

**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)**

**2019 - 2021**

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

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## **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](#) (BRFSS) 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 2019-2021 Michigan BRFSS were combined. The total sample sizes by year were: 10,518 in 2019, 7,269 in 2020, and 9,425 in 2021. Not all questions were included annually in the survey. The table subtitles indicate which years were used for that particular analysis.

For the 2019 through 2021 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.

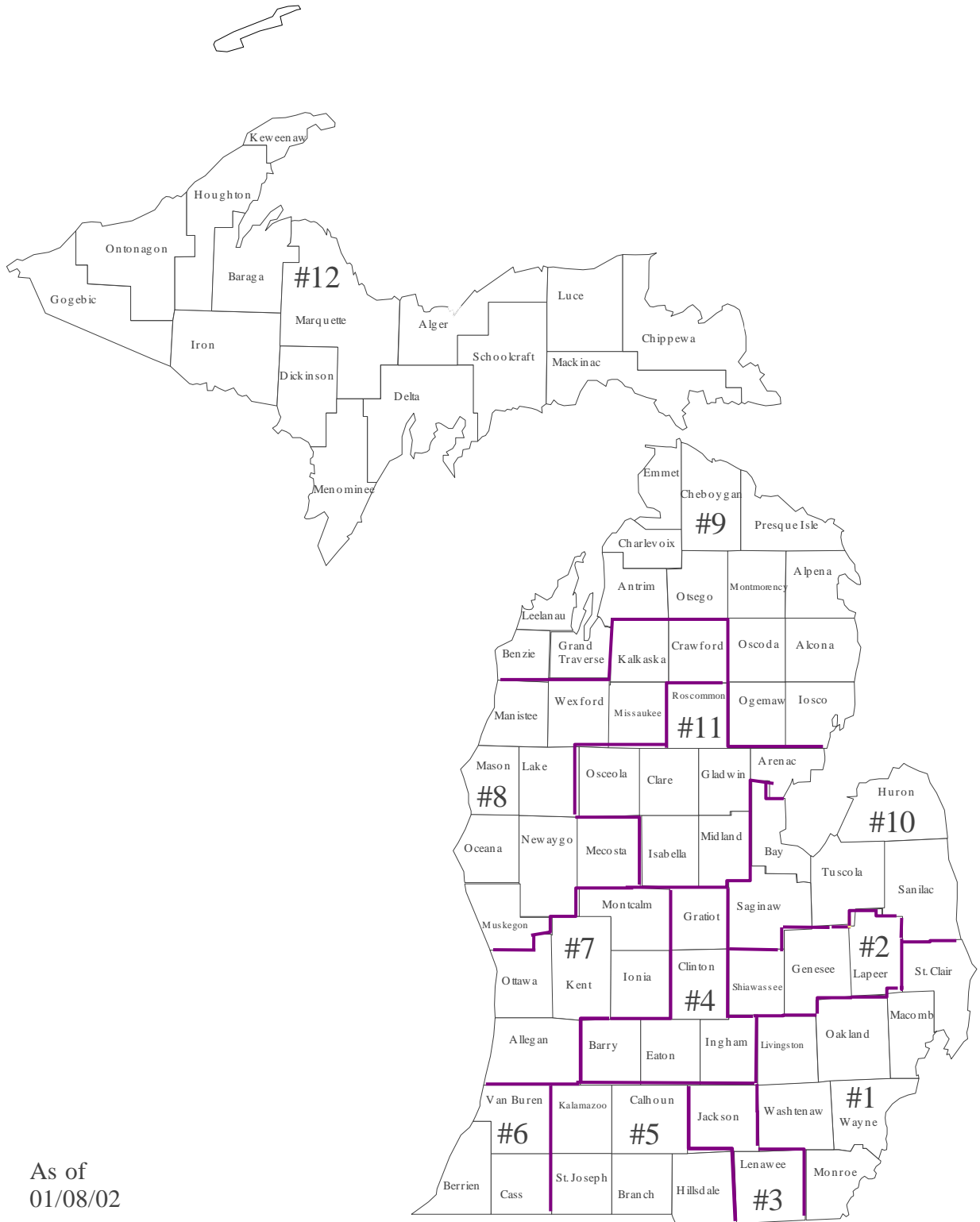
Iterative proportional fitting or raking was the weighting methodology used to make the 2019-2021 Michigan BRFSS data representative of the current Michigan adult population. Estimates based on this methodology were weighted to adjust for the probabilities of selection and a raking adjustment factor 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.

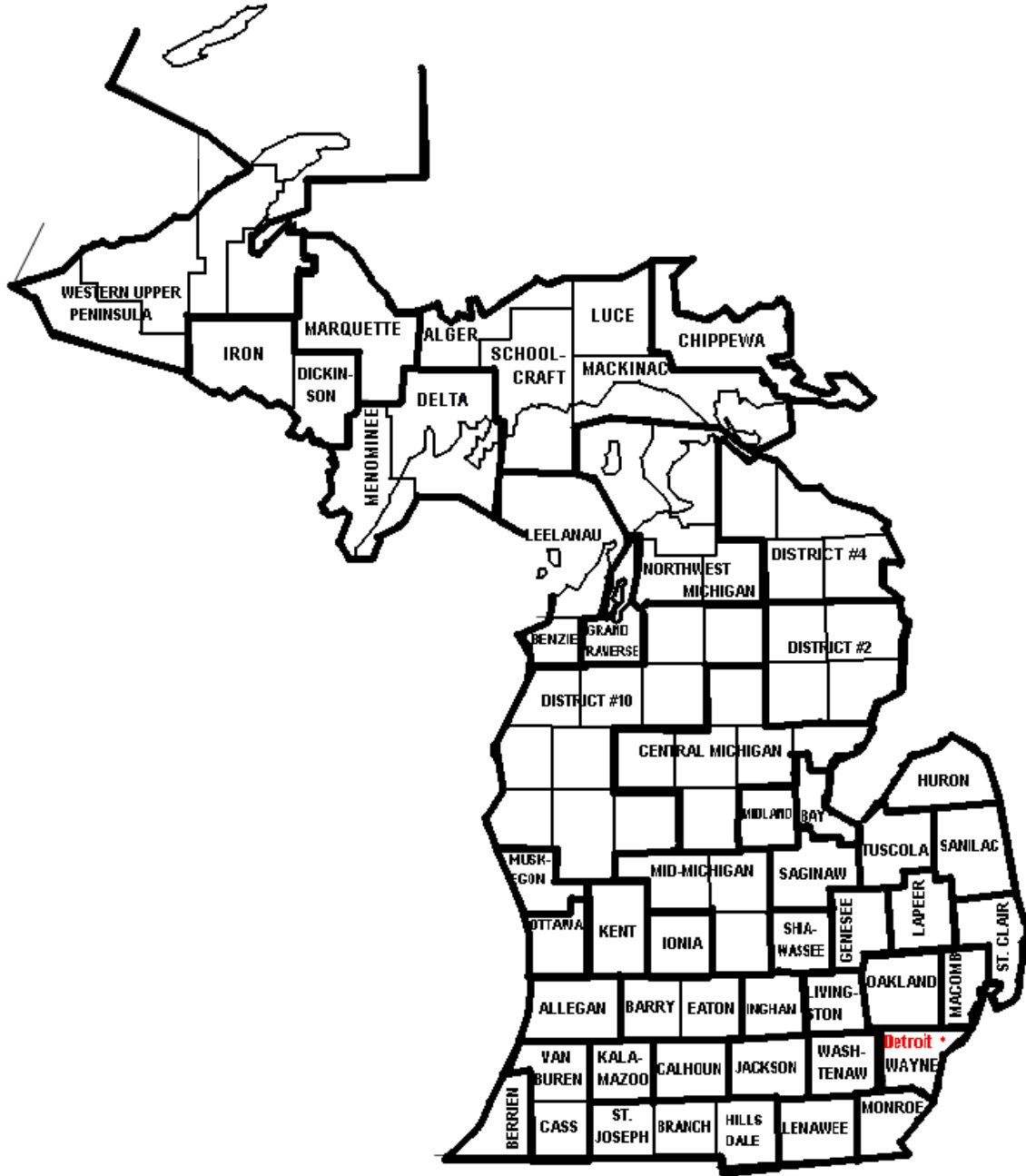
If you have any questions regarding any of the estimates within the following tables, please contact Yan Tian at [tiany@michigan.gov](mailto:tiany@michigan.gov).

## Community Health Assessment and Improvement Regions State of Michigan



As of  
01/08/02

### Local Health Departments State of Michigan



2019-2021 Michigan BRFSS Regional & Local Health Department Estimates  
October 2022

<b>Table 1: Health Status Michigan BRFSS, 2019-2021 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>27,155</b>	<b>16.9</b>	<b>(16.3-17.5)</b>
<b>Region 1</b>	11,626	16.2	(15.4-17.2)
Livingston	1,022	9.1	(7.0-11.7)
Macomb	1,678	16.6	(14.4-19.0)
Monroe	418	19.8	(15.1-25.6)
Oakland	2,806	13.0	(11.5-14.7)
St. Clair	311	15.1	(10.9-20.6)
Washtenaw	1,728	10.6	(8.7-12.8)
City of Detroit	1,169	25.1	(22.2-28.3)
Wayne exc. Detroit	2,390	17.5	(15.6-19.6)
<b>Region 2</b>	1,579	22.1	(19.6-24.9)
Genesee	1,165	23.2	(20.2-26.6)
Lapeer	185	24.4	(17.9-32.3)
Shiawassee	192	17.0	(11.2-24.8)
<b>Region 3</b>	1,329	17.1	(14.5-20.1)
Jackson	907	16.8	(13.8-20.2)
Lenawee	338	18.6	(13.9-24.5)
<b>Region 4</b>	1,664	15.2	(13.1-17.5)
Barry-Eaton	416	13.0	(9.6-17.3)
Mid-Michigan <sup>b</sup>	506	17.5	(13.5-22.5)
Ingham	835	16.4	(13.3-20.1)
<b>Region 5</b>	1,446	19.4	(16.8-22.4)
Branch-Hillsdale-St. Joseph	404	23.4	(18.2-29.6)
Calhoun	362	24.4	(18.5-31.4)
Kalamazoo	609	14.3	(11.0-18.4)
<b>Region 6</b>	681	19.4	(16.0-23.4)
Van Buren-Cass	277	23.5	(17.6-30.6)
Berrien	343	18.1	(13.6-23.6)
<b>Region 7</b>	2,712	13.9	(12.3-15.6)
Allegan	295	16.1	(11.7-21.7)
Ionia	160	18.7	(12.5-26.9)
Kent	1,354	13.7	(11.6-16.1)
Mid-Michigan <sup>b</sup>	506	17.5	(13.5-22.5)
Ottawa	643	11.5	(8.6-15.1)

2019-2021 Michigan BRFSS Regional & Local Health Department Estimates  
October 2022

<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>27,155</b>	<b>16.9</b>	<b>(16.3-17.5)</b>
<b>Region 8</b>	1,683	17.7	(14.8-21.0)
District #10	766	17.0	(13.4-21.3)
Muskegon	673	23.4	(16.4-32.3)
<b>Region 9</b>	1,220	16.5	(13.8-19.5)
District #2	160	20.9	(14.3-29.5)
District #4	229	18.2	(12.3-26.0)
Northwest Michigan	361	14.3	(10.1-19.9)
Benzie-Leelanau	163	18.4	(11.2-28.6)
Grand Traverse	291	13.0	(8.8-18.7)
<b>Region 10</b>	1,020	18.6	(15.6-22.1)
Bay	250	18.3	(12.8-25.6)
Huron	89	13.1	(7.4-22.3)
Saginaw	445	20.2	(15.2-26.3)
Sanilac	96	24.0	(15.3-35.6)
Tuscola	139	13.9	(9.0-21.0)
<b>Region 11</b>	700	17.1	(13.7-21.0)
Central Michigan	450	19.1	(14.8-24.4)
Midland	214	12.4	(8.1-18.6)
<b>Region 12</b>	885	17.4	(14.5-20.7)
Luce-Mackinac-Alger-Schoolcraft	116	19.8	(12.5-29.8)
Western Upper Peninsula	201	20.1	(14.2-27.7)
Delta-Menominee	170	17.6	(11.3-26.6)
Chippewa	100	14.1	(7.7-24.4)
Dickinson-Iron	98	18.5	(10.7-30.2)
Marquette	166	15.5	(10.0-23.2)

<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.

<b>Table 2: Poor Physical Health on at Least 14 Days in the Past Month Michigan BRFS, 2019-2021 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>26,690</b>	<b>12.6</b>	<b>(12.1-13.2)</b>
<b>Region 1</b>	11,431	11.9	(11.1-12.7)
Livingston	1,011	9.4	(6.9-12.7)
Macomb	1,640	11.2	(9.5-13.2)
Monroe	404	12.6	(9.1-17.2)
Oakland	2,760	10.5	(9.1-12.0)
St. Clair	307	11.2	(7.7-16.0)
Washtenaw	1,698	10.2	(8.3-12.3)
City of Detroit	1,146	14.5	(12.2-17.3)
Wayne exc. Detroit	2,361	13.7	(11.9-15.6)
<b>Region 2</b>	1,559	17.0	(14.7-19.5)
Genesee	1,146	17.4	(14.7-20.4)
Lapeer	184	15.9	(10.4-23.6)
Shiawassee	192	17.3	(11.6-25.1)
<b>Region 3</b>	1,310	13.4	(11.1-16.0)
Jackson	890	12.7	(10.1-15.9)
Lenawee	336	15.6	(11.3-21.1)
<b>Region 4</b>	1,625	11.1	(9.4-13.1)
Barry-Eaton	400	12.8	(9.2-17.6)
Mid-Michigan <sup>b</sup>	495	12.2	(9.1-16.3)
Ingham	820	11.0	(8.6-13.9)
<b>Region 5</b>	1,419	13.2	(11.0-15.7)
Branch-Hillsdale-St. Joseph	395	16.5	(12.2-21.9)
Calhoun	355	13.5	(9.4-19.0)
Kalamazoo	600	11.2	(8.3-15.0)
<b>Region 6</b>	666	15.0	(11.9-18.9)
Van Buren-Cass	273	17.4	(12.2-24.2)
Berrien	333	14.7	(10.5-20.3)
<b>Region 7</b>	2,673	11.2	(9.8-12.8)
Allegan	292	16.3	(11.1-23.2)
Ionia	159	11.6	(7.0-18.4)
Kent	1,339	10.6	(8.9-12.7)
Mid-Michigan <sup>b</sup>	495	12.2	(9.1-16.3)
Ottawa	632	10.2	(7.4-13.9)



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<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>26,690</b>	<b>12.6</b>	<b>(12.1-13.2)</b>
<b>Region 8</b>	1,660	13.2	(10.5-16.6)
District #10	754	12.6	(9.2-16.8)
Muskegon	664	17.4	(10.5-27.4)
<b>Region 9</b>	1,196	12.8	(10.6-15.5)
District #2	154	15.6	(10.0-23.4)
District #4	227	12.4	(7.9-19.0)
Northwest Michigan	356	12.0	(8.3-16.9)
Benzie-Leelanau	160	18.5	(11.1-29.2)
Grand Traverse	284	8.6	(5.6-13.0)
<b>Region 10</b>	1,011	14.6	(11.9-17.7)
Bay	249	18.1	(12.5-25.5)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	445	13.4	(9.6-18.4)
Sanilac	94	20.1	(11.4-32.9)
Tuscola	136	11.6	(6.8-19.2)
<b>Region 11</b>	684	12.1	(9.6-15.3)
Central Michigan	437	13.1	(9.8-17.3)
Midland	211	9.1	(5.7-14.2)
<b>Region 12</b>	866	13.8	(11.1-17.1)
Luce-Mackinac-Alger-Schoolcraft	110	13.8	(8.1-22.6)
Western Upper Peninsula	199	13.2	(8.8-19.4)
Delta-Menominee	166	14.3	(8.4-23.3)
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	164	16.1	(10.0-24.9)

