

**Estimates for Selected Risk Factors and Health Indicators
by Michigan Prosperity Region**

State of Michigan

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

2018-2020

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

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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](#) that is managed by the PHSB at the CDC.

For this report, data from the 2018-2020 Michigan BRFSS were combined. The total sample sizes by year were: 10,322 in 2018, 10,518 in 2019, and 7,269 in 2020. Not all questions were included annually in the survey. The table subtitles indicate which years were used for that particular analysis.

For the 2018 through 2020 Michigan Behavioral Risk Factor Surveys, the sample of land line telephone numbers that were utilized for data collection was selected using a list-assisted, random-digit-dialed methodology with a disproportionate stratification based on phone bank density, and whether or not the phone numbers were directory listed. The sample of cell phone numbers used within each survey year was randomly selected from dedicated cellular telephone banks sorted on the basis of area code and exchange within the State of Michigan.

Iterative proportional fitting or raking was the weighting methodology used to make the 2018-2020 Michigan BRFSS data representative of the current Michigan adult population. Estimates based on this methodology were weighted to adjust for the probabilities of selection and a raking adjustment factor that adjusted for the distribution of Michigan adults by telephone source (land line vs. cell phone), detailed race/ethnicity, education level, marital status, age by gender, gender by race/ethnicity, age by race/ethnicity, and renter/owner status. No additional weighting factors were computed at the regional level, thus the weights used might not always provide accurate regional estimates, particularly when regional demographic distributions vary greatly from that of the state.

Michigan BRFSS data from 2018-2020 were analyzed by Michigan Prosperity region. A map identifying each of Michigan's ten prosperity regions is included on the following page. Population-based prevalence estimates and asymmetric confidence intervals were calculated for indicators of health status, health risk behaviors, clinical preventive practices, and chronic conditions among the adult population in Michigan. All analyses were performed in SAS-Callable SUDAAN®, a statistical computing that is 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%.

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.

