

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)

2020-2022

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

Prepared by: Yan Tian
December 2023

This report has been modified from the original format to present data specific to the Branch Hillsdale St. Joseph Community Health Agency. The complete report is located at [2020-2022 Michigan BRFS Regional and Local Health Department Estimates](#).

*2020-2022 Michigan BRFSS Regional & Local Health Department Estimates
December 2023*

Table of Contents

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

*2020-2022 Michigan BRFSS Regional & Local Health Department Estimates
December 2023*

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

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

For this report, data from the 2020-2022 Michigan BRFSS were combined. The total sample sizes by year were: 7,269 in 2020, 9,425 in 2021, and 10,058 in 2022. Not all questions were included annually in the survey. The table subtitles indicate which years were used for that particular analysis.

For the 2020 through 2022 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.

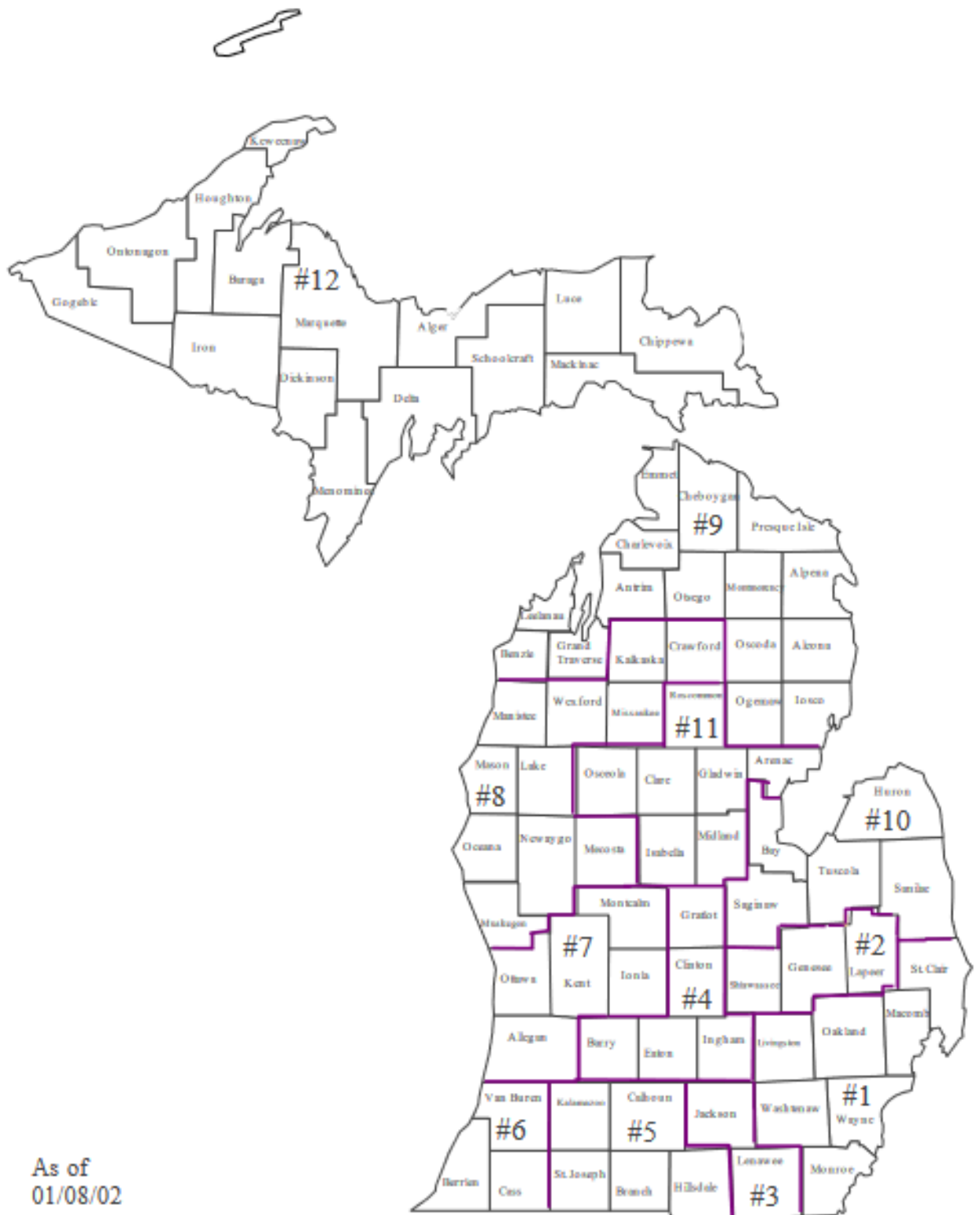
Iterative proportional fitting or raking was the weighting methodology used to make the 2020-2022 Michigan BRFSS data representative of the current Michigan adult population. Estimates based on this methodology were weighted to adjust for the probabilities of selection and a raking adjustment factor 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.