<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, 2019-2021 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>26,758</b>	<b>15.2</b>	<b>(14.6-15.8)</b>
<b>Region 1</b>	11,437	15.3	(14.4-16.2)
Livingston	998	13.8	(10.7-17.7)
Macomb	1,645	16.8	(14.5-19.3)
Monroe	409	14.0	(10.2-18.8)
Oakland	2,763	12.2	(10.8-13.8)
St. Clair	305	15.1	(10.8-20.7)
Washtenaw	1,715	16.2	(13.6-19.1)
City of Detroit	1,134	17.7	(15.1-20.5)
Wayne exc. Detroit	2,364	16.1	(14.2-18.2)
<b>Region 2</b>	1,550	16.4	(14.1-19.1)
Genesee	1,141	16.7	(13.9-19.9)
Lapeer	183	17.7	(11.8-25.7)
Shiawassee	190	14.9	(9.4-22.8)
<b>Region 3</b>	1,313	14.8	(12.3-17.7)
Jackson	892	15.5	(12.2-19.4)
Lenawee	337	14.6	(10.5-19.9)
<b>Region 4</b>	1,634	16.5	(14.2-19.0)
Barry-Eaton	405	19.2	(14.4-25.2)
Mid-Michigan <sup>b</sup>	502	13.3	(10.2-17.1)
Ingham	818	15.8	(12.8-19.4)
<b>Region 5</b>	1,425	16.9	(14.3-19.8)
Branch-Hillsdale-St. Joseph	400	17.0	(12.6-22.5)
Calhoun	354	18.9	(13.4-26.0)
Kalamazoo	604	16.9	(13.1-21.5)
<b>Region 6</b>	667	16.4	(13.1-20.4)
Van Buren-Cass	270	10.3	(6.6-15.7)
Berrien	336	19.3	(14.2-25.8)
<b>Region 7</b>	2,679	13.5	(11.9-15.4)
Allegan	289	14.3	(9.1-21.9)
Ionia	156	9.9	(5.8-16.3)
Kent	1,341	13.9	(11.6-16.4)
Mid-Michigan <sup>b</sup>	502	13.3	(10.2-17.1)
Ottawa	635	13.8	(10.3-18.3)

2019-2021 Michigan BRFSS Regional & Local Health Department Estimates  
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<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>26,758</b>	<b>15.2</b>	<b>(14.6-15.8)</b>
<b>Region 8</b>	1,667	12.7	(10.5-15.4)
District #10	764	12.3	(9.2-16.3)
Muskegon	662	12.6	(9.4-16.7)
<b>Region 9</b>	1,206	16.4	(13.7-19.5)
District #2	158	15.3	(9.7-23.4)
District #4	224	17.0	(11.8-23.8)
Northwest Michigan	357	14.8	(9.7-22.1)
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	289	18.1	(12.9-24.7)
<b>Region 10</b>	1,008	17.0	(14.0-20.4)
Bay	248	19.4	(12.6-28.8)
Huron	87	13.9	(8.1-22.8)
Saginaw	442	17.9	(13.9-22.9)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	136	13.6	(7.6-23.1)
<b>Region 11</b>	696	14.6	(11.5-18.3)
Central Michigan	447	13.7	(10.1-18.4)
Midland	213	13.4	(8.3-20.8)
<b>Region 12</b>	877	12.9	(10.2-16.1)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	199	14.2	(9.3-21.0)
Delta-Menominee	169	13.2	(7.7-21.6)
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	97	16.1	(8.7-28.0)
Marquette	165	8.9	(4.9-15.7)

<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%.

<b>Table 4: Activity Limitation on at Least 14 Days in the Past Month Michigan BRFSS, 2019-2021 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>26,925</b>	<b>9.4</b>	<b>(9.0-9.9)</b>
<b>Region 1</b>	11,521	9.3	(8.6-10.0)
Livingston	1,018	7.7	(5.5-10.8)
Macomb	1,663	8.7	(7.2-10.6)
Monroe	412	12.2	(8.7-16.9)
Oakland	2,786	7.4	(6.3-8.7)
St. Clair	307	12.6	(8.7-17.9)
Washtenaw	1,714	7.8	(6.1-9.8)
City of Detroit	1,151	12.1	(9.9-14.7)
Wayne exc. Detroit	2,367	10.1	(8.7-11.8)
<b>Region 2</b>	1,566	12.8	(10.7-15.2)
Genesee	1,156	13.0	(10.6-15.9)
Lapeer	183	14.3	(9.3-21.2)
Shiawassee	191	12.1	(6.8-20.9)
<b>Region 3</b>	1,325	9.0	(7.2-11.2)
Jackson	903	8.4	(6.5-10.7)
Lenawee	337	10.1	(6.7-15.1)
<b>Region 4</b>	1,646	7.8	(6.4-9.6)
Barry-Eaton	407	9.3	(6.2-13.7)
Mid-Michigan <sup>b</sup>	506	10.1	(7.3-13.9)
Ingham	825	6.6	(5.0-8.8)
<b>Region 5</b>	1,436	10.7	(8.5-13.4)
Branch-Hillsdale-St. Joseph	400	12.7	(8.6-18.5)
Calhoun	360	14.2	(9.4-21.0)
Kalamazoo	606	8.1	(5.5-11.7)
<b>Region 6</b>	676	10.2	(7.5-13.6)
Van Buren-Cass	275	9.4	(5.5-15.6)
Berrien	340	11.3	(7.5-16.7)
<b>Region 7</b>	2,691	7.5	(6.4-8.8)
Allegan	290	10.7	(7.0-15.9)
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	1,345	7.5	(6.0-9.3)
Mid-Michigan <sup>b</sup>	506	10.1	(7.3-13.9)
Ottawa	638	5.2	(3.4-7.9)

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<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>26,925</b>	<b>9.4</b>	<b>(9.0-9.9)</b>
<b>Region 8</b>	1,674	10.8	(8.7-13.3)
District #10	760	10.7	(7.9-14.4)
Muskegon	670	13.3	(9.7-18.0)
<b>Region 9</b>	1,209	10.1	(7.9-12.8)
District #2	155	11.8	(6.7-19.9)
District #4	228	10.7	(6.0-18.4)
Northwest Michigan	359	7.7	(4.7-12.2)
Benzie-Leelanau	163	16.3	(9.0-27.8)
Grand Traverse	288	8.2	(5.1-12.9)
<b>Region 10</b>	1,017	11.3	(9.0-14.1)
Bay	250	17.2	(11.4-25.2)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	445	10.0	(7.2-13.8)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	693	8.5	(6.4-11.3)
Central Michigan	446	9.3	(6.5-13.0)
Midland	211	6.0	(3.5-10.4)
<b>Region 12</b>	874	8.8	(6.8-11.3)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	199	8.1	(4.9-13.2)
Delta-Menominee	169	11.2	(6.2-19.3)
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> 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 BRFS, 2019-2021 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>26,086</b>	<b>28.9</b>	<b>(28.1-29.6)</b>
<b>Region 1</b>	11,149	27.3	(26.2-28.4)
Livingston	991	25.4	(21.6-29.5)
Macomb	1,621	27.4	(24.8-30.1)
Monroe	403	34.7	(28.9-41.0)
Oakland	2,681	21.8	(19.9-23.7)
St. Clair	297	31.0	(25.0-37.8)
Washtenaw	1,668	20.1	(17.7-22.8)
City of Detroit	1,100	37.9	(34.3-41.6)
Wayne exc. Detroit	2,290	29.1	(26.7-31.6)
<b>Region 2</b>	1,514	35.3	(32.3-38.4)
Genesee	1,114	35.9	(32.3-39.7)
Lapeer	177	31.9	(24.7-40.2)
Shiawassee	189	35.1	(27.1-44.1)
<b>Region 3</b>	1,279	29.8	(26.5-33.4)
Jackson	878	29.8	(25.9-33.9)
Lenawee	323	32.6	(26.1-39.9)
<b>Region 4</b>	1,611	25.4	(22.9-28.1)
Barry-Eaton	400	24.2	(19.5-29.6)
Mid-Michigan <sup>b</sup>	488	24.1	(19.9-28.8)
Ingham	808	27.0	(23.3-31.1)
<b>Region 5</b>	1,393	35.8	(32.6-39.2)
Branch-Hillsdale-St. Joseph	390	39.4	(33.2-45.9)
Calhoun	346	36.4	(29.9-43.5)
Kalamazoo	587	34.7	(29.8-39.9)
<b>Region 6</b>	654	27.0	(22.8-31.5)
Van Buren-Cass	268	33.2	(26.4-40.8)
Berrien	327	24.8	(19.3-31.3)
<b>Region 7</b>	2,604	24.6	(22.6-26.7)
Allegan	283	27.8	(21.7-34.8)
Ionia	152	31.2	(23.0-40.7)
Kent	1,298	25.8	(23.0-28.8)
Mid-Michigan <sup>b</sup>	488	24.1	(19.9-28.8)
Ottawa	622	19.8	(15.9-24.3)

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<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>26,086</b>	<b>28.9</b>	<b>(28.1-29.6)</b>
<b>Region 8</b>	1,634	30.2	(26.7-34.1)
District #10	747	31.2	(26.3-36.6)
Muskegon	653	34.7	(27.4-42.8)
<b>Region 9</b>	1,183	35.2	(31.4-39.1)
District #2	153	45.7	(36.1-55.6)
District #4	222	35.6	(27.8-44.3)
Northwest Michigan	349	29.7	(22.8-37.6)
Benzie-Leelanau	161	35.8	(26.4-46.5)
Grand Traverse	282	33.6	(26.8-41.3)
<b>Region 10</b>	988	35.2	(31.3-39.3)
Bay	242	42.1	(33.5-51.2)
Huron	88	33.8	(23.7-45.6)
Saginaw	429	33.3	(27.6-39.6)
Sanilac	92	38.3	(27.6-50.2)
Tuscola	136	27.7	(19.6-37.6)
<b>Region 11</b>	676	32.2	(27.7-37.0)
Central Michigan	439	35.2	(29.4-41.4)
Midland	204	23.9	(17.6-31.6)
<b>Region 12</b>	860	28.5	(24.7-32.5)
Luce-Mackinac-Alger-Schoolcraft	112	31.4	(21.8-42.9)
Western Upper Peninsula	196	24.3	(17.9-32.0)
Delta-Menominee	165	28.4	(20.8-37.6)
Chippewa	97	39.3	(25.0-55.8)
Dickinson-Iron	95	33.9	(23.5-46.2)
Marquette	164	27.0	(19.3-36.4)
<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.			

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<b>Table 6: Weight Status</b>							
<b>Michigan BRFSS, 2019-2021 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>24,934</b>	<b>35.2</b>	<b>(34.4-36.0)</b>	<b>34.4</b>	<b>(33.6-35.2)</b>	<b>28.5</b>	<b>(27.8-29.3)</b>
<b>Region 1</b>	10,707	34.1	(32.9-35.3)	34.6	(33.4-35.8)	29.4	(28.3-30.6)
Livingston	950	29.9	(25.9-34.3)	35.1	(31.0-39.5)	34.0	(29.7-38.5)
Macomb	1,533	35.0	(32.1-38.1)	35.4	(32.4-38.5)	27.9	(25.1-30.9)
Monroe	380	44.5	(38.2-51.1)	36.2	(30.2-42.6)	18.6	(14.2-24.1)
Oakland	2,575	29.9	(27.7-32.1)	36.6	(34.3-38.9)	31.1	(28.9-33.3)
St. Clair	285	35.4	(29.0-42.3)	32.5	(26.2-39.6)	31.6	(25.1-38.8)
Washtenaw	1,621	27.3	(24.2-30.6)	32.2	(29.0-35.6)	39.5	(36.0-43.0)
City of Detroit	1,045	38.2	(34.6-41.9)	33.4	(29.8-37.2)	25.9	(22.7-29.3)
Wayne exc. Detroit	2,225	37.7	(35.2-40.4)	33.3	(30.9-35.9)	27.1	(24.8-29.5)
<b>Region 2</b>	1,445	41.1	(37.8-44.4)	33.7	(30.7-36.9)	22.6	(19.9-25.6)
Genesee	1,059	39.7	(36.0-43.6)	33.4	(29.8-37.2)	23.7	(20.4-27.4)
Lapeer	174	44.9	(36.2-54.0)	36.6	(28.7-45.4)	16.9	(11.5-24.1)
Shiawassee	179	45.1	(36.0-54.4)	30.1	(22.8-38.5)	23.9	(17.1-32.4)
<b>Region 3</b>	1,223	36.9	(33.2-40.8)	32.9	(29.3-36.6)	27.8	(24.4-31.4)
Jackson	844	36.1	(31.8-40.6)	33.6	(29.3-38.3)	28.5	(24.3-33.0)
Lenawee	304	40.5	(33.4-48.0)	33.8	(27.4-40.9)	21.5	(16.3-27.8)
<b>Region 4</b>	1,536	33.9	(31.0-36.9)	34.3	(31.3-37.4)	30.0	(27.1-33.1)
Barry-Eaton	378	33.7	(28.1-39.9)	39.5	(33.2-46.1)	25.9	(20.5-32.1)
Mid-Michigan <sup>d</sup>	473	40.6	(35.1-46.3)	32.9	(27.7-38.5)	23.4	(19.1-28.5)
Ingham	772	33.3	(29.2-37.7)	31.4	(27.3-35.8)	34.1	(29.8-38.7)
<b>Region 5</b>	1,346	37.4	(34.2-40.8)	34.9	(31.7-38.2)	26.5	(23.5-29.7)
Branch-Hillsdale-St. Joseph	383	40.2	(34.0-46.7)	38.5	(32.6-44.8)	19.7	(15.1-25.3)
Calhoun	334	37.5	(30.9-44.6)	35.6	(29.0-42.8)	25.9	(20.0-32.8)
Kalamazoo	560	34.2	(29.5-39.3)	32.1	(27.4-37.1)	32.5	(27.7-37.7)
<b>Region 6</b>	628	38.0	(33.4-42.9)	32.5	(28.3-37.1)	27.9	(23.8-32.4)
Van Buren-Cass	258	40.9	(33.6-48.6)	30.0	(23.8-37.1)	27.3	(21.2-34.4)
Berrien	312	37.7	(31.3-44.6)	33.9	(27.8-40.6)	27.2	(21.5-33.7)
<b>Region 7</b>	2,502	34.3	(32.0-36.7)	35.0	(32.7-37.3)	29.5	(27.2-31.8)
Allegan	268	38.5	(31.3-46.1)	34.4	(27.6-42.0)	26.0	(19.8-33.4)
Ionia	146	38.9	(30.0-48.6)	37.8	(28.6-48.1)	21.7	(15.2-30.0)
Kent	1,258	32.6	(29.5-35.8)	34.5	(31.4-37.7)	31.7	(28.6-35.0)
Mid-Michigan <sup>d</sup>	473	40.6	(35.1-46.3)	32.9	(27.7-38.5)	23.4	(19.1-28.5)
Ottawa	584	32.0	(27.2-37.2)	36.3	(31.3-41.7)	30.3	(25.5-35.4)



