# Estimates for Selected Risk Factors and Health Indicators by Emergency Preparedness Region

## State of Michigan

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

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# Introduction

The Michigan Behavioral Risk Factor Survey (BRFS) is an annual, statewide telephone survey of Michigan adults aged 18 years and older that is conducted through a collaborative effort among the Behavioral Surveillance Branch (BSB) of the Centers for Disease Control and Prevention, the Michigan State University Institute for Public Policy and Social Research (IPPSR), and the Michigan Department of Community Health. Michigan BRFS data contribute to the national Behavioral Risk Factor Surveillance System that is managed by BSB.

Michigan BRFS data are collected on a quarterly by IPPSR. The telephone number samples that are utilized for data collection are 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 are directory listed. In addition, census tracts with a high density of African Americans in the population are oversampled.

In 2011, Michigan BRFSS data were analyzed by emergency preparedness region as part of the Michigan Critical Health Indicators project. A map identifying each of Michigan's eight emergency preparedness regions is included on the following page. Population-based estimates were calculated for selected indicators of health status, health risk behaviors, clinical preventive practices, and chronic conditions among adults within each of the eight emergency preparedness regions. These estimates were weighted to adjust for the probabilities of selection and a post-stratification weighting factor that adjusted for the distribution of Michigan adults by age, sex, and race/ethnicity. All analyses were performed in SAS-Callable SUDAAN®, a statistical computing program that is designed for complex sample surveys.

Local Health Jurisdictions, Emergency Preparedness Regions and Michigan Counties
Keweenaw
Houghton
Ontonagon
Baraga
Western Upper Peninsula District Health Department
Gogebic
Marquette
Iron
Dickinson-Iron District Health Department
Dickinson
8
Alger
Delta
Public Health
Delta and Menominee Counties
Menominee
Luce-Mackinac Alger-Schoolcraft Dist Health Dept
Luce
Schoolcraft
Chippewa
Mackinac
Northwest Michigan Community Health Agency
Emmet
Cheboygan
Presque Isle
District Health Department #4
Charlevoix
Antrim
Otsego
Montmorency
Alpena
Benzie-Leelanau District Health Dept
Grand Traverse
Kalkaska
Crawford
7
Oscoda
Alcona
District Health Department #2
Mainstee
Wexford
District Health Department
Missaukee
Roscommon
Ogemaw
Iosco
Mason
#10
Lake
Central Michigan District Health Department
Osceola
Clare
Gladwin
Arenac
Bay
Huron
Newaygo
Mecosta
Isabella
Midland
Oceana
6
Tuscola
Montcalm
Gratiot
Saginaw
3
Sanilac
Muskegon
Mid-Michigan District Health Dept
Lapeer
Kent
Clinton
Shiawassee
Genesee
St. Clair
Ottawa
Ionia
Macomb
1
2N
Allegan
Barry-Eaton District Health
Livingston
Oakland
Ingham
Detroit
Van Buren
Kalamazoo
Calhoun
Jackson
Washtenaw
Wayne
5
2S
Cass District
Branch-Hillsdale-St. Joseph Community Health Agency
Lenawee
Monroe
Berrien
County Health Department
Multi-jurisdiction Health Department

**Table 1: Health Status on at Least 14 Days in the Past Month**
**Michigan BRFSS**

| | Poor Mental Health[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2004 | 4.8 | 6.6 | 7.7 | 8.3 | 5.3 | 5.1 | 8.0 | 5.2 |
| 2005 | 5.4 | 7.4 | 7.8 | 5.9 | 9.2 | 4.2 | 7.3 | 4.9 |
| 2006 | 5.5 | 5.2 | 7.8 | 8.3 | 6.0 | 7.5 | 5.1 | 5.3 |
| 2007 | 5.6 | 5.6 | 8.5 | 5.0 | 8.4 | 4.5 | 7.7 | 8.7 |
| 2008 | 7.9 | 5.3 | 5.3 | 9.1 | 6.3 | 4.3 | 6.5 | 5.7 |
| 2009 | 4.3 | 5.4 | 6.2 | 7.6 | 6.3 | 7.3 | 3.5 | 4.0 |
| 2010 | 8.2 | 6.1 | 7.3 | 6.6 | 6.4 | 6.5 | 5.5 | 3.3 |

[a] Among all adults, the proportion who reported 14 or more days of poor mental health, which includes stress, depression, and problems with emotions, during the past 30 days.