Community Health Assessment and Improvement Regions State of Michigan



As of
01/08/02

Local Health Departments State of Michigan



*2020-2022 Michigan BRFSS Regional & Local Health Department Estimates
December 2023*

Table 1: Health Status			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	General Health, Fair or Poor: The proportion of adults who reported that their health, in general, was either fair or poor.		
	N	%	95% Confidence Interval
Michigan Total	26,685	16.3	(15.7-16.9)
Region 5	1,505	19.5	(16.9-22.4)
Branch Hillsdale St. Joseph	413	22.6	(17.9-28.1)

Table 2: Poor Physical Health on at Least 14 Days in the Past Month			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Poor Physical Health: 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.		
	N	%	95% Confidence Interval
Michigan Total	26,216	11.9	(11.4-12.5)
Region 5	1,476	13.5	(11.4-16.0)
Branch Hillsdale St. Joseph	405	18.9	(14.4-24.3)

Table 3: Poor Mental Health on at Least 14 Days in the Past Month			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Poor Mental Health: 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.		
	N	%	95% Confidence Interval
Michigan Total	26,335	16.0	(15.4-16.6)
Region 5	1,484	18.6	(15.7-21.8)
Branch Hillsdale St. Joseph	408	15.4	(11.3-20.7)

Table 4: Activity Limitation on at Least 14 Days in the Past Month			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Activity Limitation: 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.		
	N	%	95% Confidence Interval
Michigan Total	26,455	9.7	(9.2-10.2)
Region 5	1,492	10.9	(8.8-13.5)
Branch Hillsdale St. Joseph	410	11.5	(8.2-16.1)

2020-2022 Michigan BRFS Regional & Local Health Department Estimates
December 2023

Table 5: Disability			
Michigan BRFSS, 2019 and 2020 Combined			
Geographical Area	Disability: 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.		
	N	%	95% Confidence Interval
Michigan Total	25,216	28.8	(28.8-29.5)
Region 5	1,435	34.6	(31.3-38.0)
Branch Hillsdale St. Joseph	398	35.0	(29.1-41.4)

Table 6: Weight Status			
Michigan BRFSS, 2020-2022 Combined			
BMI, body mass index, is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters) ²]. Weight and height were self-reported. Pregnant women were excluded.			
Geographical Area	Sample Size	Healthy Weight: The proportion of adults whose BMI was greater than or equal to 18.5, but less than 25.0.	
	N	%	95% Confidence Interval
Michigan Total	23,827	29.3	(28.6-30.1)
Region 5	1,360	29	(25.6-32.5)
Branch Hillsdale St. Joseph	382	26.0	(19.9-33.3)
Geographical Area	Sample Size	Overweight: The proportion of adults whose BMI was greater than or equal to 25.0, but less than 30.0.	
	N	%	95% Confidence Interval
Michigan Total	23,827	33.9	(33.1-34.7)
Region 5	1,360	34.2	(31.1-37.5)
Branch Hillsdale St. Joseph	382	37.1	(31.1-43.4)
Geographical Area	Sample Size	Obese: The proportion of adults whose BMI was greater than or equal to 30.0.	
	N	%	95% Confidence Interval
Michigan Total	23,827	34.7	(33.9-35.5)
Region 5	1,360	35.9	(32.7-39.3)
Branch Hillsdale St. Joseph	382	35.7	(27.3-36.2)

2020-2022 Michigan BRFSS Regional & Local Health Department Estimates
December 2023

