Crude and Age-Adjusted Estimates for Chronic Health Conditions, Risk Factors, Health Indicators, and Preventive Health Practices by Expanded Race/Ethnicity

State of Michigan

Selected Tables

Michigan Behavioral Risk Factor Surveillance System (Michigan BRFSS)

2018-2020

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

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2018-2020 Michigan BRFSS Results by Expanded Race/Ethnicity September 2021

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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 BRFS data contribute to the national <u>Behavioral Risk Factor Surveillance System</u> that is managed by the PHSB at the CDC.

The total sample size for the combined 2018-2020 MiBRFS dataset was equal to 32,525 completed interviews (both landline and cell phone). The 2018-2020 combined dataset included 22,466 White, Non-Hispanics; 2,493 Black, Non-Hispanics; 460 Asian or Other Pacific Islander, Non-Hispanics; 223 American Indian/Alaska Native, Non-Hispanics; 711 Other/Multi-racial, Non-Hispanics, 409 Arab, Non-Hispanics; and 765 Hispanics. Those with unknown race/ethnicity were excluded from this 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 BRFS 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.

Both crude and age-adjusted[‡], 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 for seven racial/ethnic groups. 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 <u>TianY@michigan.gov</u>.

[‡] Klein RJ, Schoenborn CA. Age Adjustment Using the 2000 Projected U.S. Population. *Healthy People 2010 Stat Notes*. 2001:1-10.

Table 1: Prevalence Estimates among the Overall Michigan Population (N = 27,527)Michigan BRFSS (2018-2020 Combined)% (95% Confidence Interval)					
Chronic Health Conditions		Crude		Adjusted*	
Ever Told Diabetes ¹	11.7	(11.2-12.2)	10.1	(9.6-10.5)	
Ever Told Have Asthma ²	15.9	(15.3-16.5)	16.3	(15.7-17.0)	
Still Have Asthma ³	11.1	(10.6-11.7)	11.3	(10.7-11.8)	
Ever Told Chronic Obstructive Pulmonary Disease ⁴	8.4	(8.0-8.9)	7.4	(7.0-7.8)	
Ever Told Arthritis ⁵	31.0	(30.3-31.7)	27.3	(26.7-27.9)	
Ever Told Any Cardiovascular Disease ⁶	9.7	(9.3-10.2)	8.3	(7.9-8.7)	
Ever Told Cancer ⁷	12.9	(12.4-13.4)	10.8	(10.4-11.3)	
Ever Told Kidney Disease ⁸	3.4	(3.1-3.6)	2.9	(2.7-3.2)	
Ever Told Depression ⁹	21.4	(20.7-22.0)	22.0	(21.3-22.7)	
Disability ¹⁰	27.7	(26.6-28.9)	25.7	(24.5-26.9)	
Health Risk Behaviors					
Obese ¹¹	34.7	(34.0-35.5)	34.8	(34.0-35.6)	
No Leisure Time Physical Activity ¹²	23.3	(22.7-24.0)	22.6	(21.9-23.3)	
Current Smoker ¹³	18.6	(18.0-19.3)	19.8	(19.1-20.5)	
Any Alcohol Consumption ¹⁶	56.0	(55.2-56.8)	57.5	(56.7-58.4)	
Heavy Drinking ¹⁵	6.5	(6.1-6.9)	6.7	(6.3-7.2)	
Binge Drinking ¹⁸	17.9	(17.3-18.5)	19.5	(18.8-20.2)	
Health Indicators					
General Health, Fair or Poor ¹⁷	17.9	(17.3-18.5)	17.1	(16.5-17.8)	
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	13.4	(12.9-13.9)	12.9	(12.3-13.4)	
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	14.8	(14.2-15.4)	15.2	(14.6-15.9)	
Activity Limitation on at least 14 Days in the Past Month ²⁰	9.7	(9.3-10.2)	9.4	(8.9-9.9)	
No Health Care Coverage (Among 18 – 64 year olds) ²¹	9.5	(8.9-10.1)	9.6	(9-10.2)	
No Personal Health Care Provider ²²	14.6	(14.0-15.3)	16.1	(15.5-16.8)	
No Health Care Access During Past 12 Months Due to Cost ²³	10.5	(10.0-11.0)	11.0	(10.4-11.5)	
Preventive Health Practices					
No Routine Checkup in Past Year ²⁴	21.2	(20.6-21.9)	23.0	(22.2-23.7)	
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	45.5	(44.5-46.5)	47.8	(46.7-48.8)	
No Dental Visit in Past Year ²⁶	29.9	(29.0-30.8)	30.4	(29.4-31.4)	
* Age-adjusted by direct method using the 2000 U.S. Census.					

