

**Health Indicators and Risk Estimates by  
Community Health Assessment Regions  
&  
Local Health Departments**

**Michigan Behavioral Risk Factor Survey  
2006 - 2008 Combined**

Selected Tables

Chronic Disease Epidemiology Section  
Division of Genomics, Perinatal Health, and Chronic Disease Epidemiology  
Bureau of Epidemiology  
Michigan Department of Community Health

*Prepared by Chris Fussman  
Finalized: August 4, 2009*

**Table of Contents**

|   |    |
|---|----|
| Table of Contents.....  | 1  |
| Introduction.....   | 2  |
| Community Health Assessment and Improvement Regions .....                   | 3  |
| Local Health Departments .....  | 4  |
| Table 1: Health Status.....   | 5  |
| Table 2: Poor Physical Health on at Least 14 Days in the Past Month .....   | 7  |
| Table 3: Poor Mental Health on at Least 14 Days in the Past Month.....      | 9  |
| Table 4: Activity Limitation on at Least 14 Days in the Past Month .....    | 11 |
| Table 5: Life Satisfaction.....   | 13 |
| Table 6: Social and Emotional Support .....                                 | 15 |
| Table 7: Disability.....  | 17 |
| Table 8: Weight Status.....   | 19 |
| Table 9: No Health Care Coverage Among Those Aged 18-64 Years.....          | 21 |
| Table 10: Health Care Access.....   | 23 |
| Table 11: No Leisure-Time Physical Activity .....                           | 25 |
| Table 12: Inadequate Physical Activity .....                                | 27 |
| Table 13: Inadequate Fruit and Vegetable Consumption .....                  | 29 |
| Table 14: Cigarette Smoking .....   | 31 |
| Table 15: Alcohol Consumption.....  | 33 |
| Table 16: Drove Motor Vehicle After Drinking.....                           | 35 |
| Table 17: Seatbelt Use .....  | 37 |
| Table 18: No Routine Checkup in Past Year .....                             | 39 |
| Table 19: Breast Cancer Screening Among Women Age 40 and Older.....         | 41 |
| Table 20: Cervical Cancer Screening Among Women Age 18 and Older .....      | 43 |
| Table 21: Prostate Cancer Screening Among Men Aged 50 and Older .....       | 45 |
| Table 22: Colorectal Cancer Screening Among Adults 50 Years and Older ..... | 47 |
| Table 23: Oral Health.....  | 49 |
| Table 24: Immunizations Among Adults Aged 65 Years and Older.....           | 51 |
| Table 25: HIV Testing Among Adults Aged 18-64 Years .....                   | 53 |
| Table 26: Asthma.....   | 55 |
| Table 27: Heart Attack.....   | 57 |
| Table 28: Angina or Coronary Heart Disease.....                             | 59 |
| Table 29: Stroke.....   | 61 |
| Table 30: Diabetes .....  | 63 |

