)
Calhoun	359	22.3	(16.5-29.4)
Kalamazoo	580	14.3	(11.0-18.3)
<b>Region 6</b>	612	19.2	(15.7-23.1)
Van Buren-Cass	248	23.0	(17.4-29.9)
Berrien	304	17.2	(12.7-22.8)
<b>Region 7</b>	2,764	14.7	(13.1-16.4)
Allegan	313	17.4	(12.9-23.1)
Ionia	171	20.0	(13.8-28.0)
Kent	1,422	14.6	(12.5-17.0)
Mid-Michigan <sup>b</sup>	480	18.1	(14.3-22.7)
Ottawa	645	10.8	(8.0-14.3)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 1 Cont'd</b>			
<b>Geographic Area</b>	<b>General Health, Fair or Poor<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>28,058</b>	<b>17.9</b>	<b>(17.3-18.5)</b>
<b>Region 8</b>	2,121	20.6	(17.6-23.9)
District #10	898	21.9	(18.0-26.4)
Muskegon	1,047	23.4	(17.6-30.4)
<b>Region 9</b>	1,468	17.7	(15.1-20.6)
District #2	186	23.2	(16.4-31.6)
District #4	239	20.2	(14.1-28.0)
Northwest Michigan	431	16.8	(12.4-22.4)
Benzie-Leelanau	202	20.1	(13.3-29.1)
Grand Traverse	371	12.0	(8.5-16.6)
<b>Region 10</b>	1,031	20.4	(17.3-24.0)
Bay	231	22.6	(15.8-31.2)
Huron	109	16.1	(9.7-25.5)
Saginaw	424	19.5	(14.7-25.3)
Sanilac	120	28.3	(19.6-39.1)
Tuscola	144	16.6	(11.1-24.1)
<b>Region 11</b>	784	18.0	(14.8-21.8)
Central Michigan	462	21.2	(16.8-26.4)
Midland	196	13.6	(8.3-21.6)
<b>Region 12</b>	817	19.3	(16.2-22.9)
Luce-Mackinac-Alger-Schoolcraft	116	21.1	(13.1-32.1)
Western Upper Peninsula	190	16.4	(11.3-23.2)
Delta-Menominee	153	23.2	(15.9-32.5)
Chippewa	96	15.0	(8.5-25.0)
Dickinson-Iron	84	26.0	(15.6-40.0)
Marquette	144	20.3	(13.2-30.0)

<sup>a</sup> The proportion of adults who reported that their health, in general, was either fair or poor.

<sup>b</sup> 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.

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 2: Poor Physical Health on at Least 14 Days in the Past Month Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Poor Physical Health<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,591</b>	<b>13.2</b>	<b>(12.6-13.7)</b>
<b>Region 1</b>	11,384	12.5	(11.7-13.3)
Livingston	1,261	7.9	(6.1-10.3)
Macomb	1,611	10.6	(9.0-12.5)
Monroe	331	14.4	(10.5-19.4)
Oakland	2,790	11.3	(9.9-12.8)
St. Clair	333	13.0	(9.6-17.4)
Washtenaw	1,507	8.9	(7.2-10.9)
City of Detroit	1,172	17.9	(15.3-20.8)
Wayne exc. Detroit	2,289	14.0	(12.2-15.9)
<b>Region 2</b>	1,831	17.8	(15.6-20.2)
Genesee	1,345	17.7	(15.2-20.5)
Lapeer	224	21.3	(15.3-28.9)
Shiawassee	236	16.2	(10.4-24.3)
<b>Region 3</b>	1,505	14.2	(11.8-17.0)
Jackson	1,127	13.1	(10.6-16.0)
Lenawee	303	14.9	(10.6-20.5)
<b>Region 4</b>	1,642	12.3	(10.5-14.4)
Barry-Eaton	410	15.0	(11.1-19.9)
Mid-Michigan <sup>b</sup>	467	12.2	(9.2-16.0)
Ingham	878	11.3	(9.0-14.1)
<b>Region 5</b>	1,372	14.2	(11.9-16.9)
Branch-Hillsdale-St. Joseph	396	15.4	(11.0-21.1)
Calhoun	353	17.7	(12.6-24.1)
Kalamazoo	566	11.3	(8.5-14.8)
<b>Region 6</b>	603	14.6	(11.5-18.4)
Van Buren-Cass	247	17.7	(12.7-24.0)
Berrien	296	13.4	(9.1-19.3)
<b>Region 7</b>	2,725	10.8	(9.5-12.3)
Allegan	307	15.1	(10.6-21.0)
Ionia	168	12.2	(7.9-18.3)
Kent	1,404	10.9	(9.1-13.0)
Mid-Michigan <sup>b</sup>	467	12.2	(9.2-16.0)
Ottawa	637	8.6	(6.1-11.9)



2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 2 Cont'd</b>			
<b>Geographic Area</b>	<b>Poor Physical Health<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,591</b>	<b>13.2</b>	<b>(12.6-13.7)</b>
<b>Region 8</b>	2,087	15.7	(13.0-18.8)
District #10	886	16.4	(13.1-20.2)
Muskegon	1,027	20.1	(14.2-27.6)
<b>Region 9</b>	1,452	14.5	(12.1-17.2)
District #2	181	16.1	(10.5-23.9)
District #4	238	15.0	(9.7-22.4)
Northwest Michigan	426	15.1	(10.8-20.6)
Benzie-Leelanau	202	19.5	(12.9-28.3)
Grand Traverse	366	9.6	(6.8-13.4)
<b>Region 10</b>	1,009	12.2	(10.1-14.8)
Bay	226	11.2	(7.1-17.2)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	419	12.6	(9.4-16.6)
Sanilac	118	16.1	(10.1-24.6)
Tuscola	137	12.4	(7.7-19.6)
<b>Region 11</b>	773	13.1	(10.6-16.1)
Central Michigan	455	16.9	(13.1-21.5)
Midland	191	8.2	(4.9-13.3)
<b>Region 12</b>	802	16.8	(13.8-20.4)
Luce-Mackinac-Alger-Schoolcraft	113	15.9	(9.1-26.2)
Western Upper Peninsula	187	12.7	(8.2-19.0)
Delta-Menominee	151	22.7	(15.3-32.4)
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	84	20.7	(11.5-34.4)
Marquette	139	18.0	(11.5-27.0)

<sup>a</sup> 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.

<sup>b</sup> 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.

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

<b>Table 3: Poor Mental Health on at Least 14 Days in the Past Month Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Poor Mental Health<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,670</b>	<b>15.4</b>	<b>(14.8-16.0)</b>
<b>Region 1</b>	11,424	15.5	(14.6-16.4)
Livingston	1,260	13.2	(10.5-16.4)
Macomb	1,618	15.2	(13.0-17.6)
Monroe	341	14.1	(10.3-19.0)
Oakland	2,796	13.5	(12.0-15.3)
St. Clair	333	16.0	(11.6-21.6)
Washtenaw	1,512	16.7	(14.0-19.8)
City of Detroit	1,176	17.8	(15.2-20.7)
Wayne exc. Detroit	2,299	16.8	(14.9-19.0)
<b>Region 2</b>	1,825	18.8	(16.4-21.3)
Genesee	1,342	19.5	(16.8-22.6)
Lapeer	222	19.4	(13.3-27.4)
Shiawassee	236	13.9	(9.1-20.8)
<b>Region 3</b>	1,501	16.5	(13.8-19.6)
Jackson	1,119	15.5	(12.5-19.0)
Lenawee	305	19.1	(13.8-25.9)
<b>Region 4</b>	1,645	14.6	(12.5-16.9)
Barry-Eaton	411	13.8	(9.9-18.8)
Mid-Michigan <sup>b</sup>	474	11.9	(8.8-15.8)
Ingham	875	16.7	(13.8-20.2)
<b>Region 5</b>	1,384	17.9	(15.2-21.0)
Branch-Hillsdale-St. Joseph	395	16.6	(11.9-22.7)
Calhoun	359	18.5	(13.2-25.2)
Kalamazoo	574	19.0	(15.0-23.7)
<b>Region 6</b>	600	17.5	(13.9-21.8)
Van Buren-Cass	242	15.4	(10.6-21.8)
Berrien	299	19.5	(14.1-26.2)
<b>Region 7</b>	2,730	13.6	(12.0-15.4)
Allegan	306	19.1	(13.3-26.8)
Ionia	166	17.6	(11.7-25.6)
Kent	1,412	12.6	(10.6-14.9)
Mid-Michigan <sup>b</sup>	474	11.9	(8.8-15.8)
Ottawa	635	12.5	(9.5-16.4)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 3 Cont'd</b>			
<b>Geographic Area</b>	<b>Poor Mental Health<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,670</b>	<b>15.4</b>	<b>(14.8-16.0)</b>
<b>Region 8</b>	2,093	14.0	(12.0-16.3)
District #10	888	12.1	(9.6-15.1)
Muskegon	1,032	16.1	(13.0-19.7)
<b>Region 9</b>	1,454	14.7	(12.2-17.7)
District #2	185	14.8	(9.6-22.1)
District #4	235	12.7	(8.3-19.1)
Northwest Michigan	429	16.0	(10.4-23.8)
Benzie-Leelanau	200	16.7	(9.9-26.8)
Grand Traverse	452	9.0	(6.2-12.9)
<b>Region 10</b>	1,014	17.3	(14.2-21.0)
Bay	229	25.9	(17.7-36.2)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	415	16.0	(12.2-20.9)
Sanilac	120	11.7	(7.0-19.0)
Tuscola	141	13.5	(7.2-23.7)
<b>Region 11</b>	778	16.4	(13.2-20.2)
Central Michigan	458	18.3	(13.9-23.6)
Midland	193	14.2	(8.4-23.1)
<b>Region 12</b>	810	11.8	(9.3-14.7)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	189	10.5	(6.5-16.5)
Delta-Menominee	152	19.3	(12.6-28.6)
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	142	11.5	(6.6-19.1)

<sup>a</sup> 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.

<sup>b</sup> 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.

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

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 4: Activity Limitation on at Least 14 Days in the Past Month Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Activity Limitation<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,839</b>	<b>9.7</b>	<b>(9.3-10.2)</b>
<b>Region 1</b>	11,466	9.6	(8.9-10.3)
Livingston	1,267	6.8	(5.0-9.2)
Macomb	1,626	8.8	(7.3-10.8)
Monroe	338	12.2	(8.6-17.0)
Oakland	2,816	7.8	(6.6-9.2)
St. Clair	335	13.8	(9.8-18.9)
Washtenaw	1,513	7.2	(5.6-9.2)
City of Detroit	1,180	14.0	(11.7-16.7)
Wayne exc. Detroit	2,300	10.3	(8.8-11.9)
<b>Region 2</b>	1,845	12.8	(10.9-15.0)
Genesee	1,357	13.1	(10.8-15.7)
Lapeer	223	14.8	(10.0-21.2)
Shiawassee	239	11.2	(6.4-18.9)
<b>Region 3</b>	1,522	10.1	(8.1-12.5)
Jackson	1,138	8.6	(6.9-10.7)
Lenawee	307	14.1	(9.6-20.2)
<b>Region 4</b>	1,661	8.1	(6.6-9.9)
Barry-Eaton	414	10.7	(7.4-15.3)
Mid-Michigan <sup>b</sup>	480	9.8	(7.0-13.5)
Ingham	884	6.8	(5.1-9.1)
<b>Region 5</b>	1,391	10.5	(8.3-13.2)
Branch-Hillsdale-St. Joseph	399	11.2	(7.4-16.7)
Calhoun	355	14.8	(10.0-21.5)
Kalamazoo	578	7.8	(5.2-11.4)
<b>Region 6</b>	609	11.0	(8.3-14.4)
Van Buren-Cass	247	10.2	(6.5-15.6)
Berrien	302	12.8	(8.7-18.3)
<b>Region 7</b>	2,744	7.7	(6.5-9.1)
Allegan	308	12.8	(8.6-18.5)
Ionia	170	8.9	(5.1-15.0)
Kent	1,414	7.2	(5.7-9.0)
Mid-Michigan <sup>b</sup>	480	9.8	(7.0-13.5)
Ottawa	638	5.7	(3.5-9.1)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 4 Cont'd</b>			
<b>Geographic Area</b>	<b>Activity Limitation<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,839</b>	<b>9.7</b>	<b>(9.3-10.2)</b>
<b>Region 8</b>	2,105	11.1	(9.2-13.4)
District #10	892	11.4	(8.7-14.8)
Muskegon	1,038	13.2	(10.3-16.9)
<b>Region 9</b>	1,458	10.0	(8.0-12.6)
District #2	181	12.0	(7.0-19.6)
District #4	240	11.0	(6.2-18.6)
Northwest Michigan	428	9.2	(6.0-13.8)
Benzie-Leelanau	202	15.0	(8.7-24.6)
Grand Traverse	368	6.5	(4.2-10.2)
<b>Region 10</b>	1,025	10.8	(8.6-13.4)
Bay	231	14.3	(9.1-21.6)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	420	9.0	(6.5-12.5)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	143	14.3	(7.8-24.5)
<b>Region 11</b>	782	8.6	(6.7-11.0)
Central Michigan	461	10.7	(7.9-14.3)
Midland	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 12</b>	811	12.3	(9.7-15.6)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	190	12.9	(7.1-22.3)
Delta-Menominee	153	14.9	(9.4-23.0)
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	83	20.9	(11.3-35.4)
Marquette	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

<sup>a</sup> 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.

<sup>b</sup> 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.

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

<b>Table 5: Disability Michigan BRFSS, 2019 and 2020 Combined</b>			
<b>Geographic Area</b>	<b>Disability<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>17,234</b>	<b>29.0</b>	<b>(28.1-29.9)</b>
<b>Region 1</b>	7,219	36.8	(33.2-40.7)
Livingston	733	23.2	(19.1-27.9)
Macomb	1,055	26.2	(23.1-29.6)
Monroe	221	37.0	(29.4-45.2)
Oakland	1,760	22.2	(19.9-24.7)
St. Clair	186	30.7	(23.0-39.6)
Washtenaw	1,011	19.6	(16.5-23.2)
City of Detroit	691	39.0	(34.5-43.8)
Wayne exc. Detroit	1,500	29.3	(26.4-32.5)
<b>Region 2</b>	1,092	30.5	(26.6-34.7)
Genesee	813	38.3	(33.9-42.8)
Lapeer	124	34.2	(25.4-44.2)
Shiawassee	136	32.8	(23.4-43.7)
<b>Region 3</b>	940	25.1	(22.0-28.4)
Jackson	687	30.2	(25.7-35.1)
Lenawee	204	36.7	(28.7-45.4)
<b>Region 4</b>	1,072	37.5	(33.4-41.8)
Barry-Eaton	247	22.8	(17.0-29.7)
Mid-Michigan <sup>b</sup>	323	23.0	(18.2-28.6)
Ingham	562	27.3	(22.9-32.3)
<b>Region 5</b>	883	25.8	(20.8-31.5)
Branch-Hillsdale-St. Joseph	251	41.3	(33.7-49.4)
Calhoun	216	39.1	(30.7-48.1)
Kalamazoo	368	35.5	(29.5-42.1)
<b>Region 6</b>	388	23.6	(21.2-26.2)
Van Buren-Cass	156	32.1	(24.0-41.4)
Berrien	191	24.0	(17.1-32.6)
<b>Region 7</b>	1,714	32.4	(27.9-37.3)
Allegan	195	28.0	(20.8-36.5)
Ionia	107	33.4	(23.5-45.1)
Kent	864	23.7	(20.4-27.3)
Mid-Michigan <sup>b</sup>	323	23.0	(18.2-28.6)
Ottawa	401	19.8	(14.8-26.1)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 5 Cont'd</b>			
<b>Geographic Area</b>	<b>Disability<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>17,234</b>	<b>29.0</b>	<b>(28.1-29.9)</b>
<b>Region 8</b>	1,214	36.4	(31.9-41.2)
District #10	524	33.2	(26.9-40.2)
Muskegon	552	39.4	(30.7-48.8)
<b>Region 9</b>	859	34.2	(29.3-39.4)
District #2	112	48.4	(37.1-60.0)
District #4	142	32.5	(23.3-43.3)
Northwest Michigan	243	35.8	(26.7-46.1)
Benzie-Leelanau	126	38.6	(27.6-50.9)
Grand Traverse	220	30.2	(22.8-38.7)
<b>Region 10</b>	641	31.0	(25.7-36.9)
Bay	146	37.0	(26.1-49.5)
Huron	64	32.3	(20.8-46.3)
Saginaw	275	34.2	(27.0-42.1)
Sanilac	59	38.0	(25.3-52.7)
Tuscola	96	28.1	(18.3-40.5)
<b>Region 11</b>	438	29.3	(24.5-34.6)
Central Michigan	281	32.9	(26.3-40.4)
Midland	124	24.6	(16.3-35.5)
<b>Region 12</b>	547	29.3	(24.5-34.6)
Luce-Mackinac-Alger-Schoolcraft	73	31.3	(19.5-46.1)
Western Upper Peninsula	119	22.0	(14.7-31.6)
Delta-Menominee	104	29.1	(19.4-41.2)
Chippewa	61	44.5	(26.8-63.8)
Dickinson-Iron	60	38.7	(25.2-54.2)
Marquette	99	28.7	(18.6-41.5)

<sup>a</sup> Among all adults, the proportion who reported having serious difficulty hearing, visual impairment, difficulty concentrating, remembering, or making decisions, difficulty walking or climbing stairs, difficulty dressing or bathing, or difficulty doing errands alone.