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**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	%
<b>Michigan Total</b>	<b>24,934</b>	<b>35.2</b>	<b>(34.4-36.0)</b>	<b>34.4</b>	<b>(33.6-35.2)</b>	<b>28.5</b>	<b>(27.8-29.3)</b>
<b>Region 8</b>	1,564	35.1	(31.7-38.7)	35.2	(31.7-38.9)	28.0	(24.5-31.8)
District #10	720	35.3	(30.5-40.5)	38.5	(33.5-43.8)	25.3	(20.9-30.3)
Muskegon	623	39.5	(33.0-46.4)	33.3	(27.5-39.7)	26.5	(18.9-35.7)
<b>Region 9</b>	1,142	33.7	(30.2-37.4)	35.0	(31.4-38.8)	28.7	(25.3-32.4)
District #2	146	42.9	(33.3-53.0)	34.7	(26.0-44.6)	20.2	(13.0-30.1)
District #4	214	39.9	(32.2-48.2)	30.7	(23.7-38.8)	24.2	(17.4-32.7)
Northwest Michigan	341	29.3	(23.0-36.4)	41.2	(33.9-49.0)	28.2	(22.1-35.2)
Benzie-Leelanau	153	33.0	(23.9-43.7)	29.9	(21.7-39.6)	33.1	(24.3-43.4)
Grand Traverse	272	26.4	(19.9-34.1)	32.7	(26.0-40.3)	39.6	(32.2-47.5)
<b>Region 10</b>	941	41.3	(37.3-45.4)	32.0	(28.4-35.8)	24.3	(20.8-28.2)
Bay	225	33.4	(25.7-41.9)	31.9	(24.6-40.2)	27.0	(19.8-35.6)
Huron	83	41.2	(29.6-53.9)	43.0	(31.1-55.7)	15.8	(9.2-25.8)
Saginaw	407	45.5	(39.2-51.9)	30.2	(24.9-36.1)	23.8	(18.5-30.0)
Sanilac	93	43.1	(31.7-55.3)	32.6	(23.0-43.9)	23.8	(14.3-36.8)
Tuscola	132	41.2	(31.4-51.7)	30.7	(22.5-40.3)	26.3	(17.7-37.3)
<b>Region 11</b>	648	37.8	(32.5-43.4)	33.8	(29.0-39.0)	26.4	(22.1-31.2)
Central Michigan	424	39.9	(33.3-47.0)	30.6	(25.2-36.5)	28.3	(22.8-34.5)
Midland	195	31.7	(23.7-40.9)	44.7	(34.7-55.1)	19.6	(13.6-27.3)
<b>Region 12</b>	821	34.2	(30.2-38.5)	34.3	(30.2-38.7)	30.9	(27.0-35.1)
Luce-Mackinac-Alger-Schoolcraft	110	41.5	(30.7-53.2)	29.2	(20.1-40.5)	27.9	(19.0-39.0)
Western Upper Peninsula	186	34.9	(26.6-44.2)	26.6	(19.8-34.7)	38.5	(29.8-48.1)
Delta-Menominee	155	43.7	(34.4-53.4)	38.6	(29.8-48.4)	17.0	(11.1-25.2)
Chippewa	92	28.8	(18.5-41.9)	48.0	(33.4-63.0)	22.7	(14.1-34.4)
Dickinson-Iron	89	30.5	(19.9-43.6)	42.1	(30.3-54.8)	27.5	(17.1-41.0)
Marquette	158	28.4	(20.6-37.7)	31.4	(23.2-40.9)	39.6	(30.1-49.9)

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.

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<b>Table 7: No Health Care Coverage Among Those Aged 18-64 Years Michigan BRFSS, 2019-2021 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>16,506</b>	<b>8.6</b>	<b>(8.1-9.2)</b>
<b>Region 1</b>	7,195	7.5	(6.7-8.4)
Livingston	602	7.1	(4.7-10.6)
Macomb	1,013	8.3	(6.3-10.8)
Monroe	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Oakland	1,712	5.1	(4.0-6.4)
St. Clair	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Washtenaw	1,031	6.1	(4.3-8.6)
City of Detroit	810	12.1	(9.5-15.4)
Wayne exc. Detroit	1,500	7.6	(6.1-9.5)
<b>Region 2</b>	1,002	8.2	(6.4-10.4)
Genesee	751	8.0	(5.9-10.8)
Lapeer	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	802	10.4	(7.6-14.0)
Jackson	543	7.6	(5.1-11.1)
Lenawee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 4</b>	1,043	8.9	(6.8-11.5)
Barry-Eaton	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Mid-Michigan <sup>b</sup>	307	10.3	(6.5-15.9)
Ingham	555	8.4	(5.7-12.1)
<b>Region 5</b>	876	8.8	(6.8-11.3)
Branch-Hillsdale-St. Joseph	221	9.1	(5.5-14.7)
Calhoun	217	8.5	(4.9-14.5)
Kalamazoo	388	7.9	(5.3-11.5)
<b>Region 6</b>	393	7.4	(4.9-11.0)
Van Buren-Cass	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Berrien	190	8.0	(4.7-13.6)
<b>Region 7</b>	1,724	8.6	(7.1-10.5)
Allegan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	888	9.6	(7.5-12.3)
Mid-Michigan <sup>b</sup>	307	10.3	(6.5-15.9)
Ottawa	397	5.3	(3.1-8.9)

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<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>16,506</b>	<b>8.6</b>	<b>(8.1-9.2)</b>
<b>Region 8</b>	1,016	11.0	(7.9-15.1)
District #10	423	13.9	(8.8-21.3)
Muskegon	402	7.2	(4.3-11.8)
<b>Region 9</b>	674	11.0	(7.9-15.1)
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Northwest Michigan	-- <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>	577	11.3	(8.4-15.1)
Bay	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	260	8.8	(5.4-14.1)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	393	9.6	(6.4-14.0)
Central Michigan	241	12.4	(8.1-18.4)
Midland	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 12</b>	521	10.7	(7.9-14.5)
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 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%.

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<b>Table 8: Health Care Access Michigan BRFSS, 2019-2021 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>27,000</b>	<b>13.3</b>	<b>(12.7-13.9)</b>	<b>27,141</b>	<b>9.2</b>	<b>(8.7-9.7)</b>
<b>Region 1</b>	11,572	12.3	(11.4-13.2)	11,620	8.9	(8.2-9.6)
Livingston	1,017	11.0	(8.4-14.3)	1,023	5.5	(4.0-7.6)
Macomb	1,671	10.3	(8.5-12.6)	1,672	8.7	(7.1-10.7)
Monroe	415	13.0	(9.0-18.6)	417	8.5	(5.5-12.8)
Oakland	2,798	10.3	(8.8-11.9)	2,807	8.4	(7.1-9.8)
St. Clair	310	8.8	(5.3-14.3)	310	6.2	(3.6-10.4)
Washtenaw	1,721	11.8	(9.6-14.3)	1,726	8.0	(6.1-10.4)
City of Detroit	1,162	18.9	(16.0-22.1)	1,170	11.7	(9.7-14.2)
Wayne exc. Detroit	2,376	12.7	(10.8-14.8)	2,392	9.0	(7.6-10.5)
<b>Region 2</b>	1,571	13.1	(10.9-15.7)	1,580	11.7	(9.8-14.1)
Genesee	1,158	13.9	(11.3-17.2)	1,165	11.5	(9.2-14.3)
Lapeer	184	10.3	(6.0-17.1)	186	14.3	(8.9-22.0)
Shiawassee	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	192	9.1	(5.2-15.4)
<b>Region 3</b>	1,326	16.7	(13.9-19.9)	1,331	9.6	(7.4-12.3)
Jackson	902	14.1	(11.0-17.9)	907	8.0	(5.7-11.2)
Lenawee	340	16.7	(12.1-22.6)	339	11.4	(7.4-17.2)
<b>Region 4</b>	1,649	16.1	(13.7-18.8)	1,663	9.6	(7.9-11.6)
Barry-Eaton	411	12.4	(8.1-18.5)	415	6.0	(3.7-9.6)
Mid-Michigan <sup>c</sup>	503	10.3	(7.3-14.5)	505	9.1	(6.5-12.5)
Ingham	825	19.4	(15.9-23.4)	835	10.4	(7.9-13.7)
<b>Region 5</b>	1,439	14.3	(12.1-17.0)	1,448	9.6	(7.6-12.2)
Branch-Hillsdale-St. Joseph	401	11.3	(7.7-16.2)	404	11.4	(7.3-17.4)
Calhoun	361	11.5	(7.7-16.7)	364	10.5	(6.3-17.0)
Kalamazoo	606	17.0	(13.2-21.6)	609	8.3	(5.9-11.6)
<b>Region 6</b>	670	13.0	(9.9-16.8)	680	7.1	(5.1-9.9)
Van Buren-Cass	275	12.9	(8.4-19.3)	276	6.5	(3.6-11.3)
Berrien	336	11.5	(7.5-17.0)	343	6.2	(3.8-10.0)

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<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>27,000</b>	<b>13.3</b>	<b>(12.7-13.9)</b>	<b>27,141</b>	<b>9.2</b>	<b>(8.7-9.7)</b>
<b>Region 7</b>	2,694	11.4	(9.8-13.3)	2,706	8.8	(7.5-10.4)
Allegan	293	9.2	(5.6-14.8)	294	8.7	(5.7-13.1)
Ionia	160	17.8	(10.2-29.2)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Kent	1,344	12.2	(10.0-14.8)	1,352	9.9	(8.1-12.2)
Mid-Michigan <sup>c</sup>	503	10.3	(7.3-14.5)	505	9.1	(6.5-12.5)
Ottawa	639	9.0	(5.8-13.5)	641	8.2	(5.4-12.3)
<b>Region 8</b>	1,675	16.7	(13.7-20.2)	1,684	10.5	(8.3-13.3)
District #10	762	16.8	(12.2-22.7)	766	11.3	(7.8-16.2)
Muskegon	672	8.4	(5.6-12.3)	675	11.3	(8.2-15.3)
<b>Region 9</b>	1,214	11.4	(9.2-14.2)	1,222	7.9	(6.0-10.3)
District #2	157	14.2	(8.1-23.7)	160	11.2	(6.3-19.1)
District #4	227	9.6	(6.0-14.9)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Northwest Michigan	361	9.2	(6.1-13.7)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Benzie-Leelanau	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Grand Traverse	290	15.6	(9.9-23.7)	291	10.3	(6.1-16.7)
<b>Region 10</b>	1,015	15.1	(12.2-18.5)	1,018	10.8	(8.3-13.9)
Bay	249	18.0	(12.0-25.9)	251	16.0	(10.3-24.1)
Huron	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Saginaw	442	15.8	(11.4-21.5)	445	10.9	(7.2-16.0)
Sanilac	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Tuscola	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
<b>Region 11</b>	698	16.1	(12.2-20.8)	700	7.7	(5.5-10.6)
Central Michigan	450	14.8	(10.8-20.1)	451	7.7	(5.2-11.5)
Midland	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
<b>Region 12</b>	879	12.7	(10.1-15.7)	880	7.4	(5.5-9.8)
Luce-Mackinac-Alger-Schoolcraft	116	12.4	(7.0-21.1)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Western Upper Peninsula	199	15.0	(9.7-22.4)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Delta-Menominee	168	11.2	(6.6-18.4)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
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 BRFS, 2019-2021 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>26,856</b>	<b>23.1</b>	<b>(22.4-23.8)</b>
<b>Region 1</b>	11,501	22.2	(21.2-23.2)
Livingston	1,007	16.9	(13.7-20.6)
Macomb	1,653	23.0	(20.6-25.7)
Monroe	417	30.6	(24.9-36.9)
Oakland	2,783	17.7	(16.0-19.6)
St. Clair	309	21.6	(16.6-27.8)
Washtenaw	1,714	14.6	(12.5-17.0)
City of Detroit	1,146	31.8	(28.5-35.4)
Wayne exc. Detroit	2,373	23.9	(21.7-26.2)
<b>Region 2</b>	1,553	30.8	(27.9-33.9)
Genesee	1,140	30.4	(27.0-34.0)
Lapeer	185	33.4	(25.7-42.2)
Shiawassee	191	32.7	(24.8-41.7)
<b>Region 3</b>	1,316	24.7	(21.6-28.2)
Jackson	894	22.8	(19.3-26.7)
Lenawee	338	27.9	(22.1-34.7)
<b>Region 4</b>	1,648	21.9	(19.5-24.6)
Barry-Eaton	411	28.3	(22.8-34.6)
Mid-Michigan <sup>b</sup>	501	20.3	(16.4-24.9)
Ingham	826	20.4	(17.1-24.2)
<b>Region 5</b>	1,441	26.0	(23.2-29.0)
Branch-Hillsdale-St. Joseph	402	30.5	(25.1-36.5)
Calhoun	363	29.2	(23.4-35.7)
Kalamazoo	606	20.4	(16.5-25.0)
<b>Region 6</b>	674	21.9	(18.2-26.0)
Van Buren-Cass	274	24.1	(18.3-31.0)
Berrien	339	20.7	(15.9-26.5)
<b>Region 7</b>	2,690	18.9	(17.1-20.8)
Allegan	293	22.8	(17.8-28.9)
Ionia	159	31.6	(23.1-41.5)
Kent	1,340	17.7	(15.4-20.4)
Mid-Michigan <sup>b</sup>	501	20.3	(16.4-24.9)
Ottawa	640	16.1	(13.0-19.9)

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<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>26,856</b>	<b>23.1</b>	<b>(22.4-23.8)</b>
<b>Region 8</b>	1,663	24.5	(21.3-28.0)
District #10	762	26.9	(22.0-32.5)
Muskegon	657	23.1	(18.6-28.4)
<b>Region 9</b>	1,205	24.2	(21.1-27.7)
District #2	157	34.5	(25.7-44.4)
District #4	227	28.3	(21.3-36.5)
Northwest Michigan	356	20.8	(15.5-27.3)
Benzie-Leelanau	162	29.7	(21.2-39.9)
Grand Traverse	287	13.3	(9.2-18.8)
<b>Region 10</b>	1,012	25.5	(22.2-29.2)
Bay	249	23.1	(16.9-30.8)
Huron	89	21.3	(13.5-32.0)
Saginaw	441	27.2	(21.8-33.3)
Sanilac	95	32.3	(22.4-44.2)
Tuscola	137	22.5	(14.9-32.3)
<b>Region 11</b>	691	25.3	(21.2-29.9)
Central Michigan	447	29.4	(24.0-35.4)
Midland	212	15.6	(10.6-22.4)
<b>Region 12</b>	872	23.4	(20.1-27.0)
Luce-Mackinac-Alger-Schoolcraft	113	24.0	(16.0-34.4)
Western Upper Peninsula	199	21.9	(16.0-29.2)
Delta-Menominee	167	28.0	(20.3-37.2)
Chippewa	100	32.0	(20.4-46.3)
Dickinson-Iron	98	26.7	(17.4-38.7)
Marquette	166	16.2	(10.1-25.1)

<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.

<b>Table 10: Adequate Physical Activity Michigan BRFSS, 2017 and 2019 Combined</b>			
<b>Geographic Area</b>	<b>Adequate Physical Activity<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>9,452</b>	<b>23.3</b>	<b>(22.2-24.5)</b>
<b>Region 1</b>	3,882	24.0	(22.3-25.8)
Livingston	493	24.7	(19.6-30.6)
Macomb	585	21.6	(17.8-25.8)
Monroe	101	16.1	(9.3-26.4)
Oakland	965	26.2	(22.9-29.8)
St. Clair	105	18.1	(11.0-28.4)
Washtenaw	481	20.8	(16.4-25.9)
City of Detroit	364	20.8	(16.2-26.3)
Wayne exc. Detroit	772	27.7	(23.7-32.0)
<b>Region 2</b>	666	21.7	(17.9-25.9)
Genesee	526	20.8	(16.8-25.5)
Lapeer	70	28.5	(18.0-42.1)
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	583	21.0	(16.6-26.2)
Jackson	465	23.8	(18.9-29.4)
Lenawee	93	20.7	(12.7-32.0)
<b>Region 4</b>	527	24.2	(19.7-29.2)
Barry-Eaton	118	21.2	(13.4-32.0)
Mid-Michigan <sup>b</sup>	159	26.9	(18.8-37.0)
Ingham	301	24.9	(19.1-31.8)
<b>Region 5</b>	423	24.3	(19.5-29.8)
Branch-Hillsdale-St. Joseph	126	18.8	(12.2-27.9)
Calhoun	104	29.7	(18.6-43.9)
Kalamazoo	189	25.7	(19.1-33.8)
<b>Region 6</b>	176	23.8	(16.9-32.4)
Van Buren-Cass	72	17.1	(9.6-28.8)
Berrien	86	29.3	(18.7-42.7)
<b>Region 7</b>	908	26.0	(22.4-29.9)
Allegan	110	18.4	(11.0-29.1)
Ionia	57	20.7	(11.1-35.4)
Kent	451	28.1	(23.0-33.9)
Mid-Michigan <sup>b</sup>	159	26.9	(18.8-37.0)
Ottawa	227	25.7	(19.0-33.8)



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<b>Table 10 Cont'd</b>			
<b>Geographic Area</b>	<b>Adequate Physical Activity<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>9,452</b>	<b>23.3</b>	<b>(22.2-24.5)</b>
<b>Region 8</b>	799	19.9	(16.3-24.0)
District #10	327	17.2	(12.7-22.9)
Muskegon	431	24.2	(18.6-30.7)
<b>Region 9</b>	537	19.9	(15.9-24.5)
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	79	15.0	(8.4-25.3)
Northwest Michigan	162	21.5	(14.0-31.7)
Benzie-Leelanau	83	25.1	(16.0-36.9)
Grand Traverse	140	27.2	(19.3-36.8)
<b>Region 10</b>	336	21.8	(16.7-27.8)
Bay	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	142	21.9	(14.4-31.8)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	51	31.3	(18.8-47.3)
<b>Region 11</b>	243	20.7	(14.7-28.2)
Central Michigan	150	19.7	(12.5-29.6)
Midland	64	26.5	(15.0-42.6)
<b>Region 12</b>	261	23.4	(17.9-30.1)
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> The proportion who reported that they do either moderate physical activities for at least 150 minutes per week, vigorous physical activities for at least 75 minutes per week, or an equivalent combination of moderate and vigorous physical activities **and** also participate in muscle strengthening activities on two or more days per week.