## **Introduction**

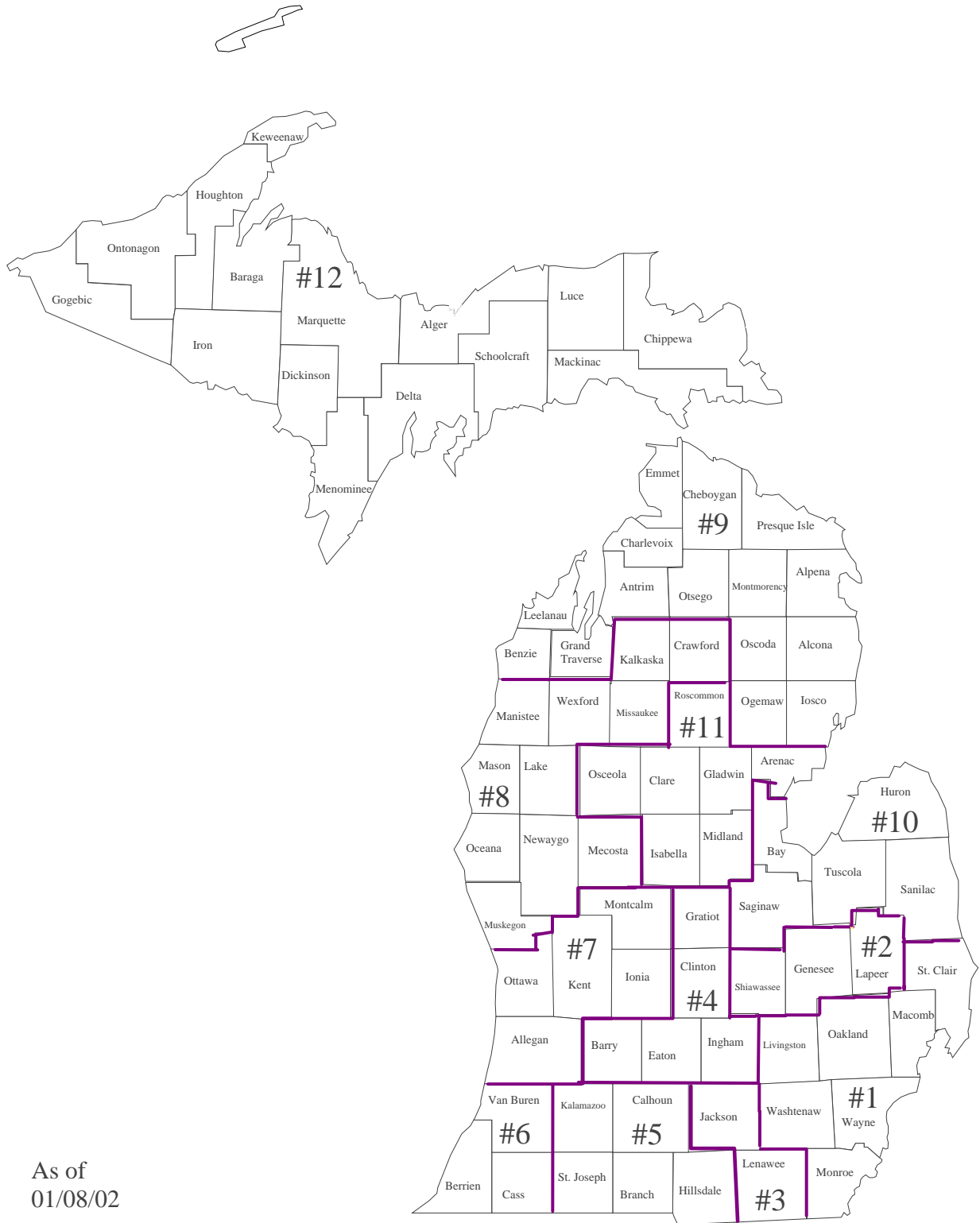
The Michigan Behavioral Risk Factor Survey (BRFS) is a statewide, random-digit dialed telephone survey of adult residents aged 18 years and older. State-specific, population-based prevalence estimates (and 95% confidence intervals) of health risk behaviors, preventive health practices, and chronic conditions are calculated using annual data sets (see Annual Tables at <http://www.michigan.gov/brfs>). However, region-specific and local health department-specific prevalence rates are usually computed using BRFSS data combined across years.

For this report, data from the 2006 - 2008 Michigan BRFSS were combined. The total sample sizes by year were: 9,447 in 2008, 7,505 in 2007, and 5,662 in 2006. Not all questions were included annually in the survey. The table subtitles indicate which years were used for that particular analysis.

Estimates have been weighted to adjust for the probabilities of selection and the distribution of Michigan adults by age, sex, and race-ethnicity at the state level. Final annual analysis weights were used; no additional weighting factors have been computed for the regional or local health department level. These analyses were performed in SUDAAN, a statistical computing program that was designed for complex sample surveys. Estimates are reported for geographic subgroups with a sample size of at least 50 respondents.

If you have any questions about these data, please contact Chris Fussman at MDCH, by phone, 517-335-8144, or by e-mail, [FussmanC@michigan.gov](mailto:FussmanC@michigan.gov).

