

**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)**

2016-2018

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

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Due to significant BRFSS methodology changes that took place in 2011, the estimates within these tables should not be compared to Michigan BRFSS estimates from prior to 2011.

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.

The total sample size for the combined 2016-2018 MiBRFS dataset was equal to 32,525 completed interviews (both landline and cell phone). The 2016-2018 combined dataset included 26,217 White, Non-Hispanics; 3,277 Black, Non-Hispanics; 536 Asian or Other Pacific Islander, Non-Hispanics; 286 American Indian/Alaska Native, Non-Hispanics; 826 Other/Multi-racial, Non-Hispanics, 482 Arab, Non-Hispanics; and 901 Hispanics. Those with unknown race/ethnicity were excluded from this analysis.

For the 2016 through 2018 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 2016-2018 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.

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 Allison Murad at murada@michigan.gov.

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

Due to significant BRFSS methodology changes that took place in 2011, the estimates within these tables should not be compared to Michigan BRFSS estimates from prior to 2011.

Table 1: Prevalence Estimates among the Overall Michigan Population (N = 33,235)				
Michigan BRFSS (2016-2018 Combined)				
% (95% Confidence Interval)				
Chronic Health Conditions	Crude		Age-Adjusted*	
Ever Told Diabetes ¹	11.3	(10.9-11.7)	9.8	(9.4-10.2)
Ever Told Have Asthma ²	16.1	(15.6-16.6)	16.4	(15.9-17.0)
Still Have Asthma ³	11.0	(10.6-11.5)	11.1	(10.6-11.6)
Ever Told Chronic Obstructive Pulmonary Disease ⁴	8.8	(8.4-9.2)	7.8	(7.4-8.2)
Ever Told Arthritis ⁵	31.5	(30.9-32.1)	28.2	(27.6-28.7)
Ever Told Any Cardiovascular Disease ⁶	10.0	(9.7-10.4)	8.6	(8.3-9.0)
Ever Told Cancer ⁷	12.8	(12.4-13.2)	10.9	(10.5-11.2)
Ever Told Kidney Disease ⁸	3.6	(3.4-3.9)	3.2	(3.0-3.5)
Ever Told Depression ⁹	22.9	(22.3-23.5)	23.3	(22.6-23.9)
Disability ¹⁰	27.1	(26.5-27.8)	25.1	(24.5-25.8)
Health Risk Behaviors				
Obese ¹¹	32.6	(31.9-33.3)	32.6	(31.9-33.3)
No Leisure Time Physical Activity ¹²	24.9	(24.3-25.6)	24.3	(23.7-25.0)
Current Smoker ¹³	19.6	(19.0-20.2)	20.8	(20.1-21.4)
Any Alcohol Consumption ¹⁶	56.9	(56.2-57.6)	58.4	(57.6-59.1)
Heavy Drinking ¹⁵	6.7	(6.3-7.0)	6.9	(6.5-7.3)
Binge Drinking ¹⁸	18.5	(17.9-19.0)	20.0	(19.3-20.6)
Health Indicators				
General Health, Fair or Poor ¹⁷	18.6	(18.1-19.1)	17.7	(17.2-18.3)
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	9.7	(9.3-10.2)	9.1	(8.7-9.5)
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	9.3	(8.9-9.8)	9.6	(9.2-10.1)
Activity Limitation on at least 14 Days in the Past Month ²⁰	10.4	(9.9-10.8)	10.0	(9.6-10.5)
No Health Care Coverage (Among 18 – 64 year olds) ²¹	9.6	(9.0-10.1)	9.8	(9.2-10.4)
No Personal Health Care Provider ²²	14.9	(14.4-15.5)	16.4	(15.8-17.0)
No Health Care Access During Past 12 Months Due to Cost ²³	12.0	(11.5-12.5)	12.6	(12.1-13.1)
Preventive Health Practices				
No Routine Checkup in Past Year ²⁴	24.6	(24.0-25.3)	26.4	(25.8-27.1)
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	44.4	(43.5-45.2)	47.0	(46.1-47.9)
No Dental Visit in Past Year ²⁶	29.9	(28.8-31.0)	29.9	(29.1-30.8)
* Age-adjusted by direct method using the 2000 U.S. Census.				