<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%.

**Table 11: Cigarette Smoking**  
**Michigan BRFSS, 2019-2021 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>26,040</b>	<b>18.0</b>	<b>(17.4-18.7)</b>	<b>26.5</b>	<b>(25.8-27.2)</b>	<b>55.5</b>	<b>(54.7-56.3)</b>
<b>Region 1</b>	11,132	16.6	(15.6-17.6)	25.7	(24.7-26.8)	57.7	(56.5-59.0)
Livingston	992	12.8	(9.9-16.4)	30.2	(26.5-34.3)	57.0	(52.6-61.3)
Macomb	1,610	18.2	(15.8-20.8)	29.1	(26.5-31.9)	52.7	(49.6-55.7)
Monroe	398	19.4	(14.5-25.4)	32.1	(26.6-38.2)	48.5	(42.2-54.8)
Oakland	2,677	11.4	(9.9-13.1)	25.7	(23.8-27.7)	62.9	(60.6-65.1)
St. Clair	300	21.7	(16.3-28.4)	29.8	(23.9-36.5)	48.4	(41.6-55.4)
Washtenaw	1,668	9.6	(7.7-11.9)	19.3	(16.8-22.0)	71.1	(68.0-74.1)
City of Detroit	1,100	24.4	(21.3-27.8)	18.6	(15.9-21.6)	57.0	(53.3-60.7)
Wayne exc. Detroit	2,290	18.6	(16.6-20.9)	26.7	(24.5-29.1)	54.6	(52.0-57.2)
<b>Region 2</b>	1,501	21.8	(19.1-24.7)	29.8	(27.0-32.9)	48.4	(45.2-51.7)
Genesee	1,102	22.4	(19.3-25.9)	28.3	(25.0-31.9)	49.3	(45.4-53.1)
Lapeer	179	20.3	(14.1-28.4)	36.0	(28.0-44.9)	43.7	(35.4-52.4)
Shiawassee	187	15.7	(9.6-24.8)	32.0	(24.5-40.6)	52.2	(43.2-61.1)
<b>Region 3</b>	1,278	20.5	(17.4-24.0)	29.2	(25.9-32.8)	50.3	(46.4-54.1)
Jackson	875	22.8	(18.9-27.1)	31.1	(27.0-35.6)	46.1	(41.6-50.7)
Lenawee	325	22.0	(16.0-29.3)	30.7	(24.6-37.6)	47.3	(40.4-54.4)
<b>Region 4</b>	1,612	15.8	(13.6-18.2)	24.8	(22.2-27.5)	59.5	(56.4-62.5)
Barry-Eaton	402	15.6	(11.3-21.2)	29.0	(23.9-34.7)	55.4	(49.1-61.4)
Mid-Michigan <sup>c</sup>	492	18.3	(14.2-23.4)	23.0	(18.7-27.9)	58.7	(53.1-64.1)
Ingham	805	14.1	(11.2-17.6)	25.5	(21.9-29.6)	60.4	(55.9-64.7)
<b>Region 5</b>	1,393	21.3	(18.3-24.7)	26.8	(24.0-29.8)	51.9	(48.5-55.2)
Branch-Hillsdale-St. Joseph	393	23.0	(17.5-29.7)	24.1	(19.5-29.3)	52.9	(46.6-59.2)
Calhoun	350	26.9	(20.6-34.4)	31.9	(25.9-38.6)	41.1	(34.7-47.9)
Kalamazoo	583	17.2	(13.3-22.0)	25.0	(20.9-29.7)	57.7	(52.5-62.8)
<b>Region 6</b>	656	21.1	(17.2-25.6)	28.7	(24.8-33.0)	50.2	(45.4-54.9)
Van Buren-Cass	269	26.5	(20.2-34.0)	31.5	(25.3-38.5)	41.9	(34.9-49.3)
Berrien	328	15.9	(11.1-22.4)	26.8	(21.5-32.8)	57.3	(50.5-63.8)
<b>Region 7</b>	2,610	15.4	(13.6-17.5)	24.0	(22.1-26.0)	60.6	(58.2-62.9)
Allegan	283	17.9	(12.6-24.7)	26.2	(20.3-33.2)	55.9	(48.3-63.1)
Ionia	154	25.8	(17.6-36.2)	21.4	(15.1-29.5)	52.8	(42.8-62.5)
Kent	1,298	14.5	(12.2-17.3)	23.7	(21.2-26.5)	61.7	(58.5-64.9)
Mid-Michigan <sup>c</sup>	492	18.3	(14.2-23.4)	23.0	(18.7-27.9)	58.7	(53.1-64.1)
Ottawa	623	13.8	(10.1-18.5)	23.8	(19.9-28.1)	62.4	(57.2-67.3)

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Table 11 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	%	95% Confidence Interval
<b>Michigan Total</b>	<b>26,040</b>	<b>18.0</b>	<b>(17.4-18.7)</b>	<b>26.5</b>	<b>(25.8-27.2)</b>	<b>55.5</b>	<b>(54.7-56.3)</b>
<b>Region 8</b>	1,634	21.2	(17.8-25.0)	27.4	(24.3-30.8)	51.4	(47.5-55.2)
District #10	746	22.1	(17.6-27.4)	28.4	(23.9-33.4)	49.5	(44.0-55.1)
Muskegon	655	25.9	(18.4-35.1)	28.3	(23.2-34.0)	45.8	(39.0-52.7)
<b>Region 9</b>	1,180	19.3	(16.2-22.8)	31.5	(28.1-35.1)	49.2	(45.4-53.1)
District #2	153	28.3	(20.4-37.8)	31.0	(22.8-40.6)	40.8	(31.6-50.7)
District #4	218	24.0	(16.6-33.6)	30.5	(23.8-38.3)	45.4	(37.3-53.8)
Northwest Michigan	350	11.2	(7.6-16.2)	32.8	(25.9-40.5)	56.0	(48.5-63.3)
Benzie-Leelanau	160	18.0	(10.3-29.5)	33.7	(24.9-43.7)	48.3	(38.4-58.4)
Grand Traverse	283	18.5	(12.9-25.7)	31.7	(25.5-38.6)	49.8	(42.2-57.5)
<b>Region 10</b>	978	23.5	(19.9-27.4)	28.6	(25.2-32.3)	47.9	(43.9-52.0)
Bay	238	29.4	(21.3-38.9)	25.7	(19.5-33.0)	45.0	(36.5-53.7)
Huron	86	26.3	(16.2-39.7)	30.2	(20.7-41.8)	43.5	(32.0-55.8)
Saginaw	424	20.5	(15.6-26.4)	29.4	(24.1-35.4)	50.1	(43.8-56.4)
Sanilac	92	13.5	(7.3-23.6)	29.0	(19.7-40.4)	57.5	(45.5-68.7)
Tuscola	137	26.9	(18.7-37.2)	30.1	(21.8-39.9)	43.0	(33.3-53.2)
<b>Region 11</b>	674	22.0	(17.9-26.6)	29.0	(24.2-34.3)	49.0	(43.8-54.4)
Central Michigan	438	25.6	(20.3-31.8)	32.5	(26.3-39.4)	41.8	(35.7-48.2)
Midland	204	14.8	(9.4-22.3)	23.2	(16.6-31.4)	62.1	(52.7-70.6)
<b>Region 12</b>	862	19.9	(16.6-23.7)	28.5	(25.0-32.4)	51.5	(47.3-55.7)
Luce-Mackinac-Alger-Schoolcraft	112	24.0	(15.4-35.4)	29.4	(20.3-40.4)	46.6	(35.6-57.9)
Western Upper Peninsula	195	18.3	(12.8-25.6)	29.3	(22.0-37.8)	52.4	(43.5-61.1)
Delta-Menominee	166	16.2	(10.4-24.4)	29.7	(21.9-39.0)	54.1	(44.8-63.1)
Chippewa	97	25.5	(14.1-41.6)	31.0	(20.9-43.5)	43.5	(31.6-56.1)
Dickinson-Iron	97	25.4	(15.3-39.0)	30.7	(20.8-42.8)	43.9	(32.5-56.0)
Marquette	164	19.6	(12.6-29.1)	24.3	(17.7-32.4)	56.1	(46.5-65.4)

<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.

**Table 12: Alcohol Consumption**  
**Michigan BRFSS, 2019-2021 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>25,881</b>	<b>55.3</b>	<b>(54.5-56.1)</b>	<b>6.5</b>	<b>(6.1-6.9)</b>	<b>17.2</b>	<b>(16.6-17.8)</b>
<b>Region 1</b>	11,073	56.8	(55.6-58.1)	6.0	(5.5-6.7)	17.0	(16.0-18.0)
Livingston	986	60.5	(56.0-64.7)	6.7	(4.5-9.8)	17.9	(14.5-21.8)
Macomb	1,607	59.4	(56.3-62.4)	5.9	(4.5-7.6)	18.1	(15.7-20.7)
Monroe	397	56.0	(49.6-62.2)	10.9	(7.2-16.2)	19.3	(14.5-25.3)
Oakland	2,670	61.1	(58.7-63.4)	6.0	(5.0-7.2)	16.2	(14.5-18.0)
St. Clair	297	58.1	(51.1-64.8)	7.7	(5.0-11.8)	20.1	(14.9-26.6)
Washtenaw	1,661	62.2	(58.7-65.7)	7.2	(5.5-9.5)	16.6	(14.0-19.6)
City of Detroit	1,089	50.5	(46.8-54.2)	5.6	(4.1-7.6)	17.7	(15.0-20.9)
Wayne exc. Detroit	2,272	51.1	(48.5-53.7)	4.9	(3.9-6.3)	15.7	(13.8-17.9)
<b>Region 2</b>	1,490	52.0	(48.7-55.2)	5.7	(4.3-7.5)	17.4	(14.8-20.4)
Genesee	1,093	51.7	(47.9-55.6)	4.4	(3.1-6.3)	17.2	(14.2-20.8)
Lapeer	178	50.9	(42.2-59.5)	11.7	(6.6-20.1)	18.8	(12.1-28.1)
Shiawassee	187	50.9	(41.8-59.9)	-- <sup>e</sup>	-- <sup>e</sup>	16.4	(10.5-24.7)
<b>Region 3</b>	1,271	53.6	(49.8-57.4)	6.5	(4.7-8.9)	17.0	(14.1-20.4)
Jackson	870	52.7	(48.1-57.2)	6.5	(4.4-9.4)	16.7	(13.3-20.7)
Lenawee	322	52.9	(45.8-59.9)	-- <sup>e</sup>	-- <sup>e</sup>	13.1	(8.8-19.2)
<b>Region 4</b>	1,608	55.3	(52.1-58.4)	5.6	(4.5-7.1)	19.2	(16.8-21.9)
Barry-Eaton	398	53.0	(46.7-59.2)	6.0	(3.6-9.8)	15.9	(11.6-21.5)
Mid-Michigan <sup>d</sup>	487	51.2	(45.6-56.8)	6.8	(4.6-9.9)	16.0	(12.3-20.6)
Ingham	810	59.0	(54.4-63.4)	5.7	(4.1-7.8)	22.0	(18.4-26.0)
<b>Region 5</b>	1,394	53.4	(50.0-56.7)	6.5	(5.0-8.4)	15.3	(12.9-18.0)
Branch-Hillsdale-St. Joseph	390	47.8	(41.6-54.1)	5.2	(3.0-9.1)	12.3	(8.5-17.6)
Calhoun	349	51.3	(44.4-58.2)	-- <sup>e</sup>	-- <sup>e</sup>	14.0	(9.3-20.5)
Kalamazoo	585	58.5	(53.3-63.4)	7.0	(4.9-9.8)	17.5	(14.0-21.6)
<b>Region 6</b>	647	52.3	(47.5-57.0)	7.9	(5.7-10.9)	17.5	(14.0-21.6)
Van Buren-Cass	266	50.4	(43.1-57.8)	7.2	(4.2-12.0)	16.7	(11.9-22.9)
Berrien	323	52.2	(45.5-58.8)	8.4	(5.3-13.1)	17.5	(12.5-23.8)
<b>Region 7</b>	2,586	57.9	(55.4-60.3)	7.1	(5.9-8.5)	17.7	(15.9-19.7)
Allegan	283	54.5	(46.9-61.8)	-- <sup>e</sup>	-- <sup>e</sup>	9.2	(5.8-14.1)
Ionia	152	49.3	(39.4-59.3)	-- <sup>e</sup>	-- <sup>e</sup>	14.7	(8.2-24.8)
Kent	1,290	60.0	(56.7-63.3)	8.2	(6.4-10.4)	20.2	(17.6-23.1)
Mid-Michigan <sup>d</sup>	487	51.2	(45.6-56.8)	6.8	(4.6-9.9)	16.0	(12.3-20.6)
Ottawa	612	59.0	(53.6-64.2)	6.3	(4.4-8.9)	17.0	(13.5-21.2)