Table 2: Prevalence Estimates among White, Non-Hispanics in Michigan (N = 22,466)Michigan BRFSS (2018-2020 Combined)% (95% Confidence Interval)					
Chronic Health Conditions		Crude	Age	Adjusted*	
Ever Told Diabetes ¹	11.4	(10.9-12.0)	9.1	(8.7-9.6)	
Ever Told Have Asthma ²	15.4	(14.7-16.0)	16.1	(15.4-16.9)	
Still Have Asthma ³	10.5	(10.0-11.1)	10.8	(10.2-11.5)	
Ever Told Chronic Obstructive Pulmonary Disease ⁴	8.7	(8.3-9.2)	7.2	(6.8-7.7)	
Ever Told Arthritis ⁵	32.8	(32.0-33.6)	27.3	(26.6-28.1)	
Ever Told Any Cardiovascular Disease ⁶	10.0	(9.5-10.5)	7.7	(7.3-8.2)	
Ever Told Cancer ⁷	15.0	(14.5-15.6)	11.6	(11.2-12.1)	
Ever Told Kidney Disease ⁸	3.6	(3.3-3.9)	2.8	(2.6-3.1)	
Ever Told Depression ⁹	22.0	(21.3-22.8)	23.1	(22.3-24)	
Disability ¹⁰	27.7	(26.5-29.0)	25.1	(23.8-26.5)	
Health Risk Behaviors					
Obese ¹¹	34.0	(33.2-34.9)	33.7	(32.8-34.6)	
No Leisure Time Physical Activity ¹²	21.7	(21.0-22.5)	20.3	(19.6-21.1)	
Current Smoker ¹³	17.9	(17.2-18.6)	19.5	(18.7-20.4)	
Any Alcohol Consumption ¹⁶	58.3	(57.4-59.1)	60.2	(59.2-61.1)	
Heavy Drinking ¹⁵	7.0	(6.6-7.5)	7.4	(6.9-7.9)	
Binge Drinking ¹⁸	18.4	(17.7-19.1)	21.0	(20.2-21.8)	
Health Indicators					
General Health, Fair or Poor ¹⁷	16.7	(16.0-17.3)	15.5	(14.8-16.3)	
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	13.3	(12.8-14.0)	12.6	(12.0-13.3)	
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	14.6	(14.0-15.3)	15.5	(14.8-16.3)	
Activity Limitation on at least 14 Days in the Past Month ²⁰	9.3	(8.8-9.8)	8.9	(8.3-9.4)	
No Health Care Coverage (Among 18 – 64 year olds) ²¹	8.2	(7.6-8.9)	8.6	(7.9-9.3)	
No Personal Health Care Provider ²²	13.1	(12.5-13.8)	15.4	(14.7-16.2)	
No Health Care Access During Past 12 Months Due to Cost ²³	9.3	(8.8-9.8)	10.1	(9.5-10.7)	
Preventive Health Practices					
No Routine Checkup in Past Year ²⁴	21.5	(20.7-22.2)	24.3	(23.4-25.2)	
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	40.9	(39.8-42.0)	43.2	(42.1-44.4)	
No Dental Visit in Past Year ²⁶	28.0	(27.0-29.0)	28.6	(27.5-29.8)	
* Age-adjusted by direct method using the 2000 U.S. Census.	·	•	•		