<sup>b</sup> 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.

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 6: Weight Status</b>							
<b>Michigan BRFSS, 2018-2020 Combined</b>							
<b>Geographic Area</b>	<b>Sample Size</b>	<b>Obese<sup>a</sup></b>		<b>Overweight<sup>b</sup></b>		<b>Healthy Weight<sup>c</sup></b>	
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>	<b>%</b>	<b>95% Confidence Interval</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>26,203</b>	<b>34.7</b>	<b>(34.0-35.5)</b>	<b>34.5</b>	<b>(33.7-35.3)</b>	<b>29.0</b>	<b>(28.3-29.8)</b>
<b>Region 1</b>	10,819	33.4	(32.3-34.6)	35.3	(34.1-36.4)	29.6	(28.5-30.8)
Livingston	1,203	31.5	(27.7-35.5)	36.2	(32.2-40.3)	31.6	(27.7-35.8)
Macomb	1,517	32.7	(29.9-35.6)	37.3	(34.3-40.3)	28.3	(25.6-31.3)
Monroe	320	40.1	(33.6-47.0)	37.9	(31.6-44.6)	21.4	(16.4-27.4)
Oakland	2,648	29.3	(27.2-31.5)	36.4	(34.2-38.7)	32.4	(30.2-34.6)
St. Clair	320	34.5	(28.5-41.1)	35.3	(29.0-42.2)	30.0	(23.6-37.2)
Washtenaw	1,448	27.4	(24.2-30.8)	32.2	(29.0-35.7)	38.9	(35.3-42.5)
City of Detroit	1,089	39.9	(36.3-43.5)	31.2	(27.8-34.8)	26.6	(23.4-29.9)
Wayne exc. Detroit	2,194	36.8	(34.2-39.3)	35.4	(32.9-37.9)	26.4	(24.1-28.8)
<b>Region 2</b>	1,723	39.6	(36.6-42.6)	33.5	(30.7-36.4)	25.0	(22.4-27.7)
Genesee	1,259	38.5	(35.0-42.1)	33.5	(30.1-37.0)	25.9	(22.8-29.2)
Lapeer	215	42.4	(34.7-50.5)	33.7	(26.7-41.5)	22.2	(16.4-29.3)
Shiawassee	224	43.3	(35.5-51.5)	31.0	(24.3-38.8)	24.2	(18.1-31.6)
<b>Region 3</b>	1,420	36.1	(32.6-39.7)	35.4	(32.0-39.1)	26.9	(23.7-30.3)
Jackson	1,070	35.1	(31.3-39.1)	35.2	(31.2-39.3)	28.5	(24.8-32.6)
Lenawee	281	41.6	(34.4-49.2)	38.2	(31.3-45.7)	18.2	(13.4-24.2)
<b>Region 4</b>	1,578	33.0	(30.1-36.0)	34.8	(31.8-37.9)	30.3	(27.5-33.3)
Barry-Eaton	387	32.6	(27.1-38.7)	40.9	(34.7-47.4)	25.3	(20.1-31.3)
Mid-Michigan <sup>d</sup>	453	44.0	(38.4-49.8)	29.1	(24.3-34.4)	23.6	(19.2-28.8)
Ingham	844	31.8	(27.9-36.0)	30.9	(27.0-35.1)	35.4	(31.2-39.7)
<b>Region 5</b>	1,327	37.3	(34.0-40.7)	33.9	(30.8-37.1)	27.5	(24.5-30.6)
Branch-Hillsdale-St. Joseph	380	37.0	(31.0-43.5)	39.3	(33.4-45.4)	22.8	(18.0-28.5)
Calhoun	342	39.4	(32.7-46.5)	32.0	(26.1-38.6)	27.0	(21.3-33.7)
Kalamazoo	547	34.8	(30.0-40.0)	31.9	(27.3-37.0)	31.6	(26.9-36.6)
<b>Region 6</b>	581	36.7	(32.1-41.6)	31.0	(26.7-35.7)	31.2	(26.9-35.8)
Van Buren-Cass	232	39.2	(32.1-46.9)	28.8	(22.5-36.1)	30.5	(24.1-37.7)
Berrien	291	37.0	(30.4-44.2)	32.3	(26.1-39.1)	29.9	(23.9-36.7)
<b>Region 7</b>	2,588	33.4	(31.1-35.7)	34.3	(32.0-36.6)	30.8	(28.5-33.1)
Allegan	294	32.3	(25.7-39.7)	35.6	(29.0-42.9)	31.2	(24.7-38.5)
Ionia	155	41.1	(32.3-50.4)	35.3	(26.9-44.6)	22.0	(15.5-30.4)
Kent	1,340	33.3	(30.3-36.5)	32.9	(30.0-36.0)	32.7	(29.6-35.8)
Mid-Michigan <sup>d</sup>	453	44.0	(38.4-49.8)	29.1	(24.3-34.4)	23.6	(19.2-28.8)
Ottawa	600	26.6	(22.4-31.4)	39.9	(34.8-45.2)	30.7	(26.0-36.0)



2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

Table 6 Cont'd							
Geographic Area	Sample Size	Obese <sup>a</sup>		Overweight <sup>b</sup>		Healthy Weight <sup>c</sup>	
	N	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
<b>Michigan Total</b>	<b>26,203</b>	<b>34.7</b>	<b>(34.0-35.5)</b>	<b>34.5</b>	<b>(33.7-35.3)</b>	<b>29.0</b>	<b>(28.3-29.8)</b>
<b>Region 8</b>	1,988	36.3	(33.0-39.6)	35.9	(32.6-39.4)	26.5	(23.3-30.0)
District #10	861	36.7	(32.1-41.6)	38.4	(33.7-43.4)	23.7	(19.9-28.1)
Muskegon	969	37.3	(32.2-42.6)	34.6	(29.8-39.9)	27.1	(20.9-34.3)
<b>Region 9</b>	1,390	33.6	(30.3-37.0)	33.1	(29.8-36.5)	30.9	(27.6-34.4)
District #2	171	43.7	(34.4-53.4)	28.9	(21.0-38.2)	27.5	(19.6-37.0)
District #4	224	41.2	(33.3-49.5)	29.4	(22.8-36.9)	25.3	(18.1-34.2)
Northwest Michigan	410	29.4	(23.6-36.0)	39.1	(32.2-46.5)	28.8	(23.0-35.5)
Benzie-Leelanau	193	32.6	(24.5-41.8)	27.8	(20.9-35.9)	35.1	(27.0-44.2)
Grand Traverse	354	26.5	(20.6-33.3)	33.4	(27.4-40.0)	38.6	(32.2-45.6)
<b>Region 10</b>	972	41.6	(37.7-45.6)	31.0	(27.5-34.6)	25.1	(21.7-28.9)
Bay	218	34.1	(26.5-42.6)	29.0	(22.2-37.0)	29.8	(22.3-38.6)
Huron	103	36.2	(26.0-47.7)	49.6	(38.3-61.1)	14.2	(8.3-23.2)
Saginaw	393	47.4	(41.3-53.7)	27.2	(22.5-32.6)	24.5	(19.3-30.6)
Sanilac	114	42.1	(31.6-53.3)	33.9	(23.9-45.6)	23.5	(15.9-33.4)
Tuscola	141	38.5	(29.2-48.8)	33.0	(24.7-42.5)	26.5	(18.0-37.2)
<b>Region 11</b>	738	36.7	(31.9-41.8)	31.6	(27.2-36.2)	29.6	(25.3-34.2)
Central Michigan	440	40.5	(34.0-47.3)	29.4	(24.3-35.2)	28.8	(23.3-35.0)
Midland	187	31.4	(23.6-40.4)	35.6	(25.7-46.8)	27.0	(19.3-36.4)
<b>Region 12</b>	772	35.9	(31.8-40.2)	34.0	(29.8-38.5)	28.4	(24.6-32.5)
Luce-Mackinac-Alger-Schoolcraft	112	41.7	(30.8-53.5)	23.9	(15.6-34.7)	30.8	(21.0-42.8)
Western Upper Peninsula	179	34.1	(26.2-42.9)	30.2	(22.3-39.5)	33.9	(25.7-43.2)
Delta-Menominee	144	44.1	(34.7-53.9)	38.1	(29.2-47.9)	17.1	(11.0-25.7)
Chippewa	92	31.3	(21.0-44.0)	48.3	(34.1-62.7)	20.0	(11.8-31.9)
Dickinson-Iron	77	30.1	(19.3-43.7)	46.5	(33.3-60.3)	23.3	(13.1-37.9)
Marquette	137	36.9	(27.5-47.5)	26.3	(18.9-35.3)	34.7	(25.6-45.1)

Note: BMI, body mass index, is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)<sup>2</sup>]. Weight and height were self-reported. Pregnant women were excluded.

<sup>a</sup> The proportion of adults whose BMI was greater than or equal to 30.0.

<sup>b</sup> The proportion of adults whose BMI was greater than or equal to 25.0, but less than 30.0.

<sup>c</sup> The proportion of adults whose BMI was greater than or equal to 18.5, but less than 25.0.

<sup>d</sup> 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.

2018-2020 Michigan BRFS Regional & Local Health Department Estimates  
September 2021

<b>Table 7: No Health Care Coverage Among Those Aged 18-64 Years Michigan BRFS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>No Health Care Coverage<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>17,819</b>	<b>9.5</b>	<b>(8.9-10.1)</b>
<b>Region 1</b>	7,427	8.2	(7.4-9.0)
Livingston	783	7.5	(5.1-10.7)
Macomb	1,020	8.9	(7.0-11.3)
Monroe	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Oakland	1,807	5.3	(4.2-6.6)
St. Clair	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Washtenaw	936	7.2	(5.3-9.7)
City of Detroit	859	13.8	(11.1-17.1)
Wayne exc. Detroit	1,507	8.2	(6.7-10.1)
<b>Region 2</b>	1,230	9.3	(7.5-11.6)
Genesee	911	9.8	(7.5-12.7)
Lapeer	153	9.4	(5.2-16.4)
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	952	11.1	(8.2-14.9)
Jackson	710	6.9	(4.8-9.8)
Lenawee	184	13.0	(7.7-21.0)
<b>Region 4</b>	1,105	9.8	(7.7-12.4)
Barry-Eaton	253	9.9	(5.9-16.3)
Mid-Michigan <sup>b</sup>	291	12.8	(8.4-19.0)
Ingham	625	8.2	(5.8-11.6)
<b>Region 5</b>	870	10.3	(8.2-12.9)
Branch-Hillsdale-St. Joseph	231	12.0	(7.8-18.0)
Calhoun	216	9.6	(5.8-15.4)
Kalamazoo	381	9.0	(6.3-12.7)
<b>Region 6</b>	384	9.7	(6.8-13.6)
Van Buren-Cass	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Berrien	187	11.1	(6.9-17.4)
<b>Region 7</b>	1,821	9.4	(7.8-11.3)
Allegan	183	8.5	(4.8-14.7)
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	972	9.2	(7.1-11.7)
Mid-Michigan <sup>b</sup>	291	12.8	(8.4-19.0)
Ottawa	411	7.6	(5.0-11.5)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 7 Cont'd</b>			
<b>Geographic Area</b>	<b>No Health Care Coverage<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>17,819</b>	<b>9.5</b>	<b>(8.9-10.1)</b>
<b>Region 8</b>	1,341	11.5	(8.5-15.4)
District #10	521	13.7	(8.7-20.9)
Muskegon	676	9.0	(6.3-12.9)
<b>Region 9</b>	842	12.5	(9.4-16.3)
District #2	99	16.5	(9.2-27.7)
District #4	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Northwest Michigan	242	15.8	(8.8-26.6)
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	222	9.6	(5.6-15.9)
<b>Region 10</b>	616	10.3	(7.6-13.7)
Bay	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	260	8.0	(4.8-13.0)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	497	11.4	(7.9-16.2)
Central Michigan	277	13.3	(8.3-20.5)
Midland	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 12</b>	507	13.6	(10.2-17.9)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	120	18.6	(11.2-29.1)
Delta-Menominee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

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

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 8: Health Care Access Michigan BRFSS, 2018-2020 Combined</b>						
<b>Geographic Area</b>	<b>No Personal Health Care Provider<sup>a</sup></b>			<b>No Health Care Access During Past 12 Months Due to Cost<sup>b</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,929</b>	<b>14.6</b>	<b>(14.0-15.3)</b>	<b>28,038</b>	<b>10.5</b>	<b>(10.0-11.0)</b>
<b>Region 1</b>	11,515	13.9	(13.0-14.8)	11,561	10.6	(9.9-11.4)
Livingston	1,271	11.8	(9.2-15.0)	1,276	6.9	(5.2-8.9)
Macomb	1,630	12.8	(10.8-15.2)	1,634	11.3	(9.5-13.4)
Monroe	341	13.4	(9.0-19.6)	344	7.9	(5.1-12.0)
Oakland	2,826	12.1	(10.6-13.8)	2,833	9.6	(8.3-11.2)
St. Clair	336	7.6	(4.1-13.4)	336	8.4	(5.5-12.7)
Washtenaw	1,521	14.1	(11.8-16.9)	1,528	8.7	(6.7-11.2)
City of Detroit	1,188	20.6	(17.6-23.8)	1,199	14.7	(12.5-17.3)
Wayne exc. Detroit	2,313	13.5	(11.7-15.6)	2,320	10.6	(9.1-12.3)
<b>Region 2</b>	1,850	13.6	(11.5-16.0)	1,859	12.4	(10.5-14.5)
Genesee	1,361	14.0	(11.5-16.8)	1,368	12.5	(10.3-15.1)
Lapeer	224	13.8	(8.9-20.6)	226	14.7	(9.7-21.7)
Shiawassee	239	10.3	(5.8-17.5)	239	10.4	(6.5-16.2)
<b>Region 3</b>	1,524	17.4	(14.6-20.7)	1,530	11.4	(9.1-14.3)
Jackson	1,140	14.2	(11.5-17.5)	1,145	9.2	(7.0-12.1)
Lenawee	308	18.4	(13.1-25.3)	308	13.8	(9.4-19.9)
<b>Region 4</b>	1,661	16.7	(14.4-19.4)	1,668	8.8	(7.2-10.8)
Barry-Eaton	418	14.7	(10.2-20.8)	417	4.5	(2.6-7.5)
Mid-Michigan <sup>c</sup>	477	12.8	(9.3-17.4)	479	9.4	(6.7-13.0)
Ingham	880	19.4	(16.1-23.3)	888	10.5	(8.0-13.7)
<b>Region 5</b>	1,394	15.6	(13.3-18.3)	1,402	10.5	(8.4-13.0)
Branch-Hillsdale-St. Joseph	402	13.8	(10.0-18.7)	404	12.1	(8.1-17.5)
Calhoun	355	11.3	(7.7-16.2)	358	9.8	(6.0-15.7)
Kalamazoo	577	18.7	(14.8-23.4)	580	10.3	(7.5-14.0)
<b>Region 6</b>	604	19.1	(15.3-23.7)	610	9.7	(7.3-12.7)
Van Buren-Cass	246	16.5	(11.2-23.5)	247	9.3	(6.1-14.1)
Berrien	298	18.7	(13.2-25.8)	303	9.4	(6.1-14.2)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 8 Cont'd</b>						
<b>Geographic Area</b>	<b>No Personal Health Care Provider<sup>a</sup></b>			<b>No Health Care Access During Past 12 Months Due to Cost<sup>b</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,929</b>	<b>14.6</b>	<b>(14.0-15.3)</b>	<b>28,038</b>	<b>10.5</b>	<b>(10.0-11.0)</b>
<b>Region 7</b>	2,748	12.3	(10.7-14.2)	2,757	10.3	(8.9-11.9)
Allegan	310	10.2	(6.5-15.8)	311	10.7	(7.0-15.9)
Ionia	169	17.1	(9.7-28.5)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Kent	1,416	13.4	(11.2-16.0)	1,419	11.0	(9.1-13.3)
Mid-Michigan <sup>c</sup>	477	12.8	(9.3-17.4)	479	9.4	(6.7-13.0)
Ottawa	641	9.1	(6.0-13.7)	643	10.5	(7.4-14.8)
<b>Region 8</b>	2,113	15.0	(12.1-18.4)	2,119	12.4	(10.0-15.2)
District #10	896	15.7	(11.2-21.4)	899	14.0	(10.3-18.8)
Muskegon	1,043	7.8	(5.6-10.8)	1,047	11.9	(9.2-15.3)
<b>Region 9</b>	1,463	13.3	(11.1-16.0)	1,471	9.8	(7.9-12.1)
District #2	183	17.7	(11.4-26.4)	186	9.4	(5.2-16.4)
District #4	239	10.7	(6.8-16.4)	241	8.3	(4.6-14.3)
Northwest Michigan	431	12.0	(8.4-16.8)	431	9.6	(6.3-14.4)
Benzie-Leelanau	202	8.2	(4.7-13.9)	203	11.5	(6.6-19.3)
Grand Traverse	369	14.6	(9.5-21.8)	371	12.2	(8.2-17.7)
<b>Region 10</b>	1,026	16.1	(13.2-19.6)	1,030	9.9	(7.7-12.6)
Bay	231	14.8	(9.5-22.3)	232	14.2	(8.9-21.9)
Huron	108	21.0	(12.7-32.8)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Saginaw	421	17.9	(13.3-23.8)	423	9.5	(6.5-13.8)
Sanilac	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	119	8.7	(4.8-15.4)
Tuscola	144	14.3	(8.5-23.1)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
<b>Region 11</b>	786	18.4	(14.6-23.0)	787	7.4	(5.6-9.8)
Central Michigan	464	16.0	(11.6-21.7)	464	7.0	(4.9-10.1)
Midland	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	196	8.2	(4.6-14.3)
<b>Region 12</b>	815	13.7	(10.9-17.0)	814	10.0	(7.7-13.0)
Luce-Mackinac-Alger-Schoolcraft	116	15.7	(9.1-26.0)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Western Upper Peninsula	188	19.1	(12.8-27.6)	188	10.2	(6.1-16.5)
Delta-Menominee	153	8.6	(4.8-15.2)	152	10.8	(6.1-18.4)
Chippewa	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Dickinson-Iron	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Marquette	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>