**Table 2: Weight Status**
**Michigan BRFSS**

| | Overweight or Obese[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2001 | 58.6 | 59.0 | 66.6 | 63.5 | 64.9 | 57.9 | 58.8 | 67.3 |
| 2002 | 61.4 | 58.7 | 64.6 | 66.8 | 63.3 | 63.7 | 67.2 | 63.6 |
| 2003 | 64.0 | 62.4 | 64.8 | 68.1 | 63.6 | 56.6 | 68.2 | 67.6 |
| 2004 | 62.5 | 59.9 | 60.8 | 64.4 | 62.9 | 63.7 | 65.2 | 58.3 |
| 2005 | 65.7 | 62.1 | 63.5 | 69.7 | 64.3 | 64.5 | 63.5 | 66.1 |
| 2006 | 65.7 | 63.5 | 67.5 | 66.2 | 65.9 | 66.7 | 70.9 | 68.7 |
| 2007 | 69.0 | 63.7 | 66.6 | 67.2 | 68.3 | 65.4 | 67.8 | 73.0 |
| 2008 | 70.1 | 63.8 | 68.2 | 72.4 | 62.7 | 64.9 | 70.0 | 67.7 |
| 2009 | 72.0 | 67.4 | 68.4 | 72.8 | 67.9 | 66.2 | 67.8 | 66.2 |
| 2010 | 70.0 | 65.4 | 66.6 | 70.8 | 68.3 | 68.4 | 70.2 | 72.7 |

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 25.0.

**Table 3: Health Care Access**
**Michigan BRFSS**

| | No Health Care Access During Past 12 Months Due to Cost[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2003 | 9.8 | 8.4 | 12.6 | 10.9 | 15.7 | 9.8 | 11.1 | 9.9 |
| 2004 | 11.9 | 8.8 | 14.0 | 12.9 | 14.6 | 9.6 | 14.8 | 10.6 |
| 2005 | 10.1 | 10.9 | 14.5 | 14.6 | 15.0 | 11.6 | 13.1 | 11.3 |
| 2006 | 12.8 | 11.0 | 12.9 | 11.7 | 12.5 | 9.9 | 16.8 | 11.0 |
| 2007 | 10.0 | 9.3 | 12.4 | 12.9 | 12.4 | 11.8 | 15.4 | 13.7 |
| 2008 | 8.6 | 11.6 | 14.3 | 13.8 | 9.8 | 12.7 | 15.9 | 9.4 |
| 2009 | 12.5 | 12.8 | 15.4 | 13.2 | 14.3 | 13.5 | 14.4 | 16.9 |
| 2010 | 12.0 | 11.7 | 16.9 | 15.0 | 15.0 | 13.5 | 14.3 | 13.5 |

[a] 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 4: Inadequate Physical Activity**
**Michigan BRFSS**

| | Inadequate Physical Activity[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2003 | 51.1 | 55.7 | 56.6 | 52.8 | 49.8 | 50.3 | 45.2 | 50.7 |
| 2005 | 47.8 | 49.1 | 52.4 | 52.1 | 52.0 | 51.8 | 48.8 | 44.9 |
| 2007 | 44.1 | 52.6 | 50.0 | 53.1 | 49.5 | 47.1 | 47.1 | 49.6 |
| 2009 | 52.4 | 47.1 | 51.1 | 49.4 | 48.5 | 46.6 | 44.5 | 43.8 |

[a] Among all adults, the proportion who reported that they do no usually do moderate physical activity for a total of at least 30 minutes on five or more days per week or vigorous physical activities for a total of at least 20 minutes on three or more days per week while not at work.

**Table 5: Inadequate Fruit and Vegetable Consumption**
**Michigan BRFSS**

| | Fruits and Vegetables (< 5 times / day)[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2003 | 80.5 | 77.4 | 79.5 | 80.5 | 77.0 | 82.7 | 83.3 | 76.3 |
| 2005 | 74.8 | 76.5 | 76.6 | 79.4 | 80.7 | 77.2 | 76.5 | 74.9 |
| 2007 | 79.4 | 77.7 | 76.7 | 80.7 | 77.8 | 80.9 | 79.6 | 78.6 |
| 2009 | 79.1 | 76.7 | 75.5 | 78.9 | 82.7 | 78.1 | 75.3 | 78.5 |

[a] Among all adults, the proportion whose total reported consumption of fruits (including juice) and vegetables was less than five times per day.