Table 3: Prevalence Estimates among Black, Non-Hispanics in Michigan (N = 2,493) Michigan BRFSS (2018-2020 Combined) % (95% Confidence Interval)					
Chronic Health Conditions	C	Crude Age-Adjust		Adjusted*	
Ever Told Diabetes ¹	15.5	(13.8-17.3)	14.4	(12.8-16.1)	
Ever Told Have Asthma ²	19.7	(17.8-21.7)	19.1	(17.2-21.2)	
Still Have Asthma ³	15.1	(13.5-17.0)	14.6	(12.9-16.4)	
Ever Told Chronic Obstructive Pulmonary Disease ⁴	8.0	(6.8-9.5)	7.3	(6.1-8.6)	
Ever Told Arthritis ⁵	29.9	(27.8-32.2)	28.0	(26.0-30.1)	
Ever Told Any Cardiovascular Disease ⁶	10.2	(8.8-11.8)	9.8	(8.5-11.3)	
Ever Told Cancer ⁷	6.8	(5.7-8.2)	6.5	(5.5-7.8)	
Ever Told Kidney Disease ⁸	3.9	(3.1-4.9)	3.8	(3.0-4.7)	
Ever Told Depression ⁹	18.2	(16.4-20.1)	17.8	(16.0-19.8)	
Disability ¹⁰	29.1	(25.7-32.7)	28.7	(25.4-32.4)	
Health Risk Behaviors					
Obese ¹¹	42.5	(40.0-45.0)	42.8	(40.3-45.4)	
No Leisure Time Physical Activity ¹²	31.9	(29.7-34.3)	31.7	(29.3-34.1)	
Current Smoker ¹³	21.5	(19.5-23.7)	21.7	(19.6-24.0)	
Any Alcohol Consumption ¹⁶	50.4	(47.8-52.9)	50.9	(48.4-53.5)	
Heavy Drinking ¹⁵	4.3	(3.4-5.4)	4.4	(3.5-5.7)	
Binge Drinking ¹⁸	14.7	(12.9-16.7)	15.2	(13.3-17.4)	
Health Indicators					
General Health, Fair or Poor ¹⁷	24.7	(22.7-26.8)	24.3	(22.2-26.4)	
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	14.2	(12.6-15.9)	13.7	(12.1-15.4)	
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	14.9	(13.2-16.7)	15.0	(13.3-16.9)	
Activity Limitation on at least 14 Days in the Past Month ²⁰	10.8	(9.4-12.4)	10.4	(8.9-12.0)	
No Health Care Coverage (Among 18 – 64 year olds) ²¹	10.9	(9.2-12.8)	11.0	(9.3-13.0)	
No Personal Health Care Provider ²²	17.0	(15.0-19.1)	17.8	(15.8-20.1)	
No Health Care Access During Past 12 Months Due to Cost ²³	12.8	(11.3-14.5)	12.9	(11.3-14.7)	
Preventive Health Practices					
No Routine Checkup in Past Year ²⁴	17.0	(15.1-19.1)	17.5	(15.5-19.7)	
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	70.7	(67.9-73.4)	72.4	(69.7-75.0)	
No Dental Visit in Past Year ²⁶	35.7	(32.8-38.8)	36.0	(32.9-39.1)	
* Age-adjusted by direct method using the 2000 U.S. Census.		•			

Table 4: Prevalence Estimates among Asian or Other Pacific Islander, Non-Hispanics in Michigan (N = 460)Michigan BRFSS (2018-2020 Combined) % (95% Confidence Interval)						
Chronic Health Conditions	(Crude		Adjusted*		
Ever Told Diabetes ¹	5.3	(3.3-8.6)	9.8	(5.9-15.7)		
Ever Told Have Asthma ²	8.9	(6.0-12.9)	10.4	(6.6-15.8)		
Still Have Asthma ³	5.2	(3.0-8.9)	6.7	(3.6-12.1)		
Ever Told Chronic Obstructive Pulmonary Disease ⁴	^a	a	^a	^a		
Ever Told Arthritis ⁵	8.5	(5.7-12.4)	14.8	(10.1-21.3)		
Ever Told Any Cardiovascular Disease ⁶	^a	a	^a	^a		
Ever Told Cancer ⁷	^a	a	^a	a		
Ever Told Kidney Disease ⁸	^a	a	^a	^a		
Ever Told Depression ⁹	8.5	(5.6-12.8)	7.0	(4.7-10.3)		
Disability ¹⁰	13.4	(7.7-22.2)	15.0	(9.6-22.8)		
Health Risk Behaviors						
Obese ¹¹	8.9	(6.2-12.8)	8.7	(5.8-12.9)		
No Leisure Time Physical Activity ¹²	18.4	(14.1-23.5)	18.5	(14.0-24.1)		
Current Smoker ¹³	7.6	(5.1-11.3)	6.6	(4.4-9.9)		
Any Alcohol Consumption ¹⁶	42.3	(36.6-48.3)	38.1	(32.5-43.9)		
Heavy Drinking ¹⁵	^a	^a	^a	^a		
Binge Drinking ¹⁸	10.4	(7.2-14.7)	8.8	(5.9-13)		
Health Indicators						
General Health, Fair or Poor ¹⁷	7.6	(4.8-11.9)	7.2	(4.6-11.3)		
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	7.3	(4.7-11.2)	6.7	(4.2-10.5)		
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	7.7	(5.2-11.1)	8.8	(5.3-14)		
Activity Limitation on at least 14 Days in the Past Month ²⁰	4.7	(2.9-7.8)	4.2	(2.4-7.1)		
No Health Care Coverage (Among 18 – 64 year olds) ²¹	8.5	(5.8-12.2)	7.7	(5.2-11.4)		
No Personal Health Care Provider ²²	21.3	(16.9-26.5)	15.3	(12.0-19.3)		
No Health Care Access During Past 12 Months Due to Cost ²³	10.1	(7.1-14.1)	10.3	(7.1-14.6)		
Preventive Health Practices						
No Routine Checkup in Past Year ²⁴	26.7	(21.7-32.4)	22.9	(18.3-28.2)		
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	22.9	(18.2-28.4)	24.3	(19.4-30.1)		
No Dental Visit in Past Year ²⁶	35.1	(28.5-42.3)	36.0	(29.4-43.1)		
* Age-adjusted by direct method using the 2000 U.S. Census.						