<sup>a</sup> The proportion of adults who reported that they did not have anyone that they thought of as their personal doctor or health care provider.  
<sup>b</sup> 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.  
<sup>c</sup> 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.  
<sup>d</sup> Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

<b>Table 9: No Leisure Time Physical Activity Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>No Leisure Time Physical Activity<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,762</b>	<b>23.3</b>	<b>(22.7-24.0)</b>
<b>Region 1</b>	11,437	22.6	(21.6-23.7)
Livingston	1,260	17.6	(14.7-20.9)
Macomb	1,613	24.2	(21.7-26.9)
Monroe	343	26.6	(20.9-33.3)
Oakland	2,809	18.3	(16.6-20.2)
St. Clair	335	24.3	(18.9-30.6)
Washtenaw	1,516	15.8	(13.5-18.4)
City of Detroit	1,177	32.7	(29.5-36.2)
Wayne exc. Detroit	2,298	23.2	(21.1-25.5)
<b>Region 2</b>	1,832	30.7	(28.0-33.5)
Genesee	1,343	30.6	(27.4-34.0)
Lapeer	225	33.7	(26.5-41.8)
Shiawassee	238	28.8	(22.3-36.4)
<b>Region 3</b>	1,515	24.8	(21.8-28.0)
Jackson	1,132	23.5	(20.3-27.0)
Lenawee	307	27.9	(21.9-34.9)
<b>Region 4</b>	1,658	21.4	(19.0-24.1)
Barry-Eaton	414	25.1	(19.8-31.2)
Mid-Michigan <sup>b</sup>	477	21.2	(17.3-25.7)
Ingham	882	20.7	(17.4-24.4)
<b>Region 5</b>	1,397	26.6	(23.7-29.7)
Branch-Hillsdale-St. Joseph	402	27.3	(22.1-33.1)
Calhoun	359	31.2	(25.3-37.9)
Kalamazoo	577	22.6	(18.6-27.3)
<b>Region 6</b>	607	21.9	(18.3-26.1)
Van Buren-Cass	246	26.0	(19.9-33.2)
Berrien	301	18.7	(14.2-24.2)
<b>Region 7</b>	2,744	18.4	(16.7-20.2)
Allegan	311	23.3	(18.1-29.3)
Ionia	170	29.7	(22.0-38.9)
Kent	1,409	16.4	(14.2-18.9)
Mid-Michigan <sup>b</sup>	477	21.2	(17.3-25.7)
Ottawa	641	16.4	(13.1-20.2)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 9 Cont'd</b>			
<b>Geographic Area</b>	<b>No Leisure Time Physical Activity<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,762</b>	<b>23.3</b>	<b>(22.7-24.0)</b>
<b>Region 8</b>	2,100	25.8	(22.7-29.2)
District #10	894	27.7	(22.9-33.1)
Muskegon	1,031	25.5	(21.6-29.9)
<b>Region 9</b>	1,457	24.9	(21.9-28.1)
District #2	183	36.2	(27.7-45.7)
District #4	239	31.4	(24.2-39.6)
Northwest Michigan	428	21.1	(15.9-27.5)
Benzie-Leelanau	201	24.8	(17.8-33.3)
Grand Traverse	367	15.1	(11.1-20.1)
<b>Region 10</b>	1,019	26.7	(23.3-30.4)
Bay	229	24.6	(18.1-32.6)
Huron	108	26.4	(18.1-36.8)
Saginaw	418	26.8	(21.4-32.9)
Sanilac	118	33.9	(24.5-44.9)
Tuscola	143	24.9	(17.1-34.8)
<b>Region 11</b>	779	24.4	(20.6-28.6)
Central Michigan	462	28.9	(23.7-34.8)
Midland	194	14.6	(9.8-21.3)
<b>Region 12</b>	805	24.8	(21.3-28.6)
Luce-Mackinac-Alger-Schoolcraft	113	27.1	(18.3-38.2)
Western Upper Peninsula	188	19.4	(13.7-26.7)
Delta-Menominee	151	30.4	(22.4-39.9)
Chippewa	96	35.7	(23.6-49.9)
Dickinson-Iron	84	24.5	(15.3-36.9)
Marquette	144	20.7	(13.4-30.6)

<sup>a</sup> 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.

<sup>b</sup> 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, 2018-2020 Combined**

Geographic Area	Sample Size	Current Smoking <sup>a</sup>		Former Smoking <sup>b</sup>		Never Smoked	
		N	%	95% Confidence Interval	%	95% Confidence Interval	%
<b>Michigan Total</b>	<b>27,183</b>	<b>18.6</b>	<b>(18.0-19.3)</b>	<b>26.7</b>	<b>(26.0-27.4)</b>	<b>54.6</b>	<b>(53.9-55.4)</b>
<b>Region 1</b>	11,182	17.0	(16.1-18.0)	26.0	(25.0-27.1)	56.9	(55.7-58.1)
Livingston	1,242	13.3	(10.7-16.4)	33.6	(29.8-37.7)	53.1	(48.9-57.2)
Macomb	1,588	18.2	(15.9-20.7)	28.5	(26.0-31.3)	53.3	(50.2-56.3)
Monroe	330	19.1	(14.3-25.1)	26.5	(21.3-32.5)	54.3	(47.7-60.8)
Oakland	2,747	12.4	(10.9-14.1)	26.4	(24.5-28.5)	61.2	(58.9-63.4)
St. Clair	326	24.8	(19.0-31.6)	31.5	(25.5-38.2)	43.7	(37.1-50.5)
Washtenaw	1,488	10.5	(8.5-12.9)	21.0	(18.4-23.8)	68.5	(65.2-71.6)
City of Detroit	1,130	24.7	(21.6-28.0)	19.4	(16.7-22.4)	55.9	(52.3-59.5)
Wayne exc. Detroit	2,247	18.7	(16.7-20.9)	27.3	(25.0-29.6)	54.1	(51.5-56.6)
<b>Region 2</b>	1,791	22.4	(19.9-25.2)	28.8	(26.3-31.6)	48.7	(45.7-51.7)
Genesee	1,310	24.5	(21.4-27.9)	26.9	(24.0-30.1)	48.6	(45.0-52.1)
Lapeer	223	20.2	(14.5-27.4)	34.1	(27.0-42.1)	45.6	(38.0-53.4)
Shiawassee	234	13.1	(8.1-20.4)	31.9	(25.1-39.7)	55.0	(46.9-62.8)
<b>Region 3</b>	1,485	20.9	(17.9-24.2)	26.6	(23.6-29.7)	52.6	(49.0-56.2)
Jackson	1,109	21.7	(18.4-25.4)	29.7	(26.1-33.6)	48.6	(44.5-52.7)
Lenawee	302	24.5	(18.2-32.2)	24.7	(19.6-30.7)	50.7	(43.6-57.8)
<b>Region 4</b>	1,623	15.5	(13.3-18.0)	25.3	(22.7-28.0)	59.2	(56.1-62.2)
Barry-Eaton	405	17.1	(12.8-22.5)	26.4	(21.6-31.9)	56.5	(50.3-62.4)
Mid-Michigan <sup>c</sup>	473	18.2	(14.2-22.9)	24.1	(19.8-29.1)	57.7	(52.1-63.0)
Ingham	858	14.8	(11.9-18.4)	25.9	(22.3-29.8)	59.3	(54.9-63.5)
<b>Region 5</b>	1,372	22.3	(19.3-25.5)	26.4	(23.6-29.3)	51.4	(48.0-54.7)
Branch-Hillsdale-St. Joseph	395	26.1	(20.6-32.5)	23.2	(18.8-28.3)	50.7	(44.5-56.8)
Calhoun	357	26.6	(20.4-33.8)	31.5	(25.5-38.2)	41.9	(35.6-48.5)
Kalamazoo	564	17.9	(14.0-22.6)	23.9	(19.9-28.4)	58.3	(53.1-63.3)
<b>Region 6</b>	598	21.1	(17.2-25.6)	28.0	(24.0-32.3)	50.9	(46.1-55.7)
Van Buren-Cass	242	22.9	(17.0-30.1)	33.5	(26.9-40.9)	43.6	(36.5-51.0)
Berrien	296	20.5	(15.1-27.2)	24.7	(19.5-30.7)	54.8	(47.8-61.6)
<b>Region 7</b>	2,696	17.1	(15.3-19.1)	24.7	(22.8-26.7)	58.2	(55.9-60.5)
Allegan	309	16.9	(12.1-23.1)	26.7	(20.8-33.5)	56.5	(49.2-63.4)
Ionia	166	24.4	(16.9-33.8)	19.5	(13.8-26.8)	56.1	(46.7-65.2)
Kent	1,382	15.9	(13.6-18.6)	25.4	(22.8-28.2)	58.6	(55.5-61.8)
Mid-Michigan <sup>c</sup>	473	18.2	(14.2-22.9)	24.1	(19.8-29.1)	57.7	(52.1-63.0)
Ottawa	630	17.2	(12.9-22.5)	23.0	(19.3-27.3)	59.8	(54.5-64.8)



2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

Table 10 Cont'd							
Geographic Area	Sample Size	Current Smoking <sup>a</sup>		Former Smoking <sup>b</sup>		Never Smoked	
		N	%	95% Confidence Interval	%	95% Confidence Interval	%
<b>Michigan Total</b>	<b>27,183</b>	<b>18.6</b>	<b>(18.0-19.3)</b>	<b>26.7</b>	<b>(26.0-27.4)</b>	<b>54.6</b>	<b>(53.9-55.4)</b>
<b>Region 8</b>	2,058	23.3	(20.0-27.0)	28.4	(25.5-31.5)	48.2	(44.6-51.8)
District #10	879	24.0	(19.5-29.1)	30.2	(26.0-34.9)	45.8	(40.6-51.1)
Muskegon	1,010	28.4	(22.2-35.6)	27.6	(23.7-31.9)	44.0	(38.6-49.4)
<b>Region 9</b>	1,431	19.7	(16.9-22.8)	32.2	(29.0-35.6)	48.1	(44.6-51.7)
District #2	181	25.0	(17.9-33.7)	34.0	(25.9-43.2)	41.0	(32.2-50.4)
District #4	229	23.6	(16.6-32.4)	33.3	(26.3-41.2)	43.1	(35.3-51.2)
Northwest Michigan	421	14.5	(10.6-19.5)	30.9	(24.4-38.2)	54.7	(47.6-61.6)
Benzie-Leelanau	198	17.6	(10.7-27.5)	34.0	(26.1-42.9)	48.4	(39.6-57.3)
Grand Traverse	363	20.0	(14.9-26.3)	33.7	(27.9-40.1)	46.3	(39.6-53.2)
<b>Region 10</b>	998	22.9	(19.5-26.7)	29.0	(25.6-32.7)	48.1	(44.1-52.1)
Bay	226	25.4	(17.8-34.8)	26.8	(20.4-34.3)	47.8	(39.0-56.8)
Huron	106	20.3	(11.9-32.4)	36.2	(26.3-47.5)	43.5	(32.8-54.8)
Saginaw	407	23.6	(18.5-29.6)	30.3	(24.9-36.4)	46.1	(40.0-52.3)
Sanilac	115	15.3	(9.2-24.4)	21.7	(14.6-31.0)	63.0	(52.2-72.6)
Tuscola	141	23.2	(15.4-33.4)	29.8	(21.8-39.3)	47.0	(37.1-57.1)
<b>Region 11</b>	766	21.4	(17.7-25.6)	26.7	(22.5-31.5)	51.9	(47.0-56.7)
Central Michigan	454	24.6	(19.6-30.4)	32.4	(26.4-39.1)	43.0	(36.9-49.2)
Midland	192	16.6	(10.2-25.8)	20.0	(14.1-27.6)	63.4	(53.6-72.1)
<b>Region 12</b>	801	20.3	(16.9-24.1)	31.1	(27.3-35.2)	48.6	(44.4-52.9)
Luce-Mackinac-Alger-Schoolcraft	112	22.8	(14.2-34.4)	27.3	(18.2-38.8)	49.9	(38.5-61.4)
Western Upper Peninsula	187	20.8	(14.7-28.5)	29.8	(22.4-38.4)	49.5	(40.7-58.3)
Delta-Menominee	152	16.7	(10.9-24.8)	31.9	(23.7-41.4)	51.4	(42.0-60.6)
Chippewa	93	25.8	(14.5-41.6)	39.1	(27.7-51.9)	35.1	(24.4-47.6)
Dickinson-Iron	83	24.6	(14.9-37.9)	38.6	(26.5-52.3)	36.7	(25.5-49.7)
Marquette	143	18.3	(11.4-28.1)	27.7	(19.8-37.2)	54.0	(44.1-63.7)

<sup>a</sup> 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.

<sup>b</sup> 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.

<sup>c</sup> 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.