Due to significant BRFSS methodology changes that took place in 2011, the estimates within these tables should not be compared to Michigan BRFSS estimates from prior to 2011.

Table 2: Prevalence Estimates among White, Non-Hispanics in Michigan (N = 26,217)				
Michigan BRFSS (2016-2018 Combined)				
% (95% Confidence Interval)				
Chronic Health Conditions	Crude		Age-Adjusted*	
Ever Told Diabetes ¹	11.0	(10.6-11.5)	8.9	(8.5-9.3)
Ever Told Have Asthma ²	15.5	(14.9-16.1)	16.1	(15.5-16.8)
Still Have Asthma ³	10.5	(10.0-11.0)	10.7	(10.2-11.3)
Ever Told Chronic Obstructive Pulmonary Disease ⁴	8.8	(8.4-9.3)	7.5	(7.1-7.9)
Ever Told Arthritis ⁵	33.2	(32.5-33.9)	28.1	(27.4-28.8)
Ever Told Any Cardiovascular Disease ⁶	10.2	(9.8-10.7)	8.1	(7.7-8.5)
Ever Told Cancer ⁷	14.9	(14.4-15.4)	11.8	(11.4-12.2)
Ever Told Kidney Disease ⁸	3.6	(3.4-3.9)	3.1	(2.8-3.3)
Ever Told Depression ⁹	23.4	(22.8-24.1)	24.3	(23.6-25.1)
Disability ¹⁰	27.1	(26.5-27.8)	25.0	(24.2-25.7)
Health Risk Behaviors				
Obese ¹¹	31.9	(31.1-32.6)	31.4	(30.6-32.3)
No Leisure Time Physical Activity ¹²	23.6	(22.9-24.3)	22.5	(21.7-23.2)
Current Smoker ¹³	18.9	(18.2-19.5)	20.6	(19.8-21.3)
Any Alcohol Consumption ¹⁶	59.4	(58.6-60.2)	61.2	(60.3-62.1)
Heavy Drinking ¹⁵	7.3	(6.9-7.7)	7.7	(7.2-8.2)
Binge Drinking ¹⁸	19.3	(18.7-20.0)	21.9	(21.2-22.7)
Health Indicators				
General Health, Fair or Poor ¹⁷	17.2	(16.7-17.8)	16.1	(15.5-16.8)
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	9.6	(9.1-10.1)	8.8	(8.3-9.3)
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	9.0	(8.5-9.5)	9.6	(9.1-10.2)
Activity Limitation on at least 14 Days in the Past Month ²⁰	9.8	(9.3-10.3)	9.4	(8.9-10.0)
No Health Care Coverage (Among 18 – 64 year olds) ²¹	7.9	(7.4-8.5)	8.3	(7.7-9.0)
No Personal Health Care Provider ²²	13.5	(12.9-14.1)	15.7	(15.0-16.4)
No Health Care Access During Past 12 Months Due to Cost ²³	10.6	(10.1-11.1)	11.5	(10.9-12.1)
Preventive Health Practices				
No Routine Checkup in Past Year ²⁴	25.1	(24.4-25.8)	28.0	(27.2-28.8)
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	39.9	(38.9-40.9)	42.7	(41.7-43.8)
No Dental Visit in Past Year ²⁶	28.2	(27.1-29.4)	28.4	(27.5-29.4)
* Age-adjusted by direct method using the 2000 U.S. Census.				

Due to significant BRFSS methodology changes that took place in 2011, the estimates within these tables should not be compared to Michigan BRFSS estimates from prior to 2011.