**Table 6: Cigarette Smoking**
**Michigan BRFSS**

| | Current Smoking[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2001 | 28.0 | 23.5 | 27.2 | 27.0 | 22.7 | 27.3 | 32.1 | 23.9 |
| 2002 | 20.3 | 26.2 | 23.9 | 26.9 | 26.3 | 22.6 | 22.7 | 18.3 |
| 2003 | 28.1 | 21.7 | 24.7 | 28.3 | 27.6 | 25.3 | 31.0 | 24.5 |
| 2004 | 20.6 | 21.1 | 24.5 | 24.1 | 27.6 | 22.8 | 22.8 | 25.7 |
| 2005 | 20.7 | 21.0 | 22.0 | 23.6 | 23.2 | 20.9 | 23.9 | 21.8 |
| 2006 | 24.2 | 17.5 | 22.7 | 22.4 | 21.2 | 24.0 | 24.0 | 26.1 |
| 2007 | 19.9 | 20.5 | 20.5 | 22.4 | 19.1 | 21.0 | 24.2 | 28.5 |
| 2008 | 16.4 | 17.9 | 21.1 | 23.2 | 22.0 | 20.4 | 22.5 | 18.9 |
| 2009 | 21.2 | 15.9 | 19.8 | 22.2 | 21.4 | 15.4 | 28.1 | 26.9 |
| 2010 | 23.0 | 15.1 | 18.9 | 20.0 | 21.3 | 19.8 | 16.0 | 16.2 |

[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.

**Table 7: Alcohol Consumption**
**Michigan BRFSS**

| | Binge Drinking[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2001 | 19.8 | 19.9 | 16.4 | 15.9 | 14.4 | 21.8 | 19.4 | 21.0 |
| 2002 | 17.6 | 17.6 | 14.9 | 16.4 | 17.9 | 16.4 | 17.0 | 20.6 |
| 2003 | 20.1 | 18.6 | 19.2 | 22.2 | 16.8 | 18.5 | 11.4 | 27.5 |
| 2004 | 15.0 | 15.1 | 14.0 | 16.8 | 16.8 | 18.4 | 19.0 | 20.2 |
| 2005 | 17.0 | 16.2 | 15.1 | 16.8 | 17.3 | 16.6 | 16.9 | 23.7 |
| 2006 | 23.5 | 16.9 | 15.6 | 16.5 | 18.1 | 15.4 | 18.6 | 23.0 |
| 2007 | 19.4 | 19.8 | 16.1 | 17.3 | 14.9 | 19.7 | 18.4 | 27.3 |
| 2008 | 17.7 | 17.3 | 17.2 | 18.0 | 17.3 | 18.3 | 16.1 | 20.1 |
| 2009 | 15.6 | 18.7 | 16.3 | 14.8 | 14.6 | 17.0 | 21.2 | 20.9 |
| 2010 | 16.8 | 15.3 | 13.5 | 15.4 | 14.5 | 14.5 | 16.8 | 15.4 |

[a] Among all adults, the proportion who reported consuming five or more drinks per occasion (for men) or four or more drinks per occasion (for women) at least once in the previous month.

**Table 8: Controlled Hypertension**
**Michigan BRFSS**

| | Taking Blood Pressure Medication[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2001 | 69.1 | 70.5 | 67.5 | 75.6 | 72.2 | 61.7 | 61.8 | 64.2 |
| 2003 | 73.1 | 74.8 | 75.9 | 83.0 | 64.1 | 70.2 | 76.7 | 76.9 |
| 2005 | 73.4 | 75.7 | 79.6 | 79.3 | 76.9 | 78.4 | 74.2 | 82.0 |
| 2007 | 78.6 | 77.8 | 80.5 | 82.0 | 76.9 | 79.5 | 80.2 | 77.8 |
| 2009 | 76.1 | 81.8 | 79.5 | 82.5 | 76.6 | 79.5 | 75.8 | 81.4 |

[a] Among adults who were ever told that they had high blood pressure, the proportion that reported that they were currently taking high blood pressure medicines for their high blood pressure.

**Table 9: Breast Cancer Screening Among Women Aged 40 Years and Older**
**Michigan BRFSS**

| | Had a Mammogram Within the Past Two Year[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2002 | 79.7 | 81.7 | 76.4 | 82.2 | 72.1 | 77.1 | 79.2 | 74.0 |
| 2004 | 79.8 | 83.2 | 75.1 | 80.4 | 71.4 | 80.3 | 82.0 | 78.1 |
| 2006 | 81.8 | 76.9 | 80.5 | 81.2 | 76.2 | 80.1 | 87.2 | 79.4 |
| 2008 | 82.4 | 78.2 | 80.1 | 80.7 | 75.5 | 78.4 | 79.7 | 77.0 |
| 2010 | 75.7 | 79.1 | 77.7 | 76.9 | 83.1 | 78.0 | 80.4 | 71.6 |

[a] Among women aged 40 years and older, the proportion who reported having a mammogram within the past two years.