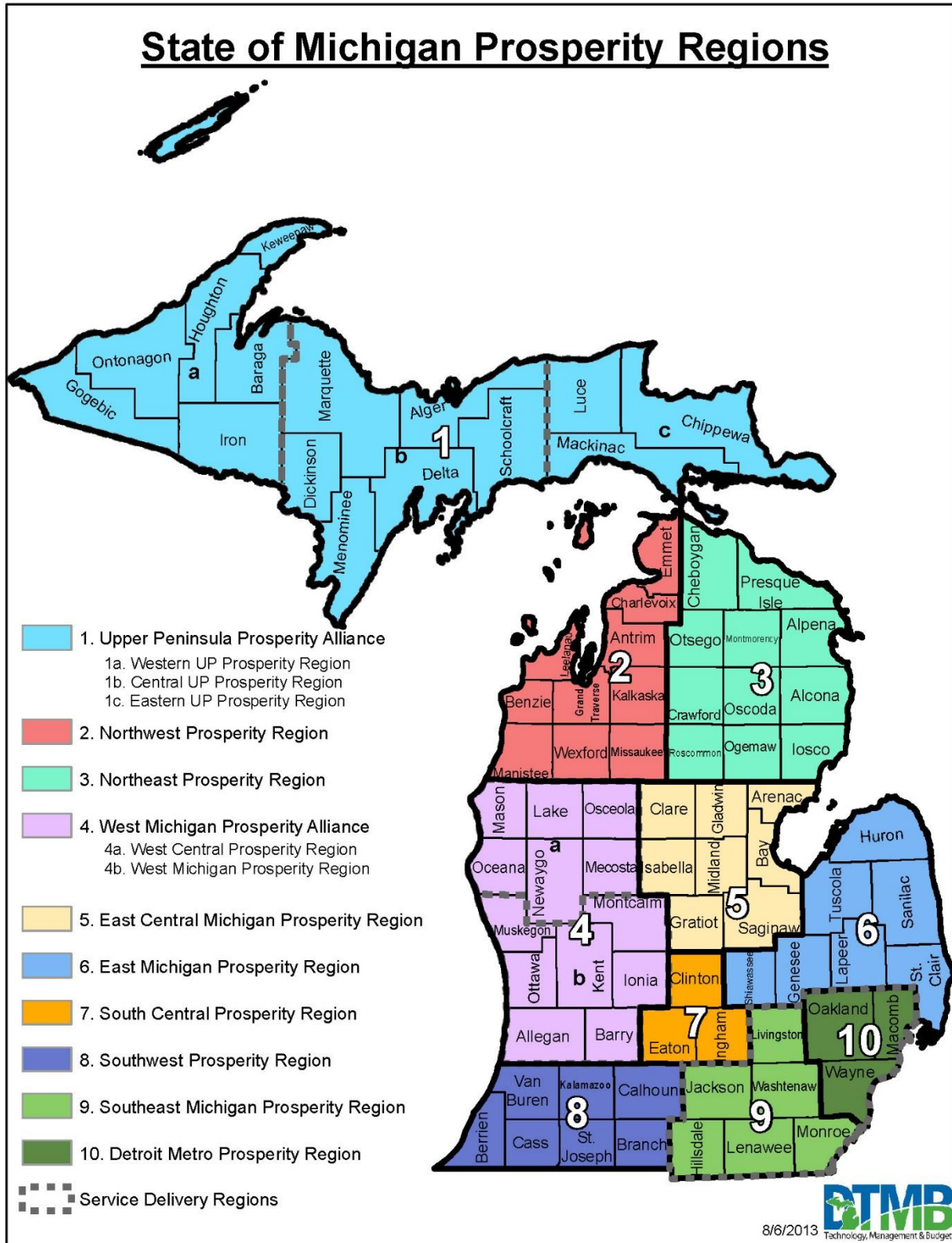


Table 1: Health Status by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	General Health, Fair or Poor^a	
	%	95% Confidence Interval
Michigan Total	17.9	(17.3-18.5)
Prosperity Region		
Upper Peninsula	17.8	(13.0-23.7)
Northwest	20.8	(16.5-25.9)
Northeast	21.9	(15.0-30.8)
West Michigan	16.4	(14.1-19.0)
East Central Michigan	22.9	(18.1-28.4)
East Michigan	23.0	(19.6-26.8)
South Central	19.0	(14.9-23.8)
Southwest	19.5	(15.4-24.4)
Southeast Michigan	14.8	(12.6-17.2)
Detroit Metro	19.4	(17.6-21.3)

^a Among all adults, the proportion who reported that their health, in general, was either fair or poor.

**Table 2: Health Status on at Least 16 Days in the Past Month by Prosperity Region
Michigan BRFSS, 2018-2020 Combined**

	Poor Physical Health ^a		Poor Mental Health ^b		Activity Limitation ^c	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	13.2	(12.6-13.7)	15.4	(14.8-16.0)	9.7	(9.3-10.2)
Prosperity Region						
Upper Peninsula	17.4	(12.0-24.5)	12.5	(8.5-18.2)	10.0	(6.5-15.0)
Northwest	18.4	(14.3-23.2)	17.5	(13.4-22.6)	12.7	(9.0-17.5)
Northeast	17.6	(11.4-26.2)	14.7	(9.6-22.0)	12.8	(7.3-21.3)
West Michigan	12.5	(10.6-14.6)	13.8	(11.7-16.4)	8.4	(6.9-10.2)
East Central Michigan	15.0	(11.4-19.4)	22.2	(17.3-28.0)	12.3	(9.0-16.7)
East Michigan	18.6	(15.5-22.1)	17.1	(14.1-20.5)	13.9	(11.1-17.2)
South Central	16.1	(12.3-20.7)	17.9	(14.0-22.6)	9.9	(7.0-13.8)
Southwest	14.8	(11.2-19.3)	19.5	(15.4-24.5)	8.6	(5.8-12.6)
Southeast Michigan	10.7	(9.0-12.7)	15.7	(13.3-18.4)	8.6	(6.9-10.7)
Detroit Metro	12.8	(11.4-14.3)	15.9	(14.3-17.7)	8.9	(7.6-10.2)

^a Among all adults, the proportion who reported 16 or more days of poor physical health, which includes physical illness and injury, during the past 30 days.

^b Among all adults, the proportion who reported 16 or more days of poor mental health, which includes stress, depression, and problems with emotions, during the past 30 days.

^c Among all adults, the proportion who reported 16 or more days in the past 30 days in which either poor physical health or poor mental health kept respondents from doing their usual activities, such as self-care, work, and recreation.

**Table 3: Mean Number of Days of Poor Physical Health, Poor Mental Health, and Activity Limitations by Prosperity Region
Michigan BRFSS, 2018-2020 Combined**

	Poor Physical Health ^a		Poor Mental Health ^b		Activity Limitation ^c	
	Mean # of days	95% Confidence Interval	Mean # of days	95% Confidence Interval	Mean # of days	95% Confidence Interval
Michigan Total	4.2	(4.0-4.3)	4.9	(4.7-5.0)	3.0	(2.9-3.2)
Prosperity Region						
Upper Peninsula	5.2	(3.4-6.9)	4.4	(3.1-5.7)	3.1	(2.0-4.3)
Northwest	5.6	(4.4-6.7)	5.3	(4.3-6.4)	3.7	(2.6-4.9)
Northeast	5.7	(3.7-7.6)	4.4	(3.0-5.9)	3.8	(2.0-5.5)
West Michigan	4.1	(3.6-4.6)	4.6	(4.0-5.2)	2.7	(2.3-3.1)
East Central Michigan	4.7	(3.8-5.7)	6.2	(4.9-7.4)	3.5	(2.7-4.4)
East Michigan	5.7	(4.9-6.6)	5.3	(4.5-6.2)	4.0	(3.3-4.8)
South Central	5.1	(4.0-6.2)	5.9	(4.8-7.0)	3.2	(2.3-4.0)
Southwest	4.8	(3.8-5.9)	5.8	(4.7-6.8)	3.0	(2.2-3.8)
Southeast Michigan	3.7	(3.2-4.2)	4.6	(4.0-5.2)	2.7	(2.3-3.2)
Detroit Metro	4.1	(3.7-4.4)	4.9	(4.4-5.3)	2.8	(2.5-3.1)

^a Among all adults, the mean number of days during the past 30 days in which physical health, including illness and injury, was not good.

^b Among all adults, the mean number of days during the past 30 days in which mental health, including stress, depression, and problems with emotions, was not good.