Table 3: Prevalence Estimates among Black, Non-Hispanics in Michigan (N = 3,277)				
Michigan BRFSS (2016-2018 Combined)				
% (95% Confidence Interval)				
Chronic Health Conditions	Crude		Age-Adjusted*	
Ever Told Diabetes ¹	14.3	(13.0-15.8)	14.0	(12.7-15.4)
Ever Told Have Asthma ²	21.3	(19.6-23.1)	21.1	(19.3-23.0)
Still Have Asthma ³	15.2	(13.7-16.8)	14.9	(13.3-16.5)
Ever Told Chronic Obstructive Pulmonary Disease ⁴	10.3	(9.1-11.6)	9.9	(8.7-11.2)
Ever Told Arthritis ⁵	30.4	(28.6-32.4)	30.5	(28.7-32.3)
Ever Told Any Cardiovascular Disease ⁶	10.8	(9.6-12.1)	10.9	(9.8-12.1)
Ever Told Cancer ⁷	6.7	(5.8-7.7)	6.7	(5.9-7.7)
Ever Told Kidney Disease ⁸	4.6	(3.9-5.6)	4.9	(4.1-5.8)
Ever Told Depression ⁹	21.0	(19.3-22.8)	20.5	(18.8-22.3)
Disability ¹⁰	29.1	(27.2-31.1)	28.5	(26.6-30.5)
Health Risk Behaviors				
Obese ¹¹	40.0	(37.9-42.2)	40.6	(38.4-42.8)
No Leisure Time Physical Activity ¹²	31.5	(29.5-33.5)	31.4	(29.3-33.5)
Current Smoker ¹³	23.3	(21.5-25.3)	23.3	(21.5-25.3)
Any Alcohol Consumption ¹⁶	51.0	(48.8-53.2)	51.8	(49.6-54.0)
Heavy Drinking ¹⁵	4.1	(3.3-5.0)	4.1	(3.3-5.1)
Binge Drinking ¹⁸	15.3	(13.6-17.0)	15.6	(13.9-17.5)
Health Indicators				
General Health, Fair or Poor ¹⁷	26.4	(24.6-28.3)	26.6	(24.8-28.5)
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	11.5	(10.2-12.9)	11.2	(9.9-12.6)
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	10.5	(9.2-11.9)	10.2	(8.9-11.7)
Activity Limitation on at least 14 Days in the Past Month ²⁰	13.1	(11.7-14.6)	12.7	(11.3-14.2)
No Health Care Coverage (Among 18 – 64 year olds) ²¹	12.6	(11.0-14.4)	12.7	(11.0-14.5)
No Personal Health Care Provider ²²	17.5	(15.8-19.3)	17.4	(15.7-19.2)
No Health Care Access During Past 12 Months Due to Cost ²³	16.0	(14.4-17.6)	15.8	(14.2-17.6)
Preventive Health Practices				
No Routine Checkup in Past Year ²⁴	18.2	(16.5-20.0)	18.3	(16.6-20.1)
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	70.9	(68.5-73.2)	73.5	(71.4-75.6)
No Dental Visit in Past Year ²⁶	36.3	(32.9-39.8)	35.7	(33.1-38.3)
* Age-adjusted by direct method using the 2000 U.S. Census.				

Due to significant BRFSS methodology changes that took place in 2011, the estimates within these tables should not be compared to Michigan BRFSS estimates from prior to 2011.