**Table 10: Cervical Cancer Screening Among Women Aged 18 Years and Older**
**Michigan BRFSS**

| | Had a Pap Test Within the Past Three Years[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2002 | 89.1 | 86.6 | 82.3 | 81.7 | 86.7 | 86.7 | 90.9 | 78.1 |
| 2004 | 89.0 | 85.1 | 83.0 | 76.7 | 78.1 | 84.8 | 78.7 | 77.4 |
| 2006 | 85.1 | 82.6 | 85.2 | 82.0 | 78.1 | 81.6 | 84.6 | 77.3 |
| 2008 | 82.9 | 81.1 | 79.4 | 81.8 | 78.7 | 81.1 | 79.1 | 76.9 |
| 2010 | 78.1 | 80.4 | 78.5 | 76.4 | 73.5 | 78.5 | 75.7 | 74.2 |

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

**Table 11: Colorectal Cancer Screening Among Adults Aged 50 Years and Older**
**Michigan BRFSS**

| | Had a Sigmoidoscopy or Colonoscopy Within the Past Five Years[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2002 | 47.5 | 50.0 | 45.3 | 39.7 | 39.3 | 49.7 | 50.0 | 32.0 |
| 2004 | 54.3 | 54.6 | 47.0 | 42.1 | 47.7 | 57.1 | 47.6 | 48.3 |
| 2006 | 55.3 | 60.0 | 57.5 | 56.8 | 47.8 | 54.7 | 55.1 | 54.6 |
| 2008 | 57.0 | 57.4 | 57.8 | 59.7 | 52.8 | 60.3 | 55.4 | 54.0 |
| 2010 | 59.6 | 59.9 | 55.5 | 54.3 | 58.3 | 56.7 | 61.4 | 53.5 |

[a] Among adults aged 50 years and older, the proportion who reported having a sigmoidoscopy or colonoscopy with the previous five years.

**Table 12: Influenza Vaccination Among Adults Aged 65 Years and Older**
**Michigan BRFSS**

| | Had Flu Vaccine Within the Past Year[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2001 | 58.3 | 62.5 | 55.3 | 64.6 | 64.3 | 62.0 | 58.7 | 57.0 |
| 2002 | 78.4 | 64.7 | 63.0 | 65.2 | 73.9 | 70.7 | 67.6 | 57.9 |
| 2003 | 70.8 | 75.8 | 57.5 | 71.6 | 55.3 | 70.5 | 75.1 | 66.3 |
| 2004 | 66.0 | 62.2 | 62.3 | 68.2 | 67.4 | 72.6 | 74.5 | 69.5 |
| 2005 | 73.9 | 66.8 | 58.2 | 64.6 | 70.8 | 73.0 | 70.4 | 68.3 |
| 2006 | 74.1 | 68.6 | 68.7 | 71.6 | 67.5 | 78.4 | 77.4 | 70.5 |
| 2007 | 72.2 | 72.9 | 64.3 | 71.8 | 73.5 | 71.3 | 77.1 | 66.0 |
| 2008 | 71.1 | 76.3 | 68.6 | 65.3 | 64.9 | 73.3 | 76.0 | 62.9 |
| 2009 | 74.7 | 65.1 | 67.2 | 64.9 | 70.3 | 74.0 | 76.9 | 60.5 |
| 2010 | 67.2 | 66.5 | 67.8 | 60.2 | 66.3 | 69.9 | 76.8 | 71.2 |

[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 previous 12 months.

**Table 13: Pneumonia Vaccination Among Adults Aged 65 Years and Older**
**Michigan BRFSS**

| | Ever Had Pneumonia Vaccine[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2001 | 58.4 | 64.9 | 49.8 | 50.3 | 61.2 | 63.1 | 70.6 | 63.2 |
| 2002 | 69.2 | 61.8 | 61.0 | 60.5 | 63.4 | 65.4 | 65.3 | 58.7 |
| 2003 | 64.3 | 68.7 | 56.5 | 59.3 | 48.6 | 75.0 | 68.3 | 55.7 |
| 2004 | 53.9 | 54.4 | 57.6 | 57.3 | 67.0 | 64.5 | 65.9 | 58.4 |
| 2005 | 71.5 | 64.5 | 63.5 | 66.8 | 65.5 | 68.0 | 64.7 | 68.0 |
| 2006 | 70.6 | 66.2 | 61.6 | 67.9 | 70.3 | 75.7 | 65.4 | 64.5 |
| 2007 | 62.6 | 63.1 | 60.7 | 62.7 | 64.9 | 64.5 | 70.7 | 62.3 |
| 2008 | 71.2 | 67.7 | 60.6 | 66.1 | 67.0 | 68.3 | 71.8 | 64.1 |
| 2009 | 69.0 | 67.1 | 64.0 | 65.1 | 68.5 | 70.6 | 71.0 | 65.8 |
| 2010 | 68.1 | 65.4 | 69.6 | 66.2 | 65.0 | 70.4 | 70.7 | 65.6 |

[a] Among adults aged 65 years and older, the proportion who reported that they ever had a pneumococcal vaccine.