^c Among all adults, the mean number of days during the past 30 days in which poor physical health or poor mental health kept respondent from doing their usual activities, such as self-care, work, and recreation.

Table 4: Disability by Prosperity Region Michigan BRFSS, 2019 and 2020 Combined		
	Total Disability^a	
	%	95% Confidence Interval
Michigan Total	29.0	(28.1-29.9)
Prosperity Region		
Upper Peninsula	30.9	(25.8-36.6)
Northwest	32.6	(27.5-38.3)
Northeast	39.3	(32.8-46.2)
West Michigan	26.7	(24.4-29.2)
East Central Michigan	33.2	(28.9-37.8)
East Michigan	35.2	(32.1-38.3)
South Central	24.7	(21.3-28.5)
Southwest	33.9	(30.3-37.6)
Southeast Michigan	27.5	(25.2-29.8)
Detroit Metro	27.8	(26.3-29.5)
^a 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.		

**Table 5: Weight Status by Prosperity Region
Michigan BRFSS, 2018-2020 Combined**

	Obese ^a		Overweight ^b		Healthy Weight ^c		Underweight ^d	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	34.7	(34.0-35.5)	34.5	(33.7-35.3)	29.0	(28.3-29.8)	1.8	(1.5-2.0)
Prosperity Region								
Upper Peninsula	33.2	(26.5-40.6)	36.9	(29.6-44.8)	28.6	(22.1-36.2)	-- ^e	-- ^e
Northwest	32.5	(27.5-38.0)	35.2	(30.1-40.5)	30.6	(25.6-36.0)	-- ^e	-- ^e
Northeast	37.4	(28.9-46.7)	32.4	(24.6-41.3)	26.2	(18.2-36.1)	-- ^e	-- ^e
West Michigan	36.6	(33.3-39.9)	33.6	(30.6-36.7)	28.8	(25.7-32.2)	1.0	(0.5-1.9)
East Central Michigan	39.1	(33.4-45.1)	30.2	(25.3-35.6)	29.1	(23.5-35.4)		
East Michigan	42.1	(38.1-46.2)	34.4	(30.6-38.3)	21.4	(18.3-25.0)	2.1	(1.2-3.7)
South Central	33.9	(28.9-39.3)	36.9	(31.5-42.7)	27.7	(22.9-33.1)	-- ^e	-- ^e
Southwest	35.6	(30.7-40.9)	35.8	(30.9-40.9)	27.0	(22.6-31.7)	-- ^e	-- ^e
Southeast Michigan	34.6	(31.3-38.1)	36.2	(32.9-39.6)	28.2	(25.2-31.3)	-- ^e	-- ^e
Detroit Metro	35.6	(33.5-37.9)	34.0	(31.9-36.2)	28.6	(26.6-30.8)	1.7	(1.2-2.6)

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

^a Among all adults, the proportion of respondents whose BMI was greater than or equal to 30.0.

^b Among all adults, the proportion of respondents whose BMI was greater than or equal to 25.0, but less than 30.0.

^c Among all adults, the proportion of respondents whose BMI was greater than or equal to 18.5, but less than 25.0.

^d Among all adults, the proportion of respondents whose BMI was less than 18.5.

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

Table 6: Health Care Coverage Among Adults 18-64 Years Old by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	No Health Care Coverage^a (Among 18 - 64 year olds)	
	%	95% Confidence Interval
Michigan Total	9.5	(8.9-10.1)
Prosperity Region		
Upper Peninsula	15.3	(9.7-23.4)
Northwest	14.9	(9.6-22.4)
Northeast	13.7	(7.4-23.9)
West Michigan	11.7	(9.1-14.9)
East Central Michigan	12.9	(8.6-18.8)
East Michigan	9.5	(7.1-12.6)
South Central	12.1	(8.3-17.3)
Southwest	11.7	(8.4-16.2)
Southeast Michigan	7.7	(5.8-10.1)
Detroit Metro	10.1	(8.4-12.0)
^a Among adults aged 18-64 years, the proportion who reported having no health care coverage, including health insurance, prepaid plans such as HMOs, or government plans, such as Medicare or Indian Health Services.		

Table 7: Health Care Access by Prosperity Region Michigan BRFSS, 2018-2020 Combined				
	No Personal Health Care Provider^a		No Health Care Access During Past 12 Months Due to Cost^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	14.6	(14.0-15.3)	10.5	(10.0-11.0)
Prosperity Region				
Upper Peninsula	11.5	(7.8-16.8)	10.5	(6.9-15.7)
Northwest	13.8	(10.1-18.6)	10.9	(7.5-15.6)
Northeast	11.9	(7.0-19.3)	11.6	(6.8-18.9)
West Michigan	11.9	(9.4-15.1)	13.1	(10.8-15.6)
East Central Michigan	19.9	(15.1-25.8)	12.4	(8.8-17.3)
East Michigan	11.9	(9.4-14.8)	11.2	(8.8-14.2)
South Central	18.6	(14.5-23.7)	11.3	(8.1-15.6)
Southwest	15.2	(11.7-19.4)	10.3	(7.3-14.3)
Southeast Michigan	14.1	(11.8-16.7)	9.8	(7.9-12.0)
Detroit Metro	13.7	(12.1-15.5)	12.3	(10.8-13.9)
^a Among all adults, the proportion who reported that they did not have anyone that they thought of as their personal doctor or health care provider. ^b Among all adults, the proportion who reported that in the past 12 months, they could not see a doctor when they needed to due to the cost.				