## Community Health Assessment and Improvement Regions State of Michigan



As of  
01/08/02

### Local Health Departments State of Michigan



| <b>Table 1: Health Status<br/>Michigan BRFSS, 2006-2008 Combined</b> |   |             |                                    |
|--|---|-------------|------------------------------------|
| <b>Geographic Area</b>   | <b>General Health,<br/>Fair or Poor<sup>a</sup></b> |             |                                    |
|  | <b>N</b>  | <b>%</b>    | <b>95% Confidence<br/>Interval</b> |
| <b>Michigan Total</b>  | <b>22,553</b>                                       | <b>14.8</b> | <b>(14.2-15.3)</b>                 |
| <b>Region 1</b>  | 9,842   | 15.1        | (14.2-16.0)                        |
| Livingston   | 355   | 7.9         | (5.4-11.3)                         |
| Macomb   | 1,326   | 14.4        | (12.4-16.7)                        |
| Monroe   | 301   | 13.8        | (9.9-18.9)                         |
| Oakland  | 2,333   | 12.7        | (11.2-14.5)                        |
| St. Clair  | 347   | 14.9        | (11.1-19.8)                        |
| Washtenaw  | 666   | 11.6        | (8.7-15.3)                         |
| City of Detroit  | 2,311   | 24.8        | (22.4-27.4)                        |
| Wayne exc. Detroit   | 2,154   | 13.6        | (11.9-15.4)                        |
| <b>Region 2</b>  | 1,372   | 18.2        | (15.8-21.0)                        |
| Genesee  | 1,021   | 19.6        | (16.6-23.0)                        |
| Lapeer   | 184   | 12.3        | (8.2-18.1)                         |
| Shiawassee   | 167   | 17.2        | (11.8-24.4)                        |
| <b>Region 3</b>  | 628   | 12.4        | (9.8-15.5)                         |
| Jackson  | 396   | 13.6        | (10.2-17.8)                        |
| Lenawee  | 232   | 10.4        | (6.9-15.4)                         |
| <b>Region 4</b>  | 1,310   | 12.0        | (10.2-14.1)                        |
| Barry-Eaton  | 398   | 13.0        | (9.8-17.0)                         |
| Mid-Michigan <sup>b</sup>  | 521   | 14.1        | (11.0-17.9)                        |
| Ingham   | 618   | 10.9        | (8.5-14.0)                         |
| <b>Region 5</b>  | 1,168   | 16.3        | (13.7-19.3)                        |
| Branch-Hillsdale-St. Joseph  | 313   | 17.1        | (12.6-22.9)                        |
| Calhoun  | 293   | 16.1        | (11.2-22.6)                        |
| Kalamazoo  | 562   | 15.9        | (12.2-20.5)                        |
| <b>Region 6</b>  | 790   | 17.5        | (14.5-21.0)                        |
| Van Buren-Cass   | 306   | 16.0        | (11.8-21.4)                        |
| Berrien  | 484   | 18.7        | (14.7-23.5)                        |
| <b>Region 7</b>  | 2,342   | 11.0        | (9.4-12.8)                         |
| Allegan  | 220   | 12.5        | (5.8-25.1)                         |
| Ionia  | 140   | 10.5        | (6.4-16.7)                         |
| Kent   | 1,191   | 10.4        | (8.5-12.8)                         |
| Mid-Michigan <sup>b</sup>  | 521   | 14.1        | (11.0-17.9)                        |
| Ottawa   | 564   | 9.9         | (7.4-13.1)                         |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 1 Cont'd</b>           |   |             |                                    |
|---------------------------------|---|-------------|------------------------------------|
| <b>Geographic Area</b>          | <b>General Health,<br/>Fair or Poor<sup>a</sup></b> |             |                                    |
|                                 | <b>N</b>  | <b>%</b>    | <b>95% Confidence<br/>Interval</b> |
| <b>Michigan Total</b>           | <b>22,553</b>                                       | <b>14.8</b> | <b>(14.2-15.3)</b>                 |
| <b>Region 8</b>                 | 1,167   | 16.8        | (14.5-19.3)                        |
| District #10                    | 727   | 16.3        | (13.6-19.5)                        |
| Muskegon                        | 440   | 17.5        | (13.6-22.1)                        |
| <b>Region 9</b>                 | 1,127   | 12.7        | (10.7-15.0)                        |
| District #2                     | 219   | 16.1        | (11.4-22.4)                        |
| District #4                     | 259   | 15.6        | (11.3-21.3)                        |
| Northwest Michigan              | 324   | 11.3        | (8.2-15.5)                         |
| Benzie-Leelanau                 | 105   | 10.3        | (5.3-19.1)                         |
| Grand Traverse                  | 220   | 9.2         | (5.6-14.7)                         |
| <b>Region 10</b>                | 1,175   | 15.3        | (13.0-17.8)                        |
| Bay                             | 268   | 12.9        | (9.1-18.0)                         |
| Huron                           | 100   | 20.3        | (12.9-30.6)                        |
| Saginaw                         | 585   | 15.5        | (12.2-19.4)                        |
| Sanilac                         | 105   | 17.9        | (10.8-28.1)                        |
| Tuscola                         | 117   | 14.1        | (8.8-21.7)                         |
| <b>Region 11</b>                | 699   | 18.1        | (14.9-21.8)                        |
| Central Michigan                | 480   | 20.2        | (16.3-24.9)                        |
| Midland                         | 219   | 13.3        | (8.9-19.4)                         |
| <b>Region 12</b>                | 913   | 16.5        | (13.9-19.5)                        |
| Luce-Mackinac-Alger-Schoolcraft | 132   | 14.8        | (9.2-22.9)                         |
| Western Upper Peninsula         | 188   | 18.9        | (12.9-27.0)                        |
| Delta-Menominee                 | 196   | 16.1        | (11.4-22.2)                        |
| Chippewa                        | 101   | 16.2        | (10.1-24.9)                        |
| Dickinson-Iron                  | 132   | 19.8        | (12.6-29.6)                        |
| Marquette                       | 164   | 13.6        | (8.7-20.6)                         |