Table 7: No Health Care Coverage Among Those Aged 18-64 Years Michigan BRFSS, 2020-2022 Combined			
Geographical Area	No Health Care Coverage: 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.		
	N	%	95% Confidence Interval
Michigan Total	15,629	6.8	(6.2-7.3)
Region 5	887	6.9	(5.1-9.3)
Branch Hillsdale St. Joseph	S	S	Suppressed due to a denominator <50 and/or a relative standard error >30%

Table 8: Health Care Access Michigan BRFSS, 2020-2022 Combined			
Geographical Area	No Personal Health Care Provider: The proportion of adults who reported that they did not have anyone that they thought of as their personal doctor or health care provider.		
	N	%	95% Confidence Interval
Michigan Total	26,505	12.4	(11.8-13.0)
Region 5	1,499	13.5	(11.2-16.1)
Branch Hillsdale St. Joseph	411	8.7	(5.6-13.1)
Geographical Area	No Health Care Access During Past 12 Months Due to Cost: 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.		
	N	%	95% Confidence Interval
Michigan Total	26,683	7.9	(7.5-8.4)
Region 5	1,509	8.2	(6.4-10.4)
Branch Hillsdale St. Joseph	415	9.2	(5.8-14.1)

Table 9: No Leisure Time Physical Activity Michigan BRFSS, 2020-2022 Combined			
Geographical Area	No Leisure Time Physical Activity: 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.		
	N	%	95% Confidence Interval
Michigan Total	26,686	22.6	(22.0-23.2)
Region 5	1,504	23.8	(21.2-26.7)
Branch Hillsdale St. Joseph	413	26.9	(22.0-32.4)

2020-2022 Michigan BRFSS Regional & Local Health Department Estimates
December 2023

Table 10: Cigarette Smoking			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Sample Size	Never Smoked	
		%	95% Confidence Interval
	N		
Michigan Total	24,994	56.6	(55.7-57.4)
Region 5	1,430	52.8	(49.4-56.2)
Branch Hillsdale St. Joseph	397	52.5	(46.0-58.9)
Geographical Area	Sample Size	Former Smoking: 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.	
		%	95% Confidence Interval
	N		
Michigan Total	24,994	26.5	(25.8-27.3)
Region 5	1,430	28.0	(25.2-31.0)
Branch Hillsdale St. Joseph	397	29.3	(24.0-35.2)
Geographical Area	Sample Size	Current Smoking: 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.	
		%	95% Confidence Interval
	N		
Michigan Total	24,994	16.9	(16.3-17.6)
Region 5	1,430	19.2	(16.4-22.3)
Branch Hillsdale St. Joseph	397	18.2	(13.6-23.9)

Table 11: Alcohol Consumption			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Sample Size	Any Alcohol in the Past Month: Among all adults, the proportion who reported consuming at least one drink of any alcoholic beverage in the previous month.	
		%	95% Confidence Interval
	N		
Michigan Total	24,524	54.8	(54.0-55.6)
Region 5	1,411	52.9	(49.5-56.3)
Branch Hillsdale St. Joseph	386	48.0	(41.5-54.6)
Geographical Area	Sample Size	Heavy Drinking: 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.	
		%	95% Confidence Interval
	N		
Michigan Total	24,524	6.8	(6.4-7.2)
Region 5	1,411	7.4	(5.7-9.5)
Branch Hillsdale St. Joseph	386	5.4	(3.1-9.3)

*2020-2022 Michigan BRFSS Regional & Local Health Department Estimates
December 2023*

Geographical Area	Sample Size	Binge Drinking: 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.	
	N	%	95% Confidence Interval
Michigan Total	24,524	16.9	(16.2-17.5)
Region 5	1,411	15.4	(13.0-18.2)
Branch Hillsdale St. Joseph	394	11.1	(7.5-16.0)

Table 12: No Routine Checkup in Past Year			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Had No Routine Checkup in Past Year: The proportion of adults who reported that they did not have a routine checkup in the past year.		
	N	%	95% Confidence Interval
Michigan Total	26,457	22.3	(21.6-23.0)
Region 5	1,482	23.4	(20.6-26.4)
Branch Hillsdale St. Joseph	405	19.0	(14.6-24.4)