Table 8: No Leisure Time Physical Activity by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	No Leisure Time Physical Activity^a	
	%	95% Confidence Interval
Michigan Total	23.3	(22.7-24.0)
Prosperity Region		
Upper Peninsula	31.0	(24.2-38.8)
Northwest	26.7	(22.0-32.1)
Northeast	37.4	(28.9-46.8)
West Michigan	23.0	(20.4-26.0)
East Central Michigan	29.0	(23.6-35.0)
East Michigan	29.2	(25.7-33.0)
South Central	25.4	(20.8-30.6)
Southwest	29.1	(24.5-34.0)
Southeast Michigan	22.6	(19.9-25.6)
Detroit Metro	24.4	(22.5-26.5)
^a Among all adults, the proportion who reported not participating in any leisure time physical activities or exercises such as running, calisthenics, golf, gardening, or walking during the past month.		

**Table 9: Cigarette Smoking by Prosperity Region
Michigan BRFSS, 2018-2020 Combined**

	Current Smoking ^a		Former Smoking ^b		Never Smoked	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	18.6	(18.0-19.3)	26.7	(26.0-27.4)	54.6	(53.9-55.4)
Prosperity Region						
Upper Peninsula	21.4	(15.4-28.9)	28.1	(22.0-35.2)	50.5	(43.0-58.0)
Northwest	16.8	(13.3-21.1)	35.4	(30.4-40.7)	47.8	(42.3-53.3)
Northeast	25.5	(17.9-34.9)	32.9	(25.0-42.0)	41.6	(32.8-51.0)
West Michigan	17.3	(14.8-20.1)	25.6	(23.0-28.3)	57.2	(53.9-60.4)
East Central Michigan	28.0	(22.4-34.5)	25.5	(20.9-30.8)	46.4	(40.6-52.3)
East Michigan	23.2	(19.7-27.0)	27.4	(24.1-31.0)	49.4	(45.3-53.5)
South Central	15.3	(11.6-19.8)	28.0	(23.4-33.2)	56.7	(51.1-62.1)
Southwest	20.5	(16.2-25.6)	26.9	(22.6-31.6)	52.6	(47.4-57.7)
Southeast Michigan	17.4	(14.8-20.4)	23.7	(21.1-26.5)	58.9	(55.5-62.2)
Detroit Metro	17.4	(15.6-19.3)	26.6	(24.8-28.6)	56.0	(53.7-58.2)

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

^b Among all adults, the proportion who reported that they had ever smoked at least 100 cigarettes (5 packs) in their life, but they do not smoke cigarettes now.

Table 10: Current Smokers Who Attempted to Quit by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	Tried to Quit Smoking One Day or Longer in Past Year^a	
	%	95% Confidence Interval
Michigan Total	58.0	(56.0-59.9)
Prosperity Region		
Upper Peninsula	46.0	(29.4-63.6)
Northwest	55.2	(42.3-67.3)
Northeast	48.3	(29.4-67.7)
West Michigan	37.6	(29.9-46.0)
East Central Michigan	36.5	(24.6-50.4)
East Michigan	43.4	(34.6-52.6)
South Central	46.1	(32.4-60.4)
Southwest	43.9	(31.5-57.1)
Southeast Michigan	47.3	(38.4-56.5)
Detroit Metro	35.5	(30.0-41.5)

^a Among current smokers, the proportion who reported that during the past 12 months, they had tried to quit smoking for one day or longer.

Table 11: Current Hookah Use by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	Current Hookah Use^a	
	%	95% Confidence Interval
Michigan Total	3.0	(2.7-3.4)
Prosperity Region		
Upper Peninsula	--b	--b
Northwest	--b	--b
Northeast	--b	--b
West Michigan	3.0	(2.1-4.1)
East Central Michigan	2.1	(1.2-3.6)
East Michigan	2.4	(1.5-3.8)
South Central	3.5	(2.0-6.0)
Southwest	2.4	(1.5-3.8)
Southeast Michigan	2.3	(1.7-3.1)
Detroit Metro	4.0	(3.3-4.8)

^a Among all adults, the proportion who reported smoking tobacco using a hookah, narghile, or water pipe on one or more days during the previous thirty day.
^b Suppressed due to a denominator < 50 and/or a relative standard error > 30%.

Table 12: Alcohol Consumption by Prosperity Region
Michigan BRFSS, 2018-2020 Combined

	Any Alcohol in Past Month ^a		Heavy Drinking ^b		Binge Drinking ^c	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	56.0	(55.2-56.8)	6.5	(6.1-6.9)	17.9	(17.3-18.5)
Prosperity Region						
Upper Peninsula	61.2	(53.6-68.2)	10.4	(6.1-17.2)	21.0	(15.3-28.2)
Northwest	55.7	(50.1-61.1)	7.6	(5.4-10.5)	14.7	(11.6-18.4)
Northeast	51.0	(41.9-60.0)	-- ^d	-- ^d	18.0	(12.0-26.0)
West Michigan	56.5	(53.1-59.8)	7.0	(5.6-8.6)	17.0	(14.8-19.6)
East Central Michigan	48.4	(42.4-54.4)	5.6	(3.5-8.6)	14.2	(10.5-18.8)
East Michigan	53.3	(49.2-57.3)	5.4	(3.9-7.5)	17.0	(14.0-20.5)
South Central	60.5	(55.0-65.8)	4.5	(2.8-7.2)	23.0	(18.4-28.3)
Southwest	54.0	(48.7-59.1)	5.6	(3.7-8.3)	16.0	(12.5-20.2)
Southeast Michigan	57.8	(54.3-61.2)	7.1	(5.5-9.2)	18.4	(15.7-21.3)
Detroit Metro	58.5	(56.2-60.7)	5.8	(4.7-7.0)	18.5	(16.7-20.4)