<sup>a</sup> The proportion who reported that their health, in general, was either fair or poor.  
<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 2: Poor Physical Health on at Least 14 Days in the Past Month<br/>Michigan BRFSS, 2006-2008 Combined</b> |   |             |                                |
|---|---|-------------|--------------------------------|
| <b>Geographic Area</b>  | <b>Poor Physical Health<sup>a</sup></b> |             |                                |
|   | <b>N</b>                                | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>   | <b>22,112</b>                           | <b>10.9</b> | <b>(10.5-11.4)</b>             |
| <b>Region 1</b>   | 9,651                                   | 10.5        | (9.8-11.3)                     |
| Livingston  | 353                                     | 5.8         | (3.8-8.9)                      |
| Macomb  | 1,305                                   | 9.9         | (8.3-11.9)                     |
| Monroe  | 294                                     | 9.7         | (6.6-14.1)                     |
| Oakland   | 2,295                                   | 10.5        | (9.0-12.2)                     |
| St. Clair   | 338                                     | 12.6        | (9.2-17.2)                     |
| Washtenaw   | 662                                     | 7.0         | (5.2-9.6)                      |
| City of Detroit   | 2,237                                   | 13.9        | (12.2-15.9)                    |
| Wayne exc. Detroit  | 2,120                                   | 10.3        | (8.9-12.0)                     |
| <b>Region 2</b>   | 1,345                                   | 13.5        | (11.3-16.0)                    |
| Genesee   | 998                                     | 14.2        | (11.4-17.4)                    |
| Lapeer  | 183                                     | 12.8        | (8.3-19.0)                     |
| Shiawassee  | 164                                     | 10.6        | (6.6-16.5)                     |
| <b>Region 3</b>   | 617                                     | 11.3        | (8.6-14.7)                     |
| Jackson   | 390                                     | 13.4        | (9.6-18.3)                     |
| Lenawee   | 227                                     | 7.7         | (4.9-11.9)                     |
| <b>Region 4</b>   | 1,287                                   | 10.2        | (8.5-12.2)                     |
| Barry-Eaton   | 389                                     | 9.8         | (6.7-14.1)                     |
| Mid-Michigan <sup>b</sup>   | 512                                     | 10.6        | (7.8-14.2)                     |
| Ingham  | 609                                     | 9.0         | (7.1-11.5)                     |
| <b>Region 5</b>   | 1,140                                   | 11.0        | (9.1-13.2)                     |
| Branch-Hillsdale-St. Joseph   | 305                                     | 9.2         | (6.1-13.5)                     |
| Calhoun   | 285                                     | 11.9        | (8.3-16.8)                     |
| Kalamazoo   | 550                                     | 11.5        | (8.8-17.1)                     |
| <b>Region 6</b>   | 768                                     | 10.8        | (8.5-13.6)                     |
| Van Buren-Cass  | 298                                     | 11.8        | (8.0-17.1)                     |
| Berrien   | 470                                     | 10.0        | (7.4-13.3)                     |
| <b>Region 7</b>   | 2,310                                   | 9.0         | (7.7-10.5)                     |
| Allegan   | 215                                     | 10.0        | (6.4-15.2)                     |
| Ionia   | 138                                     | 5.5         | (2.5-11.4)                     |
| Kent  | 1,176                                   | 9.7         | (7.8-12.1)                     |
| Mid-Michigan <sup>b</sup>   | 512                                     | 10.6        | (7.8-14.2)                     |
| Ottawa  | 558                                     | 8.6         | (6.2-11.8)                     |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 2 Cont'd</b>           |   |             |                                |
|---------------------------------|---|-------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Poor Physical Health<sup>a</sup></b> |             |                                |
|                                 | <b>N</b>                                | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>22,112</b>                           | <b>10.9</b> | <b>(10.5-11.4)</b>             |
| <b>Region 8</b>                 | 1,144                                   | 13.4        | (11.3-15.9)                    |
| District #10                    | 712                                     | 12.6        | (9.9-15.8)                     |
| Muskegon                        | 432                                     | 14.8        | (11.5-18.9)                    |
| <b>Region 9</b>                 | 1,112                                   | 12.6        | (10.5-15.1)                    |
| District #2                     | 216                                     | 12.7        | (8.4-18.7)                     |
| District #4                     | 253                                     | 18.3        | (13.2-24.9)                    |
| Northwest Michigan              | 319                                     | 12.7        | (9.1-17.4)                     |
| Benzie-Leelanau                 | 103                                     | 12.9        | (6.7-23.4)                     |
| Grand Traverse                  | 221                                     | 6.2         | (3.9-9.6)                      |
| <b>Region 10</b>                | 1,144                                   | 11.2        | (9.4-13.2)                     |
| Bay                             | 263                                     | 7.8         | (5.1-11.6)                     |
| Huron                           | 95                                      | 9.0         | (4.4-17.5)                     |
| Saginaw                         | 572                                     | 13.3        | (10.5-16.6)                    |
| Sanilac                         | 101                                     | 9.5         | (5.0-17.2)                     |
| Tuscola                         | 113                                     | 14.1        | (8.8-21.8)                     |
| <b>Region 11</b>                | 684                                     | 12.4        | (9.8-15.5)                     |
| Central Michigan                | 470                                     | 14.2        | (11.0-18.2)                    |
| Midland                         | 214                                     | 8.4         | (4.8-14.1)                     |
| <b>Region 12</b>                | 891                                     | 11.3        | (9.2-13.9)                     |
| Luce-Mackinac-Alger-Schoolcraft | 130                                     | 8.0         | (4.0-15.2)                     |
| Western Upper Peninsula         | 179                                     | 13.1        | (8.2-20.1)                     |
| Delta-Menominee                 | 192                                     | 13.3        | (8.9-19.5)                     |
| Chippewa                        | 98                                      | 10.3        | (5.6-18.1)                     |
| Dickinson-Iron                  | 129                                     | 14.0        | (7.8-23.9)                     |
| Marquette                       | 163                                     | 8.5         | (5.2-13.7)                     |