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

**Table 11: Alcohol Consumption  
Michigan BRFSS, 2018-2020 Combined**

Geographic Area	Sample Size	Any Alcohol in Past Month <sup>a</sup>		Heavy Drinking <sup>b</sup>		Binge Drinking <sup>c</sup>	
		N	%	95% Confidence Interval	%	95% Confidence Interval	%
<b>Michigan Total</b>	<b>27,067</b>	<b>56.0</b>	<b>(55.2-56.8)</b>	<b>6.5</b>	<b>(6.1-6.9)</b>	<b>17.9</b>	<b>(17.3-18.5)</b>
<b>Region 1</b>	11,123	57.3	(56.0-58.5)	6.1	(5.5-6.7)	17.8	(16.9-18.8)
Livingston	1,236	62.1	(57.9-66.1)	7.1	(5.3-9.3)	17.9	(14.9-21.3)
Macomb	1,583	58.2	(55.2-61.2)	5.5	(4.1-7.2)	17.6	(15.3-20.0)
Monroe	332	52.8	(46.1-59.4)	9.2	(6.0-13.7)	17.7	(13.3-23.2)
Oakland	2,735	61.5	(59.2-63.8)	6.0	(5.0-7.1)	18.1	(16.3-20.0)
St. Clair	322	58.6	(51.7-65.2)	7.5	(4.8-11.6)	20.5	(15.1-27.1)
Washtenaw	1,485	62.6	(58.9-66.1)	7.8	(6.0-10.1)	18.8	(16.1-22.0)
City of Detroit	1,121	49.8	(46.2-53.4)	5.6	(4.2-7.4)	16.8	(14.1-19.8)
Wayne exc. Detroit	2,229	53.3	(50.7-55.9)	5.7	(4.6-7.0)	17.3	(15.3-19.5)
<b>Region 2</b>	1,781	53.9	(51.0-56.9)	5.7	(4.4-7.3)	16.6	(14.3-19.3)
Genesee	1,304	52.4	(48.8-55.9)	4.7	(3.4-6.3)	16.2	(13.4-19.5)
Lapeer	222	56.9	(49.1-64.5)	9.4	(5.2-16.4)	20.4	(14.3-28.1)
Shiawassee	231	56.5	(48.2-64.4)			13.3	(8.8-19.5)
<b>Region 3</b>	1,480	56.2	(52.6-59.7)	7.1	(5.3-9.4)	17.8	(15.0-20.9)
Jackson	1,103	53.7	(49.6-57.7)	6.7	(4.7-9.4)	17.4	(14.3-21.0)
Lenawee	302	60.2	(53.3-66.8)	7.1	(4.2-11.9)	18.6	(13.4-25.2)
<b>Region 4</b>	1,629	56.2	(53.1-59.3)	6.2	(4.9-7.7)	19.1	(16.7-21.8)
Barry-Eaton	405	49.9	(43.7-56.1)	8.5	(5.7-12.5)	16.7	(12.3-22.1)
Mid-Michigan <sup>d</sup>	471	53.2	(47.6-58.8)	6.5	(4.4-9.5)	15.7	(12.0-20.4)
Ingham	866	60.8	(56.4-65.0)	5.4	(3.9-7.4)	22.2	(18.8-26.1)
<b>Region 5</b>	1,369	51.4	(48.1-54.8)	6.6	(5.1-8.5)	16.8	(14.4-19.5)
Branch-Hillsdale-St. Joseph	394	45.1	(39.1-51.2)	4.8	(2.7-8.6)	14.4	(10.4-19.5)
Calhoun	355	46.6	(39.9-53.5)			14.8	(10.2-20.9)
Kalamazoo	561	59.6	(54.3-64.6)	7.2	(5.2-10.0)	19.8	(16.1-24.0)
<b>Region 6</b>	596	52.6	(47.8-57.4)	6.4	(4.4-9.1)	16.5	(13.1-20.7)
Van Buren-Cass	242	56.2	(48.6-63.4)	6.6	(3.7-11.4)	14.1	(9.7-20.1)
Berrien	295	47.2	(40.4-54.2)	5.7	(3.3-9.6)	18.2	(13.0-24.8)
<b>Region 7</b>	2,686	57.7	(55.3-60.1)	7.2	(6.1-8.5)	18.1	(16.4-20.0)
Allegan	309	55.6	(48.3-62.7)	6.9	(4.4-10.6)	12.7	(8.9-17.7)
Ionia	165	43.2	(34.1-52.7)			12.1	(7.0-20.3)
Kent	1,380	59.7	(56.4-62.9)	7.7	(6.2-9.6)	20.3	(17.8-23.0)
Mid-Michigan <sup>d</sup>	471	53.2	(47.6-58.8)	6.5	(4.4-9.5)	15.7	(12.0-20.4)
Ottawa	625	60.3	(55.0-65.3)	6.6	(4.7-9.2)	17.9	(14.2-22.3)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

Table 11 Cont'd							
Geographic Area	Sample Size	Any Alcohol in Past Month <sup>a</sup>		Heavy Drinking <sup>b</sup>		Binge Drinking <sup>c</sup>	
		N	%	95% Confidence Interval	%	95% Confidence Interval	%
<b>Michigan Total</b>	<b>27,067</b>	<b>56.0</b>	<b>(55.2-56.8)</b>	<b>6.5</b>	<b>(6.1-6.9)</b>	<b>17.9</b>	<b>(17.3-18.5)</b>
<b>Region 8</b>	2,048	51.9	(48.2-55.5)	6.7	(4.9-9.1)	16.3	(13.8-19.3)
District #10	874	48.7	(43.4-53.9)	6.9	(4.2-11.0)	15.7	(12.0-20.3)
Muskegon	1,005	52.9	(47.0-58.7)	7.5	(5.1-10.9)	17.9	(14.1-22.5)
<b>Region 9</b>	1,423	58.6	(55.1-62.1)	7.8	(6.2-9.8)	17.3	(14.8-20.0)
District #2	175	52.9	(43.4-62.2)	-- <sup>e</sup>	-- <sup>e</sup>	19.9	(13.3-28.5)
District #4	231	51.9	(43.6-60.0)	9.8	(5.9-15.9)	15.5	(10.5-22.2)
Northwest Michigan	417	55.9	(48.9-62.7)	5.7	(3.7-8.6)	13.7	(9.9-18.8)
Benzie-Leelanau	199	65.2	(56.6-73.0)	6.2	(3.5-10.9)	11.6	(7.6-17.4)
Grand Traverse	362	70.0	(63.7-75.5)	8.3	(5.4-12.7)	23.4	(17.9-30.0)
<b>Region 10</b>	997	55.3	(51.3-59.3)	6.7	(5.1-8.9)	19.5	(16.5-22.9)
Bay	227	58.8	(49.8-67.2)	-- <sup>e</sup>	-- <sup>e</sup>	21.4	(14.8-29.8)
Huron	102	57.3	(45.9-68.0)	-- <sup>e</sup>	-- <sup>e</sup>	18.4	(10.4-30.4)
Saginaw	409	56.8	(50.6-62.9)	7.2	(4.8-10.5)	19.8	(15.5-24.9)
Sanilac	114	40.9	(30.7-51.9)	-- <sup>e</sup>	-- <sup>e</sup>	18.8	(11.6-29.2)
Tuscola	142	53.3	(43.3-63.1)	-- <sup>e</sup>	-- <sup>e</sup>	16.3	(10.4-24.6)
<b>Region 11</b>	765	53.4	(48.5-58.2)	6.5	(4.6-8.9)	18.4	(14.5-23.2)
Central Michigan	453	49.0	(42.6-55.4)	6.3	(4.0-9.6)	18.2	(12.9-25.0)
Midland	193	54.6	(44.2-64.5)	-- <sup>e</sup>	-- <sup>e</sup>	15.4	(9.3-24.5)
<b>Region 12</b>	796	58.5	(54.2-62.6)	9.8	(7.4-13.0)	23.5	(19.8-27.6)
Luce-Mackinac-Alger-Schoolcraft	113	48.8	(37.4-60.2)	-- <sup>e</sup>	-- <sup>e</sup>	20.3	(12.6-31.0)
Western Upper Peninsula	185	58.6	(49.8-66.8)	-- <sup>e</sup>	-- <sup>e</sup>	25.6	(17.5-35.7)
Delta-Menominee	150	60.9	(51.4-69.7)	-- <sup>e</sup>	-- <sup>e</sup>	20.4	(13.3-30.0)
Chippewa	94	62.7	(50.2-73.8)	-- <sup>e</sup>	-- <sup>e</sup>	23.2	(12.4-39.0)
Dickinson-Iron	82	64.7	(50.5-76.7)	-- <sup>e</sup>	-- <sup>e</sup>	25.0	(15.7-37.3)
Marquette	142	53.7	(43.6-63.5)	10.5	(6.1-17.6)	24.6	(17.2-33.9)

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

<sup>b</sup> 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.

<sup>c</sup> 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.

<sup>d</sup> 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.

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

<b>Table 12: Seatbelt Use Michigan BRFSS, 2018 and 2020 Combined</b>			
<b>Geographic Area</b>	<b>Always Uses a Seatbelt<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>16,940</b>	<b>89.1</b>	<b>(88.4-89.8)</b>
<b>Region 1</b>	6,986	90.1	(89.1-91.1)
Livingston	723	94.7	(91.9-96.6)
Macomb	944	91.1	(88.4-93.2)
Monroe	222	92.4	(87.4-95.5)
Oakland	1,709	91.5	(89.5-93.1)
St. Clair	211	79.8	(69.9-87.1)
Washtenaw	986	89.6	(85.8-92.5)
City of Detroit	725	87.0	(83.7-89.8)
Wayne exc. Detroit	1,405	90.1	(88.0-92.0)
<b>Region 2</b>	1,073	88.2	(85.2-90.6)
Genesee	741	87.2	(83.4-90.3)
Lapeer	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Shiawassee	165	89.4	(82.9-93.6)
<b>Region 3</b>	867	90.0	(86.7-92.6)
Jackson	616	91.9	(88.6-94.4)
Lenawee	203	84.5	(75.9-90.4)
<b>Region 4</b>	1,054	90.2	(87.5-92.4)
Barry-Eaton	279	89.0	(82.9-93.1)
Mid-Michigan <sup>b</sup>	298	91.8	(87.1-94.9)
Ingham	534	89.9	(85.6-93.0)
<b>Region 5</b>	918	89.7	(86.7-92.1)
Branch-Hillsdale-St. Joseph	260	86.2	(79.2-91.1)
Calhoun	246	90.5	(83.3-94.7)
Kalamazoo	360	91.5	(87.6-94.2)
<b>Region 6</b>	411	86.4	(81.4-90.3)
Van Buren-Cass	164	88.0	(80.3-92.9)
Berrien	206	83.9	(75.6-89.7)
<b>Region 7</b>	1,713	88.5	(86.3-90.4)
Allegan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	899	87.8	(84.7-90.4)
Mid-Michigan <sup>b</sup>	298	91.8	(87.1-94.9)
Ottawa	379	89.5	(84.3-93.1)

2018-2020 Michigan BRFS Regional & Local Health Department Estimates  
September 2021

<b>Table 12 Cont'd</b>			
<b>Geographic Area</b>	<b>Always Uses a Seatbelt<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>16,940</b>	<b>89.1</b>	<b>(88.4-89.8)</b>
<b>Region 8</b>	1,183	87.7	(83.0-91.3)
District #10	521	84.0	(75.6-89.8)
Muskegon	540	93.1	(90.2-95.2)
<b>Region 9</b>	852	90.1	(87.3-92.4)
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	146	87.0	(78.7-92.4)
Northwest Michigan	242	87.2	(80.4-91.9)
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 10</b>	639	86.3	(82.6-89.3)
Bay	146	88.2	(80.5-93.1)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	252	86.3	(79.7-90.9)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	89	83.5	(72.8-90.5)
<b>Region 11</b>	498	89.6	(85.7-92.5)
Central Michigan	286	89.1	(84.0-92.8)
Midland	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 12</b>	509	84.2	(79.1-88.2)
Luce-Mackinac-Alger-Schoolcraft	78	80.1	(65.9-89.4)
Western Upper Peninsula	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Delta-Menominee	101	89.2	(81.3-94.0)
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	90	84.5	(73.8-91.4)
<sup>a</sup> The proportion of adults who reported always using a seatbelt when driving or riding in a car. <sup>b</sup> 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. <sup>c</sup> Suppressed due to a denominator < 50 and/or a relative standard error > 30%.			

<b>Table 13: No Routine Checkup in Past Year Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Had No Routine Checkup in Past Year<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,799</b>	<b>21.2</b>	<b>(20.6-21.9)</b>
<b>Region 1</b>	11,472	20.2	(19.2-21.2)
Livingston	1,264	21.7	(18.3-25.4)
Macomb	1,618	20.1	(17.7-22.7)
Monroe	338	19.7	(14.6-25.9)
Oakland	2,813	20.4	(18.5-22.4)
St. Clair	336	23.0	(17.2-30.0)
Washtenaw	1,521	25.1	(22.0-28.4)
City of Detroit	1,192	18.5	(15.8-21.7)
Wayne exc. Detroit	2,302	18.4	(16.5-20.6)
<b>Region 2</b>	1,851	19.2	(16.9-21.7)
Genesee	1,365	18.7	(16.1-21.7)
Lapeer	223	20.6	(15.0-27.7)
Shiawassee	237	18.0	(12.2-25.7)
<b>Region 3</b>	1,515	23.7	(20.6-27.1)
Jackson	1,131	20.3	(17.1-23.9)
Lenawee	307	26.6	(20.4-34.0)
<b>Region 4</b>	1,653	22.6	(20.0-25.4)
Barry-Eaton	414	23.0	(17.8-29.1)
Mid-Michigan <sup>b</sup>	478	19.7	(15.5-24.8)
Ingham	876	24.1	(20.5-28.1)
<b>Region 5</b>	1,382	21.3	(18.5-24.3)
Branch-Hillsdale-St. Joseph	398	21.3	(16.8-26.7)
Calhoun	353	20.4	(14.9-27.4)
Kalamazoo	572	21.1	(17.1-25.8)
<b>Region 6</b>	605	25.5	(21.5-30.0)
Van Buren-Cass	246	26.4	(20.1-33.8)
Berrien	299	24.7	(19.1-31.3)
<b>Region 7</b>	2,741	23.2	(21.2-25.4)
Allegan	307	19.9	(14.8-26.1)
Ionia	170	22.7	(14.7-33.3)
Kent	1,413	23.6	(20.9-26.5)
Mid-Michigan <sup>b</sup>	478	19.7	(15.5-24.8)
Ottawa	638	23.9	(19.4-28.9)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 13 Cont'd</b>			
<b>Geographic Area</b>	<b>Had No Routine Checkup in Past Year<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,799</b>	<b>21.2</b>	<b>(20.6-21.9)</b>
<b>Region 8</b>	2,100	22.4	(19.2-26.0)
District #10	887	25.0	(20.1-30.7)
Muskegon	1,040	16.4	(13.1-20.3)
<b>Region 9</b>	1,454	18.4	(15.7-21.6)
District #2	183	16.6	(10.6-25.1)
District #4	239	15.0	(9.9-22.1)
Northwest Michigan	427	21.5	(15.6-28.7)
Benzie-Leelanau	201	18.8	(12.5-27.2)
Grand Traverse	368	17.0	(12.4-23.0)
<b>Region 10</b>	1,022	23.6	(20.2-27.4)
Bay	231	22.2	(15.6-30.6)
Huron	108	25.2	(16.3-36.9)
Saginaw	419	25.3	(20.0-31.4)
Sanilac	120	21.1	(13.1-32.3)
Tuscola	141	21.3	(13.8-31.5)
<b>Region 11</b>	778	23.1	(19.3-27.5)
Central Michigan	459	22.2	(17.2-28.1)
Midland	194	19.4	(12.8-28.4)
<b>Region 12</b>	809	21.0	(17.7-24.8)
Luce-Mackinac-Alger-Schoolcraft	115	19.1	(11.5-30.0)
Western Upper Peninsula	187	23.3	(16.3-32.2)
Delta-Menominee	152	21.1	(14.3-29.9)
Chippewa	95	25.4	(15.1-39.3)
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	144	18.6	(12.3-27.0)

<sup>a</sup> The proportion of adults who reported that they did not have a routine checkup in the past year.  
<sup>b</sup> 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.  
<sup>c</sup> Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

<b>Table 14: Breast Cancer Screening Among Women 40 Years and Older Michigan BRFSS, 2018 and 2020 Combined</b>			
<b>Geographic Area</b>	<b>Had Mammogram in Past Two Years<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>3,021</b>	<b>72.7</b>	<b>(70.5-74.7)</b>
<b>Region 1</b>	1,344	72.6	(69.2-75.8)
Livingston	104	72.3	(60.5-81.7)
Macomb	183	75.1	(66.6-82.1)
Monroe	54	73.7	(56.0-86.1)
Oakland	318	73.2	(66.4-79.0)
St. Clair	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Washtenaw	211	70.8	(62.1-78.2)
City of Detroit	122	66.9	(55.4-76.7)
Wayne exc. Detroit	306	72.4	(65.0-78.7)
<b>Region 2</b>	159	74.5	(65.1-82.1)
Genesee	106	77.8	(66.9-85.8)
Lapeer	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	146	72.7	(62.0-81.3)
Jackson	85	70.7	(56.3-81.9)
Lenawee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 4</b>	209	75.5	(68.0-81.8)
Barry-Eaton	54	60.4	(43.8-75.0)
Mid-Michigan <sup>b</sup>	72	82.7	(70.9-90.4)
Ingham	90	75.9	(63.8-84.9)
<b>Region 5</b>	183	70.6	(62.0-78.0)
Branch-Hillsdale-St. Joseph	54	64.6	(48.1-78.3)
Calhoun	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kalamazoo	68	65.2	(50.9-77.1)
<b>Region 6</b>	92	67.9	(55.5-78.2)
Van Buren-Cass	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Berrien	53	70.6	(54.6-82.8)
<b>Region 7</b>	282	75.5	(68.7-81.3)
Allegan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	143	77.6	(67.9-85.0)
Mid-Michigan <sup>b</sup>	72	82.7	(70.9-90.4)
Ottawa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>



2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 14 Cont'd</b>			
<b>Geographic Area</b>	<b>Mammogram in the Past Two Years<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>3,021</b>	<b>72.7</b>	<b>(70.5-74.7)</b>
<b>Region 8</b>	146	73.5	(64.1-81.2)
District #10	82	83.9	(72.3-91.2)
Muskegon	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 9</b>	124	74.0	(61.7-83.3)
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Northwest Michigan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 10</b>	121	66.0	(52.7-77.2)
Bay	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	76	70.1	(56.7-80.8)
Central Michigan	50	70.2	(53.7-82.7)
Midland	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 12</b>	111	73.7	(63.1-82.2)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Delta-Menominee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

<sup>a</sup> Among women aged 40 years and older, the proportion who reported having a mammogram in the past two years.