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

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

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

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

Table 13: Mean Number of Binge Drinking Occasions during the Past Month among Binge Drinkers by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	Number of Binge Drinking Occasions^a	
	Mean	95% Confidence Interval
Michigan Total	4.9	(4.6-5.1)
Prosperity Region		
Upper Peninsula	5.7	(3.4-8.1)
Northwest	5.8	(3.7-7.9)
Northeast	7.6	(2.7-12.5)
West Michigan	5.3	(4.3-6.3)
East Central Michigan	5.1	(3.1-7.1)
East Michigan	4.3	(3.1-5.4)
South Central	5.0	(3.3-6.7)
Southwest	5.5	(3.5-7.5)
Southeast Michigan	4.3	(3.5-5.1)
Detroit Metro	3.9	(3.3-4.4)

^a Among adults who binge drank in the past month, the mean number of times during which five or more alcoholic beverages (for men) or four or more (for women) were consumed during the past month.

Table 14: Seatbelt Use by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	Always Uses a Seatbelt^a	
	%	95% Confidence Interval
Michigan Total	89.1	(88.4-89.8)
Prosperity Region		
Upper Peninsula	84.2	(79.1-88.2)
Northwest	86.9	(79.6-91.8)
Northeast	88.7	(84.1-92.1)
West Michigan	88.9	(87.0-90.5)
East Central Michigan	88.9	(85.8-91.3)
East Michigan	86.4	(83.7-88.7)
South Central	90.6	(87.5-93.0)
Southwest	88.7	(85.9-90.9)
Southeast Michigan	90.6	(88.8-92.2)
Detroit Metro	90.3	(89.1-91.3)
^a Among all adults, the proportion who reported always using a seatbelt when driving or riding in a car.		

Table 15: No Routine Checkup in Past Year by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	Had No Routine Checkup in Past Year^a	
	%	95% Confidence Interval
Michigan Total	21.2	(20.6-21.9)
Prosperity Region		
Upper Peninsula	21.2	(15.8-27.8)
Northwest	21.5	(17.2-26.6)
Northeast	17.8	(11.1-27.2)
West Michigan	20.2	(17.4-23.3)
East Central Michigan	27.1	(21.6-33.3)
East Michigan	19.4	(16.2-23.0)
South Central	22.3	(17.9-27.4)
Southwest	22.1	(18.0-26.8)
Southeast Michigan	22.4	(19.6-25.5)
Detroit Metro	16.9	(15.2-18.8)

^a Among all adults, the proportion who reported that they did not have a routine checkup in the past year.

Table 16: Breast Cancer Screening Among Women Aged 40 Years and Older by Prosperity Region Michigan BRFSS, 2018 and 2020 Combined		
	Had Mammogram in Past Two Years^a	
	%	95% Confidence Interval
Michigan Total	73.0	(71.6-74.4)
Prosperity Region		
Upper Peninsula	70.0	(61.9-77.1)
Northwest	77.8	(70.5-83.6)
Northeast	71.0	(60.6-79.6)
West Michigan	74.8	(71.2-78.0)
East Central Michigan	70.8	(63.8-77.0)
East Michigan	74.8	(70.0-79.0)
South Central	76.3	(70.5-81.3)
Southwest	71.1	(65.9-75.8)
Southeast Michigan	72.4	(68.7-75.8)
Detroit Metro	72.9	(70.3-75.3)

^a Among women aged 50 years and older, the proportion who reported having a mammogram in the past two years.

Table 17: Cervical Cancer Screening Among Women Aged 18 Years and Older by Prosperity Region Michigan BRFSS, 2018 and 2020 Combined		
	Had Appropriately Timed Pap Test^a	
	%	95% Confidence Interval
Michigan Total	81.3	(79.8-82.8)
Prosperity Region		
Upper Peninsula	79.1	(68.6-86.8)
Northwest	78.2	(69.5-85.0)
Northeast	83.0	(70.9-90.8)
West Michigan	78.4	(74.0-82.2)
East Central Michigan	82.0	(75.1-87.3)
East Michigan	77.9	(71.7-83.0)
South Central	86.4	(79.3-91.3)
Southwest	81.3	(75.7-85.8)
Southeast Michigan	76.1	(71.4-80.3)
Detroit Metro	85.2	(82.7-87.4)

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

Table 18: Prostate Cancer Screening Among Men Aged 50 Years and Older by Prosperity Region Michigan BRFSS, 2018 and 2020 Combined		
	Had PSA Test in Past Year^a	
	%	95% Confidence Interval
Michigan Total	33.2	(31.4-35.0)
Prosperity Region		
Upper Peninsula	32.3	(24.0-42.0)
Northwest	37.6	(29.6-46.4)
Northeast	33.9	(24.7-44.5)
West Michigan	28.2	(24.0-32.9)
East Central Michigan	31.9	(24.8-40.1)
East Michigan	33.1	(27.6-39.1)
South Central	38.9	(30.3-48.3)
Southwest	30.9	(24.9-37.6)
Southeast Michigan	34.8	(30.5-39.3)
Detroit Metro	34.8	(31.5-38.2)

^a Among men aged 50 years and older, the proportion who reported having has a Prostate-Specific Antigen (PSA) test in the past year.