<sup>a</sup> The proportion who reported 14 or more days, out of the previous 30, on which their physical health was not good, which includes physical illness and injury.  
<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 3: Poor Mental Health on at Least 14 Days in the Past Month<br/>Michigan BRFSS, 2006-2008 Combined</b> |                                       |             |                                |
|---|---------------------------------------|-------------|--------------------------------|
| <b>Geographic Area</b>  | <b>Poor Mental Health<sup>a</sup></b> |             |                                |
|   | <b>N</b>                              | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>   | <b>22,280</b>                         | <b>10.8</b> | <b>(10.3-11.3)</b>             |
| <b>Region 1</b>   | 9,718                                 | 11.0        | (10.2-11.9)                    |
| Livingston  | 354                                   | 10.1        | (6.4-15.8)                     |
| Macomb  | 1,310                                 | 10.2        | (8.4-12.4)                     |
| Monroe  | 294                                   | 13.0        | (8.8-18.9)                     |
| Oakland   | 2,309                                 | 9.7         | (8.1-11.5)                     |
| St. Clair   | 343                                   | 9.1         | (6.1-13.3)                     |
| Washtenaw   | 663                                   | 8.7         | (6.3-12.0)                     |
| City of Detroit   | 2,275                                 | 13.3        | (11.4-15.3)                    |
| Wayne exc. Detroit  | 2,122                                 | 12.4        | (10.6-14.5)                    |
| <b>Region 2</b>   | 1,356                                 | 12.0        | (9.9-14.4)                     |
| Genesee   | 1,005                                 | 12.5        | (10.1-15.4)                    |
| Lapeer  | 185                                   | 6.9         | (4.1-11.3)                     |
| Shiawassee  | 166                                   | 14.8        | (8.8-23.7)                     |
| <b>Region 3</b>   | 614                                   | 8.7         | (6.5-11.6)                     |
| Jackson   | 388                                   | 10.9        | (7.8-15.1)                     |
| Lenawee   | 226                                   | 5.0         | (2.9-8.4)                      |
| <b>Region 4</b>   | 1,293                                 | 11.7        | (9.7-14.0)                     |
| Barry-Eaton   | 394                                   | 13.8        | (9.9-19.0)                     |
| Mid-Michigan <sup>b</sup>   | 518                                   | 9.6         | (7.0-13.2)                     |
| Ingham  | 607                                   | 10.6        | (8.2-13.7)                     |
| <b>Region 5</b>   | 1,159                                 | 12.0        | (9.7-14.7)                     |
| Branch-Hillsdale-St. Joseph   | 310                                   | 9.7         | (6.4-14.5)                     |
| Calhoun   | 291                                   | 16.1        | (11.1-22.7)                    |
| Kalamazoo   | 558                                   | 11.1        | (8.0-15.1)                     |
| <b>Region 6</b>   | 782                                   | 9.7         | (7.6-12.4)                     |
| Van Buren-Cass  | 302                                   | 8.8         | (6.0-12.8)                     |
| Berrien   | 480                                   | 10.5        | (7.6-14.2)                     |
| <b>Region 7</b>   | 2,322                                 | 8.7         | (7.3-10.3)                     |
| Allegan   | 216                                   | 10.3        | (6.3-16.5)                     |
| Ionia   | 140                                   | 8.5         | (4.2-16.4)                     |