<sup>b</sup> 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.

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

<b>Table 15: Cervical Cancer Screening Among Women 18 Years and Older Michigan BRFS, 2018 and 2020 Combined</b>			
<b>Geographic Area</b>	<b>Had Appropriately Timed Pap Test<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>1,806</b>	<b>79.2</b>	<b>(76.7-81.4)</b>
<b>Region 1</b>	817	80.6	(76.9-83.9)
Livingston	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Macomb	95	87.1	(78.2-92.6)
Monroe	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Oakland	180	83.0	(75.0-88.8)
St. Clair	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Washtenaw	131	63.0	(50.5-73.9)
City of Detroit	102	81.6	(70.6-89.1)
Wayne exc. Detroit	194	79.9	(70.9-86.7)
<b>Region 2</b>	91	76.9	(63.1-86.7)
Genesee	67	74.7	(57.8-86.4)
Lapeer	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	75	76.4	(60.2-87.4)
Jackson	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Lenawee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 4</b>	134	80.4	(70.5-87.6)
Barry-Eaton	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Mid-Michigan <sup>b</sup>	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ingham	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 5</b>	103	75.6	(64.8-84.0)
Branch-Hillsdale-St. Joseph	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Calhoun	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kalamazoo	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 6</b>	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Van Buren-Cass	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Berrien	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 7</b>	189	76.1	(68.2-82.6)
Allegan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	110	74.6	(63.6-83.1)
Mid-Michigan <sup>b</sup>	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ottawa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 15 Cont'd</b>			
<b>Geographic Area</b>	<b>Had Appropriately Timed Pap Test<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>1,806</b>	<b>79.2</b>	<b>(76.7-81.4)</b>
<b>Region 8</b>	86	73.2	(60.1-83.3)
District #10	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Muskegon	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 9</b>	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Northwest Michigan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 10</b>	69	76.7	(63.3-86.3)
Bay	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Central Michigan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Midland	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 12</b>	51	75.7	(59.9-86.7)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Delta-Menominee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

<sup>a</sup> Among women aged 18 years and older, the proportion who reported having a Pap test within the previous three years.

<sup>b</sup> 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.

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

<b>Table 18: Prostate Cancer Screening Among Men 50 Years and Older Michigan BRFS, 2018 and 2020 Combined</b>			
<b>Geographic Area</b>	<b>Had PSA Test in Past Year<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>1,730</b>	<b>32.9</b>	<b>(30.2-35.7)</b>
<b>Region 1</b>	752	35.2	(30.9-39.8)
Livingston	57	34.3	(20.4-51.5)
Macomb	105	45.0	(33.3-57.4)
Monroe	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Oakland	180	43.4	(35.0-52.2)
St. Clair	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Washtenaw	148	29.6	(21.5-39.3)
City of Detroit	56	20.5	(11.2-34.6)
Wayne exc. Detroit	148	27.2	(19.8-36.2)
<b>Region 2</b>	83	25.3	(16.2-37.3)
Genesee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Lapeer	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	88	37.0	(26.2-49.3)
Jackson	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Lenawee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 4</b>	107	38.8	(28.3-50.5)
Barry-Eaton	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Mid-Michigan <sup>b</sup>	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ingham	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 5</b>	104	26.2	(17.8-36.7)
Branch-Hillsdale-St. Joseph	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Calhoun	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kalamazoo	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 6</b>	41	34.6	(20.8-51.7)
Van Buren-Cass	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Berrien	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 7</b>	169	24.3	(17.8-32.2)
Allegan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	76	25.0	(15.6-37.5)
Mid-Michigan <sup>b</sup>	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ottawa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 18 Cont'd</b>			
<b>Geographic Area</b>	<b>Had PSA Test in Past Year<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>1,730</b>	<b>32.9</b>	<b>(30.2-35.7)</b>
<b>Region 8</b>	84	21.5	(12.6-34.1)
District #10	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Muskegon	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 9</b>	84	36.7	(25.8-49.0)
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Northwest Michigan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 10</b>	76	41.1	(28.9-54.5)
Bay	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	52	29.3	(18.2-43.5)
Central Michigan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Midland	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 12</b>	75	35.0	(23.0-49.2)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Delta-Menominee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

<sup>a</sup> Among men aged 50 years and older, the proportion who reported having a Prostate-Specific Antigen (PSA) test within the past year.

<sup>b</sup> 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.

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

<b>Table 17: Colorectal Cancer Screening Among Adults 50 Years and Older Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Appropriate Colorectal Cancer Screening<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>4,353</b>	<b>75.6</b>	<b>(73.9-77.3)</b>
<b>Region 1</b>	1,916	74.5	(71.8-77.1)
Livingston	151	74.2	(64.1-82.2)
Macomb	263	77.9	(70.4-83.9)
Monroe	71	69.4	(55.2-80.6)
Oakland	458	75.0	(69.8-79.6)
St. Clair	51	73.0	(56.2-85.1)
Washtenaw	338	72.9	(66.4-78.5)
City of Detroit	153	70.7	(61.1-78.8)
Wayne exc. Detroit	409	74.8	(69.1-79.7)
<b>Region 2</b>	230	77.5	(70.5-83.3)
Genesee	143	74.6	(65.2-82.2)
Lapeer	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	213	79.8	(72.3-85.7)
Jackson	126	84.9	(74.9-91.3)
Lenawee	77	75.6	(62.3-85.3)
<b>Region 4</b>	286	80.1	(73.5-85.3)
Barry-Eaton	86	82.3	(71.1-89.8)
Mid-Michigan <sup>b</sup>	92	82.3	(71.0-89.8)
Ingham	115	79.5	(68.7-87.2)
<b>Region 5</b>	260	78.2	(71.8-83.6)
Branch-Hillsdale-St. Joseph	82	76.5	(64.2-85.5)
Calhoun	68	77.8	(64.2-87.3)
Kalamazoo	89	80.1	(68.8-88.0)
<b>Region 6</b>	115	73.0	(62.8-81.2)
Van Buren-Cass	51	78.9	(64.4-88.6)
Berrien	58	69.2	(53.9-81.2)
<b>Region 7</b>	407	76.7	(71.2-81.5)
Allegan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	198	76.7	(68.5-83.3)
Mid-Michigan <sup>b</sup>	92	82.3	(71.0-89.8)
Ottawa	92	75.5	(61.6-85.5)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

Table 17 Cont'd			
Geographic Area	Appropriate Colorectal Cancer Screening <sup>a</sup>		
	N	%	95% Confidence Interval
<b>Michigan Total</b>	<b>4,353</b>	<b>75.6</b>	<b>(73.9-77.3)</b>
<b>Region 8</b>	212	68.4	(58.5-76.8)
District #10	114	65.4	(51.6-77.0)
Muskegon	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 9</b>	204	74.2	(64.4-82.1)
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Northwest Michigan	51	56.0	(34.7-75.4)
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 10</b>	182	77.9	(67.8-85.5)
Bay	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	114	80.1	(70.4-87.2)
Central Michigan	78	75.8	(63.4-85.0)
Midland	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 12</b>	177	78.7	(70.2-85.3)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Delta-Menominee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

<sup>a</sup> Among adults aged 50 years and older, the proportion who had either a fecal occult blood test within the past year, a sigmoidoscopy within the past five years, or a colonoscopy within the past ten years.  
<sup>b</sup> 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.  
<sup>c</sup> Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 18: Oral Health Michigan BRFSS, 2018 and 2020 Combined</b>						
<b>Geographic Area</b>	<b>No Dental Visit in Past Year<sup>a</sup></b>			<b>6+ Teeth Missing<sup>b</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>7,210</b>	<b>30.8</b>	<b>(29.3-32.2)</b>	<b>7,120</b>	<b>14.9</b>	<b>(13.9-16.1)</b>
<b>Region 1</b>	3,156	29.5	(27.3-31.7)	3,108	12.3	(10.9-13.9)
Livingston	217	19.4	(13.9-26.6)	220	7.9	(4.7-12.7)
Macomb	418	30.1	(24.8-36.1)	411	11.8	(8.5-16.1)
Monroe	115	25.8	(16.5-37.9)	112	20.1	(11.8-32.1)
Oakland	760	23.3	(19.7-27.4)	750	7.8	(5.9-10.3)
St. Clair	77	18.3	(9.9-31.5)	73	14.7	(8.4-24.6)
Washtenaw	523	30.0	(23.8-37.1)	515	7.7	(5.1-11.6)
City of Detroit	309	43.0	(36.2-50.1)	306	22.2	(17.2-28.3)
Wayne exc. Detroit	695	31.2	(26.9-35.8)	679	13.3	(10.5-16.8)
<b>Region 2</b>	388	32.9	(27.4-38.9)	381	18.0	(14.1-22.7)
Genesee	252	34.1	(27.3-41.6)	250	17.0	(12.5-22.6)
Lapeer	57	24.5	(13.1-41.0)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Shiawassee	66	32.9	(21.2-47.3)	65	20.9	(11.6-34.6)
<b>Region 3</b>	329	30.9	(25.1-37.4)	327	17.8	(13.1-23.6)
Jackson	198	30.5	(23.2-39.0)	196	17.6	(12.0-25.1)
Lenawee	107	32.7	(22.7-44.5)	107	23.9	(14.4-36.8)
<b>Region 4</b>	516	27.4	(22.7-32.6)	515	12.9	(9.4-17.4)
Barry-Eaton	125	19.9	(13.1-29.1)	125	17.5	(10.0-28.9)
Mid-Michigan <sup>c</sup>	149	28.0	(20.4-37.1)	147	14.7	(9.4-22.2)
Ingham	245	32.3	(25.1-40.5)	244	8.4	(4.8-14.4)
<b>Region 5</b>	430	34.4	(28.8-40.4)	434	19.6	(15.2-24.8)
Branch-Hillsdale-St. Joseph	117	31.8	(22.4-42.9)	120	27.4	(19.0-37.9)
Calhoun	107	43.6	(31.7-56.2)	107	23.1	(14.2-35.3)
Kalamazoo	163	26.8	(19.4-35.8)	165	11.7	(6.8-19.4)
<b>Region 6</b>	201	32.9	(25.8-41.0)	197	13.9	(9.5-19.9)
Van Buren-Cass	79	31.0	(20.4-44.1)	78	20.5	(12.5-31.7)
Berrien	100	31.0	(21.4-42.6)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>



2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

Table 18 Cont'd

Geographic Area	No Dental Visit in Past Year <sup>a</sup>			6+ Teeth Missing <sup>b</sup>		
	N	%	95% Confidence Interval	N	%	95% Confidence Interval
<b>Michigan Total</b>	<b>7,210</b>	<b>30.8</b>	<b>(29.3-32.2)</b>	<b>7,120</b>	<b>14.9</b>	<b>(13.9-16.1)</b>
<b>Region 7</b>	746	28.5	(24.6-32.8)	739	10.6	(8.4-13.3)
Allegan	79	22.8	(13.5-35.7)	77	14.9	(8.4-25.1)
Ionia	--d	--d	--d	--d	--d	--d
Kent	380	31.5	(25.9-37.8)	381	8.6	(5.9-12.4)
Mid-Michigan <sup>c</sup>	149	28.0	(20.4-37.1)	147	14.7	(9.4-22.2)
Ottawa	162	22.2	(14.9-31.9)	--d	--d	--d
<b>Region 8</b>	353	34.5	(27.3-42.4)	343	22.6	(15.4-31.8)
District #10	171	35.3	(24.1-48.3)	165	27.9	(17.3-41.8)
Muskegon	88	33.5	(21.0-48.9)	86	37.7	(20.6-58.5)
<b>Region 9</b>	287	32.7	(26.0-40.3)	282	17.5	(12.5-24.1)
District #2	52	51.0	(35.1-66.8)	52	38.4	(23.2-56.3)
District #4	62	37.8	(25.5-52.0)	--d	--d	--d
Northwest Michigan	--d	--d	--d	--d	--d	--d
Benzie-Leelanau	--d	--d	--d	--d	--d	--d
Grand Traverse	74	24.9	(14.9-38.5)	--d	--d	--d
<b>Region 10</b>	280	33.3	(26.4-41.0)	278	19.0	(14.1-25.1)
Bay	65	30.7	(18.0-47.1)	--d	--d	--d
Huron	--d	--d	--d	--d	--d	--d
Saginaw	120	36.0	(25.4-48.2)	118	15.0	(8.9-24.1)
Sanilac	--d	--d	--d	--d	--d	--d
Tuscola	--d	--d	--d	--d	--d	--d
<b>Region 11</b>	174	39.8	(29.1-51.7)	174	18.8	(12.7-26.9)
Central Michigan	115	45.6	(32.4-59.4)	115	23.3	(14.9-34.5)
Midland	59	27.8	(15.2-45.3)	--d	--d	--d
<b>Region 12</b>	261	29.6	(22.1-38.3)	257	29.2	(21.8-38.0)
Luce-Mackinac-Alger-Schoolcraft	--d	--d	--d	--d	--d	--d
Western Upper Peninsula	59	29.9	(17.1-47.0)	--d	--d	--d
Delta-Menominee	54	33.6	(19.9-50.7)	51	35.1	(20.2-53.6)
Chippewa	--d	--d	--d	--d	--d	--d
Dickinson-Iron	--d	--d	--d	--d	--d	--d
Marquette	--d	--d	--d	--d	--d	--d

<sup>a</sup> The proportion of adults who reported that they had not visited a dentist or dental clinic for any reason in the past year

<sup>b</sup> The proportion of adult s 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.

<sup>c</sup> 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.