Table 19: Colorectal Cancer Screening Among Adults Aged 50 Years and Older by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	Appropriate Colorectal Cancer Screening^a	
	%	95% Confidence Interval
Michigan Total	74.6	(73.5-75.7)
Prosperity Region		
Upper Peninsula	74.7	(68.6-80.0)
Northwest	72.0	(64.7-78.3)
Northeast	74.2	(66.8-80.4)
West Michigan	77.3	(74.3-80.0)
East Central Michigan	79.3	(74.2-83.7)
East Michigan	74.2	(70.5-77.5)
South Central	80.1	(75.4-84.1)
Southwest	73.6	(69.4-77.4)
Southeast Michigan	76.3	(73.6-78.9)
Detroit Metro	72.9	(70.8-74.9)
^a Among adults aged 50 years and older, the proportion who reported having 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.		

Table 20: Oral Health by Prosperity Region Michigan BRFSS, 2018 and 2020 Combined				
	No Dental Visit in Past Year^a		6+ Teeth Missing^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	24.9	(20.2-30.2)	24.9	(20.2-30.2)
Prosperity Region				
Upper Peninsula	30.1	(25.0-35.6)	24.9	(20.2-30.2)
Northwest	33.0	(27.2-39.5)	18.9	(13.6-25.6)
Northeast	37.2	(31.3-43.6)	27.0	(21.6-33.2)
West Michigan	28.8	(26.5-31.3)	14.4	(12.5-16.4)
East Central Michigan	34.4	(29.9-39.3)	15.8	(13.0-19.1)
East Michigan	30.0	(27.1-33.0)	18.9	(16.7-21.3)
South Central	23.6	(20.1-27.4)	9.6	(7.4-12.5)
Southwest	32.9	(29.6-36.4)	15.9	(13.5-18.5)
Southeast Michigan	26.2	(24.0-28.7)	13.5	(11.8-15.4)
Detroit Metro	29.2	(27.6-30.8)	13.3	(12.2-14.4)

^a Among all adults, the proportion who reported that they had not visited a dentist or dental clinic for any reason within the previous year.

^b Among all adults, the proportion 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.

Table 21: Immunizations among Adults Aged 65 Years and Older by Prosperity Region Michigan BRFSS, 2018-2020 Combined				
	Had Flu Vaccine in Past Year^a		Ever Had Pneumonia Vaccine^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	61.6	(60.3-62.9)	72.8	(71.6-74.1)
Prosperity Region				
Upper Peninsula	46.5	(35.1-58.3)	63.3	(50.3-74.6)
Northwest	67.9	(60.3-74.6)	73.3	(65.7-79.7)
Northeast	48.5	(34.5-62.7)	71.3	(56.5-82.6)
West Michigan	63.7	(58.9-68.1)	77.2	(73.0-81.0)
East Central Michigan	63.9	(54.5-72.3)	71.9	(63.7-78.8)
East Michigan	60.2	(53.9-66.3)	69.8	(63.7-75.4)
South Central	68.4	(59.6-76.0)	81.9	(73.9-87.8)
Southwest	57.8	(49.5-65.7)	70.8	(62.1-78.1)
Southeast Michigan	58.6	(53.2-63.9)	76.4	(71.5-80.7)
Detroit Metro	61.4	(57.6-65.0)	71.6	(67.9-75.1)

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

Table 22: HIV Testing among Adults Aged 18 - 64 Years by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	Ever Had an HIV Test^a	
	%	95% Confidence Interval
Michigan Total	45.5	(44.5-46.5)
Prosperity Region		
Upper Peninsula	46.5	(36.8-56.5)
Northwest	37.8	(31.2-45.0)
Northeast	36.8	(26.4-48.6)
West Michigan	43.1	(39.0-47.2)
East Central Michigan	46.6	(39.0-54.4)
East Michigan	46.1	(41.0-51.3)
South Central	46.0	(39.2-52.9)
Southwest	48.8	(42.3-55.3)
Southeast Michigan	50.5	(46.1-54.8)
Detroit Metro	50.1	(47.2-52.9)

^a Among adults aged 18 - 64 years, the proportion who reported that they ever had been tested for HIV, apart from tests that were part of a blood donation. Don't know was considered a valid response to this question.