| Kent  | 1,181                                 | 9.1         | (7.2-11.6)                     |
| Mid-Michigan <sup>b</sup>   | 518                                   | 9.6         | (7.0-13.2)                     |
| Ottawa  | 559                                   | 7.4         | (5.2-10.5)                     |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 3 Cont'd</b>           |                                       |             |                                |
|---------------------------------|---------------------------------------|-------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Poor Mental Health<sup>a</sup></b> |             |                                |
|                                 | <b>N</b>                              | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>22,280</b>                         | <b>10.8</b> | <b>(10.3-11.3)</b>             |
| <b>Region 8</b>                 | 1,156                                 | 12.3        | (10.0-15.2)                    |
| District #10                    | 716                                   | 9.4         | (7.2-12.2)                     |
| Muskegon                        | 438                                   | 17.4        | (12.7-23.5)                    |
| <b>Region 9</b>                 | 1,109                                 | 9.7         | (7.8-12.1)                     |
| District #2                     | 216                                   | 10.3        | (6.2-16.6)                     |
| District #4                     | 255                                   | 10.3        | (6.8-15.3)                     |
| Northwest Michigan              | 321                                   | 11.2        | (7.7-15.9)                     |
| Benzie-Leelanau                 | 104                                   | 10.6        | (5.3-20.4)                     |
| Grand Traverse                  | 213                                   | 5.9         | (2.8-12.1)                     |
| <b>Region 10</b>                | 1,165                                 | 11.0        | (8.9-13.4)                     |
| Bay                             | 265                                   | 10.2        | (6.1-16.5)                     |
| Huron                           | 96                                    | 11.2        | (5.9-20.2)                     |
| Saginaw                         | 582                                   | 11.8        | (8.9-15.5)                     |
| Sanilac                         | 105                                   | 11.6        | (6.6-19.7)                     |
| Tuscola                         | 117                                   | 8.7         | (4.8-15.2)                     |
| <b>Region 11</b>                | 688                                   | 13.1        | (10.0-17.0)                    |
| Central Michigan                | 475                                   | 12.8        | (9.4-17.2)                     |
| Midland                         | 213                                   | 13.6        | (7.9-22.5)                     |
| <b>Region 12</b>                | 898                                   | 9.6         | (7.2-12.5)                     |
| Luce-Mackinac-Alger-Schoolcraft | 130                                   | 7.6         | (4.0-14.0)                     |
| Western Upper Peninsula         | 183                                   | 8.0         | (4.2-14.7)                     |
| Delta-Menominee                 | 194                                   | 14.9        | (9.6-22.6)                     |
| Chippewa                        | 97                                    | 17.9        | (8.1-35.0)                     |
| Dickinson-Iron                  | 132                                   | 5.1         | (2.5-10.1)                     |
| Marquette                       | 162                                   | 5.1         | (2.2-11.3)                     |