Table 5: Prevalence Estimates among American Indian / Alaskan Native, Non-Hispanics in Michigan (N = 223)Michigan BRFSS (2018-2020 Combined) % (95% Confidence Interval)						
(Crude	Age-	Adjusted*			
19.3	(13.5-26.8)	14.6	(10.3-20.2)			
27.1	(19.6-36.2)	24.5	(17.6-33)			
23.2	(16.1-32.3)	21.2	(14.5-29.9)			
20.5	(13.9-29.1)	15.2	(10.2-22)			
48.6	(40.0-57.3)	40.5	(32.9-48.6)			
22.3	(15.8-30.5)	16.6	(11.7-22.9)			
11.5	(7.3-17.7)	8.9	(5.3-14.5)			
^a	a	a	^a			
30.8	(23.1-39.7)	33.2	(25.0-42.6)			
45.2	(32.4-58.7)	36.6	(24.5-50.7)			
34.8	(26.7-43.8)	30.9	(23.6-39.2)			
28.8	(21.7-37.2)	25.6	(19.2-33.2)			
38.5	(30.2-47.5)	36.3	(28.3-45)			
40.6	(32.6-49.1)	38.8	(30.6-47.6)			
5.3	(2.8-9.6)	5.6	(2.7-11.2)			
13.4	(9.0-19.5)	14.3	(9.1-21.7)			
33.5	(25.6-42.5)	26.1	(19.9-33.4)			
32.0	(24.2-40.9)	26.2	(19.7-34)			
23.2	(16.1-32.4)	21.1	(14.1-30.4)			
30.8	(22.7-40.2)	26.6	(19.1-35.7)			
12.4	(7.4-20.0)	14.5	(8.8-23.2)			
17.5	(12.3-24.3)	20.3	(14.1-28.5)			
15.4	(10.7-21.7)	15.6	(10.3-22.7)			
16.5	(11.5-23.1)	19.7	(13.2-28.4)			
65.8	(55.6-74.7)	69.0	(59.4-77.2)			
36.1	(26.1-47.5)	33.5	(23.4-45.4)			
	 223) 020 Combendary 19.3 27.1 23.2 20.5 48.6 22.3 11.5 ^a 30.8 45.2 34.8 28.8 38.5 40.6 5.3 13.4 28.8 38.5 40.6 5.3 13.4 23.2 30.8 12.4 17.5 15.4 16.5 65.8 	223) Combined) Interval) 19.3 19.3 27.1 19.3 27.1 19.3 27.1 19.3 23.2 (16.1-32.3) 20.5 (13.9-29.1) 48.6 (40.0-57.3) 22.3 (15.8-30.5) 11.5 (7.3-17.7) $-a^a$ 30.8 (23.1-39.7) 45.2 (32.4-58.7) 38.5 (30.2-47.5) 40.6 (32.6-49.1) 5.3 (25.6-42.5) 33.5 (25.6-42.5) 32.0 (24.2-40.9) 23.2 (16.1-32.4)	= 223)CrudeAge-19.3 $(13.5-26.8)$ 14.627.1 $(19.6-36.2)$ 24.523.2 $(16.1-32.3)$ 21.220.5 $(13.9-29.1)$ 15.248.6 $(40.0-57.3)$ 40.522.3 $(15.8-30.5)$ 16.611.5 $(7.3-17.7)$ 8.9 $-a^a$ $-a^a$ $-a^a$ 30.8 $(23.1-39.7)$ 33.245.2 $(32.4-58.7)$ 36.634.8 $(26.7-43.8)$ 30.928.8 $(21.7-37.2)$ 25.638.5 $(30.2-47.5)$ 36.340.6 $(32.6-49.1)$ 38.85.3 $(28-9.6)$ 5.613.4 $(9.0-19.5)$ 14.330.8 $(22.7-40.2)$ 26.132.0 $(24.2-40.9)$ 26.223.2 $(16.1-32.4)$ 21.130.8 $(22.7-40.2)$ 26.612.4 $(7.4-20.0)$ 14.517.5 $(12.3-24.3)$ 20.315.4 $(10.7-21.7)$ 15.616.5 $(11.5-23.1)$ 19.765.8 $(55.6-74.7)$ 69.0			