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Table 12 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	%	95% Confidence Interval
<b>Michigan Total</b>	<b>25,881</b>	<b>55.3</b>	<b>(54.5-56.1)</b>	<b>6.5</b>	<b>(6.1-6.9)</b>	<b>17.2</b>	<b>(16.6-17.8)</b>
<b>Region 8</b>	1,625	52.8	(49.0-56.7)	7.8	(5.7-10.7)	16.4	(13.6-19.8)
District #10	742	49.4	(43.8-55.0)	8.5	(5.2-13.4)	14.8	(10.8-19.9)
Muskegon	652	54.0	(46.7-61.2)	8.0	(5.2-12.1)	17.3	(12.8-22.8)
<b>Region 9</b>	1,169	56.4	(52.6-60.2)	7.9	(6.1-10.1)	16.2	(13.7-19.1)
District #2	147	49.5	(39.7-59.4)	-- <sup>e</sup>	-- <sup>e</sup>	18.5	(11.8-27.7)
District #4	219	48.7	(40.4-57.0)	8.5	(4.9-14.4)	13.2	(8.8-19.3)
Northwest Michigan	346	58.3	(50.9-65.4)	7.7	(4.9-11.9)	14.5	(10.4-19.9)
Benzie-Leelanau	159	66.7	(56.7-75.4)	-- <sup>e</sup>	-- <sup>e</sup>	15.1	(9.2-24.0)
Grand Traverse	282	64.0	(56.5-70.9)	7.6	(4.6-12.4)	21.3	(15.6-28.5)
<b>Region 10</b>	973	52.3	(48.3-56.4)	5.7	(4.1-7.9)	16.8	(13.9-20.1)
Bay	237	56.5	(47.7-64.9)	-- <sup>e</sup>	-- <sup>e</sup>	18.6	(12.5-26.8)
Huron	84	57.8	(45.6-69.2)	-- <sup>e</sup>	-- <sup>e</sup>	21.8	(12.6-35.0)
Saginaw	423	52.6	(46.3-58.9)	5.6	(3.5-8.7)	16.8	(12.7-21.9)
Sanilac	91	39.1	(27.9-51.4)	-- <sup>e</sup>	-- <sup>e</sup>	13.0	(6.6-24.0)
Tuscola	137	49.2	(39.2-59.2)	-- <sup>e</sup>	-- <sup>e</sup>	12.9	(7.7-20.7)
<b>Region 11</b>	671	48.1	(42.9-53.4)	7.2	(5.1-10.2)	16.1	(12.0-21.4)
Central Michigan	436	44.6	(38.2-51.3)	6.4	(4.1-9.8)	15.3	(10.2-22.5)
Midland	203	50.8	(41.0-60.6)	-- <sup>e</sup>	-- <sup>e</sup>	15.6	(9.9-23.8)
<b>Region 12</b>	857	58.1	(53.9-62.2)	9.5	(7.1-12.5)	22.6	(19.1-26.5)
Luce-Mackinac-Alger-Schoolcraft	112	48.9	(37.8-60.2)	-- <sup>e</sup>	-- <sup>e</sup>	21.1	(13.2-31.9)
Western Upper Peninsula	193	55.0	(45.9-63.8)	6.2	(3.7-10.3)	22.4	(15.8-30.8)
Delta-Menominee	166	59.2	(49.9-67.8)	10.1	(5.6-17.6)	19.2	(12.5-28.4)
Chippewa	98	68.4	(56.8-78.2)	-- <sup>e</sup>	-- <sup>e</sup>	28.0	(16.2-43.9)
Dickinson-Iron	96	67.5	(55.6-77.5)	-- <sup>e</sup>	-- <sup>e</sup>	26.6	(16.9-39.3)
Marquette	162	52.4	(42.5-62.0)	9.3	(5.3-16.0)	19.8	(13.4-28.3)

<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 13: High Blood Pressure Michigan BRFSS, 2019 and 2021 Combined</b>			
<b>Geographic Area</b>	<b>Ever Told HBP<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>19,863</b>	<b>35.2</b>	<b>(34.4-36.1)</b>
<b>Region 1</b>	8,431	34.7	(33.5-36.0)
Livingston	797	32.4	(27.9-37.2)
Macomb	1,252	34.5	(31.4-37.7)
Monroe	302	41.1	(34.4-48.2)
Oakland	2,042	32.6	(30.2-35.0)
St. Clair	234	37.6	(30.8-44.9)
Washtenaw	1,196	23.1	(20.3-26.2)
City of Detroit	856	45.5	(41.5-49.6)
Wayne exc. Detroit	1,691	34.7	(32.0-37.5)
<b>Region 2</b>	1,186	39.5	(36.1-43.1)
Genesee	907	40.3	(36.3-44.4)
Lapeer	129	41.1	(31.7-51.1)
Shiawassee	126	35.8	(25.9-47.0)
<b>Region 3</b>	998	36.7	(32.5-41.0)
Jackson	707	39.0	(34.2-44.0)
Lenawee	230	38.5	(30.9-46.8)
<b>Region 4</b>	1,144	32.6	(29.5-36.0)
Barry-Eaton	288	37.3	(31.0-44.1)
Mid-Michigan <sup>b</sup>	358	31.1	(25.7-37.0)
Ingham	587	31.9	(27.4-36.8)
<b>Region 5</b>	1,007	36.4	(32.8-40.3)
Branch-Hillsdale-St. Joseph	282	38.2	(31.3-45.6)
Calhoun	253	44.3	(36.4-52.5)
Kalamazoo	444	31.6	(26.6-37.1)
<b>Region 6</b>	480	40.7	(35.4-46.2)
Van Buren-Cass	198	43.3	(34.9-52.1)
Berrien	243	40.7	(33.5-48.4)
<b>Region 7</b>	1,959	32.3	(29.9-34.9)
Allegan	214	39.9	(32.3-48.0)
Ionia	114	44.9	(33.4-57.0)
Kent	969	32.2	(28.8-35.8)
Mid-Michigan <sup>b</sup>	358	31.1	(25.7-37.0)
Ottawa	481	26.9	(22.4-32.1)

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<b>Table 13 Cont'd</b>			
<b>Geographic Area</b>	<b>Ever Told HBP<sup>a</sup></b>		
	<b>N</b>	<b>%</b>	<b>95% Confidence Interval</b>
<b>Michigan Total</b>	<b>19,863</b>	<b>35.2</b>	<b>(34.4-36.1)</b>
<b>Region 8</b>	1,332	33.7	(30.3-37.3)
District #10	596	33.9	(29.2-39.0)
Muskegon	585	36.8	(31.6-42.3)
<b>Region 9</b>	931	36.3	(32.4-40.4)
District #2	107	48.0	(36.6-59.6)
District #4	167	37.4	(28.8-46.8)
Northwest Michigan	296	32.4	(26.0-39.5)
Benzie-Leelanau	129	40.5	(30.2-51.7)
Grand Traverse	216	31.3	(24.6-38.9)
<b>Region 10</b>	740	39.9	(35.6-44.4)
Bay	185	37.8	(29.6-46.7)
Huron	60	32.7	(21.3-46.5)
Saginaw	328	37.7	(31.3-44.7)
Sanilac	71	50.4	(36.9-63.8)
Tuscola	95	48.8	(37.2-60.6)
<b>Region 11</b>	519	40.9	(35.5-46.5)
Central Michigan	328	43.0	(36.0-50.1)
Midland	155	39.3	(30.3-49.2)
<b>Region 12</b>	624	36.1	(31.7-40.8)
Luce-Mackinac-Alger-Schoolcraft	78	26.3	(16.9-38.4)
Western Upper Peninsula	142	40.1	(30.4-50.7)
Delta-Menominee	116	37.6	(28.1-48.2)
Chippewa	77	27.4	(17.8-39.6)
Dickinson-Iron	58	46.2	(31.2-61.9)
Marquette	119	37.6	(27.8-48.6)

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

<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 14: Cholesterol Screening and Awareness  
Michigan BRFSS, 2019 and 2021 Combined**

Geographic Area	Cholesterol Ever Checked <sup>a</sup>			Ever Told High Cholesterol <sup>b</sup>		
	N	%	95% Confidence Interval	N	%	95% Confidence Interval
<b>Michigan Total</b>	<b>18,594</b>	<b>92.6</b>	<b>(92.0-93.1)</b>	<b>18,208</b>	<b>34.5</b>	<b>(33.6-35.3)</b>
<b>Region 1</b>	7,931	94.4	(93.6-95.1)	7,821	34.2	(32.9-35.5)
Livingston	752	94.5	(91.4-96.6)	749	34.5	(29.9-39.3)
Macomb	1,186	94.7	(92.4-96.3)	1,170	36.5	(33.3-39.9)
Monroe	281	88.4	(80.5-93.3)	275	31.0	(24.8-37.9)
Oakland	1,932	96.0	(94.6-97.1)	1,917	34.8	(32.3-37.4)
St. Clair	219	90.5	(83.6-94.6)	210	40.8	(33.3-48.7)
Washtenaw	1,117	91.8	(88.8-94.1)	1,090	24.4	(21.5-27.5)
City of Detroit	796	93.4	(90.6-95.4)	771	34.6	(30.7-38.7)
Wayne exc. Detroit	1,593	95.3	(93.8-96.5)	1,587	34.7	(31.9-37.6)
<b>Region 2</b>	1,108	91.8	(88.9-93.9)	1,080	38.9	(35.4-42.6)
Genesee	849	91.5	(88.2-94.0)	830	39.6	(35.5-43.8)
Lapeer	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	117	37.3	(27.9-47.8)
Shiawassee	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	114	37.2	(27.0-48.8)
<b>Region 3</b>	925	91.1	(87.5-93.8)	906	32.9	(28.7-37.5)
Jackson	654	89.9	(84.6-93.5)	652	32.9	(28.3-37.7)
Lenawee	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	203	33.6	(26.0-42.2)
<b>Region 4</b>	1,062	87.8	(84.4-90.6)	1,029	34.6	(31.3-38.2)
Barry-Eaton	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	268	39.7	(33.1-46.6)
Mid-Michigan <sup>c</sup>	332	91.1	(84.7-95.0)	329	32.4	(26.8-38.7)
Ingham	537	87.2	(82.1-90.9)	522	32.6	(28.0-37.5)
<b>Region 5</b>	942	89.4	(85.8-92.2)	912	37.1	(33.4-41.0)
Branch-Hillsdale-St. Joseph	264	86.7	(78.0-92.3)	252	44.6	(37.1-52.2)
Calhoun	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	226	37.8	(30.2-46.1)
Kalamazoo	415	89.7	(84.1-93.4)	407	31.8	(26.6-37.4)
<b>Region 6</b>	457	92.2	(88.2-94.9)	441	30.4	(25.7-35.5)
Van Buren-Cass	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	185	31.5	(24.2-39.8)
Berrien	234	90.5	(83.9-94.5)	222	31.5	(24.9-38.9)



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<b>Table 14 Cont'd</b>						
<b>Geographic Area</b>	<b>Cholesterol Ever Checked<sup>a</sup></b>			<b>Ever Told High Cholesterol<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>18,594</b>	<b>92.6</b>	<b>(92.0-93.1)</b>	<b>18,208</b>	<b>34.5</b>	<b>(33.6-35.3)</b>
<b>Region 7</b>	1,831	93.3	(91.4-94.7)	1,801	31.9	(29.4-34.5)
Allegan	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	203	38.1	(30.4-46.5)
Ionia	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	107	29.3	(20.2-40.5)
Kent	893	92.8	(90.0-94.8)	880	32.6	(29.1-36.3)
Mid-Michigan <sup>c</sup>	332	91.1	(84.7-95.0)	329	32.4	(26.8-38.7)
Ottawa	453	95.1	(91.6-97.2)	451	27.4	(22.7-32.6)
<b>Region 8</b>	1,254	91.7	(88.5-94.0)	1,226	34.0	(30.4-37.8)
District #10	562	91.9	(86.8-95.1)	542	30.4	(25.8-35.5)
Muskegon	551	93.0	(88.1-95.9)	554	44.4	(38.5-50.4)
<b>Region 9</b>	876	91.7	(88.7-94.0)	855	39.1	(34.8-43.5)
District #2	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	95	35.0	(23.9-48.0)
District #4	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	151	46.4	(36.1-57.0)
Northwest Michigan	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	273	44.8	(37.1-52.7)
Benzie-Leelanau	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	123	37.6	(27.3-49.2)
Grand Traverse	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	198	24.8	(18.7-32.1)
<b>Region 10</b>	706	92.5	(89.1-94.9)	686	34.0	(29.9-38.3)
Bay	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	171	31.4	(24.0-39.8)
Huron	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	55	28.8	(17.7-43.2)
Saginaw	308	91.9	(86.3-95.4)	303	34.7	(28.3-41.7)
Sanilac	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	66	40.6	(28.4-54.1)
Tuscola	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	90	34.9	(24.5-47.0)
<b>Region 11</b>	481	93.0	(88.8-95.7)	475	39.9	(34.3-45.8)
Central Michigan	303	92.2	(86.4-95.6)	296	42.0	(34.7-49.7)
Midland	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	145	42.1	(32.7-52.2)
<b>Region 12</b>	578	88.0	(83.2-91.6)	554	35.4	(30.8-40.4)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	69	29.4	(18.9-42.6)
Western Upper Peninsula	134	82.7	(70.1-90.7)	126	41.9	(31.4-53.2)
Delta-Menominee	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	105	42.3	(31.6-53.8)
Chippewa	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	68	27.2	(17.2-40.1)
Dickinson-Iron	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	52	34.2	(20.5-51.2)
Marquette	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	104	41.1	(30.1-53.0)

<sup>a</sup> Among all adults, the proportion who reported ever having had their blood cholesterol checked.

<sup>b</sup> Among adults who ever had their blood cholesterol checked, the proportion who reported that a doctor, nurse, or other health professional had told them that their cholesterol was high.

<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 15: No Routine Checkup in Past Year Michigan BRFSS, 2019-2021 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>26,913</b>	<b>22.0</b>	<b>(21.3-22.7)</b>
<b>Region 1</b>	11,530	20.9	(19.9-21.9)
Livingston	1,013	23.0	(19.5-27.0)
Macomb	1,661	18.8	(16.4-21.4)
Monroe	411	23.2	(17.9-29.5)
Oakland	2,788	21.3	(19.4-23.4)
St. Clair	309	25.3	(19.4-32.2)
Washtenaw	1,714	27.9	(24.8-31.2)
City of Detroit	1,160	19.2	(16.4-22.4)
Wayne exc. Detroit	2,373	19.3	(17.3-21.5)
<b>Region 2</b>	1,573	21.5	(18.9-24.4)
Genesee	1,162	21.8	(18.7-25.2)
Lapeer	186	19.7	(13.8-27.3)
Shiawassee	188	19.8	(12.9-29.2)
<b>Region 3</b>	1,317	25.7	(22.4-29.3)
Jackson	895	23.4	(19.5-27.8)
Lenawee	339	29.7	(23.5-36.8)
<b>Region 4</b>	1,655	23.7	(21.0-26.6)
Barry-Eaton	412	21.9	(16.9-28.0)
Mid-Michigan <sup>b</sup>	506	20.9	(16.5-26.2)
Ingham	828	25.9	(22.0-30.3)
<b>Region 5</b>	1,425	21.5	(18.7-24.5)
Branch-Hillsdale-St. Joseph	396	19.4	(15.0-24.9)
Calhoun	356	20.1	(14.4-27.3)
Kalamazoo	603	23.1	(18.9-27.8)
<b>Region 6</b>	674	27.0	(23.0-31.5)
Van Buren-Cass	274	26.7	(20.4-34.1)
Berrien	340	27.0	(21.4-33.4)
<b>Region 7</b>	2,692	23.3	(21.2-25.6)
Allegan	291	19.2	(14.0-25.6)
Ionia	159	25.7	(16.9-37.1)
Kent	1,348	24.0	(21.2-27.1)
Mid-Michigan <sup>b</sup>	506	20.9	(16.5-26.2)
Ottawa	635	22.3	(17.9-27.3)

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<b>Table 15 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>26,913</b>	<b>22.0</b>	<b>(21.3-22.7)</b>
<b>Region 8</b>	1,667	25.1	(21.6-28.9)
District #10	757	27.8	(22.5-33.8)
Muskegon	670	18.3	(14.0-23.5)
<b>Region 9</b>	1,207	18.3	(15.4-21.7)
District #2	157	19.2	(12.3-28.6)
District #4	227	17.2	(11.8-24.4)
Northwest Michigan	358	18.0	(12.4-25.5)
Benzie-Leelanau	163	14.4	(8.8-22.8)
Grand Traverse	287	20.7	(15.0-27.7)
<b>Region 10</b>	1,012	22.4	(19.0-26.1)
Bay	250	24.8	(17.9-33.3)
Huron	89	22.4	(13.4-35.0)
Saginaw	443	21.8	(16.9-27.8)
Sanilac	95	20.7	(12.0-33.2)
Tuscola	134	20.6	(13.3-30.6)
<b>Region 11</b>	693	22.7	(18.7-27.2)
Central Michigan	445	23.4	(18.4-29.3)
Midland	212	20.6	(14.4-28.6)
<b>Region 12</b>	878	22.2	(18.8-25.9)
Luce-Mackinac-Alger-Schoolcraft	114	21.9	(14.0-32.5)
Western Upper Peninsula	198	22.1	(15.2-31.1)
Delta-Menominee	170	22.6	(15.9-31.2)
Chippewa	100	31.9	(20.5-46.0)
Dickinson-Iron	98	15.6	(9.1-25.6)
Marquette	165	18.9	(12.0-28.5)

<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.