Table 13: Breast Cancer Screening Among Women 40 Years and Older			
Michigan BRFSS, 2020 and 2022 Combined			
Geographical Area	Had Mammogram in Past Two Years: Among women aged 40 years and older, the proportion who reported having a mammogram in the past two years.		
	N	%	95% Confidence Interval
Michigan Total	7,015	72.7	(71.3-74.1)
Region 5	408	69.8	(63.9-75.1)
Branch Hillsdale St. Joseph	123	70.1	(59.4-79.0)

Table 14: Cervical Cancer Screening Among Women 18 Years and Older			
Michigan BRFSS, 2022			
Geographical Area	Had Appropriately Timed Pap Test: Among women aged 18 years and older, the proportion who reported having a Pap test within the previous three years.		
	N	%	95% Confidence Interval
Michigan Total	2,044	54.6	(51.9-57.4)
Region 5	109	47.1	(36.1-58.4)
Branch Hillsdale St. Joseph	23	37.4	(19.4-59.7)

2020-2022 Michigan BRFSS Regional & Local Health Department Estimates
December 2023

Table 15: Colorectal Cancer Screening Among Adults 50 Years and Older Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Appropriate Colorectal Cancer Screening: Among adults aged 50 years and older, the proportion who had either a fecal occult blood test within the past year, a sigmoidoscopy within the past five years, or a colonoscopy within the past ten years.		
	N	%	95% Confidence Interval
Michigan Total	10,328	75.4	(74.3-76.5)
Region 5	581	76.6	(72.1-80.6)
Branch Hillsdale St. Joseph	189	75.0	(66.5-81.9)

Table 16: Oral Health Michigan BRFSS, 2020 and 2022 Combined			
Geographical Area	No Dental Visit in Past Year: The proportion of adults who reported that they had not visited a dentist or dental clinic for any reason in the past year		
	N	%	95% Confidence Interval
Michigan Total	17,165	30.7	(29.8-31.7)
Region 5	946	32.7	(28.9-36.8)
Branch Hillsdale St. Joseph	261	34.4	(27.1-42.4)
Geographical Area	6+ Teeth Missing: The proportion of adults who reported that they were missing 6+ teeth due to tooth decay or gum disease. This excludes teeth lost for other reasons, such as injury or orthodontics.		
	N	%	95% Confidence Interval
Michigan Total	16,969	14.2	(13.5-14.9)
Region 5	943	17.7	(14.7-21.2)
Branch Hillsdale St. Joseph	258	26.6	(20.0-34.3)

Table 17: Immunizations Among Adults Aged 65 Years and Older Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Had Flu Vaccine in Past Year: 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.		
	N	%	95% Confidence Interval
Michigan Total	9,191	72.0	(70.8-73.2)
Region 5	539	76.6	(71.9-80.6)
Branch Hillsdale St. Joseph	180	74.1	(66.2-80.8)
Geographical Area	Ever Had Pneumonia Vaccine: Among adults aged 65 years and older, the proportion who reported that they ever had a pneumococcal vaccine.		
	N	%	95% Confidence Interval
Michigan Total	8,885	72.8	(71.5-74.0)

2020-2022 Michigan BRFSS Regional & Local Health Department Estimates
December 2023

Region 5	512	73.5	(68.5-78.0)
Branch Hillsdale St. Joseph	175	75.8	(67.9-82.2)

Table 18: HIV Testing Among Adults Aged 18-64 Years			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Ever Had an HIV Test: 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. Note: "Don't know" was considered a valid response.		
	N	%	95% Confidence Interval
Michigan Total	13,785	43.5	(42.5-44.6)
Region 5	793	47.5	(43.1-51.9)
Branch Hillsdale St. Joseph	181	32.9	(25.2-61.6)

Table 19: Asthma			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Ever Told Have Asthma: The proportion of adults who reported that they were ever told by a doctor, nurse, or other health care professional that they had asthma.		
	N	%	95% Confidence Interval
Michigan Total	26,656	16.2	(15.6-16.8)
Region 5	1,508	16.6	(14.3-19.1)
Branch Hillsdale St. Joseph	414	18.8	(14.3-24.1)
Geographical Area	Still Have Asthma: Among all adults, the proportion who reported that they still had asthma.		
	N	%	95% Confidence Interval
Michigan Total	26,533	11.5	(11.0-12.0)
Region 5	1,506	12.5	(10.4-14.8)
Branch Hillsdale St. Joseph	414	14.2	(10.3-19.1)