Table 6: Prevalence Estimates among Other/Multi-Racial, Non-Hispanics in Michigan (N = 711)Michigan BRFSS (2018-2020 Combined) % (95% Confidence Interval)					
Chronic Health Conditions		Crude		Adjusted*	
Ever Told Diabetes ¹	11.0	(8.3-14.5)	13.0	(9.8-17.0)	
Ever Told Have Asthma ²	22.5	(18.7-26.8)	22.0	(18.3-26.2)	
Still Have Asthma ³	15.7	(12.6-19.5)	15.7	(12.5-19.5)	
Ever Told Chronic Obstructive Pulmonary Disease ⁴	9.7	(7.3-12.8)	10.5	(8.0-13.8)	
Ever Told Arthritis ⁵	29.3	(25.4-33.7)	33.9	(29.8-38.2)	
Ever Told Any Cardiovascular Disease ⁶	10.2	(7.6-13.6)	11.8	(9.2-15.1)	
Ever Told Cancer ⁷	7.9	(6.1-10.2)	9.7	(7.5-12.5)	
Ever Told Kidney Disease ⁸	2.3	(1.4-3.6)	2.4	(1.5-3.8)	
Ever Told Depression ⁹	31.3	(27.0-35.9)	29.9	(26.0-34.1)	
Disability ¹⁰	31.8	(25.0-39.5)	31.6	(25.2-38.8)	
Health Risk Behaviors					
Obese ¹¹	36.1	(31.5-40.9)	36.1	(31.5-40.9)	
No Leisure Time Physical Activity ¹²	23.6	(19.7-28.0)	25.8	(21.9-30.2)	
Current Smoker ¹³	25.5	(21.4-30.0)	25.6	(21.7-29.9)	
Any Alcohol Consumption ¹⁶	51.1	(46.3-55.9)	50.1	(45.4-54.7)	
Heavy Drinking ¹⁵	7.4	(5.2-10.4)	7.1	(5.0-10.1)	
Binge Drinking ¹⁸	23.5	(19.5-28.1)	21.7	(18.0-25.9)	
Health Indicators					
General Health, Fair or Poor ¹⁷	22.3	(18.6-26.6)	23.0	(19.5-27)	
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	15.2	(12.3-18.6)	16.7	(13.7-20.2)	
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	22.3	(18.6-26.6)	22.0	(18.4-26.1)	
Activity Limitation on at least 14 Days in the Past Month ²⁰	14.2	(11.1-18.0)	14.9	(11.9-18.5)	
No Health Care Coverage (Among 18 – 64 year olds) ²¹	12.0	(9.1-15.6)	11.4	(8.6-15.1)	
No Personal Health Care Provider ²²	21.5	(17.9-25.7)	19.3	(16.1-23.0)	
No Health Care Access During Past 12 Months Due to Cost ²³	19.4	(16.0-23.4)	17.8	(14.7-21.4)	
Preventive Health Practices					
No Routine Checkup in Past Year ²⁴	24.7	(20.7-29.1)	23.4	(19.6-27.7)	
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	57.8	(52.4-63.0)	61.2	(56.0-66.2)	
No Dental Visit in Past Year ²⁶	36.8	(31.3-42.8)	37.4	(31.9-43.3)	
* Age-adjusted by direct method using the 2000 U.S. Census.					