**Table 16: Immunizations Among Adults Aged 65 Years and Older  
Michigan BRFS, 2019-2021 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>9348</b>	<b>67.5</b>	<b>(66.2-68.8)</b>	<b>9,058</b>	<b>72.1</b>	<b>(70.8-73.4)</b>
<b>Region 1</b>	3,900	68.2	(66.1-70.1)	3,763	71.5	(69.5-73.5)
Livingston	386	69.2	(62.5-75.1)	372	73.1	(66.5-78.8)
Macomb	589	71.0	(66.2-75.4)	575	76.0	(71.4-80.2)
Monroe	143	54.9	(44.3-65.0)	139	66.7	(55.8-76.1)
Oakland	955	72.2	(68.6-75.6)	920	74.2	(70.4-77.5)
St. Clair	105	68.6	(57.0-78.3)	102	70.5	(58.8-80.0)
Washtenaw	621	76.6	(72.1-80.5)	596	75.9	(71.1-80.2)
City of Detroit	296	54.7	(47.2-62.0)	288	58.1	(50.3-65.4)
Wayne exc. Detroit	783	66.2	(61.7-70.4)	750	70.1	(65.4-74.4)
<b>Region 2</b>	508	63.6	(58.2-68.7)	495	67.5	(62.1-72.5)
Genesee	359	63.6	(57.0-69.7)	348	65.8	(59.0-72.0)
Lapeer	65	58.7	(44.7-71.3)	63	61.3	(46.8-74.0)
Shiawassee	73	69.3	(54.0-81.2)	73	81.3	(69.2-89.5)
<b>Region 3</b>	476	65.3	(59.5-70.7)	463	76.9	(71.5-81.5)
Jackson	325	62.7	(55.0-69.7)	318	73.7	(66.2-80.0)
Lenawee	134	64.5	(54.5-73.3)	131	78.7	(69.7-85.6)
<b>Region 4</b>	559	72.6	(67.9-76.8)	551	77.7	(73.1-81.6)
Barry-Eaton	176	70.9	(62.5-78.0)	173	81.2	(73.8-86.9)
Mid-Michigan <sup>c</sup>	177	65.0	(56.2-72.9)	173	67.8	(58.9-75.6)
Ingham	247	76.1	(68.9-82.2)	244	78.7	(71.2-84.6)
<b>Region 5</b>	525	69.1	(64.0-73.8)	503	72.1	(66.7-76.8)
Branch-Hillsdale-St. Joseph	174	68.2	(59.7-75.7)	170	73.6	(65.4-80.4)
Calhoun	129	66.2	(55.6-75.4)	124	62.1	(50.7-72.3)
Kalamazoo	202	72.3	(63.1-79.9)	192	78.2	(68.6-85.5)
<b>Region 6</b>	258	73.3	(66.4-79.3)	249	74.1	(66.9-80.2)
Van Buren-Cass	117	77.6	(67.7-85.2)	115	73.4	(62.4-82.1)
Berrien	134	70.7	(60.4-79.2)	127	74.6	(64.4-82.6)

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Table 16 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>9348</b>	<b>67.5</b>	<b>(66.2-68.8)</b>	<b>9,058</b>	<b>72.1</b>	<b>(70.8-73.4)</b>
<b>Region 7</b>	867	70.9	(67.2-74.4)	845	75.5	(71.8-78.9)
Allegan	112	76.2	(65.7-84.3)	108	80.6	(70.7-87.8)
Ionia	58	69.5	(55.9-80.4)	57	68.4	(54.2-79.8)
Kent	416	71.4	(65.8-76.5)	402	75.1	(69.4-80.0)
Mid-Michigan <sup>c</sup>	177	65.0	(56.2-72.9)	173	67.8	(58.9-75.6)
Ottawa	217	73.3	(66.0-79.6)	215	82.4	(75.6-87.6)
<b>Region 8</b>	602	65.1	(59.3-70.4)	587	71.8	(65.6-77.2)
District #10	314	61.8	(54.3-68.9)	306	68.3	(59.8-75.8)
Muskegon	251	71.6	(63.5-78.5)	244	77.6	(69.5-84.1)
<b>Region 9</b>	502	69.1	(63.2-74.5)	486	71.8	(65.8-77.1)
District #2	70	58.6	(43.6-72.1)	69	78.1	(64.0-87.7)
District #4	88	62.9	(50.2-74.0)	87	69.5	(56.6-79.9)
Northwest Michigan	149	73.3	(61.4-82.6)	144	65.4	(52.6-76.3)
Benzie-Leelanau	76	72.4	(54.1-85.4)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Grand Traverse	119	79.4	(69.1-86.9)	115	73.4	(60.8-83.0)
<b>Region 10</b>	404	62.1	(55.2-68.5)	392	69.2	(62.3-75.3)
Bay	88	71.5	(59.3-81.2)	88	82.2	(71.7-89.4)
Huron	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Saginaw	171	61.0	(49.0-71.8)	162	65.5	(53.0-76.2)
Sanilac	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Tuscola	63	54.3	(39.3-68.5)	62	68.1	(53.5-79.8)
<b>Region 11</b>	269	64.5	(55.9-72.3)	259	75.8	(68.1-82.1)
Central Michigan	182	63.9	(53.2-73.4)	176	76.2	(66.7-83.7)
Midland	81	65.8	(52.4-77.1)	77	71.8	(57.4-82.8)
<b>Region 12</b>	321	63.5	(56.7-69.8)	314	73.1	(66.0-79.1)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Western Upper Peninsula	77	62.7	(49.2-74.4)	76	76.9	(63.0-86.6)
Delta-Menominee	73	68.1	(53.6-79.7)	72	74.4	(60.2-84.8)
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	61	71.0	(54.1-83.6)	59	72.8	(51.6-87.1)

<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%.

<b>Table 17: HIV Testing Among Adults Aged 18-64 Years Michigan BRFSS, 2019-2021 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>14,890</b>	<b>44.9</b>	<b>(43.8-45.9)</b>
<b>Region 1</b>	6,482	47.5	(46.0-49.0)
Livingston	542	39.6	(34.1-45.5)
Macomb	905	41.1	(37.3-45.0)
Monroe	236	43.8	(36.3-51.6)
Oakland	1,534	44.9	(41.9-47.9)
St. Clair	177	42.7	(34.4-51.5)
Washtenaw	954	46.2	(42.0-50.6)
City of Detroit	722	68.4	(64.1-72.4)
Wayne exc. Detroit	1,350	45.7	(42.5-49.1)
<b>Region 2</b>	898	43.1	(39.2-47.2)
Genesee	668	44.9	(40.2-49.7)
Lapeer	105	37.8	(28.0-48.8)
Shiawassee	104	39.8	(29.1-51.7)
<b>Region 3</b>	711	45.8	(40.9-50.7)
Jackson	488	49.9	(44.0-55.7)
Lenawee	166	40.4	(31.4-50.1)
<b>Region 4</b>	955	44.4	(40.6-48.3)
Barry-Eaton	200	45.4	(37.2-53.8)
Mid-Michigan <sup>b</sup>	278	46.0	(39.0-53.2)
Ingham	514	42.1	(37.0-47.5)
<b>Region 5</b>	796	47.5	(43.3-51.9)
Branch-Hillsdale-St. Joseph	197	36.7	(29.0-45.0)
Calhoun	204	52.9	(44.0-61.5)
Kalamazoo	351	50.9	(44.6-57.2)
<b>Region 6</b>	352	49.3	(43.1-55.4)
Van Buren-Cass	132	57.3	(47.5-66.6)
Berrien	170	44.9	(36.3-53.8)
<b>Region 7</b>	1,560	41.5	(38.5-44.5)
Allegan	153	43.8	(34.5-53.6)
Ionia	85	48.6	(36.2-61.2)
Kent	800	43.7	(39.7-47.7)
Mid-Michigan <sup>b</sup>	278	46.0	(39.0-53.2)
Ottawa	355	33.8	(27.9-40.2)

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<b>Table 17 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>14,890</b>	<b>44.9</b>	<b>(43.8-45.9)</b>
<b>Region 8</b>	903	42.6	(37.7-47.7)
District #10	380	36.8	(30.0-44.1)
Muskegon	356	54.3	(44.9-63.4)
<b>Region 9</b>	605	39.2	(34.4-44.3)
District #2	67	38.8	(26.2-53.1)
District #4	118	45.9	(35.3-56.8)
Northwest Michigan	181	35.0	(26.4-44.7)
Benzie-Leelanau	72	41.8	(29.0-55.9)
Grand Traverse	151	37.5	(28.6-47.3)
<b>Region 10</b>	527	42.4	(37.2-47.7)
Bay	134	51.2	(40.2-62.2)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	234	41.6	(33.9-49.6)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	69	49.8	(36.5-63.2)
<b>Region 11</b>	368	35.0	(28.6-42.0)
Central Michigan	231	35.3	(26.9-44.6)
Midland	111	29.7	(19.6-42.3)
<b>Region 12</b>	481	40.7	(35.5-46.1)
Luce-Mackinac-Alger-Schoolcraft	66	39.8	(27.0-54.2)
Western Upper Peninsula	102	31.4	(22.1-42.6)
Delta-Menominee	81	58.4	(46.0-69.7)
Chippewa	60	34.8	(20.8-52.0)
Dickinson-Iron	56	41.8	(27.9-57.2)
Marquette	93	38.2	(27.0-50.8)

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%.

<b>Table 18: Asthma Michigan BRFSS, 2019-2021 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>27,113</b>	<b>16.0</b>	<b>(15.4-16.6)</b>	<b>26,968</b>	<b>11.2</b>	<b>(10.7-11.8)</b>
<b>Region 1</b>	11,614	16.7	(15.8-17.7)	11,550	11.8	(11.0-12.6)
Livingston	1,024	13.6	(10.7-17.1)	1,020	8.6	(6.3-11.7)
Macomb	1,671	18.4	(16.1-21.0)	1,657	12.5	(10.6-14.7)
Monroe	417	14.5	(10.8-19.2)	415	9.9	(6.9-13.9)
Oakland	2,804	15.6	(13.9-17.4)	2,790	10.1	(8.8-11.7)
St. Clair	309	20.5	(15.3-26.9)	303	14.5	(10.0-20.5)
Washtenaw	1,724	15.9	(13.7-18.5)	1,715	11.9	(9.9-14.3)
City of Detroit	1,170	18.9	(16.3-21.8)	1,166	14.6	(12.3-17.2)
Wayne exc. Detroit	2,393	15.7	(13.9-17.7)	2,382	11.5	(9.9-13.2)
<b>Region 2</b>	1,575	17.0	(14.7-19.5)	1,564	12.6	(10.7-14.8)
Genesee	1,163	17.7	(15.0-20.7)	1,157	13.0	(10.8-15.7)
Lapeer	186	10.9	(6.7-17.2)	185	7.2	(4.3-11.9)
Shiawassee	189	17.8	(11.6-26.3)	185	15.5	(9.6-24.1)
<b>Region 3</b>	1,329	16.5	(13.8-19.5)	1,321	12.2	(9.9-15.1)
Jackson	905	17.1	(13.9-20.8)	901	13.3	(10.4-16.8)
Lenawee	340	18.6	(13.4-25.3)	338	14.3	(9.5-20.9)
<b>Region 4</b>	1,658	16.8	(14.7-19.2)	1,650	11.5	(9.7-13.5)
Barry-Eaton	415	15.2	(11.3-20.1)	415	10.9	(7.8-15.1)
Mid-Michigan <sup>c</sup>	506	15.2	(11.8-19.5)	504	12.7	(9.5-16.8)
Ingham	831	19.0	(15.8-22.7)	824	12.6	(10.1-15.7)
<b>Region 5</b>	1,448	17.6	(15.0-20.4)	1,446	12.8	(10.6-15.3)
Branch-Hillsdale-St. Joseph	403	17.0	(12.6-22.5)	403	11.2	(7.8-15.8)
Calhoun	364	19.9	(14.6-26.5)	363	15.3	(10.5-21.9)
Kalamazoo	610	17.4	(13.7-21.7)	609	12.9	(9.9-16.7)
<b>Region 6</b>	680	12.3	(9.5-15.6)	674	8.2	(6.0-11.2)
Van Buren-Cass	276	14.7	(9.9-21.2)	272	10.6	(6.4-17.1)
Berrien	343	10.5	(7.5-14.6)	341	7.0	(4.6-10.5)
<b>Region 7</b>	2,709	16.3	(14.5-18.3)	2,692	10.3	(8.9-11.9)
Allegan	294	21.9	(16.0-29.2)	289	12.8	(8.8-18.5)
Ionia	159	14.7	(8.6-23.9)	159	7.5	(4.1-13.3)
Kent	1,353	15.1	(12.8-17.7)	1,349	10.5	(8.5-12.9)
Mid-Michigan <sup>c</sup>	506	15.2	(11.8-19.5)	504	12.7	(9.5-16.8)
Ottawa	643	16.8	(12.7-21.8)	636	7.7	(5.6-10.5)



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Table 18 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>27,113</b>	<b>16.0</b>	<b>(15.4-16.6)</b>	<b>26,968</b>	<b>11.2</b>	<b>(10.7-11.8)</b>
<b>Region 8</b>	1,680	14.2	(11.4-17.6)	1,673	10.2	(7.7-13.5)
District #10	766	14.3	(10.0-20.2)	763	10.9	(6.8-16.9)
Muskegon	670	14.5	(11.1-18.7)	667	10.6	(7.7-14.6)
<b>Region 9</b>	1,221	15.8	(13.2-18.9)	1,216	11.0	(8.8-13.8)
District #2	160	16.5	(10.0-26.0)	159	13.7	(7.8-23.1)
District #4	229	17.4	(12.0-24.4)	229	10.6	(6.6-16.5)
Northwest Michigan	361	16.7	(11.8-23.0)	361	12.3	(8.2-18.0)
Benzie-Leelanau	164	17.9	(10.5-28.7)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Grand Traverse	291	11.5	(7.8-16.6)	289	7.4	(4.7-11.7)
<b>Region 10</b>	1,015	15.2	(12.1-18.8)	1,010	11.1	(8.3-14.6)
Bay	247	19.5	(12.4-29.3)	246	15.0	(8.6-24.9)
Huron	88	22.5	(13.8-34.5)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Saginaw	444	13.0	(8.9-18.5)	443	9.6	(5.9-15.1)
Sanilac	96	19.6	(10.7-33.3)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Tuscola	139	7.0	(3.8-12.5)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
<b>Region 11</b>	696	13.8	(11.0-17.3)	694	10.0	(7.7-13.1)
Central Michigan	449	11.6	(8.4-15.7)	448	9.9	(7.0-13.9)
Midland	211	18.5	(12.8-25.8)	210	12.1	(7.9-18.1)
<b>Region 12</b>	881	13.8	(11.3-16.7)	875	9.1	(7.2-11.5)
Luce-Mackinac-Alger-Schoolcraft	116	12.7	(7.1-21.7)	-- <sup>d</sup>	-- <sup>d</sup>	-- <sup>d</sup>
Western Upper Peninsula	200	12.0	(7.5-18.4)	199	7.3	(4.4-11.8)
Delta-Menominee	169	17.5	(11.6-25.6)	167	10.7	(6.5-17.2)
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	165	17.3	(11.3-25.5)	164	11.0	(6.5-17.8)