Table 4: Prevalence Estimates among Asian or Other Pacific Islander, Non-Hispanics in Michigan (N = 536)				
Michigan BRFSS (2016-2018 Combined)				
% (95% Confidence Interval)				
Chronic Health Conditions	Crude		Age-Adjusted*	
Ever Told Diabetes ¹	7.1	(4.9-10.2)	11.0	(7.5-15.9)
Ever Told Have Asthma ²	8.5	(6.2-11.7)	10.6	(6.7-16.2)
Still Have Asthma ³	4.5	(3.0-6.7)	7.4	(4.1-13.1)
Ever Told Chronic Obstructive Pulmonary Disease ⁴	-- ^a	-- ^a	-- ^a	-- ^a
Ever Told Arthritis ⁵	9.7	(7.4-12.7)	15.1	(11.4-19.7)
Ever Told Any Cardiovascular Disease ⁶	2.0	(1.1-3.5)	2.3	(1.3-4.1)
Ever Told Cancer ⁷	2.1	(1.2-3.8)	3.9	(2.0-7.5)
Ever Told Kidney Disease ⁸	-- ^a	-- ^a	-- ^a	-- ^a
Ever Told Depression ⁹	11.0	(7.9-15.0)	10.1	(7.1-14.2)
Disability ¹⁰	9.3	(6.6-13.0)	11.0	(7.7-15.4)
Health Risk Behaviors				
Obese ¹¹	10.8	(8.0-14.4)	13.8	(9.8-19.3)
No Leisure Time Physical Activity ¹²	19.6	(15.6-24.2)	21.3	(16.5-27.0)
Current Smoker ¹³	11.2	(8.0-15.3)	9.8	(7.1-13.3)
Any Alcohol Consumption ¹⁶	43.5	(38.4-48.7)	41.1	(35.3-47.2)
Heavy Drinking ¹⁵	-- ^a	-- ^a	-- ^a	-- ^a
Binge Drinking ¹⁸	9.5	(6.7-13.2)	7.7	(5.5-10.8)
Health Indicators				
General Health, Fair or Poor ¹⁷	6.8	(4.6-9.9)	8.6	(5.7-12.8)
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	3.0	(1.7-5.3)	3.2	(1.8-5.7)
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	3.3	(1.8-6.0)	2.6	(1.4-4.7)
Activity Limitation on at least 14 Days in the Past Month ²⁰	4.2	(2.4-7.3)	5.7	(3.0-10.8)
No Health Care Coverage (Among 18 – 64 year olds) ²¹	12.6	(9.1-17.3)	12.4	(8.9-17.2)
No Personal Health Care Provider ²²	14.9	(14.4-15.5)	14.0	(11.4-17.1)
No Health Care Access During Past 12 Months Due to Cost ²³	19.6	(16.0-23.9)	11.0	(7.8-15.2)
Preventive Health Practices				
No Routine Checkup in Past Year ²⁴	29.8	(25.3-34.8)	24.4	(20.5-28.8)
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	27.4	(22.7-32.7)	30.6	(25.5-36.2)
No Dental Visit in Past Year ²⁶	29.4	(22.2-37.9)	28.4	(27.5-29.4)
* Age-adjusted by direct method using the 2000 U.S. Census.				
^a Suppressed due to a denominator < 50 and/or a relative standard error > 30%.				

Due to significant BRFSS methodology changes that took place in 2011, the estimates within these tables should not be compared to Michigan BRFSS estimates from prior to 2011.

Table 5: Prevalence Estimates among American Indian / Alaskan Native, Non-Hispanics in Michigan (N = 286)				
Michigan BRFSS (2016-2018 Combined)				
% (95% Confidence Interval)				
Chronic Health Conditions	Crude		Age-Adjusted*	
Ever Told Diabetes ¹	15.2	(10.7-21.2)	13.5	(9.5-18.8)
Ever Told Have Asthma ²	19.0	(14.0-25.4)	18.5	(13.3-24.9)
Still Have Asthma ³	16.4	(11.6-22.6)	15.9	(11.1-22.5)
Ever Told Chronic Obstructive Pulmonary Disease ⁴	17.7	(12.6-24.2)	16.4	(11.4-23.1)
Ever Told Arthritis ⁵	42.5	(34.9-50.5)	39.3	(33.0-46.1)
Ever Told Any Cardiovascular Disease ⁶	17.1	(12.0-23.8)	14.8	(10.1-21.1)
Ever Told Cancer ⁷	12.6	(7.9-19.6)	12.4	(8.4-17.9)
Ever Told Kidney Disease ⁸	-- ^a	-- ^a	-- ^a	-- ^a
Ever Told Depression ⁹	30.4	(23.8-37.9)	29.5	(22.9-37.1)
Disability ¹⁰	40.8	(33.0-49.0)	36.8	(29.4-37.7)
Health Risk Behaviors				
Obese ¹¹	36.0	(28.3-44.5)	34.1	(26.4-42.7)
No Leisure Time Physical Activity ¹²	31.6	(24.5-39.6)	33.6	(26.1-41.9)
Current Smoker ¹³	43.2	(35.2-51.6)	44.1	(36.2-52.4)
Any Alcohol Consumption ¹⁶	53.4	(45.2-61.4)	55.5	(47.1-63.5)
Heavy Drinking ¹⁵	12.2	(7.5-19.3)	11.2	(7.0-17.6)
Binge Drinking ¹⁸	16.7	(11.6-23.4)	15.7	(10.9-22.2)
Health Indicators				
General Health, Fair or Poor ¹⁷	35.9	(28.4-44.1)	32.9	(25.4-41.4)
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	23.2	(16.7-31.3)	21.6	(15.6-29.2)
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	15.0	(10.1-21.7)	12.6	(8.3-18.6)
Activity Limitation on at least 14 Days in the Past Month ²⁰	23.3	(16.9-31.1)	21.3	(15.4-28.6)
No Health Care Coverage (Among 18 – 64 year olds) ²¹	15.6	(9.2-25.2)	16.6	(9.9-26.4)
No Personal Health Care Provider ²²	20.8	(14.8-28.5)	22.0	(16.0-29.5)
No Health Care Access During Past 12 Months Due to Cost ²³	20.9	(15.1-28.3)	22.2	(16.2-29.6)
Preventive Health Practices				
No Routine Checkup in Past Year ²⁴	27.9	(20.9-36.2)	28.9	(22.0-36.9)
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	56.9	(47.1-66.1)	60.0	(50.6-68.7)
No Dental Visit in Past Year ²⁶	40.1	(29.4-51.9)	39.3	(30.4-49.0)
* Age-adjusted by direct method using the 2000 U.S. Census.				
^a Suppressed due to a denominator < 50 and/or a relative standard error > 30%.				