Table 23: Asthma among Adults by Prosperity Region Michigan BRFSS, 2018-2020 Combined				
	Lifetime Asthma Prevalence^a		Current Asthma Prevalence^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	15.9	(15.3-16.5)	11.1	(10.6-11.7)
Prosperity Region				
Upper Peninsula	12.7	(8.8-18.0)	9.2	(6.0-13.7)
Northwest	17.1	(13.1-22.1)	10.3	(7.0-14.8)
Northeast	16.4	(10.6-24.6)	11.6	(6.7-19.4)
West Michigan	17.5	(14.8-20.4)	11.3	(9.2-13.8)
East Central Michigan	17.0	(12.6-22.5)	12.2	(8.3-17.5)
East Michigan	17.7	(14.6-21.2)	13.2	(10.4-16.5)
South Central	20.3	(16.2-25.3)	13.3	(10.0-17.5)
Southwest	17.1	(13.5-21.6)	10.9	(8.1-14.6)
Southeast Michigan	14.2	(12.0-16.7)	9.0	(7.4-11.0)
Detroit Metro	16.3	(14.7-18.0)	11.5	(10.1-13.1)
^a Among all adults, the proportion who reported that they were ever told by a doctor, nurse, or other health care professional that they had asthma.				
^b Among all adults, the proportion who reported that they still had asthma.				

Table 24: Asthma among Children by Prosperity Region Michigan BRFSS, 2018-2020 Combined				
	Lifetime Asthma Prevalence^a		Current Asthma Prevalence^b	
	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	12.0	(10.9-13.1)	8.3	(7.4-9.2)
Prosperity Region				
Upper Peninsula	12.0	(6.5-21.2)	-- ^c	-- ^c
Northwest	8.6	(5.5-13.1)	5.3	(3.1-8.8)
Northeast	-- ^c	-- ^c	-- ^c	-- ^c
West Michigan	9.2	(7.2-11.6)	6.3	(4.7-8.3)
East Central Michigan	9.4	(6.4-13.7)	5.9	(3.5-9.6)
East Michigan	13.4	(10.4-17.1)	9.6	(7.0-12.9)
South Central	15.6	(11.0-21.7)	11.3	(7.3-17.1)
Southwest	11.4	(8.0-16.1)	8.3	(5.4-12.6)
Southeast Michigan	11.6	(9.4-14.3)	7.5	(5.7-9.8)
Detroit Metro	13.5	(11.6-15.6)	9.3	(7.8-11.0)
^a Estimated proportion of Michigan children aged 0-17 years who were ever told by a doctor, nurse or other health professional that they had asthma, using proxy information from the adult respondent. ^b Estimated proportion of Michigan children aged 0-17 years who still have asthma, using proxy information from the adult respondent. ^c Suppressed due to a denominator < 50 and/or a relative standard error > 30%.				

Table 25: Chronic Obstructive Pulmonary Disease (COPD) by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	Ever Told COPD, Emphysema or Chronic Bronchitis^a	
	%	95% Confidence Interval
Michigan Total	8.4	(8.0-8.9)
Prosperity Region		
Upper Peninsula	8.8	(5.5-13.7)
Northwest	8.0	(5.8-10.9)
Northeast	19.7	(12.9-28.8)
West Michigan	6.3	(5.1-7.7)
East Central Michigan	7.2	(4.8-10.8)
East Michigan	13.3	(10.7-16.5)
South Central	7.4	(5.4-10.3)
Southwest	8.1	(5.5-11.8)
Southeast Michigan	7.7	(6.3-9.4)
Detroit Metro	8.2	(7.1-9.4)
^a Among all adults, the proportion who reported ever being told by a doctor that they had chronic obstructive pulmonary disease (COPD), emphysema or chronic bronchitis.		

Table 26: Arthritis by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	Ever Told Arthritis^a	
	%	95% Confidence Interval
Michigan Total	31.0	(30.3-31.7)
Prosperity Region		
Upper Peninsula	36.5	(29.8-43.7)
Northwest	32.6	(27.7-37.8)
Northeast	41.1	(32.7-50.0)
West Michigan	30.3	(27.7-33.2)
East Central Michigan	30.2	(25.5-35.3)
East Michigan	38.5	(34.8-42.3)
South Central	32.4	(27.7-37.5)
Southwest	29.0	(24.8-33.7)
Southeast Michigan	28.7	(25.9-31.7)
Detroit Metro	30.4	(28.5-32.4)
^a Among all adults, the proportion who reported ever being told by a doctor that they had some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia.		

**Table 27: Cardiovascular Disease by Prosperity Region
Michigan BRFSS, 2018-2020 Combined**

	Ever Told Heart Attack ^a		Had Told Angina or Coronary Heart Disease ^b		Ever Told Stroke ^c		Ever Told Any Cardiovascular Disease ^d	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	4.9	(4.6-5.3)	4.8	(4.5-5.1)	3.5	(3.2-3.7)	9.7	(9.3-10.2)
Prosperity Region								
Upper Peninsula	6.5	(3.7-11.2)	7.7	(4.6-12.5)	-- ^e	-- ^e	11.3	(7.6-16.4)
Northwest	6.3	(4.3-9.0)	5.4	(3.4-8.4)	2.6	(1.6-4.3)	12.6	(9.6-16.4)
Northeast	-- ^e	-- ^e	4.1	(2.4-7.0)	-- ^e	-- ^e	13.8	(8.9-20.7)
West Michigan	3.5	(2.6-4.5)	3.6	(2.8-4.6)	2.5	(1.8-3.5)	7.1	(5.9-8.6)
East Central Michigan	4.3	(2.7-6.9)	3.6	(2.4-5.3)	3.3	(2.0-5.4)	9.5	(7.0-12.7)
East Michigan	6.4	(4.6-8.7)	6.0	(4.5-8.0)	5.0	(3.6-7.1)	11.9	(9.7-14.6)
South Central	3.6	(2.3-5.8)	4.0	(2.6-6.2)	3.2	(1.9-5.4)	7.4	(5.3-10.3)
Southwest	5.7	(3.9-8.4)	4.4	(2.9-6.7)	3.8	(2.4-5.8)	10.2	(7.8-13.3)
Southeast Michigan	3.9	(3.0-5.0)	4.1	(3.2-5.3)	3.4	(2.5-4.6)	8.4	(7.0-10.0)
Detroit Metro	4.3	(3.5-5.2)	4.7	(4.0-5.6)	3.8	(3.0-4.7)	9.8	(8.6-11.1)