<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 19: Chronic Obstructive Pulmonary Disease (COPD) Michigan BRFSS, 2019-2021 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>27,078</b>	<b>8.1</b>	<b>(7.7-8.6)</b>
<b>Region 1</b>	11,591	7.7	(7.2-8.4)
Livingston	1,016	5.7	(4.1-7.7)
Macomb	1,668	9.2	(7.7-11.0)
Monroe	417	10.2	(7.3-14.0)
Oakland	2,801	5.5	(4.6-6.5)
St. Clair	310	11.2	(7.6-16.1)
Washtenaw	1,722	4.8	(3.6-6.4)
City of Detroit	1,166	10.4	(8.5-12.7)
Wayne exc. Detroit	2,388	8.4	(7.2-9.9)
<b>Region 2</b>	1,575	10.9	(9.2-12.9)
Genesee	1,160	10.6	(8.7-13.0)
Lapeer	186	13.5	(8.4-21.0)
Shiawassee	192	9.7	(6.1-14.9)
<b>Region 3</b>	1,329	9.4	(7.6-11.6)
Jackson	907	10.1	(7.8-12.9)
Lenawee	338	11.4	(7.8-16.3)
<b>Region 4</b>	1,663	7.0	(5.7-8.6)
Barry-Eaton	414	8.9	(6.1-12.9)
Mid-Michigan <sup>b</sup>	507	8.3	(5.9-11.5)
Ingham	834	5.5	(3.9-7.8)
<b>Region 5</b>	1,440	8.3	(6.6-10.4)
Branch-Hillsdale-St. Joseph	401	8.4	(5.7-12.3)
Calhoun	360	10.9	(7.0-16.3)
Kalamazoo	608	6.3	(4.1-9.4)
<b>Region 6</b>	678	8.3	(6.0-11.3)
Van Buren-Cass	276	13.1	(8.5-19.6)
Berrien	341	5.5	(3.5-8.6)
<b>Region 7</b>	2,710	6.2	(5.3-7.4)
Allegan	295	7.9	(4.8-12.7)
Ionia	160	9.8	(5.9-15.8)
Kent	1,352	5.5	(4.4-7.0)
Mid-Michigan <sup>b</sup>	507	8.3	(5.9-11.5)
Ottawa	643	6.0	(4.2-8.4)

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<b>Table 19 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>27,078</b>	<b>8.1</b>	<b>(7.7-8.6)</b>
<b>Region 8</b>	1,678	8.6	(7.0-10.6)
District #10	764	9.7	(7.4-12.7)
Muskegon	670	6.8	(4.9-9.4)
<b>Region 9</b>	1,215	10.1	(8.0-12.7)
District #2	159	25.5	(17.4-35.9)
District #4	228	9.4	(5.7-15.2)
Northwest Michigan	361	6.5	(4.1-10.1)
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	289	5.1	(3.1-8.2)
<b>Region 10</b>	1,016	9.9	(7.6-12.8)
Bay	249	10.4	(6.1-17.3)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	446	10.5	(6.9-15.6)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	136	8.1	(4.6-14.0)
<b>Region 11</b>	697	10.2	(7.8-13.3)
Central Michigan	448	11.7	(8.4-16.0)
Midland	214	8.5	(5.4-13.2)
<b>Region 12</b>	881	8.3	(6.3-10.9)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	199	4.7	(2.6-8.5)
Delta-Menominee	169	15.0	(9.1-23.9)
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%.

<b>Table 20: Arthritis Michigan BRFSS, 2019-2021 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>27,034</b>	<b>30.3</b>	<b>(29.6-30.9)</b>
<b>Region 1</b>	11,570	29.2	(28.2-30.3)
Livingston	1,020	30.7	(26.9-34.8)
Macomb	1,661	30.0	(27.5-32.6)
Monroe	417	33.4	(27.8-39.6)
Oakland	2,796	27.3	(25.4-29.3)
St. Clair	308	32.9	(27.1-39.2)
Washtenaw	1,716	21.7	(19.4-24.2)
City of Detroit	1,169	31.2	(28.1-34.5)
Wayne exc. Detroit	2,381	31.4	(29.2-33.8)
<b>Region 2</b>	1,571	36.9	(34.1-39.9)
Genesee	1,158	37.8	(34.4-41.3)
Lapeer	186	37.1	(29.6-45.3)
Shiawassee	190	34.4	(26.7-42.9)
<b>Region 3</b>	1,329	31.3	(28.1-34.7)
Jackson	906	32.1	(28.2-36.2)
Lenawee	339	37.3	(31.0-44.1)
<b>Region 4</b>	1,661	29.8	(27.2-32.5)
Barry-Eaton	415	31.8	(26.6-37.5)
Mid-Michigan <sup>b</sup>	506	33.1	(28.4-38.2)
Ingham	832	28.3	(24.8-32.1)
<b>Region 5</b>	1,443	32.4	(29.5-35.5)
Branch-Hillsdale-St. Joseph	402	37.8	(32.1-43.7)
Calhoun	361	36.2	(29.9-43.0)
Kalamazoo	609	27.3	(23.2-31.8)
<b>Region 6</b>	673	30.2	(26.2-34.5)
Van Buren-Cass	273	30.9	(24.6-38.0)
Berrien	341	31.7	(26.2-37.9)
<b>Region 7</b>	2,701	26.6	(24.7-28.6)
Allegan	292	35.1	(28.6-42.1)
Ionia	160	43.1	(34.0-52.7)
Kent	1,349	24.9	(22.4-27.6)
Mid-Michigan <sup>b</sup>	506	33.1	(28.4-38.2)
Ottawa	640	22.0	(18.6-26.0)

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<b>Table 20 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>27,034</b>	<b>30.3</b>	<b>(29.6-30.9)</b>
<b>Region 8</b>	1,679	28.5	(25.6-31.7)
District #10	763	29.8	(25.5-34.6)
Muskegon	671	38.9	(33.7-44.4)
<b>Region 9</b>	1,219	35.9	(32.6-39.4)
District #2	160	47.5	(38.3-56.9)
District #4	227	39.5	(32.0-47.6)
Northwest Michigan	362	31.6	(25.5-38.5)
Benzie-Leelanau	163	36.5	(27.2-46.9)
Grand Traverse	291	29.2	(23.2-36.0)
<b>Region 10</b>	1,013	35.5	(31.9-39.4)
Bay	247	32.3	(25.3-40.1)
Huron	87	34.9	(24.4-47.0)
Saginaw	444	36.3	(30.6-42.3)
Sanilac	95	33.6	(24.1-44.6)
Tuscola	139	40.8	(31.4-50.9)
<b>Region 11</b>	699	30.7	(26.5-35.2)
Central Michigan	449	32.4	(27.0-38.2)
Midland	214	30.7	(23.5-39.0)
<b>Region 12</b>	878	34.8	(31.1-38.7)
Luce-Mackinac-Alger-Schoolcraft	114	29.1	(20.5-39.6)
Western Upper Peninsula	200	36.8	(29.2-45.1)
Delta-Menominee	170	40.1	(31.6-49.3)
Chippewa	99	36.0	(23.1-51.3)
Dickinson-Iron	96	40.6	(29.4-52.9)
Marquette	165	34.7	(26.8-43.6)

<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 21: Heart Attack Michigan BRFSS, 2019-2021 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>27,058</b>	<b>4.7</b>	<b>(4.4-5.1)</b>
<b>Region 1</b>	11,588	4.3	(3.9-4.8)
Livingston	1,020	4.0	(2.6-6.0)
Macomb	1,672	3.9	(2.9-5.2)
Monroe	416	4.0	(2.4-6.7)
Oakland	2,801	3.7	(3.0-4.6)
St. Clair	310	4.8	(2.9-7.8)
Washtenaw	1,720	3.2	(2.4-4.1)
City of Detroit	1,163	5.6	(4.1-7.6)
Wayne exc. Detroit	2,383	5.3	(4.3-6.5)
<b>Region 2</b>	1,573	5.6	(4.4-7.2)
Genesee	1,161	5.8	(4.3-7.7)
Lapeer	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	1,322	5.3	(4.0-7.0)
Jackson	903	6.5	(4.6-9.0)
Lenawee	334	4.8	(2.7-8.5)
<b>Region 4</b>	1,663	4.6	(3.5-6.1)
Barry-Eaton	417	4.1	(2.6-6.6)
Mid-Michigan <sup>b</sup>	505	3.6	(2.3-5.7)
Ingham	832	5.5	(3.7-8.2)
<b>Region 5</b>	1,442	5.7	(4.3-7.4)
Branch-Hillsdale-St. Joseph	403	5.3	(3.4-8.2)
Calhoun	361	9.8	(6.2-15.2)
Kalamazoo	607	3.6	(2.2-5.7)
<b>Region 6</b>	678	5.2	(3.6-7.3)
Van Buren-Cass	277	7.7	(4.9-12.1)
Berrien	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 7</b>	2,704	3.4	(2.8-4.2)
Allegan	294	6.6	(3.8-11.1)
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	1,351	2.9	(2.1-4.0)
Mid-Michigan <sup>b</sup>	505	3.6	(2.3-5.7)
Ottawa	640	2.6	(1.6-4.2)

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<b>Table 21 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>27,058</b>	<b>4.7</b>	<b>(4.4-5.1)</b>
<b>Region 8</b>	1,677	3.8	(2.9-5.1)
District #10	763	5.2	(3.7-7.1)
Muskegon	670	2.8	(1.8-4.5)
<b>Region 9</b>	1,217	6.6	(5.0-8.7)
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	229	8.3	(5.1-13.4)
Northwest Michigan	361	4.9	(2.7-8.6)
Benzie-Leelanau	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Grand Traverse	290	5.4	(3.2-9.0)
<b>Region 10</b>	1,012	6.7	(4.8-9.2)
Bay	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	444	7.5	(4.5-12.2)
Sanilac	95	11.7	(6.4-20.4)
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	696	6.0	(4.1-8.7)
Central Michigan	449	6.9	(4.3-10.8)
Midland	212	5.1	(2.8-9.1)
<b>Region 12</b>	878	5.8	(4.2-7.9)
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	97	17.9	(10.2-29.6)
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 22: Angina or Coronary Heart Disease Michigan BRFS, 2019-2021 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>26,975</b>	<b>4.6</b>	<b>(4.3-4.9)</b>
<b>Region 1</b>	11,566	4.7	(4.3-5.2)
Livingston	1,017	4.2	(2.9-6.2)
Macomb	1,666	5.5	(4.4-6.8)
Monroe	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Oakland	2,795	4.8	(4.0-5.7)
St. Clair	309	6.6	(4.2-10.3)
Washtenaw	1,717	4.0	(3.0-5.1)
City of Detroit	1,161	4.2	(3.0-5.7)
Wayne exc. Detroit	2,383	4.9	(3.9-6.3)
<b>Region 2</b>	1,563	5.0	(3.9-6.3)
Genesee	1,152	4.6	(3.5-6.1)
Lapeer	184	7.7	(4.2-13.7)
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	1,325	5.2	(3.9-6.9)
Jackson	902	5.7	(4.1-7.8)
Lenawee	338	6.3	(3.7-10.4)
<b>Region 4</b>	1,651	3.9	(3.1-5.0)
Barry-Eaton	414	4.8	(3.2-7.2)
Mid-Michigan <sup>b</sup>	500	3.7	(2.3-5.8)
Ingham	829	3.2	(2.1-4.7)
<b>Region 5</b>	1,433	5.4	(4.1-6.9)
Branch-Hillsdale-St. Joseph	398	5.4	(3.5-8.5)
Calhoun	360	5.1	(3.2-8.2)
Kalamazoo	605	5.4	(3.5-8.2)
<b>Region 6</b>	675	4.3	(3.0-6.2)
Van Buren-Cass	275	6.0	(3.6-9.8)
Berrien	339	3.0	(1.7-5.4)
<b>Region 7</b>	2,689	3.3	(2.7-4.1)
Allegan	292	4.3	(2.3-7.7)
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	1,350	3.4	(2.6-4.5)
Mid-Michigan <sup>b</sup>	500	3.7	(2.3-5.8)
Ottawa	633	3.0	(1.9-4.5)



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<b>Table 22 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>26,975</b>	<b>4.6</b>	<b>(4.3-4.9)</b>
<b>Region 8</b>	1,677	3.2	(2.4-4.4)
District #10	765	3.7	(2.5-5.4)
Muskegon	668	3.4	(2.3-4.9)
<b>Region 9</b>	1,209	5.5	(4.1-7.3)
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	229	7.1	(4.1-12.0)
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>	1,011	4.3	(3.2-5.7)
Bay	246	4.8	(2.8-8.3)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	444	3.2	(2.0-5.2)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	696	5.4	(3.6-8.1)
Central Michigan	448	6.3	(3.8-10.2)
Midland	212	4.3	(2.4-7.4)
<b>Region 12</b>	877	7.1	(5.0-10.1)
Luce-Mackinac-Alger-Schoolcraft	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Western Upper Peninsula	200	5.2	(2.9-9.1)
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 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 23: Stroke</b>			
<b>Michigan BRFS, 2019-2021 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>27,132</b>	<b>3.6</b>	<b>(3.4-3.9)</b>
<b>Region 1</b>	11,622	3.7	(3.3-4.1)
Livingston	1,021	3.4	(2.2-5.1)
Macomb	1,674	2.9	(2.2-3.9)
Monroe	418	5.8	(3.5-9.6)
Oakland	2,809	2.9	(2.3-3.8)
St. Clair	311	5.2	(3.0-8.6)
Washtenaw	1,723	2.6	(1.9-3.5)
City of Detroit	1,167	5.4	(4.1-7.2)
Wayne exc. Detroit	2,396	4.1	(3.2-5.3)
<b>Region 2</b>	1,576	5.3	(4.1-6.9)
Genesee	1,162	5.7	(4.2-7.7)
Lapeer	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	1,329	3.2	(2.2-4.6)
Jackson	906	3.5	(2.4-5.2)
Lenawee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 4</b>	1,661	3.2	(2.4-4.2)
Barry-Eaton	416	4.5	(2.8-7.0)
Mid-Michigan <sup>b</sup>	504	3.3	(2.0-5.6)
Ingham	832	2.4	(1.5-3.7)
<b>Region 5</b>	1,446	4.1	(3.1-5.5)
Branch-Hillsdale-St. Joseph	403	4.3	(2.6-6.9)
Calhoun	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kalamazoo	610	3.6	(2.2-5.7)
<b>Region 6</b>	680	2.9	(1.9-4.5)
Van Buren-Cass	276	4.5	(2.6-7.8)
Berrien	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 7</b>	2,706	2.9	(2.3-3.7)
Allegan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	1,355	3.0	(2.2-4.2)
Mid-Michigan <sup>b</sup>	504	3.3	(2.0-5.6)
Ottawa	641	2.5	(1.5-4.0)

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<b>Table 23 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>27,132</b>	<b>3.6</b>	<b>(3.4-3.9)</b>
<b>Region 8</b>	1,683	2.4	(1.7-3.3)
District #10	765	2.4	(1.5-3.9)
Muskegon	673	3.0	(1.8-5.0)
<b>Region 9</b>	1,220	5.0	(3.6-7.0)
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>	1,019	4.0	(2.8-5.6)
Bay	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	447	4.5	(2.7-7.5)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	698	3.2	(2.0-5.1)
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>	884	3.2	(2.2-4.7)
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 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%.