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

**Table 19: Immunizations Among Adults Aged 65 Years and Older  
Michigan BRFSS, 2018-2020 Combined**

Geographic Area	Had Flu Vaccine in Past Year <sup>a</sup>			Ever Had Pneumonia Vaccine <sup>b</sup>		
	N	%	95% Confidence Interval	N	%	95% Confidence Interval
<b>Michigan Total</b>	<b>9,472</b>	<b>61.6</b>	<b>(60.3-62.9)</b>	<b>9,204</b>	<b>72.8</b>	<b>(71.6-74.1)</b>
<b>Region 1</b>	3,809	62.3	(60.1-64.3)	3,687	72.2	(70.2-74.2)
Livingston	459	64.3	(58.0-70.2)	443	78.2	(72.4-83.0)
Macomb	564	65.1	(60.0-69.8)	547	77.3	(72.6-81.3)
Monroe	119	51.7	(40.7-62.6)	117	69.4	(57.6-79.1)
Oakland	930	64.8	(60.9-68.5)	900	73.9	(70.1-77.3)
St. Clair	100	67.3	(56.1-76.8)	99	79.3	(69.2-86.8)
Washtenaw	560	66.3	(61.2-71.1)	536	78.3	(73.7-82.3)
City of Detroit	298	51.1	(43.7-58.4)	290	57.9	(50.3-65.2)
Wayne exc. Detroit	761	61.0	(56.4-65.5)	738	69.6	(64.8-74.1)
<b>Region 2</b>	577	61.1	(56.0-65.9)	560	67.1	(62.0-71.7)
Genesee	413	61.4	(55.4-67.2)	399	66.8	(60.7-72.4)
Lapeer	70	53.8	(40.2-67.0)	67	54.0	(39.7-67.7)
Shiawassee	84	66.3	(52.4-77.9)	84	80.8	(70.5-88.1)
<b>Region 3</b>	533	59.9	(54.3-65.3)	524	76.1	(71.0-80.6)
Jackson	399	57.9	(51.4-64.2)	394	74.5	(68.4-79.8)
Lenawee	116	57.1	(46.5-67.1)	114	75.5	(65.4-83.4)
<b>Region 4</b>	543	69.6	(64.8-74.1)	534	78.2	(73.6-82.2)
Barry-Eaton	158	61.6	(52.5-70.0)	154	82.1	(74.3-87.9)
Mid-Michigan <sup>c</sup>	176	64.8	(56.2-72.6)	173	71.2	(62.7-78.5)
Ingham	254	73.5	(66.3-79.7)	251	78.0	(70.5-84.0)
<b>Region 5</b>	511	60.2	(54.8-65.3)	492	71.1	(65.7-76.0)
Branch-Hillsdale-St. Joseph	165	58.9	(49.8-67.5)	161	69.4	(60.4-77.1)
Calhoun	139	58.7	(48.5-68.2)	137	63.1	(52.4-72.7)
Kalamazoo	189	63.5	(54.0-72.1)	179	79.5	(69.5-86.9)
<b>Region 6</b>	217	61.4	(53.4-68.9)	213	73.1	(65.4-79.7)
Van Buren-Cass	101	67.4	(55.1-77.7)	101	75.9	(64.7-84.4)
Berrien	109	56.6	(45.4-67.2)	105	71.1	(59.6-80.4)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

Table 19 Cont'd						
Geographic Area	Had Flu Vaccine in Past Year <sup>a</sup>			Ever Had Pneumonia Vaccine <sup>b</sup>		
	N	%	95% Confidence Interval	N	%	95% Confidence Interval
<b>Michigan Total</b>	<b>9,472</b>	<b>61.6</b>	<b>(60.3-62.9)</b>	<b>9,204</b>	<b>72.8</b>	<b>(71.6-74.1)</b>
<b>Region 7</b>	879	62.9	(59.0-66.8)	857	76.3	(72.5-79.7)
Allegan	123	58.5	(47.5-68.7)	120	78.4	(69.3-85.3)
Ionia	56	59.6	(44.7-73.0)	55	66.0	(50.9-78.4)
Kent	418	64.5	(58.6-70.0)	406	76.2	(70.4-81.2)
Mid-Michigan <sup>c</sup>	176	64.8	(56.2-72.6)	173	71.2	(62.7-78.5)
Ottawa	222	67.5	(60.1-74.1)	216	83.0	(76.4-88.0)
<b>Region 8</b>	746	64.6	(59.9-69.1)	730	76.0	(70.7-80.7)
District #10	365	62.6	(56.1-68.6)	358	74.2	(66.5-80.7)
Muskegon	352	68.3	(61.7-74.3)	343	79.5	(73.2-84.7)
<b>Region 9</b>	597	60.5	(54.7-66.0)	577	72.4	(66.7-77.5)
District #2	78	60.3	(45.7-73.4)	77	79.0	(65.0-88.4)
District #4	95	49.9	(37.6-62.2)	90	60.9	(47.4-73.0)
Northwest Michigan	180	63.1	(51.8-73.1)	175	70.1	(57.9-79.9)
Benzie-Leelanau	100	58.2	(44.0-71.1)	96	81.4	(71.2-88.6)
Grand Traverse	144	70.8	(60.5-79.3)	139	75.4	(65.6-83.2)
<b>Region 10</b>	387	58.4	(52.0-64.6)	375	69.2	(63.1-74.7)
Bay	82	66.4	(54.6-76.4)	82	76.7	(65.1-85.4)
Huron	--d	--d	--d	--d	--d	--d
Saginaw	154	50.2	(40.0-60.4)	145	64.7	(53.9-74.1)
Sanilac	--d	--d	--d	--d	--d	--d
Tuscola	61	56.9	(42.7-70.1)	60	68.8	(53.8-80.6)
<b>Region 11</b>	270	57.2	(49.4-64.6)	260	82.1	(76.2-86.7)
Central Michigan	173	55.1	(45.3-64.6)	167	83.5	(76.4-88.8)
Midland	79	62.4	(49.6-73.6)	76	73.9	(60.9-83.8)
<b>Region 12</b>	293	56.2	(49.1-63.0)	289	69.9	(62.6-76.3)
Luce-Mackinac-Alger-Schoolcraft	--d	--d	--d	--d	--d	--d
Western Upper Peninsula	65	44.9	(31.5-59.1)	64	68.3	(52.8-80.6)
Delta-Menominee	64	55.0	(39.8-69.3)	64	71.7	(56.9-82.9)
Chippewa	--d	--d	--d	--d	--d	--d
Dickinson-Iron	--d	--d	--d	--d	--d	--d
Marquette	57	74.6	(59.2-85.6)	--d	--d	--d

<sup>a</sup> 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.

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

<sup>c</sup> 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.

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

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 20: HIV Testing Among Adults Aged 18-64 Years Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Ever Had an HIV Test<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>16,211</b>	<b>45.5</b>	<b>(44.5-46.5)</b>
<b>Region 1</b>	6,758	49.1	(47.6-50.6)
Livingston	723	40.5	(35.4-45.8)
Macomb	932	44.0	(40.3-47.7)
Monroe	199	43.5	(35.7-51.6)
Oakland	1,638	46.2	(43.3-49.1)
St. Clair	209	39.9	(32.0-48.4)
Washtenaw	874	46.3	(42.0-50.7)
City of Detroit	766	71.8	(67.6-75.6)
Wayne exc. Detroit	1,363	47.3	(44.1-50.6)
<b>Region 2</b>	1,126	45.9	(42.3-49.6)
Genesee	821	48.6	(44.3-53.1)
Lapeer	149	39.4	(30.8-48.7)
Shiawassee	143	41.3	(31.8-51.6)
<b>Region 3</b>	865	45.7	(41.2-50.4)
Jackson	642	49.2	(44.0-54.4)
Lenawee	171	39.7	(31.0-49.1)
<b>Region 4</b>	1,012	44.2	(40.5-48.0)
Barry-Eaton	231	48.8	(41.1-56.6)
Mid-Michigan <sup>b</sup>	266	45.1	(38.0-52.4)
Ingham	573	42.3	(37.3-47.4)
<b>Region 5</b>	797	45.5	(41.3-49.8)
Branch-Hillsdale-St. Joseph	211	37.8	(30.4-45.8)
Calhoun	203	51.4	(42.7-59.9)
Kalamazoo	346	46.2	(40.0-52.5)
<b>Region 6</b>	359	45.4	(39.5-51.3)
Van Buren-Cass	135	50.0	(40.6-59.4)
Berrien	174	44.4	(36.0-53.1)
<b>Region 7</b>	1,679	41.2	(38.4-44.1)
Allegan	172	42.3	(33.4-51.7)
Ionia	100	43.0	(31.8-55.0)
Kent	901	42.8	(39.0-46.7)
Mid-Michigan <sup>b</sup>	266	45.1	(38.0-52.4)
Ottawa	373	36.0	(30.2-42.3)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 20 Cont'd</b>			
<b>Geographic Area</b>	<b>Ever Had an HIV Test<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>16,211</b>	<b>45.5</b>	<b>(44.5-46.5)</b>
<b>Region 8</b>	1,182	44.9	(40.2-49.7)
District #10	467	39.9	(33.2-46.9)
Muskegon	597	54.0	(46.6-61.1)
<b>Region 9</b>	760	37.2	(33.1-41.6)
District #2	89	42.5	(30.5-55.5)
District #4	120	34.2	(25.1-44.7)
Northwest Michigan	219	32.0	(24.6-40.3)
Benzie-Leelanau	89	44.2	(32.6-56.4)
Grand Traverse	207	39.4	(31.6-47.9)
<b>Region 10</b>	572	41.9	(36.9-47.1)
Bay	136	49.1	(38.1-60.2)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	237	41.4	(34.0-49.2)
Sanilac	68	39.0	(26.7-52.8)
Tuscola	75	45.4	(32.5-59.0)
<b>Region 11</b>	447	38.2	(32.3-44.4)
Central Michigan	249	41.1	(32.8-49.9)
Midland	106	29.8	(19.6-42.6)
<b>Region 12</b>	459	39.4	(34.2-44.9)
Luce-Mackinac-Alger-Schoolcraft	63	31.4	(20.0-45.6)
Western Upper Peninsula	112	30.0	(21.4-40.4)
Delta-Menominee	79	53.0	(40.8-64.8)
Chippewa	55	44.9	(28.5-62.4)
Dickinson-Iron	50	44.9	(29.4-61.4)
Marquette	77	36.1	(24.7-49.2)

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

<sup>a</sup> 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.

<sup>b</sup> 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.

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

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 21: Asthma</b>						
<b>Michigan BRFSS, 2018-2020 Combined</b>						
<b>Geographic Area</b>	<b>Ever Told Have Asthma<sup>a</sup></b>			<b>Still Have Asthma<sup>b</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,999</b>	<b>15.9</b>	<b>(15.3-16.5)</b>	<b>27,860</b>	<b>11.1</b>	<b>(10.6-11.7)</b>
<b>Region 1</b>	11,542	16.3	(15.4-17.2)	11,485	11.6	(10.8-12.4)
Livingston	1,275	12.3	(9.9-15.2)	1,271	7.3	(5.6-9.3)
Macomb	1,632	17.1	(14.9-19.5)	1,621	11.8	(9.9-13.9)
Monroe	344	14.3	(10.6-19.0)	342	10.4	(7.3-14.6)
Oakland	2,826	14.4	(12.8-16.1)	2,811	9.5	(8.2-10.9)
St. Clair	336	24.5	(19.0-31.0)	328	17.2	(12.4-23.3)
Washtenaw	1,525	17.2	(14.8-20.0)	1,520	12.3	(10.1-14.8)
City of Detroit	1,196	20.2	(17.6-23.1)	1,193	15.5	(13.2-18.0)
Wayne exc. Detroit	2,318	15.1	(13.4-17.0)	2,309	11.6	(10.1-13.3)
<b>Region 2</b>	1,856	16.9	(14.7-19.3)	1,846	12.2	(10.4-14.2)
Genesee	1,367	18.7	(16.1-21.6)	1,361	13.1	(11.0-15.5)
Lapeer	226	10.8	(7.1-16.2)	225	8.6	(5.5-13.3)
Shiawassee	237	13.9	(8.7-21.7)	234	11.8	(6.8-19.6)
<b>Region 3</b>	1,527	17.4	(14.8-20.3)	1,516	12.1	(9.9-14.7)
Jackson	1,142	18.6	(15.5-22.0)	1,136	13.8	(11.1-17.0)
Lenawee	308	18.2	(13.3-24.5)	305	12.9	(8.7-18.8)
<b>Region 4</b>	1,667	16.0	(13.9-18.4)	1,659	10.8	(9.1-12.8)
Barry-Eaton	416	16.4	(12.3-21.5)	416	10.5	(7.4-14.6)
Mid-Michigan <sup>c</sup>	481	16.2	(12.5-20.7)	480	13.0	(9.6-17.3)
Ingham	886	16.9	(13.9-20.4)	878	11.4	(9.0-14.3)
<b>Region 5</b>	1,402	17.9	(15.4-20.6)	1,399	12.2	(10.2-14.6)
Branch-Hillsdale-St. Joseph	402	17.8	(13.6-23.0)	402	11.7	(8.4-15.9)
Calhoun	359	19.2	(14.2-25.4)	357	13.6	(9.1-19.7)
Kalamazoo	581	17.6	(14.0-21.9)	580	12.0	(9.2-15.6)
<b>Region 6</b>	610	13.0	(10.2-16.4)	605	8.7	(6.4-11.6)
Van Buren-Cass	246	14.2	(9.7-20.2)	242	10.3	(6.5-15.9)
Berrien	304	12.4	(8.8-17.2)	303	7.5	(4.8-11.6)
<b>Region 7</b>	2,758	14.8	(13.2-16.5)	2,745	9.6	(8.4-11.0)
Allegan	311	18.1	(12.9-24.8)	307	10.3	(6.8-15.2)
Ionia	170	13.1	(8.3-20.2)	170	8.1	(4.7-13.7)
Kent	1,419	13.8	(11.8-16.0)	1,415	9.7	(8.0-11.7)
Mid-Michigan <sup>c</sup>	481	16.2	(12.5-20.7)	480	13.0	(9.6-17.3)
Ottawa	644	14.8	(11.1-19.4)	640	7.2	(5.2-9.9)

2018-2020 Michigan BRFS Regional & Local Health Department Estimates  
September 2021

Table 21 Cont'd						
Geographic Area	Ever Told Have Asthma <sup>a</sup>			Still Have Asthma <sup>b</sup>		
	N	%	95% Confidence Interval	N	%	95% Confidence Interval
<b>Michigan Total</b>	<b>27,999</b>	<b>15.9</b>	<b>(15.3-16.5)</b>	<b>27,860</b>	<b>11.1</b>	<b>(10.6-11.7)</b>
<b>Region 8</b>	2,116	14.9	(12.1-18.2)	2,105	10.2	(7.6-13.4)
District #10	897	15.1	(10.7-20.7)	892	10.3	(6.4-16.4)
Muskegon	1,044	14.6	(11.7-18.1)	1,039	10.7	(8.2-13.9)
<b>Region 9</b>	1,468	15.9	(13.4-18.7)	1,463	10.9	(8.8-13.5)
District #2	186	16.6	(10.4-25.4)	185	12.8	(7.2-21.7)
District #4	240	13.9	(9.2-20.5)	240	7.9	(4.7-13.0)
Northwest Michigan	431	16.5	(12.1-22.2)	431	13.8	(9.6-19.4)
Benzie-Leelanau	202	18.9	(11.9-28.6)	--d	--d	--d
Grand Traverse	370	13.9	(9.9-19.2)	368	8.7	(5.6-13.3)
<b>Region 10</b>	1,028	16.6	(13.4-20.4)	1,023	12.1	(9.2-15.8)
Bay	230	20.6	(13.0-31.1)	--d	--d	--d
Huron	108	19.1	(11.8-29.5)	108	13.8	(7.8-23.4)
Saginaw	423	16.5	(12.0-22.3)	421	12.2	(8.1-17.9)
Sanilac	120	18.0	(10.7-28.8)	--d	--d	--d
Tuscola	--d	--d	--d	--d	--d	--d
<b>Region 11</b>	783	14.5	(11.7-17.9)	780	10.4	(8.1-13.4)
Central Michigan	463	12.9	(9.5-17.3)	461	10.7	(7.6-15.0)
Midland	193	17.8	(12.2-25.3)	192	11.9	(7.6-18.0)
<b>Region 12</b>	813	15.1	(12.1-18.7)	808	10.9	(8.3-14.2)
Luce-Mackinac-Alger-Schoolcraft	116	13.0	(7.3-22.3)	--d	--d	--d
Western Upper Peninsula	189	17.8	(10.9-27.6)	--d	--d	--d
Delta-Menominee	152	16.3	(10.2-24.8)	151	9.0	(4.9-15.9)
Chippewa	--d	--d	--d	--d	--d	--d
Dickinson-Iron	--d	--d	--d	--d	--d	--d
Marquette	143	15.1	(9.5-23.1)	142	13.3	(8.0-21.3)

<sup>a</sup> The proportion of adults who reported that they were ever told by a doctor, nurse, or other health care professional that they had asthma.  
<sup>b</sup> Among all adults, the proportion who reported that they still had asthma.  
<sup>c</sup> 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.  
<sup>d</sup> Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

<b>Table 22: Chronic Obstructive Pulmonary Disease (COPD) Michigan BRFS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Ever Told COPD, Emphysema or Chronic Bronchitis<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,957</b>	<b>8.4</b>	<b>(8.0-8.9)</b>
<b>Region 1</b>	11,523	8.0	(7.4-8.6)
Livingston	1,270	5.6	(4.2-7.5)
Macomb	1,630	8.7	(7.1-10.5)
Monroe	343	9.2	(6.3-13.1)
Oakland	2,824	6.4	(5.4-7.6)
St. Clair	336	13.1	(9.3-18.2)
Washtenaw	1,524	4.7	(3.5-6.3)
City of Detroit	1,193	10.3	(8.5-12.6)
Wayne exc. Detroit	2,313	8.8	(7.5-10.2)
<b>Region 2</b>	1,852	11.8	(10.0-13.8)
Genesee	1,362	12.3	(10.2-14.7)
Lapeer	225	14.3	(9.3-21.4)
Shiawassee	239	7.2	(4.3-11.7)
<b>Region 3</b>	1,526	10.8	(8.9-13.2)
Jackson	1,142	10.7	(8.5-13.3)
Lenawee	308	13.4	(9.1-19.1)
<b>Region 4</b>	1,669	7.1	(5.8-8.7)
Barry-Eaton	416	9.4	(6.5-13.2)
Mid-Michigan <sup>b</sup>	480	10.0	(7.4-13.4)
Ingham	888	5.3	(3.7-7.4)
<b>Region 5</b>	1,392	9.5	(7.6-11.8)
Branch-Hillsdale-St. Joseph	401	8.9	(6.1-12.8)
Calhoun	355	13.4	(8.8-19.7)
Kalamazoo	576	7.2	(4.8-10.5)
<b>Region 6</b>	610	8.5	(6.3-11.5)
Van Buren-Cass	247	12.6	(8.4-18.7)
Berrien	304	6.5	(4.1-10.2)
<b>Region 7</b>	2,761	6.6	(5.6-7.7)
Allegan	312	9.3	(6.1-13.8)
Ionia	171	10.3	(6.3-16.4)
Kent	1,420	5.5	(4.3-6.9)
Mid-Michigan <sup>b</sup>	480	10.0	(7.4-13.4)
Ottawa	645	5.6	(3.9-8.0)



2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 22 Cont'd</b>			
<b>Geographic Area</b>	<b>Ever Told COPD, Emphysema or Chronic Bronchitis<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,957</b>	<b>8.4</b>	<b>(8.0-8.9)</b>
<b>Region 8</b>	2,111	8.7	(7.2-10.4)
District #10	895	10.1	(7.9-12.9)
Muskegon	1,040	7.8	(6.0-10.0)
<b>Region 9</b>	1,466	11.8	(9.6-14.4)
District #2	184	25.1	(17.2-35.0)
District #4	240	13.1	(8.5-19.7)
Northwest Michigan	432	8.4	(5.9-11.9)
Benzie-Leelanau	202	7.0	(3.8-12.5)
Grand Traverse	369	7.6	(5.0-11.5)
<b>Region 10</b>	1,026	9.3	(7.1-12.0)
Bay	229	10.6	(6.4-16.8)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	423	9.8	(6.3-14.8)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	143	7.7	(4.5-13.0)
<b>Region 11</b>	782	8.9	(6.7-11.8)
Central Michigan	461	11.2	(7.9-15.6)
Midland	196	6.9	(4.0-11.8)
<b>Region 12</b>	810	8.7	(6.6-11.4)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	187	6.7	(3.8-11.7)
Delta-Menominee	153	13.6	(7.8-22.7)
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

<sup>a</sup> 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.