Due to significant BRFSS methodology changes that took place in 2011, the estimates within these tables should not be compared to Michigan BRFSS estimates from prior to 2011.

Table 6: Prevalence Estimates among Other/Multi-Racial, Non-Hispanics in Michigan (N = 826)				
Michigan BRFSS (2016-2018 Combined)				
% (95% Confidence Interval)				
Chronic Health Conditions	Crude		Age-Adjusted*	
Ever Told Diabetes ¹	11.6	(9.2-14.4)	11.8	(9.4-14.7)
Ever Told Have Asthma ²	25.4	(21.8-29.4)	24.1	(20.6-27.9)
Still Have Asthma ³	18.0	(14.9-21.6)	16.8	(13.9-20.1)
Ever Told Chronic Obstructive Pulmonary Disease ⁴	14.2	(11.4-17.5)	13.9	(11.3-17.1)
Ever Told Arthritis ⁵	33.2	(29.3-37.2)	34.9	(31.1-38.9)
Ever Told Any Cardiovascular Disease ⁶	13.1	(10.6-16.0)	13.3	(10.8-16.2)
Ever Told Cancer ⁷	10.8	(8.6-13.6)	12.1	(9.7-15.1)
Ever Told Kidney Disease ⁸	4.8	(3.3-6.8)	5.1	(3.5-7.2)
Ever Told Depression ⁹	35.7	(31.6-39.9)	35.0	(31.0-39.3)
Disability ¹⁰	32.7	(28.7-36.9)	33.4	(29.4-37.7)
Health Risk Behaviors				
Obese ¹¹	32.0	(28.0-36.2)	31.6	(27.6-35.8)
No Leisure Time Physical Activity ¹²	23.5	(20.0-27.4)	23.7	(20.3-27.6)
Current Smoker ¹³	29.0	(25.1-33.3)	29.9	(25.9-34.1)
Any Alcohol Consumption ¹⁶	53.5	(49.1-57.8)	54.2	(50.0-58.4)
Heavy Drinking ¹⁵	6.5	(4.7-8.9)	6.9	(5.0-9.4)
Binge Drinking ¹⁸	21.3	(17.9-25.2)	21.3	(17.9-25.2)
Health Indicators				
General Health, Fair or Poor ¹⁷	27.0	(23.4-31.0)	27.1	(23.4-31.1)
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	13.4	(10.6-16.7)	13.3	(10.6-16.5)
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	16.5	(13.4-20.2)	16.4	(13.2-20.1)
Activity Limitation on at least 14 Days in the Past Month ²⁰	15.9	(13.0-19.4)	16.6	(13.5-20.1)
No Health Care Coverage (Among 18 – 64 year olds) ²¹	11.2	(8.5-14.7)	10.8	(8.2-14.3)
No Personal Health Care Provider ²²	22.5	(19.0-26.4)	21.5	(18.2-25.1)
No Health Care Access During Past 12 Months Due to Cost ²³	20.9	(17.8-24.4)	20.3	(17.3-23.8)
Preventive Health Practices				
No Routine Checkup in Past Year ²⁴	26.9	(23.3-30.9)	26.8	(23.3-30.6)
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	55.4	(50.4-60.3)	59.8	(55.1-64.4)
No Dental Visit in Past Year ²⁶	43.7	(37.0-50.6)	39.3	(34.2-44.5)