<sup>a</sup> The proportion who reported 14 or more days, out of the previous 30, on which their mental health was not good, which includes stress, depression, and problems with emotions.  
<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 4: Activity Limitation on at Least 14 Days in the Past Month<br/>Michigan BRFSS, 2006-2008 Combined</b> |  |            |                                |
|--|--|------------|--------------------------------|
| <b>Geographic Area</b>   | <b>Activity Limitation<sup>a</sup></b> |            |                                |
|  | <b>N</b>                               | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>  | <b>22,220</b>                          | <b>7.0</b> | <b>(6.6-7.4)</b>               |
| <b>Region 1</b>  | 9,700                                  | 6.6        | (6.0-7.2)                      |
| Livingston   | 352                                    | 1.7        | (0.9-3.4)                      |
| Macomb   | 1,308                                  | 5.4        | (4.2-7.0)                      |
| Monroe   | 297                                    | 5.8        | (3.6-9.4)                      |
| Oakland  | 2,304                                  | 5.8        | (4.8-7.2)                      |
| St. Clair  | 342                                    | 7.2        | (4.6-7.2)                      |
| Washtenaw  | 662                                    | 4.3        | (2.8-6.6)                      |
| City of Detroit  | 2,264                                  | 10.5       | (8.8-12.5)                     |
| Wayne exc. Detroit   | 2,123                                  | 7.0        | (5.8-8.4)                      |
| <b>Region 2</b>  | 1,346                                  | 9.4        | (7.7-11.5)                     |
| Genesee  | 1,000                                  | 9.9        | (7.9-12.5)                     |
| Lapeer   | 182                                    | 5.1        | (2.8-9.0)                      |
| Shiawassee   | 164                                    | 11.0       | (6.2-18.8)                     |
| <b>Region 3</b>  | 616                                    | 7.8        | (5.7-10.5)                     |
| Jackson  | 392                                    | 9.4        | (6.5-13.3)                     |
| Lenawee  | 224                                    | 5.0        | (2.9-8.4)                      |
| <b>Region 4</b>  | 1,290                                  | 6.6        | (5.2-8.5)                      |
| Barry-Eaton  | 392                                    | 6.6        | (3.9-11.0)                     |
| Mid-Michigan <sup>b</sup>  | 514                                    | 6.6        | (4.3-9.9)                      |
| Ingham   | 608                                    | 6.2        | (4.6-8.3)                      |
| <b>Region 5</b>  | 1,151                                  | 7.6        | (5.9-9.7)                      |
| Branch-Hillsdale-St. Joseph  | 306                                    | 7.4        | (4.4-12.4)                     |
| Calhoun  | 288                                    | 7.6        | (4.7-12.2)                     |
| Kalamazoo  | 557                                    | 7.6        | (5.4-10.6)                     |
| <b>Region 6</b>  | 776                                    | 6.7        | (5.1-8.7)                      |
| Van Buren-Cass   | 302                                    | 5.3        | (3.2-8.5)                      |
| Berrien  | 474                                    | 7.7        | (5.6-10.7)                     |
| <b>Region 7</b>  | 2,325                                  | 5.0        | (4.1-6.1)                      |
| Allegan  | 220                                    | 6.9        | (3.6-12.8)                     |
| Ionia  | 140                                    | 4.5        | (1.8-10.9)                     |
| Kent   | 1,181                                  | 5.1        | (3.8-6.8)                      |
| Mid-Michigan <sup>b</sup>  | 514                                    | 6.6        | (4.3-9.9)                      |
| Ottawa   | 560                                    | 3.9        | (2.5-6.1)                      |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 4 Cont'd</b>           |  |            |                                |
|---------------------------------|--|------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Activity Limitation<sup>a</sup></b> |            |                                |
|                                 | <b>N</b>                               | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>22,220</b>                          | <b>7.0</b> | <b>(6.6-7.4)</b>               |
| <b>Region 8</b>                 | 1,141                                  | 9.2        | (7.5-11.4)                     |
| District #10                    | 708                                    | 7.7        | (5.7-10.2)                     |
| Muskegon                        | 433                                    | 11.9       | (8.7-16.0)                     |
| <b>Region 9</b>                 | 1,115                                  | 7.9        | (6.2-9.9)                      |
| District #2                     | 216                                    | 10.4       | (6.7-16.0)                     |
| District #4                     | 257                                    | 10.2       | (6.1-16.4)                     |
| Northwest Michigan              | 320                                    | 8.8        | (5.9-13.0)                     |
| Benzie-Leelanau                 | 105                                    | 5.3        | (2.6-10.5)                     |
| Grand Traverse                  | 217                                    | 2.8        | (1.3-5.9)                      |
| <b>Region 10</b>                | 1,151                                  | 7.4        | (5.9-9.3)                      |
| Bay                             | 264                                    | 5.8        | (3.5-9.5)                      |
| Huron                           | 95                                     | 4.4        | (1.6-11.6)                     |
| Saginaw                         | 575                                    | 9.1        | (6.7-12.2)                     |
| Sanilac                         | 102                                    | 5.4        | (2.5-11.2)                     |
| Tuscola                         | 115                                    | 8.7        | (4.7-15.3)                     |
| <b>Region 11</b>                | 692                                    | 8.9        | (6.4-12.2)                     |
| Central Michigan                | 474                                    | 9.6        | (6.8-13.2)                     |
| Midland                         | 218                                    | 7.5        | (3.3-16.2)                     |
| <b>Region 12</b>                | 899                                    | 6.8        | (5.2-8.9)                      |
| Luce-Mackinac-Alger-Schoolcraft | 131                                    | 6.7        | (3.2-13.8)                     |
| Western Upper Peninsula         | 182                                    | 7.7        | (3.9-14.7)                     |
| Delta-Menominee                 | 194                                    | 9.2        | (5.5-14.9)                     |
| Chippewa                        | 98                                     | 5.1        | (2.4-10.4)                     |
| Dickinson-Iron                  | 130                                    | 4.4        | (2.1-9.0)                      |
| Marquette                       | 164                                    | 6.1        | (3.3-10.9)                     |