<b>Table 24: Cardiovascular Disease Michigan BRFS, 2019-2021 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>26,935</b>	<b>9.7</b>	<b>(9.2-10.1)</b>
<b>Region 1</b>	11,549	9.6	(8.9-10.2)
Livingston	1,017	9.4	(7.2-12.1)
Macomb	1,664	9.3	(7.8-11.0)
Monroe	414	9.7	(6.8-13.8)
Oakland	2,792	8.5	(7.3-9.8)
St. Clair	310	11.4	(8.1-15.8)
Washtenaw	1,714	7.0	(5.8-8.4)
City of Detroit	1,157	11.8	(9.7-14.3)
Wayne exc. Detroit	2,378	10.5	(9.0-12.2)
<b>Region 2</b>	1,561	11.2	(9.5-13.2)
Genesee	1,149	11.5	(9.4-13.9)
Lapeer	185	13.9	(9.1-20.6)
Shiawassee	191	6.9	(3.9-11.9)
<b>Region 3</b>	1,317	10.3	(8.4-12.5)
Jackson	899	12.1	(9.6-15.2)
Lenawee	334	10.3	(6.9-15.1)
<b>Region 4</b>	1,651	9.2	(7.7-11.0)
Barry-Eaton	415	10.5	(7.8-13.9)
Mid-Michigan <sup>b</sup>	498	8.4	(6.2-11.2)
Ingham	828	8.9	(6.6-11.8)
<b>Region 5</b>	1,437	11.1	(9.2-13.2)
Branch-Hillsdale-St. Joseph	400	10.0	(7.3-13.5)
Calhoun	362	15.4	(11.0-21.1)
Kalamazoo	605	9.5	(7.1-12.7)
<b>Region 6</b>	675	9.1	(7.1-11.7)
Van Buren-Cass	276	13.2	(9.4-18.2)
Berrien	339	6.0	(4.0-9.1)
<b>Region 7</b>	2,687	7.2	(6.2-8.3)
Allegan	291	10.1	(6.7-14.9)
Ionia	157	11.8	(7.2-18.9)
Kent	1,350	6.9	(5.6-8.5)
Mid-Michigan <sup>b</sup>	498	8.4	(6.2-11.2)
Ottawa	632	5.9	(4.3-8.0)

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<b>Table 24 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>26,935</b>	<b>9.7</b>	<b>(9.2-10.1)</b>
<b>Region 8</b>	1,669	7.6	(6.2-9.3)
District #10	762	9.0	(7.0-11.5)
Muskegon	664	6.8	(5.0-9.3)
<b>Region 9</b>	1,208	13.5	(11.2-16.2)
District #2	158	16.6	(10.3-25.8)
District #4	229	16.5	(11.5-23.0)
Northwest Michigan	356	9.0	(6.0-13.3)
Benzie-Leelanau	162	20.2	(12.7-30.5)
Grand Traverse	287	10.8	(7.2-16.0)
<b>Region 10</b>	1,006	11.1	(8.8-13.8)
Bay	246	10.0	(6.2-15.8)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	441	11.9	(8.3-16.8)
Sanilac	94	17.9	(11.2-27.5)
Tuscola	137	6.4	(3.5-11.3)
<b>Region 11</b>	697	10.7	(8.1-13.8)
Central Michigan	449	11.1	(7.9-15.4)
Midland	212	9.9	(6.4-14.8)
<b>Region 12</b>	877	12.0	(9.4-15.2)
Luce-Mackinac-Alger-Schoolcraft	116	12.6	(7.6-20.3)
Western Upper Peninsula	198	11.4	(7.3-17.4)
Delta-Menominee	167	10.6	(6.1-17.8)
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	97	21.9	(13.4-33.6)
Marquette	166	9.7	(5.8-15.9)

<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 25: Cancer Michigan BRFS, 2019-2021 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>27,091</b>	<b>13.0</b>	<b>(12.5-13.5)</b>
<b>Region 1</b>	11,600	12.6	(11.9-13.4)
Livingston	1,023	15.3	(12.7-18.2)
Macomb	1,675	12.9	(11.2-14.8)
Monroe	416	17.0	(12.9-22.1)
Oakland	2,796	13.8	(12.4-15.2)
St. Clair	310	15.2	(11.4-20.0)
Washtenaw	1,722	12.5	(10.8-14.3)
City of Detroit	1,167	7.2	(5.7-9.1)
Wayne exc. Detroit	2,389	13.0	(11.5-14.7)
<b>Region 2</b>	1,573	14.3	(12.3-16.5)
Genesee	1,163	12.2	(10.1-14.5)
Lapeer	184	20.1	(14.5-27.2)
Shiawassee	189	22.2	(15.6-30.5)
<b>Region 3</b>	1,327	13.9	(11.7-16.4)
Jackson	904	14.3	(11.7-17.5)
Lenawee	338	16.1	(11.9-21.5)
<b>Region 4</b>	1,661	12.2	(10.6-14.0)
Barry-Eaton	416	15.0	(11.6-19.1)
Mid-Michigan <sup>b</sup>	503	11.3	(8.7-14.4)
Ingham	833	10.9	(8.9-13.4)
<b>Region 5</b>	1,441	14.2	(12.2-16.5)
Branch-Hillsdale-St. Joseph	402	14.2	(11.0-18.3)
Calhoun	364	16.3	(11.6-22.3)
Kalamazoo	604	12.2	(9.7-15.3)
<b>Region 6</b>	678	14.2	(11.5-17.3)
Van Buren-Cass	276	15.2	(11.2-20.4)
Berrien	341	14.3	(10.7-18.9)
<b>Region 7</b>	2,708	11.9	(10.7-13.2)
Allegan	295	14.1	(10.4-18.8)
Ionia	159	14.1	(9.3-20.9)
Kent	1,352	11.8	(10.2-13.6)
Mid-Michigan <sup>b</sup>	503	11.3	(8.7-14.4)
Ottawa	643	11.6	(9.4-14.2)

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<b>Table 25 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>27,091</b>	<b>13.0</b>	<b>(12.5-13.5)</b>
<b>Region 8</b>	1,684	11.1	(9.6-12.8)
District #10	767	13.2	(10.9-16.0)
Muskegon	673	13.7	(10.8-17.1)
<b>Region 9</b>	1,216	15.9	(13.5-18.6)
District #2	158	19.8	(13.7-27.8)
District #4	228	12.3	(8.2-17.9)
Northwest Michigan	359	14.9	(10.9-20.1)
Benzie-Leelanau	164	17.6	(10.8-27.3)
Grand Traverse	291	18.5	(13.6-24.5)
<b>Region 10</b>	1,016	14.4	(12.1-17.0)
Bay	250	16.0	(11.1-22.6)
Huron	87	16.4	(9.6-26.5)
Saginaw	443	14.2	(10.9-18.1)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	139	14.0	(8.8-21.6)
<b>Region 11</b>	699	15.0	(12.3-18.2)
Central Michigan	449	16.4	(13.0-20.6)
Midland	214	10.0	(6.7-14.6)
<b>Region 12</b>	881	15.2	(12.5-18.4)
Luce-Mackinac-Alger-Schoolcraft	116	16.8	(10.1-26.6)
Western Upper Peninsula	199	11.2	(7.4-16.6)
Delta-Menominee	170	18.2	(12.5-25.8)
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	98	14.1	(8.7-22.1)
Marquette	165	18.0	(11.7-26.5)

<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.

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

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<b>Table 26: Diabetes</b>			
<b>Michigan BRFS, 2019-2021 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>27,150</b>	<b>11.4</b>	<b>(10.9-11.9)</b>
<b>Region 1</b>	11,620	11.3	(10.5-12.0)
Livingston	1,022	8.8	(6.8-11.3)
Macomb	1,672	11.6	(9.9-13.5)
Monroe	418	12.5	(9.2-16.9)
Oakland	2,809	9.3	(8.1-10.7)
St. Clair	311	13.0	(9.4-17.8)
Washtenaw	1,724	8.7	(7.0-10.7)
City of Detroit	1,167	14.7	(12.4-17.2)
Wayne exc. Detroit	2,394	12.3	(10.8-14.1)
<b>Region 2</b>	1,576	13.1	(11.2-15.1)
Genesee	1,163	14.5	(12.3-17.2)
Lapeer	185	11.9	(7.8-17.7)
Shiawassee	191	7.3	(4.0-13.1)
<b>Region 3</b>	1,330	11.6	(9.5-14.2)
Jackson	906	13.8	(10.9-17.3)
Lenawee	339	10.4	(7.5-14.3)
<b>Region 4</b>	1,664	10.7	(9.1-12.6)
Barry-Eaton	416	11.7	(8.7-15.7)
Mid-Michigan <sup>b</sup>	506	8.8	(6.6-11.6)
Ingham	834	10.3	(8.1-13.0)
<b>Region 5</b>	1,446	10.7	(9.0-12.6)
Branch-Hillsdale-St. Joseph	403	11.5	(8.6-15.2)
Calhoun	364	12.5	(8.9-17.3)
Kalamazoo	608	8.6	(6.4-11.5)
<b>Region 6</b>	677	13.6	(10.9-16.8)
Van Buren-Cass	274	15.8	(11.2-21.9)
Berrien	342	13.1	(9.7-17.5)
<b>Region 7</b>	2,712	10.2	(9.0-11.6)
Allegan	295	11.5	(8.1-16.1)
Ionia	160	15.2	(9.8-22.9)
Kent	1,355	10.1	(8.4-12.2)
Mid-Michigan <sup>b</sup>	506	8.8	(6.6-11.6)
Ottawa	642	9.9	(7.4-13.2)



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<b>Table 26 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>27,150</b>	<b>11.4</b>	<b>(10.9-11.9)</b>
<b>Region 8</b>	1,688	10.6	(8.9-12.6)
District #10	769	11.7	(9.2-14.8)
Muskegon	674	13.4	(10.2-17.5)
<b>Region 9</b>	1,222	12.5	(10.2-15.1)
District #2	160	18.0	(12.0-26.2)
District #4	229	14.5	(9.9-20.6)
Northwest Michigan	362	9.3	(5.8-14.5)
Benzie-Leelanau	164	15.3	(8.6-25.8)
Grand Traverse	291	9.0	(5.9-13.5)
<b>Region 10</b>	1,021	14.0	(11.6-16.8)
Bay	250	12.8	(9.0-17.8)
Huron	88	13.7	(7.8-22.8)
Saginaw	447	14.3	(10.5-19.2)
Sanilac	96	13.6	(8.0-22.3)
Tuscola	139	15.9	(9.5-25.4)
<b>Region 11</b>	701	12.8	(10.0-16.2)
Central Michigan	451	13.9	(10.4-18.4)
Midland	214	11.1	(7.0-17.1)
<b>Region 12</b>	884	12.0	(9.5-15.0)
Luce-Mackinac-Alger-Schoolcraft	116	13.1	(7.4-22.1)
Western Upper Peninsula	201	13.8	(9.2-20.2)
Delta-Menominee	169	11.6	(7.7-17.2)
Chippewa	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Dickinson-Iron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Marquette	166	8.4	(4.8-14.3)

<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%.

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<b>Table 27: Kidney Disease Michigan BRFSS, 2019-2021 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>27,117</b>	<b>3.4</b>	<b>(3.1-3.6)</b>
<b>Region 1</b>	11,607	3.3	(2.9-3.7)
Livingston	1,019	2.3	(1.6-3.5)
Macomb	1,669	2.7	(2.0-3.7)
Monroe	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Oakland	2,808	2.9	(2.3-3.7)
St. Clair	310	5.8	(3.3-10.2)
Washtenaw	1,721	4.0	(2.8-5.7)
City of Detroit	1,168	3.5	(2.5-4.9)
Wayne exc. Detroit	2,392	3.6	(2.7-4.7)
<b>Region 2</b>	1,575	4.7	(3.6-6.0)
Genesee	1,161	4.5	(3.3-6.0)
Lapeer	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Shiawassee	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 3</b>	1,334	4.0	(3.0-5.5)
Jackson	909	3.3	(2.2-4.8)
Lenawee	340	5.9	(3.6-9.6)
<b>Region 4</b>	1,660	2.6	(1.9-3.5)
Barry-Eaton	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Mid-Michigan <sup>b</sup>	507	2.4	(1.4-4.1)
Ingham	830	2.3	(1.5-3.6)
<b>Region 5</b>	1,442	4.9	(3.8-6.3)
Branch-Hillsdale-St. Joseph	403	4.4	(2.8-7.1)
Calhoun	361	6.5	(3.9-10.6)
Kalamazoo	607	4.6	(3.2-6.5)
<b>Region 6</b>	678	3.0	(1.9-4.6)
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>	2,709	2.8	(2.2-3.6)
Allegan	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Ionia	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Kent	1,352	3.0	(2.2-4.1)
Mid-Michigan <sup>b</sup>	507	2.4	(1.4-4.1)
Ottawa	644	2.1	(1.2-3.8)

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<b>Table 27 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>27,117</b>	<b>3.4</b>	<b>(3.1-3.6)</b>
<b>Region 8</b>	1,685	2.7	(2.0-3.6)
District #10	767	2.8	(1.8-4.2)
Muskegon	674	4.1	(2.7-6.1)
<b>Region 9</b>	1,218	4.2	(2.9-6.0)
District #2	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
District #4	228	5.3	(2.9-9.4)
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>	1,019	3.4	(2.4-4.8)
Bay	249	4.3	(2.3-7.7)
Huron	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Saginaw	446	3.5	(2.0-5.9)
Sanilac	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
Tuscola	-- <sup>c</sup>	-- <sup>c</sup>	-- <sup>c</sup>
<b>Region 11</b>	698	2.1	(1.3-3.6)
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>	883	3.3	(2.0-5.1)
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 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%.

<b>Table 28: Depression Michigan BRFSS, 2019-2021 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>27,055</b>	<b>21.2</b>	<b>(20.5-21.9)</b>
<b>Region 1</b>	11,578	19.5	(18.6-20.5)
Livingston	1,017	21.8	(18.2-26.0)
Macomb	1,670	18.8	(16.5-21.3)
Monroe	415	21.0	(16.4-26.5)
Oakland	2,794	17.4	(15.7-19.3)
St. Clair	307	19.9	(14.9-26.0)
Washtenaw	1,719	22.5	(19.9-25.3)
City of Detroit	1,166	19.0	(16.4-21.9)
Wayne exc. Detroit	2,387	21.0	(18.9-23.2)
<b>Region 2</b>	1,574	25.5	(22.7-28.5)
Genesee	1,160	26.6	(23.3-30.2)
Lapeer	186	21.6	(15.2-29.8)
Shiawassee	191	22.8	(15.4-32.5)
<b>Region 3</b>	1,331	24.3	(21.1-27.8)
Jackson	905	23.7	(19.8-28.1)
Lenawee	341	24.9	(19.2-31.6)
<b>Region 4</b>	1,661	21.9	(19.5-24.5)
Barry-Eaton	416	18.1	(13.9-23.4)
Mid-Michigan <sup>b</sup>	505	20.4	(16.6-24.9)
Ingham	831	22.7	(19.4-26.4)
<b>Region 5</b>	1,447	26.5	(23.5-29.7)
Branch-Hillsdale-St. Joseph	403	23.8	(18.4-30.3)
Calhoun	364	26.4	(20.4-33.4)
Kalamazoo	609	28.8	(24.3-33.8)
<b>Region 6</b>	680	21.2	(17.6-25.3)
Van Buren-Cass	277	20.7	(15.4-27.1)
Berrien	342	20.4	(15.4-26.7)
<b>Region 7</b>	2,698	22.1	(20.1-24.2)
Allegan	294	19.2	(13.9-26.1)
Ionia	160	26.4	(17.9-37.3)
Kent	1,346	24.5	(21.8-27.5)
Mid-Michigan <sup>b</sup>	505	20.4	(16.6-24.9)
Ottawa	639	18.0	(14.3-22.4)

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<b>Table 28 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>27,055</b>	<b>21.2</b>	<b>(20.5-21.9)</b>
<b>Region 8</b>	1,676	22.6	(19.4-26.1)
District #10	763	22.5	(18.3-27.4)
Muskegon	670	28.6	(21.4-37.1)
<b>Region 9</b>	1,214	21.5	(18.7-24.6)
District #2	159	26.0	(18.7-35.0)
District #4	227	20.6	(15.0-27.6)
Northwest Michigan	360	17.5	(12.9-23.3)
Benzie-Leelanau	162	24.8	(16.6-35.3)
Grand Traverse	290	21.5	(16.2-27.8)
<b>Region 10</b>	1,014	22.8	(19.6-26.3)
Bay	248	29.7	(22.3-38.2)
Huron	87	15.0	(8.6-24.8)
Saginaw	445	22.3	(17.7-27.6)
Sanilac	95	18.7	(11.4-29.0)
Tuscola	138	19.0	(11.7-29.3)
<b>Region 11</b>	698	20.9	(16.6-25.9)
Central Michigan	451	21.8	(16.2-28.5)
Midland	211	20.8	(14.6-28.7)
<b>Region 12</b>	880	20.3	(17.1-23.9)
Luce-Mackinac-Alger-Schoolcraft	116	21.2	(13.1-32.5)
Western Upper Peninsula	201	17.7	(12.2-24.9)
Delta-Menominee	169	21.1	(14.0-30.6)
Chippewa	99	15.9	(9.1-26.5)
Dickinson-Iron	97	27.6	(17.7-40.4)
Marquette	164	24.4	(16.9-33.7)

<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.