<sup>b</sup> 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.

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

2018-2020 Michigan BRFS Regional & Local Health Department Estimates  
September 2021

<b>Table 23: Arthritis Michigan BRFS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Ever Told Arthritis<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,943</b>	<b>31.0</b>	<b>(30.3-31.7)</b>
<b>Region 1</b>	11,511	29.9	(28.9-31.0)
Livingston	1,273	29.4	(26.0-33.0)
Macomb	1,625	30.8	(28.2-33.5)
Monroe	343	35.9	(30.0-42.3)
Oakland	2,821	27.5	(25.6-29.5)
St. Clair	335	34.5	(28.8-40.8)
Washtenaw	1,521	22.5	(20.0-25.1)
City of Detroit	1,193	31.2	(28.1-34.4)
Wayne exc. Detroit	2,310	32.9	(30.6-35.2)
<b>Region 2</b>	1,852	36.8	(34.2-39.6)
Genesee	1,363	37.7	(34.5-41.0)
Lapeer	226	33.6	(27.2-40.7)
Shiawassee	237	37.8	(30.4-45.8)
<b>Region 3</b>	1,525	33.7	(30.5-37.1)
Jackson	1,143	34.0	(30.4-37.8)
Lenawee	306	38.6	(32.1-45.6)
<b>Region 4</b>	1,667	29.9	(27.4-32.7)
Barry-Eaton	419	31.7	(26.6-37.3)
Mid-Michigan <sup>b</sup>	479	36.6	(31.6-41.8)
Ingham	885	26.9	(23.4-30.6)
<b>Region 5</b>	1,399	32.8	(29.9-35.9)
Branch-Hillsdale-St. Joseph	402	39.6	(34.0-45.6)
Calhoun	358	35.6	(29.4-42.3)
Kalamazoo	579	27.1	(23.1-31.6)
<b>Region 6</b>	608	30.8	(26.7-35.3)
Van Buren-Cass	246	32.9	(26.3-40.2)
Berrien	303	29.7	(24.1-36.0)
<b>Region 7</b>	2,753	26.3	(24.4-28.2)
Allegan	309	32.0	(25.9-38.7)
Ionia	171	42.1	(33.4-51.3)
Kent	1,416	24.3	(21.8-26.9)
Mid-Michigan <sup>b</sup>	479	36.6	(31.6-41.8)
Ottawa	643	21.7	(18.3-25.5)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 23 Cont'd</b>			
<b>Geographic Area</b>	<b>Ever Told Arthritis<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,943</b>	<b>31.0</b>	<b>(30.3-31.7)</b>
<b>Region 8</b>	2,113	33.7	(30.7-36.8)
District #10	896	35.7	(31.2-40.5)
Muskegon	1,041	40.7	(36.5-45.1)
<b>Region 9</b>	1,470	36.0	(32.9-39.3)
District #2	186	49.9	(40.9-58.9)
District #4	240	40.9	(33.4-48.8)
Northwest Michigan	433	32.2	(26.3-38.7)
Benzie-Leelanau	202	36.5	(28.3-45.5)
Grand Traverse	370	28.0	(22.7-34.0)
<b>Region 10</b>	1,021	35.6	(32.0-39.4)
Bay	229	35.4	(27.7-44.0)
Huron	106	26.0	(17.8-36.4)
Saginaw	421	35.2	(29.7-41.0)
Sanilac	118	36.2	(26.8-46.8)
Tuscola	144	44.1	(34.6-54.2)
<b>Region 11</b>	784	30.0	(26.2-34.1)
Central Michigan	461	35.4	(30.1-41.2)
Midland	196	30.8	(23.2-39.5)
<b>Region 12</b>	813	37.2	(33.2-41.4)
Luce-Mackinac-Alger-Schoolcraft	114	37.1	(26.9-48.7)
Western Upper Peninsula	190	33.9	(26.4-42.2)
Delta-Menominee	154	46.1	(36.9-55.4)
Chippewa	95	36.4	(23.6-51.4)
Dickinson-Iron	83	42.6	(30.3-55.8)
Marquette	143	39.7	(30.5-49.7)

<sup>a</sup> 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.

<sup>b</sup> 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

<b>Table 24: Heart Attack Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Ever Told Heart Attack<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,944</b>	<b>4.9</b>	<b>(4.6-5.3)</b>
<b>Region 1</b>	11,522	4.6	(4.2-5.1)
Livingston	1,273	4.0	(2.8-5.8)
Macomb	1,633	4.0	(3.0-5.3)
Monroe	343	7.5	(4.8-11.5)
Oakland	2,829	3.8	(3.1-4.7)
St. Clair	337	5.5	(3.4-8.6)
Washtenaw	1,521	3.8	(2.9-4.9)
City of Detroit	1,189	4.9	(3.6-6.7)
Wayne exc. Detroit	2,306	5.8	(4.8-7.1)
<b>Region 2</b>	1,846	5.4	(4.3-6.9)
Genesee	1,358	5.3	(4.0-7.1)
Lapeer	225	7.4	(4.1-13.1)
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	1,524	5.2	(4.0-6.7)
Jackson	1,143	5.5	(4.1-7.3)
Lenawee	304	6.0	(3.6-9.9)
<b>Region 4</b>	1,672	4.2	(3.1-5.6)
Barry-Eaton	418	3.1	(1.8-5.2)
Mid-Michigan <sup>b</sup>	481	4.0	(2.6-6.1)
Ingham	889	4.9	(3.2-7.4)
<b>Region 5</b>	1,397	5.6	(4.3-7.3)
Branch-Hillsdale-St. Joseph	402	5.1	(3.3-7.8)
Calhoun	358	8.0	(4.9-13.0)
Kalamazoo	577	4.5	(2.9-6.9)
<b>Region 6</b>	607	5.1	(3.6-7.3)
Van Buren-Cass	247	8.9	(5.7-13.7)
Berrien	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 7</b>	2,751	3.4	(2.7-4.3)
Allegan	312	5.3	(2.9-9.5)
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	1,416	3.1	(2.2-4.4)
Mid-Michigan <sup>b</sup>	481	4.0	(2.6-6.1)
Ottawa	639	2.8	(1.7-4.5)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 24 Cont'd</b>			
<b>Geographic Area</b>	<b>Ever Told Heart Attack<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,944</b>	<b>4.9</b>	<b>(4.6-5.3)</b>
<b>Region 8</b>	2,112	5.4	(4.3-6.8)
District #10	893	6.8	(5.0-9.1)
Muskegon	1,043	4.9	(3.6-6.7)
<b>Region 9</b>	1,466	6.5	(5.0-8.4)
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	241	7.0	(4.3-11.3)
Northwest Michigan	432	5.8	(3.8-9.0)
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	369	4.6	(2.7-7.6)
<b>Region 10</b>	1,022	7.5	(5.5-10.1)
Bay	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	421	8.3	(5.0-13.3)
Sanilac	117	9.7	(5.3-17.1)
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	784	5.3	(3.7-7.7)
Central Michigan	464	6.9	(4.4-10.7)
Midland	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 12</b>	812	7.0	(5.2-9.2)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Delta-Menominee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	84	21.6	(12.8-34.1)
Marquette	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

<sup>a</sup> Among all adults, the proportion who had ever been told by a doctor that they had a heart attack or myocardial infarction.

<sup>b</sup> 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.

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

<b>Table 25: Angina or Coronary Heart Disease Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Ever Told Angina or Coronary Heart Disease<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,873</b>	<b>4.8</b>	<b>(4.5-5.1)</b>
<b>Region 1</b>	11,493	4.9	(4.4-5.4)
Livingston	1,269	3.7	(2.5-5.5)
Macomb	1,627	5.3	(4.2-6.6)
Monroe	341	4.8	(2.8-8.1)
Oakland	2,818	4.8	(4.0-5.8)
St. Clair	335	7.1	(4.6-10.7)
Washtenaw	1,518	4.1	(3.2-5.4)
City of Detroit	1,186	4.0	(2.9-5.4)
Wayne exc. Detroit	2,309	5.5	(4.4-6.8)
<b>Region 2</b>	1,842	5.2	(4.2-6.5)
Genesee	1,357	5.1	(4.0-6.5)
Lapeer	223	7.1	(3.9-12.6)
Shiawassee	237	3.4	(1.9-6.1)
<b>Region 3</b>	1,517	5.7	(4.4-7.4)
Jackson	1,134	6.1	(4.5-8.1)
Lenawee	306	6.8	(4.0-11.1)
<b>Region 4</b>	1,662	3.7	(2.9-4.7)
Barry-Eaton	416	3.6	(2.2-5.8)
Mid-Michigan <sup>b</sup>	475	3.6	(2.4-5.5)
Ingham	885	3.0	(2.0-4.5)
<b>Region 5</b>	1,391	5.2	(4.0-6.7)
Branch-Hillsdale-St. Joseph	401	6.3	(4.3-9.2)
Calhoun	356	3.9	(2.2-6.7)
Kalamazoo	575	5.3	(3.5-8.1)
<b>Region 6</b>	605	4.5	(3.1-6.4)
Van Buren-Cass	243	6.4	(3.8-10.7)
Berrien	302	3.1	(1.7-5.6)
<b>Region 7</b>	2,743	3.2	(2.5-4.0)
Allegan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	1,418	3.5	(2.6-4.8)
Mid-Michigan <sup>b</sup>	475	3.6	(2.4-5.5)
Ottawa	636	2.3	(1.5-3.6)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 25 Cont'd</b>			
<b>Geographic Area</b>	<b>Ever Told Angina or Coronary Heart Disease<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,873</b>	<b>4.8</b>	<b>(4.5-5.1)</b>
<b>Region 8</b>	2,113	4.2	(3.3-5.3)
District #10	897	4.7	(3.4-6.4)
Muskegon	1,042	4.6	(3.5-6.1)
<b>Region 9</b>	1,460	5.9	(4.6-7.4)
District #2	185	7.0	(3.8-12.4)
District #4	241	7.1	(4.4-11.3)
Northwest Michigan	429	4.3	(2.8-6.6)
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	368	6.0	(3.5-10.0)
<b>Region 10</b>	1,019	5.4	(4.1-7.2)
Bay	228	5.2	(3.0-8.9)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	421	4.8	(2.9-8.0)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	784	6.2	(4.4-8.8)
Central Michigan	464	7.5	(5.0-11.2)
Midland	193	4.6	(2.5-8.3)
<b>Region 12</b>	815	7.4	(5.2-10.5)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Delta-Menominee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

<sup>a</sup> Among all adults, the proportion who had ever been told by a doctor that they had angina or coronary heart disease.  
<sup>b</sup> 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.  
<sup>c</sup> Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

<b>Table 26: Stroke</b>			
<b>Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Ever Told Stroke<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>28,030</b>	<b>3.5</b>	<b>(3.2-3.7)</b>
<b>Region 1</b>	11,555	3.6	(3.2-4.1)
Livingston	1,274	2.2	(1.4-3.4)
Macomb	1,634	3.6	(2.8-4.7)
Monroe	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Oakland	2,834	3.0	(2.3-3.9)
St. Clair	336	4.4	(2.5-7.8)
Washtenaw	1,526	2.8	(2.0-3.9)
City of Detroit	1,194	5.1	(3.9-6.7)
Wayne exc. Detroit	2,323	3.8	(2.9-4.9)
<b>Region 2</b>	1,857	4.5	(3.5-5.9)
Genesee	1,366	5.0	(3.7-6.8)
Lapeer	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	1,528	3.8	(2.7-5.4)
Jackson	1,145	4.1	(2.8-5.8)
Lenawee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 4</b>	1,671	2.7	(2.0-3.7)
Barry-Eaton	419	2.8	(1.6-4.7)
Mid-Michigan <sup>b</sup>	480	3.1	(1.8-5.4)
Ingham	888	2.2	(1.4-3.5)
<b>Region 5</b>	1,401	3.8	(2.8-5.1)
Branch-Hillsdale-St. Joseph	403	4.4	(2.7-7.3)
Calhoun	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kalamazoo	580	3.5	(2.2-5.4)
<b>Region 6</b>	611	2.8	(1.8-4.4)
Van Buren-Cass	247	4.6	(2.5-8.1)
Berrien	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 7</b>	2,754	2.4	(1.9-3.1)
Allegan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	1,420	2.3	(1.7-3.3)
Mid-Michigan <sup>b</sup>	480	3.1	(1.8-5.4)
Ottawa	640	2.2	(1.3-3.7)



2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 26 Cont'd</b>			
<b>Geographic Area</b>	<b>Ever Told Stroke<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>28,030</b>	<b>3.5</b>	<b>(3.2-3.7)</b>
<b>Region 8</b>	2,119	2.7	(2.0-3.5)
District #10	897	2.6	(1.7-3.9)
Muskegon	1,046	3.5	(2.3-5.0)
<b>Region 9</b>	1,472	4.6	(3.3-6.4)
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Northwest Michigan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 10</b>	1,028	4.1	(2.8-5.9)
Bay	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	423	5.5	(3.2-9.4)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	785	3.3	(2.2-5.0)
Central Michigan	463	3.7	(2.3-5.9)
Midland	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 12</b>	817	3.5	(2.4-5.1)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Delta-Menominee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

<sup>a</sup> Among all adults, the proportion who had ever been told by a doctor that they had a stroke.  
<sup>b</sup> 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.  
<sup>c</sup> Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

2018-2020 Michigan BRFS Regional & Local Health Department Estimates  
September 2021

<b>Table 27: Cardiovascular Disease Michigan BRFS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Ever Told Any Cardiovascular Disease<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,806</b>	<b>9.7</b>	<b>(9.3-10.2)</b>
<b>Region 1</b>	11,468	9.6	(8.9-10.3)
Livingston	1,271	8.1	(6.2-10.5)
Macomb	1,623	9.8	(8.3-11.5)
Monroe	339	10.3	(7.2-14.7)
Oakland	2,813	8.4	(7.3-9.7)
St. Clair	335	11.6	(8.3-16.1)
Washtenaw	1,517	7.6	(6.3-9.2)
City of Detroit	1,180	10.6	(8.7-12.9)
Wayne exc. Detroit	2,300	10.9	(9.4-12.6)
<b>Region 2</b>	1,838	11.0	(9.4-12.8)
Genesee	1,349	11.2	(9.3-13.4)
Lapeer	226	13.2	(8.7-19.4)
Shiawassee	237	7.3	(4.4-11.9)
<b>Region 3</b>	1,516	10.2	(8.5-12.3)
Jackson	1,136	11.5	(9.3-14.2)
Lenawee	304	10.8	(7.4-15.7)
<b>Region 4</b>	1,664	8.4	(7.0-10.1)
Barry-Eaton	418	7.0	(5.0-9.9)
Mid-Michigan <sup>b</sup>	475	8.8	(6.5-11.8)
Ingham	886	8.4	(6.2-11.1)
<b>Region 5</b>	1,389	10.8	(9.1-12.9)
Branch-Hillsdale-St. Joseph	399	10.9	(8.1-14.6)
Calhoun	357	12.4	(8.6-17.5)
Kalamazoo	574	9.9	(7.4-13.1)
<b>Region 6</b>	604	9.1	(7.0-11.8)
Van Buren-Cass	245	14.2	(10.1-19.6)
Berrien	299	5.5	(3.5-8.5)
<b>Region 7</b>	2,733	6.6	(5.7-7.7)
Allegan	311	9.0	(5.9-13.6)
Ionia	167	10.8	(6.5-17.6)
Kent	1,412	6.4	(5.1-8.0)
Mid-Michigan <sup>b</sup>	475	8.8	(6.5-11.8)
Ottawa	631	5.3	(3.8-7.4)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 27 Cont'd</b>			
<b>Geographic Area</b>	<b>Ever Told Any Cardiovascular Disease<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,806</b>	<b>9.7</b>	<b>(9.3-10.2)</b>
<b>Region 8</b>	2,105	9.4	(7.9-11.1)
District #10	892	10.9	(8.7-13.6)
Muskegon	1,039	9.0	(7.1-11.2)
<b>Region 9</b>	1,456	13.3	(11.2-15.8)
District #2	182	19.1	(12.5-28.1)
District #4	241	15.9	(11.1-22.1)
Northwest Michigan	428	10.4	(7.4-14.4)
Benzie-Leelanau	200	15.0	(9.0-23.8)
Grand Traverse	366	10.6	(7.2-15.2)
<b>Region 10</b>	1,014	12.2	(9.8-15.1)
Bay	228	10.3	(6.4-16.1)
Huron	108	15.9	(9.9-24.5)
Saginaw	417	13.6	(9.6-19.0)
Sanilac	116	12.4	(7.4-20.0)
Tuscola	142	7.6	(4.4-12.8)
<b>Region 11</b>	782	10.7	(8.3-13.7)
Central Michigan	463	13.0	(9.7-17.3)
Midland	193	6.9	(4.2-11.3)
<b>Region 12</b>	811	13.1	(10.3-16.5)
Luce-Mackinac-Alger-Schoolcraft	116	10.9	(6.3-18.1)
Western Upper Peninsula	187	10.6	(6.6-16.8)
Delta-Menominee	150	12.2	(7.1-20.2)
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	84	29.6	(19.2-42.7)
Marquette	144	9.2	(5.4-15.1)

<sup>a</sup> 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.