Table 7: Prevalence Estimates among Arab, Non-Hispanics in Michigan (N = 409) Michigan BRFSS (2018-2020 Combined) % (95% Confidence Interval)						
Chronic Health Conditions	(Crude	Age-	Adjusted*		
Ever Told Diabetes ¹	5.7	(3.6-9.0)	8.5	(5.6-12.6)		
Ever Told Have Asthma ²	13.0	(9.1-18.0)	12.8	(9.2-17.5)		
Still Have Asthma ³	8.5	(5.7-12.6)	8.8	(5.8-13.0)		
Ever Told Chronic Obstructive Pulmonary Disease ⁴	4.9	(2.8-8.5)	5.6	(3.3-9.2)		
Ever Told Arthritis ⁵	16.0	(12.4-20.3)	24.3	(19.8-29.5		
Ever Told Any Cardiovascular Disease ⁶	5.0	(3.2-7.8)	7.3	(4.8-11.0)		
Ever Told Cancer ⁷	6.8	(4.6-9.9)	11.3	(8.2-15.4)		
Ever Told Kidney Disease ⁸	^a	^a	a	a		
Ever Told Depression ⁹	15.5	(11.6-20.3)	16.6	(12.4-21.7		
Disability ¹⁰	13.4	(8.0-21.7)	16.1	(9.9-25.2)		
Health Risk Behaviors						
Obese ¹¹	24.9	(19.7-31.0)	27.6	(22.5-33.4		
No Leisure Time Physical Activity ¹²	28.3	(22.6-34.7)	30.8	(25.2-37.0		
Current Smoker ¹³	16.7	(12.5-22.0)	17.4	(13.2-22.7		
Any Alcohol Consumption ¹⁶	39.7	(33.6-46.1)	40.5	(34.4-46.9		
Heavy Drinking ¹⁵	4.8	(2.9-7.8)	4.6	(2.8-7.6)		
Binge Drinking ¹⁸	11.2	(8.0-15.5)	9.6	(6.9-13.4)		
Health Indicators						
General Health, Fair or Poor ¹⁷	13.2	(9.6-18.0)	16.7	(12.2-22.3		
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	11.5	(7.6-17.1)	13.1	(9.1-18.5)		
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	14.8	(10.4-20.6)	14.6	(10.7-19.7		
Activity Limitation on at least 14 Days in the Past Month ²⁰	6.5	(4.1-10.2)	6.7	(4.2-10.6)		
No Health Care Coverage (Among 18 – 64 year olds) ²¹	13.4	(9.4-18.7)	11.7	(8.4-16.2)		
No Personal Health Care Provider ²²	17.9	(13.5-23.3)	14.8	(11.1-19.4		
No Health Care Access During Past 12 Months Due to Cost ²³	18.4	(14.0-23.9)	17.6	(13.4-22.8		
Preventive Health Practices						
No Routine Checkup in Past Year ²⁴	20.7	(16.1-26.3)	17.9	(13.9-22.8		
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	34.6	(28.0-41.9)	38.4	(31.6-45.7		
No Dental Visit in Past Year ²⁶	25.8	(19.7-33.1)	27.2	(21.0-34.3		