* Age-adjusted by direct method using the 2000 U.S. Census.

Due to significant BRFSS methodology changes that took place in 2011, the estimates within these tables should not be compared to Michigan BRFSS estimates from prior to 2011.

Table 7: Prevalence Estimates among Arab, Non-Hispanics in Michigan (N = 482)				
Michigan BRFSS (2016-2018 Combined)				
% (95% Confidence Interval)				
Chronic Health Conditions	Crude		Age-Adjusted*	
Ever Told Diabetes ¹	7.7	(5.4-10.8)	11.8	(8.5-16.0)
Ever Told Have Asthma ²	14.5	(10.9-18.9)	13.3	(10.0-17.4)
Still Have Asthma ³	9.7	(6.7-13.8)	9.3	(6.4-13.3)
Ever Told Chronic Obstructive Pulmonary Disease ⁴	-- ^a	-- ^a	-- ^a	-- ^a
Ever Told Arthritis ⁵	13.6	(10.5-17.3)	19.8	(16.0-24.3)
Ever Told Any Cardiovascular Disease ⁶	6.7	(4.6-9.7)	10.0	(7.1-13.9)
Ever Told Cancer ⁷	5.5	(3.8-7.9)	9.8	(7.2-13.2)
Ever Told Kidney Disease ⁸	-- ^a	-- ^a	-- ^a	-- ^a
Ever Told Depression ⁹	17.4	(13.8-21.8)	18.8	(15.0-23.4)
Disability ¹⁰	15.7	(12.1-20.2)	20.2	(16.0-25.2)
Health Risk Behaviors				
Obese ¹¹	28.5	(23.4-34.1)	28.7	(23.8-34.1)
No Leisure Time Physical Activity ¹²	26.9	(22.3-32.2)	29.2	(24.3-34.6)
Current Smoker ¹³	16.6	(12.9-21.2)	17.3	(13.5-22.0)
Any Alcohol Consumption ¹⁶	43.4	(37.9-49.0)	44.3	(38.9-49.9)
Heavy Drinking ¹⁵	3.9	(2.2-6.8)	3.1	(1.9-5.3)
Binge Drinking ¹⁸	13.6	(10.1-18.0)	11.1	(8.2-14.8)
Health Indicators				
General Health, Fair or Poor ¹⁷	13.2	(10.0-17.3)	16.1	(12.2-20.8)
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	5.2	(3.4-7.9)	7.8	(5.2-11.7)
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	10.7	(7.7-14.7)	10.6	(7.5-14.7)
Activity Limitation on at least 14 Days in the Past Month ²⁰	7.4	(5.1-10.8)	8.5	(5.8-12.4)
No Health Care Coverage (Among 18 – 64 year olds) ²¹	12.0	(8.7-16.3)	11.4	(8.2-15.6)
No Personal Health Care Provider ²²	16.9	(13.1-21.6)	14.2	(10.9-18.4)
No Health Care Access During Past 12 Months Due to Cost ²³	18.0	(13.9-23.0)	17.8	(13.8-22.6)
Preventive Health Practices				
No Routine Checkup in Past Year ²⁴	26.0	(21.4-31.2)	23.5	(19.3-28.2)
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	31.5	(26.0-37.5)	33.3	(27.8-39.3)
No Dental Visit in Past Year ²⁶	30.6	(22.3-40.4)	27.3	(21.5-34.0)
* Age-adjusted by direct method using the 2000 U.S. Census.				
^a Suppressed due to a denominator < 50 and/or a relative standard error > 30%.				