<sup>b</sup> 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.

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

<b>Table 28: Cancer Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Ever Told Cancer<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,985</b>	<b>12.9</b>	<b>(12.4-13.4)</b>
<b>Region 1</b>	11,537	12.9	(12.2-13.6)
Livingston	1,275	15.2	(12.6-18.1)
Macomb	1,636	12.5	(10.9-14.4)
Monroe	342	20.3	(15.6-26.0)
Oakland	2,821	14.0	(12.6-15.4)
St. Clair	336	17.5	(13.4-22.6)
Washtenaw	1,524	12.1	(10.4-14.0)
City of Detroit	1,199	8.2	(6.6-10.1)
Wayne exc. Detroit	2,314	13.3	(11.8-14.9)
<b>Region 2</b>	1,854	13.2	(11.5-15.2)
Genesee	1,367	11.8	(9.9-14.0)
Lapeer	223	17.5	(12.6-23.8)
Shiawassee	238	16.8	(12.1-22.9)
<b>Region 3</b>	1,524	13.7	(11.7-16.1)
Jackson	1,141	14.8	(12.3-17.7)
Lenawee	307	14.6	(10.7-19.7)
<b>Region 4</b>	1,668	10.9	(9.4-12.5)
Barry-Eaton	417	11.6	(8.9-15.1)
Mid-Michigan <sup>b</sup>	479	10.8	(8.3-13.9)
Ingham	887	10.8	(8.8-13.2)
<b>Region 5</b>	1,396	12.5	(10.6-14.7)
Branch-Hillsdale-St. Joseph	402	13.7	(10.5-17.8)
Calhoun	359	15.6	(11.1-21.4)
Kalamazoo	575	8.5	(6.4-11.1)
<b>Region 6</b>	609	11.9	(9.5-14.7)
Van Buren-Cass	246	13.3	(9.5-18.2)
Berrien	303	12.3	(9.0-16.7)
<b>Region 7</b>	2,757	12.3	(11.1-13.6)
Allegan	313	14.8	(11.2-19.3)
Ionia	170	16.8	(11.5-23.8)
Kent	1,419	11.5	(9.9-13.2)
Mid-Michigan <sup>b</sup>	479	10.8	(8.3-13.9)
Ottawa	642	12.4	(10.1-15.0)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 28 Cont'd</b>			
<b>Geographic Area</b>	<b>Ever Told Cancer<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,985</b>	<b>12.9</b>	<b>(12.4-13.4)</b>
<b>Region 8</b>	2,119	12.8	(11.1-14.7)
District #10	899	16.1	(13.3-19.4)
Muskegon	1,044	12.7	(10.4-15.4)
<b>Region 9</b>	1,465	15.6	(13.4-18.1)
District #2	185	23.8	(17.3-31.9)
District #4	239	8.8	(5.4-14.1)
Northwest Michigan	428	15.6	(11.6-20.6)
Benzie-Leelanau	203	20.2	(13.4-29.2)
Grand Traverse	371	15.0	(11.3-19.6)
<b>Region 10</b>	1,026	14.6	(12.3-17.2)
Bay	232	14.0	(9.6-20.0)
Huron	107	16.3	(9.9-25.7)
Saginaw	421	13.8	(10.6-17.7)
Sanilac	119	15.2	(8.5-25.8)
Tuscola	144	17.1	(11.3-25.1)
<b>Region 11</b>	787	13.1	(10.6-16.1)
Central Michigan	464	15.0	(11.5-19.3)
Midland	196	10.7	(7.2-15.6)
<b>Region 12</b>	814	15.0	(12.2-18.4)
Luce-Mackinac-Alger-Schoolcraft	116	18.1	(10.6-29.1)
Western Upper Peninsula	188	9.0	(5.6-14.1)
Delta-Menominee	154	19.8	(13.6-28.0)
Chippewa	95	18.5	(8.0-37.1)
Dickinson-Iron	84	11.4	(6.1-20.4)
Marquette	143	16.5	(10.4-25.2)

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

<sup>b</sup> 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.

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 29: Diabetes</b> <b>Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Ever Told Diabetes<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>28,059</b>	<b>11.7</b>	<b>(11.2-12.2)</b>
<b>Region 1</b>	11,561	11.6	(10.9-12.4)
Livingston	1,276	9.0	(7.0-11.5)
Macomb	1,632	12.6	(10.8-14.6)
Monroe	344	10.3	(7.3-14.4)
Oakland	2,837	10.3	(9.0-11.7)
St. Clair	337	12.3	(8.8-16.9)
Washtenaw	1,527	9.8	(8.0-11.9)
City of Detroit	1,199	13.0	(11.0-15.4)
Wayne exc. Detroit	2,318	12.9	(11.3-14.7)
<b>Region 2</b>	1,858	12.7	(10.9-14.6)
Genesee	1,368	14.3	(12.1-16.8)
Lapeer	226	8.6	(5.4-13.4)
Shiawassee	238	8.9	(5.3-14.5)
<b>Region 3</b>	1,529	11.0	(9.2-13.2)
Jackson	1,145	12.2	(9.8-15.2)
Lenawee	307	11.7	(8.5-16.0)
<b>Region 4</b>	1,672	10.5	(8.8-12.4)
Barry-Eaton	418	10.8	(7.6-15.0)
Mid-Michigan <sup>b</sup>	482	11.1	(8.5-14.3)
Ingham	888	9.2	(7.2-11.8)
<b>Region 5</b>	1,400	12.4	(10.5-14.6)
Branch-Hillsdale-St. Joseph	403	13.7	(10.3-17.9)
Calhoun	360	15.4	(11.0-21.1)
Kalamazoo	577	9.4	(7.1-12.4)
<b>Region 6</b>	610	11.3	(8.8-14.3)
Van Buren-Cass	247	15.6	(11.0-21.6)
Berrien	303	8.8	(6.0-12.7)
<b>Region 7</b>	2,765	10.9	(9.5-12.4)
Allegan	312	11.4	(7.8-16.2)
Ionia	171	15.7	(10.3-23.2)
Kent	1,423	11.0	(9.1-13.1)
Mid-Michigan <sup>b</sup>	482	11.1	(8.5-14.3)
Ottawa	645	9.4	(6.9-12.9)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 29 Cont'd</b>			
<b>Geographic Area</b>	<b>Ever Told Diabetes<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>28,059</b>	<b>11.7</b>	<b>(11.2-12.2)</b>
<b>Region 8</b>	2,123	12.2	(10.4-14.2)
District #10	900	13.6	(10.9-16.9)
Muskegon	1,047	13.3	(10.6-16.5)
<b>Region 9</b>	1,472	12.8	(10.6-15.4)
District #2	186	19.4	(13.2-27.6)
District #4	241	16.3	(11.4-22.6)
Northwest Michigan	432	8.3	(5.2-13.2)
Benzie-Leelanau	203	15.8	(9.4-25.2)
Grand Traverse	371	9.6	(6.5-13.9)
<b>Region 10</b>	1,031	13.2	(10.9-15.8)
Bay	232	12.1	(8.2-17.3)
Huron	108	11.6	(6.6-19.5)
Saginaw	424	13.4	(10.0-17.7)
Sanilac	120	13.1	(7.6-21.7)
Tuscola	144	15.9	(9.5-25.3)
<b>Region 11</b>	787	11.9	(9.3-15.1)
Central Michigan	464	15.5	(11.8-20.2)
Midland	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 12</b>	818	12.5	(9.8-15.6)
Luce-Mackinac-Alger-Schoolcraft	116	12.3	(6.9-20.8)
Western Upper Peninsula	190	12.2	(7.9-18.3)
Delta-Menominee	154	12.4	(8.1-18.6)
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	84	13.6	(7.5-23.6)
Marquette	144	9.0	(5.2-15.1)

<sup>a</sup> 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.

<sup>b</sup> 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.

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

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 30: Kidney Disease Michigan BRFSS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Ever Told Kidney Disease<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>28,022</b>	<b>3.4</b>	<b>(3.1-3.6)</b>
<b>Region 1</b>	11,547	3.4	(3.0-3.8)
Livingston	1,271	2.5	(1.7-3.7)
Macomb	1,633	2.9	(2.1-3.9)
Monroe	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Oakland	2,834	3.0	(2.4-3.8)
St. Clair	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Washtenaw	1,524	3.9	(2.7-5.7)
City of Detroit	1,197	4.0	(2.9-5.5)
Wayne exc. Detroit	2,319	3.4	(2.6-4.4)
<b>Region 2</b>	1,855	3.7	(2.8-4.9)
Genesee	1,365	3.6	(2.6-5.0)
Lapeer	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	1,532	4.2	(3.1-5.7)
Jackson	1,147	3.5	(2.4-4.9)
Lenawee	308	5.5	(3.2-9.4)
<b>Region 4</b>	1,668	2.6	(1.9-3.6)
Barry-Eaton	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Mid-Michigan <sup>b</sup>	482	2.0	(1.1-3.7)
Ingham	885	2.8	(1.8-4.2)
<b>Region 5</b>	1,396	4.8	(3.6-6.5)
Branch-Hillsdale-St. Joseph	403	4.6	(2.8-7.5)
Calhoun	355	7.3	(4.0-12.8)
Kalamazoo	578	3.7	(2.5-5.5)
<b>Region 6</b>	608	3.6	(2.3-5.5)
Van Buren-Cass	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Berrien	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 7</b>	2,761	2.7	(2.2-3.4)
Allegan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	1,420	2.9	(2.1-3.9)
Mid-Michigan <sup>b</sup>	482	2.0	(1.1-3.7)
Ottawa	645	2.3	(1.3-3.9)



2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 30 Cont'd</b>			
<b>Geographic Area</b>	<b>Ever Told Kidney Disease<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>28,022</b>	<b>3.4</b>	<b>(3.1-3.6)</b>
<b>Region 8</b>	2,119	3.2	(2.5-4.2)
District #10	898	3.9	(2.7-5.6)
Muskegon	1,045	3.2	(2.2-4.7)
<b>Region 9</b>	1,470	3.9	(2.7-5.6)
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Northwest Michigan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 10</b>	1,032	3.0	(2.1-4.4)
Bay	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	784	2.4	(1.5-3.8)
Central Michigan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Midland	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 12</b>	816	4.5	(3.1-6.5)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Delta-Menominee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>

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

2018-2020 Michigan BRFS Regional & Local Health Department Estimates  
September 2021

<b>Table 31: Depression Michigan BRFS, 2018-2020 Combined</b>			
<b>Geographic Area</b>	<b>Ever Told Depression<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,944</b>	<b>21.4</b>	<b>(20.7-22.0)</b>
<b>Region 1</b>	11,517	19.4	(18.5-20.4)
Livingston	1,271	20.3	(17.2-23.8)
Macomb	1,630	17.1	(15.0-19.4)
Monroe	341	24.8	(19.6-30.8)
Oakland	2,823	17.9	(16.2-19.8)
St. Clair	333	20.8	(15.8-26.8)
Washtenaw	1,521	22.3	(19.5-25.2)
City of Detroit	1,193	19.7	(17.2-22.5)
Wayne exc. Detroit	2,314	20.8	(18.8-23.0)
<b>Region 2</b>	1,852	23.1	(20.7-25.8)
Genesee	1,363	24.7	(21.8-27.9)
Lapeer	225	24.3	(18.0-32.0)
Shiawassee	238	15.0	(10.2-21.6)
<b>Region 3</b>	1,528	24.8	(21.7-28.1)
Jackson	1,142	25.4	(21.8-29.3)
Lenawee	309	26.0	(20.1-32.9)
<b>Region 4</b>	1,666	22.0	(19.6-24.6)
Barry-Eaton	418	19.5	(15.2-24.7)
Mid-Michigan <sup>b</sup>	480	20.7	(16.7-25.4)
Ingham	883	23.3	(20.0-26.9)
<b>Region 5</b>	1,400	26.7	(23.7-29.9)
Branch-Hillsdale-St. Joseph	402	24.3	(19.1-30.5)
Calhoun	360	26.7	(20.7-33.7)
Kalamazoo	579	29.1	(24.6-34.0)
<b>Region 6</b>	611	22.2	(18.4-26.5)
Van Buren-Cass	248	20.5	(15.2-27.1)
Berrien	303	22.1	(16.7-28.6)
<b>Region 7</b>	2,747	22.3	(20.3-24.3)
Allegan	311	22.7	(17.1-29.5)
Ionia	171	32.6	(23.8-42.8)
Kent	1,413	22.5	(19.9-25.2)
Mid-Michigan <sup>b</sup>	480	20.7	(16.7-25.4)
Ottawa	639	19.2	(15.2-24.0)

2018-2020 Michigan BRFSS Regional & Local Health Department Estimates  
September 2021

<b>Table 31 Cont'd</b>			
<b>Geographic Area</b>	<b>Ever Told Depression<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>27,944</b>	<b>21.4</b>	<b>(20.7-22.0)</b>
<b>Region 8</b>	2,111	25.5	(22.3-28.9)
District #10	894	24.7	(20.5-29.5)
Muskegon	1,042	32.0	(26.0-38.5)
<b>Region 9</b>	1,463	23.6	(20.9-26.6)
District #2	185	22.3	(15.8-30.5)
District #4	238	21.4	(15.6-28.6)
Northwest Michigan	430	23.4	(18.3-29.5)
Benzie-Leelanau	201	23.1	(16.0-32.2)
Grand Traverse	370	27.0	(21.6-33.2)
<b>Region 10</b>	1,027	23.9	(20.6-27.5)
Bay	231	30.8	(23.0-39.9)
Huron	107	14.0	(8.4-22.5)
Saginaw	422	22.9	(18.3-28.3)
Sanilac	120	23.2	(15.6-33.2)
Tuscola	144	20.5	(12.8-31.2)
<b>Region 11</b>	783	20.3	(16.4-24.8)
Central Michigan	464	21.8	(16.5-28.4)
Midland	193	16.9	(11.5-24.2)
<b>Region 12</b>	811	21.4	(18.0-25.1)
Luce-Mackinac-Alger-Schoolcraft	115	20.7	(12.5-32.4)
Western Upper Peninsula	190	18.5	(12.8-26.0)
Delta-Menominee	151	24.7	(17.0-34.5)
Chippewa	96	19.3	(11.4-30.8)
Dickinson-Iron	83	28.7	(17.8-42.8)
Marquette	142	23.7	(16.6-32.7)

<sup>a</sup> 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.

<sup>b</sup> 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.