Among all adults, the proportion who had ever been told by a doctor that...

^a they had a heart attack or myocardial infarction;

^b they had angina or coronary heart disease;

^c they had a stroke;

^d they had a heart attack, coronary heart disease or a stroke.

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

**Table 28: Cancer by Prosperity Region
Michigan BRFSS, 2018-2020 Combined**

	Ever Told Skin Cancer ^a		Ever Told Any Other Types of Cancer ^b		Ever Told Cancer ^c	
	%	95% Confidence Interval	%	95% Confidence Interval	%	95% Confidence Interval
Michigan Total	6.4	(6.1-6.8)	7.9	(7.5-8.2)	12.9	(12.4-13.4)
Prosperity Region						
Upper Peninsula	7.8	(4.6-12.9)	8.7	(5.5-13.5)	14.0	(9.9-19.5)
Northwest	8.2	(5.9-11.2)	9.2	(6.8-12.5)	16.0	(12.7-19.9)
Northeast	8.7	(5.1-14.6)	8.2	(4.8-13.7)	15.0	(10.0-22.0)
West Michigan	6.8	(5.7-8.1)	7.8	(6.6-9.2)	13.3	(11.7-15.1)
East Central Michigan	6.0	(4.2-8.4)	12.0	(9.0-16.0)	15.4	(12.0-19.6)
East Michigan	7.2	(5.7-9.2)	8.6	(6.9-10.8)	13.9	(11.7-16.5)
South Central	7.1	(5.1-9.7)	7.4	(5.3-10.1)	11.5	(8.9-14.7)
Southwest	6.1	(4.5-8.3)	6.7	(4.9-9.3)	11.6	(9.1-14.6)
Southeast Michigan	7.5	(6.3-9.0)	8.9	(7.4-10.7)	14.6	(12.7-16.7)
Detroit Metro	6.6	(5.7-7.5)	8.5	(7.5-9.8)	13.6	(12.3-15.0)

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

^b Among all adults, the proportion who reported ever being told by a doctor that they had a form of cancer other than skin cancer.

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

Table 29: Diabetes by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	Ever Told Diabetes^a	
	%	95% Confidence Interval
Michigan Total	11.7	(11.2-12.2)
Prosperity Region		
Upper Peninsula	13.1	(9.4-18.0)
Northwest	12.3	(9.3-16.1)
Northeast	17.5	(11.7-25.2)
West Michigan	11.0	(9.4-12.9)
East Central Michigan	11.7	(9.0-15.2)
East Michigan	12.9	(10.6-15.6)
South Central	11.1	(8.3-14.8)
Southwest	12.4	(9.7-15.7)
Southeast Michigan	8.7	(7.2-10.4)
Detroit Metro	10.9	(9.7-12.3)
^a Among all adults, the proportion who reported that they were ever told by a doctor that they had diabetes. Adults told they have prediabetes and women who had diabetes only during pregnancy were classified as not having been diagnosed.		

Table 30: Kidney Disease by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	Ever Told Kidney Disease^a	
	%	95% Confidence Interval
Michigan Total	3.4	(3.1-3.6)
Prosperity Region		
Upper Peninsula	-- ^b	-- ^b
Northwest	2.9	(1.6-5.1)
Northeast	-- ^b	-- ^b
West Michigan	3.0	(2.3-4.1)
East Central Michigan	2.8	(1.5-5.0)
East Michigan	4.9	(3.4-7.0)
South Central	2.7	(1.5-4.8)
Southwest	4.3	(2.9-6.2)
Southeast Michigan	3.8	(2.8-5.1)
Detroit Metro	3.3	(2.7-4.0)
^a Among all adults, the proportion who reported ever being told by a doctor that they had kidney disease.		
^b Suppressed due to a denominator < 50 and/or a relative standard error > 30%.		

Table 31: Depression by Prosperity Region Michigan BRFSS, 2018-2020 Combined		
	Ever Told Depression^a	
	%	95% Confidence Interval
Michigan Total	21.4	(20.7-22.0)
Prosperity Region		
Upper Peninsula	21.6	(16.1-28.4)
Northwest	25.7	(21.1-30.8)
Northeast	20.9	(14.8-28.6)
West Michigan	24.5	(21.5-27.7)
East Central Michigan	23.8	(19.0-29.3)
East Michigan	23.1	(19.8-26.8)
South Central	23.3	(19.0-28.1)
Southwest	22.6	(18.3-27.5)
Southeast Michigan	22.2	(19.5-25.2)
Detroit Metro	19.1	(17.4-20.9)

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