Due to significant BRFSS methodology changes that took place in 2011, the estimates within these tables should not be compared to Michigan BRFSS estimates from prior to 2011.

Table 8: Prevalence Estimates among Hispanics in Michigan (N = 901)				
Michigan BRFSS (2016-2018 Combined)				
% (95% Confidence Interval)				
Chronic Health Conditions	Crude		Age-Adjusted*	
Ever Told Diabetes ¹	11.0	(8.8-13.5)	15.0	(12.2-18.3)
Ever Told Have Asthma ²	13.7	(11.1-16.8)	12.7	(10.4-15.5)
Still Have Asthma ³	9.3	(7.1-12.1)	8.6	(6.8-11.0)
Ever Told Chronic Obstructive Pulmonary Disease ⁴	5.5	(3.9-7.5)	6.4	(4.6-8.9)
Ever Told Arthritis ⁵	22.0	(19.0-25.4)	28.5	(25.1-32.3)
Ever Told Any Cardiovascular Disease ⁶	6.9	(5.1-9.2)	9.7	(7.2-12.8)
Ever Told Cancer ⁷	3.8	(2.8-5.3)	5.3	(3.8-7.3)
Ever Told Kidney Disease ⁸	2.2	(1.4-3.4)	-- ^a	-- ^a
Ever Told Depression ⁹	23.8	(20.6-27.4)	24.1	(20.5-28.1)
Disability ¹⁰	21.8	(18.5-25.6)	25.4	(21.8-29.4)
Health Risk Behaviors				
Obese ¹¹	37.0	(33.0-41.3)	39.8	(35.5-44.3)
No Leisure Time Physical Activity ¹²	29.0	(25.1-33.1)	31.4	(27.2-36.0)
Current Smoker ¹³	20.6	(17.3-24.3)	19.0	(15.9-22.4)
Any Alcohol Consumption ¹⁶	49.5	(45.3-53.7)	47.8	(43.7-52.0)
Heavy Drinking ¹⁵	6.1	(4.6-8.2)	5.6	(4.1-7.5)
Binge Drinking ¹⁸	19.9	(16.7-23.4)	17.2	(14.5-20.2)
Health Indicators				
General Health, Fair or Poor ¹⁷	19.9	(16.8-23.5)	22.5	(18.9-26.5)
Poor Physical Health on at least 14 Days in the Past Month ¹⁸	7.5	(5.7-9.8)	10.6	(8.0-14.0)
Poor Mental Health on at least 14 Days in the Past Month ¹⁹	11.6	(9.2-14.5)	12.4	(9.6-15.9)
Activity Limitation on at least 14 Days in the Past Month ²⁰	12.0	(9.4-15.2)	13.1	(10.2-16.7)
No Health Care Coverage (Among 18 – 64 year olds) ²¹	18.0	(14.7-21.9)	16.4	(13.3-20.0)
No Personal Health Care Provider ²²	25.2	(21.6-29.3)	21.6	(18.3-25.2)
No Health Care Access During Past 12 Months Due to Cost ²³	16.0	(13.2-19.3)	15.4	(12.7-18.7)
Preventive Health Practices				
No Routine Checkup in Past Year ²⁴	31.8	(28.0-35.9)	29.0	(25.4-32.9)
Ever Had an HIV Test Among Those Aged 18 – 64 Years ²⁵	44.6	(40.2-49.2)	44.7	(40.2-49.2)
No Dental Visit in Past Year ²⁶	33.8	(27.4-40.9)	33.8	(29.2-38.8)
* Age-adjusted by direct method using the 2000 U.S. Census.				
^a Suppressed due to a denominator < 50 and/or a relative standard error > 30%.				

Due to significant BRFSS methodology changes that took place in 2011, the estimates within these tables should not be compared to Michigan BRFSS estimates from prior to 2011.

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 pre-diabetes 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 The proportion who reported being limited in any activities because of physical, mental, or emotional problems, or reported that they required use of special equipment (such as a cane, a wheelchair, a special bed, or a special telephone) due to a health problem.
- 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 2016 and 2018.