**Table 14: Heart Attack**
**Michigan BRFSS**

| | Ever Told Heart Attack[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2005 | 4.6 | 4.5 | 4.6 | 6.1 | 4.6 | 3.9 | 5.0 | 4.1 |
| 2006 | 4.3 | 4.4 | 5.0 | 5.7 | 5.7 | 3.9 | 6.4 | 5.4 |
| 2007 | 4.3 | 3.7 | 4.6 | 7.4 | 5.1 | 3.8 | 6.0 | 7.3 |
| 2008 | 3.9 | 4.2 | 4.6 | 6.6 | 4.0 | 3.8 | 5.0 | 4.2 |
| 2009 | 4.0 | 3.8 | 4.2 | 5.9 | 5.5 | 3.8 | 5.6 | 3.6 |
| 2010 | 6.0 | 4.6 | 4.8 | 4.8 | 5.5 | 3.5 | 6.3 | 4.7 |

[a] Among all adults, the proportion who reported ever being told by a doctor that they had a heart attack or myocardial infarction.

**Table 15: Stroke**
**Michigan BRFSS**

| | Ever Told Stroke[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2005 | 3.0 | 3.1 | 3.2 | 3.1 | 2.8 | 2.5 | 3.4 | 2.4 |
| 2006 | 3.0 | 2.5 | 3.2 | 3.0 | 3.3 | 2.5 | 3.3 | 4.3 |
| 2007 | 1.9 | 2.7 | 3.4 | 3.6 | 2.2 | 2.0 | 3.2 | 4.1 |
| 2008 | 1.6 | 2.6 | 3.4 | 3.8 | 2.6 | 2.8 | 3.7 | 3.5 |
| 2009 | 2.0 | 2.0 | 3.2 | 3.0 | 2.8 | 2.0 | 5.8 | 2.2 |
| 2010 | 3.4 | 2.1 | 3.4 | 3.2 | 3.0 | 2.1 | 3.1 | 4.3 |

[a] Among all adults, the proportion who reported ever being told by a doctor that they had a stroke.

**Table 16: Diabetes**
**Michigan BRFSS**

| | Ever Told Diabetes[a] (%) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Region 1** | **Region 2N** | **Region 2S** | **Region 3** | **Region 5** | **Region 6** | **Region 7** | **Region 8** |
| **Year** | | | | | | | | |
| 2001 | 7.0 | 7.1 | 8.8 | 8.0 | 5.6 | 6.5 | 4.2 | 6.0 |
| 2002 | 8.4 | 7.3 | 8.4 | 7.7 | 7.4 | 7.9 | 10.1 | 10.0 |
| 2003 | 6.1 | 6.5 | 9.6 | 9.6 | 8.0 | 7.0 | 7.8 | 8.9 |
| 2004 | 7.9 | 6.5 | 7.7 | 7.0 | 10.3 | 7.4 | 7.3 | 8.1 |
| 2005 | 7.4 | 7.2 | 8.6 | 9.8 | 7.1 | 8.3 | 7.6 | 8.4 |
| 2006 | 8.7 | 7.0 | 11.0 | 11.1 | 7.2 | 8.2 | 8.7 | 9.3 |
| 2007 | 7.6 | 7.0 | 10.5 | 11.8 | 8.8 | 7.3 | 9.7 | 12.0 |
| 2008 | 7.7 | 8.8 | 10.5 | 9.9 | 8.4 | 9.1 | 7.4 | 9.1 |
| 2009 | 8.6 | 8.1 | 10.0 | 9.9 | 11.6 | 9.3 | 10.7 | 7.6 |
| 2010 | 9.4 | 10.4 | 11.6 | 9.9 | 9.6 | 9.8 | 8.2 | 9.8 |

[a] Among all adults, the proportion who reported that they were ever told by a doctor that they have diabetes. Adults who had been told they have prediabetes and women who had diabetes only during pregnancy were classified as not having been diagnosed.