Table 20: Chronic Obstructive Pulmonary Disease (COPD)			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Ever Told COPD, Emphysema or Chronic Bronchitis: 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.		
	N	%	95% Confidence Interval
Michigan Total	26,623	8.3	(7.9-8.8)
Region 5	1,502	8.9	(7.3-11.0)
Branch Hillsdale St. Joseph	414	11.0	(7.7-15.5)

2020-2022 Michigan BRFS Regional & Local Health Department Estimates
December 2023

Table 21: Arthritis			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Ever Told Arthritis: 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.		
	N	%	95% Confidence Interval
Michigan Total	26,593	30.0	(29.3-30.7)
Region 5	1,501	33.4	(30.4-36.4)
Branch Hillsdale St. Joseph	414	40.9	(35.0-47.0)

Table 22: Heart Attack			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Ever Told Heart Attack: Among all adults, the proportion who had ever been told by a doctor that they had a heart attack or myocardial infarction.		
	N	%	95% Confidence Interval
Michigan Total	26,567	4.8	(4.5-5.2)
Region 5	1,499	5.4	(4.2-7.1)
Branch Hillsdale St. Joseph	414	7.6	(5.2-11.1)

Table 23: Angina or Coronary Heart Disease			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Ever Told Angina or Coronary Heart Disease: Among all adults, the proportion who had ever been told by a doctor that they had angina or coronary heart disease.		
	N	%	95% Confidence Interval
Michigan Total	26,519	4.6	(4.3-4.9)
Region 5	1,495	5.0	(3.9-6.4)
Branch Hillsdale St. Joseph	408	6.2	(4.1-9.4)

Table 24: Stroke			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Ever Told Stroke: Among all adults, the proportion who had ever been told by a doctor that they had a stroke.		
	N	%	95% Confidence Interval
Michigan Total	26,671	3.6	(3.3-3.8)
Region 5	1,505	3.9	(2.9-5.3)
Branch Hillsdale St. Joseph	S	S	Suppressed due to a denominator <50 and/or a relative standard error >30%

2020-2022 Michigan BRFSS Regional & Local Health Department Estimates
December 2023

Table 25: Cardiovascular Disease			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Ever Told Any Cardiovascular Disease: 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.		
	N	%	95% Confidence Interval
Michigan Total	26,459	9.8	(9.4-10.3)
Region 5	1,494	10.8	(9.0-12.9)
Branch Hillsdale St. Joseph	410	11.7	(8.6-15.7)

Table 26: Cancer			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Ever Told Cancer: Among all adults, the proportion who reported ever being told by a doctor that they had skin cancer or any other type of cancer.		
	N	%	95% Confidence Interval
Michigan Total	26,609	12.4	(12.0-12.9)
Region 5	1,499	13.8	(11.8-16.0)
Branch Hillsdale St. Joseph	410	15.5	(12.0-19.7)

Table 27: Diabetes			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Ever Told Diabetes: 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.		
	N	%	95% Confidence Interval
Michigan Total	26,694	11.6	(11.1-12.1)
Region 5	1,508	10.2	(8.6-12.1)
Branch Hillsdale St. Joseph	415	11.4	(8.6-15.1)

Table 28: Kidney Disease			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Ever Told Kidney Disease: Among all adults, the proportion who reported ever being told by a doctor that they had kidney disease.		
	N	%	95% Confidence Interval
Michigan Total	26,661	3.6	(3.3-3.9)
Region 5	1,504	4.5	(3.4-6.0)
Branch Hillsdale St. Joseph	414	5.2	(2.9-9.1)

*2020-2022 Michigan BRFSS Regional & Local Health Department Estimates
December 2023*

Table 29: Depression			
Michigan BRFSS, 2020-2022 Combined			
Geographical Area	Ever Told Depression: Among all adults, the proportion who reported ever being told by a doctor that they had kidney disease.		
	N	%	95% Confidence Interval
Michigan Total	26,620	21.7	(21.2-22.4)
Region 5	1,503	25.4	(22.6-28.5)
Branch Hillsdale St. Joseph	413	18.4	(14.0-23.9)