Table 8: Prevalence Estimates among Hispanics in Michigan (N = 765) Michigan BRFSS (2018-2020 Combined) % (95% Confidence Interval)					
Chronic Health Conditions	Crude		Age	-Adjusted*	
Ever Told Diabetes ¹	9.4	(7.3-12.1)	14.2	(11.1-18)	
Ever Told Have Asthma ²	16.3	(13.2-20.0)	16.3	(13.3-19.9)	
Still Have Asthma ³	10.7	(8.4-13.7)	10.8	(8.4-13.7)	
Ever Told Chronic Obstructive Pulmonary Disease ⁴	7.0	(5.1-9.5)	8.6	(6.2-11.7)	
Ever Told Arthritis ⁵	19.8	(16.7-23.4)	26.5	(22.7-30.8)	
Ever Told Any Cardiovascular Disease ⁶	7.2	(5.3-9.7)	10.0	(7.5-13.3)	
Ever Told Cancer ⁷	5.6	(4.0-7.8)	7.3	(5.2-10.1)	
Ever Told Kidney Disease ⁸	^a	a	^a	^a	
Ever Told Depression ⁹	25.4	(21.4-29.8)	25.6	(21.5-30.2	
Disability ¹⁰	27.3	(21.0-34.8)	34.2	(27.7-41.3	
Health Risk Behaviors					
Obese ¹¹	43.1	(38.4-48.0)	46.4	(41.7-51.1	
No Leisure Time Physical Activity ¹²	22.6	(19.1-26.5)	26.2	(22.1-30.7	
Current Smoker ¹³	23.4	(19.6-27.7)	21.5	(18.1-25.3	
Any Alcohol Consumption ¹⁶	55.5	(50.9-60.1)	52.8	(48.2-57.2	
Heavy Drinking ¹⁵	6.4	(4.5-8.8)	6.1	(4.3-8.5)	
Binge Drinking ¹⁸	24.2	(20.1-28.9)	20.8	(17.4-24.7	
Health Indicators					
General Health, Fair or Poor ¹⁷	20.3	(17.0-24.0)	23.4	(19.4-27.9	
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	11.8	(9.2-14.9)	14.4	(11.0-18.5	
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	16.7	(13.7-20.3)	18.0	(14.4-22.2	
Activity Limitation on at least 14 Days in the Past Month ²⁰	11.4	(8.8-14.7)	12.4	(9.1-16.6)	
No Health Care Coverage (Among 18 – 64 year olds) ²¹	18.3	(14.9-22.2)	17.6	(14.2-21.5	
No Personal Health Care Provider ²²	25.4	(21.5-29.8)	19.6	(16.6-23.0	
No Health Care Access During Past 12 Months Due to Cost ²³	14.8	(11.9-18.3)	13.5	(10.9-16.7	
Preventive Health Practices					
No Routine Checkup in Past Year ²⁴	26.4	(22.6-30.6)	23.4	(19.9-27.2	
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	52.2	(47.2-57.2)	54.0	(49.2-58.8	
No Dental Visit in Past Year ²⁶	39.3	(33.6-45.2)	35.2	(30.2-40.5	

Appendix: Definitions

- ¹ Among all adults, the proportion 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 prediabetes were considered to not have been diagnosed with diabetes.
- ² 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.
- ³ Among all adults, the proportion who reported that they still had asthma.
- ⁴ 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.
- ⁵ 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.
- ⁶ 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.
- ⁷ Among all adults, the proportion who reported ever being told by a doctor that they had skin cancer or any other type of cancer.
- ⁸ Among all adults, the proportion who reported ever being told by a doctor that they had kidney disease.
- ⁹ 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.
- ¹⁰ 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 bating, or difficulty doing errands alone.
- ¹¹ 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. Among all adults, the proportion of respondents whose BMI was greater than or equal to 30.0.
- ¹² 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.
- ¹³ Among all adults, the proportion 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.
- ¹⁶ Among all adults, the proportion who reported consuming at least one drink of any alcoholic beverage in the previous month.
- ¹⁵ Among all adults, the proportion who reported consuming on average more than two alcoholic beverages per day for men or more than one alcoholic beverage per day for women.
- ¹⁸ Among all adults, the proportion who reported consuming five or more drinks per occasion at least once in the previous month.
- ¹⁷ Among all adults, the proportion who reported that their health, in general, was either fair or poor.
- ¹⁸ 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.
- ¹⁹ 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.
- ²⁰ 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 them from doing their usual activities, such as self-care, work, and recreation.
- ²¹ 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.
- ²² 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.
- ²³ Among all adults, the proportion who reported that in the past 12 months that there was a time when they could not see a doctor when they needed to due to the cost.
- ²⁴ Among all adults, the proportion who reported that they did not have a routine checkup in the past year. ²⁵ 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.
- ²⁶ Among all adults, the proportion who reported that they had not visited a dentist or dental clinic for any reason in the previous year. Data for this variable were only collected in 2018 and 2020.