<sup>a</sup> The proportion who reported 14 or more days, out of the previous 30, on which either poor physical health or poor mental health kept them from doing their usual activities, such as self-care, work, and recreation.

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 5: Life Satisfaction<br/>Michigan BRFSS, 2006-2008 Combined</b> |  |            |                                |
|--|--|------------|--------------------------------|
| <b>Geographic Area</b>   | <b>Dissatisfied or Very Dissatisfied<sup>a</sup></b> |            |                                |
|  | <b>N</b>   | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>  | <b>21,932</b>  | <b>6.1</b> | <b>(5.7-6.5)</b>               |
| <b>Region 1</b>  | 9,530  | 6.6        | (3.0-7.3)                      |
| Livingston   | 345  | 3.4        | (1.6-7.2)                      |
| Macomb   | 1,291  | 6.9        | (5.3-8.9)                      |
| Monroe   | 290  | 3.4        | (2.1-5.7)                      |
| Oakland  | 2,262  | 4.6        | (3.6-5.8)                      |
| St. Clair  | 340  | 6.1        | (3.7-9.9)                      |
| Washtenaw  | 656  | 4.1        | (2.7-6.2)                      |
| City of Detroit  | 2,220  | 12.3       | (10.4-14.6)                    |
| Wayne exc. Detroit   | 2,106  | 6.5        | (5.1-8.2)                      |
| <b>Region 2</b>  | 1,338  | 5.5        | (4.2-7.2)                      |
| Genesee  | 991  | 6.4        | (4.7-8.7)                      |
| Lapeer   | 182  | 2.2        | (0.9-5.1)                      |
| Shiawassee   | 165  | 4.1        | (1.7-9.5)                      |
| <b>Region 3</b>  | 614  | 5.4        | (3.7-7.8)                      |
| Jackson  | 386  | 6.4        | (4.1-10.0)                     |
| Lenawee  | 228  | 3.5        | (1.9-6.6)                      |
| <b>Region 4</b>  | 1,276  | 6.1        | (4.6-8.0)                      |
| Barry-Eaton  | 385  | 6.1        | (3.5-10.3)                     |
| Mid-Michigan <sup>b</sup>  | 513  | 3.7        | (2.3-5.8)                      |
| Ingham   | 601  | 7.1        | (5.0-10.2)                     |
| <b>Region 5</b>  | 1,132  | 7.2        | (5.4-9.4)                      |
| Branch-Hillsdale-St. Joseph  | 305  | 7.3        | (4.3-12.2)                     |
| Calhoun  | 285  | 10.1       | (6.2-16.0)                     |
| Kalamazoo  | 542  | 5.4        | (3.4-8.5)                      |
| <b>Region 6</b>  | 767  | 5.6        | (4.0-7.9)                      |
| Van Buren-Cass   | 297  | 4.7        | (2.5-8.8)                      |
| Berrien  | 470  | 6.4        | (4.2-9.5)                      |
| <b>Region 7</b>  | 2,297  | 4.3        | (3.3-5.6)                      |
| Allegan  | 219  | 5.5        | (2.5-11.6)                     |
| Ionia  | 137  | 1.2        | (0.3-4.2)                      |
| Kent   | 1,166  | 4.7        | (3.2-6.8)                      |
| Mid-Michigan <sup>b</sup>  | 513  | 3.7        | (2.3-5.8)                      |
| Ottawa   | 552  | 4.1        | (2.6-6.4)                      |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 5 Cont'd</b>           |  |            |                                |
|---------------------------------|--|------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Dissatisfied or Very Dissatisfied<sup>a</sup></b> |            |                                |
|                                 | <b>N</b>   | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>21,932</b>  | <b>6.1</b> | <b>(5.7-6.5)</b>               |
| <b>Region 8</b>                 | 1,138  | 7.3        | (5.5-9.7)                      |
| District #10                    | 711  | 6.1        | (4.3-8.7)                      |
| Muskegon                        | 427  | 9.4        | (6.0-14.6)                     |
| <b>Region 9</b>                 | 1,102  | 6.1        | (4.6-8.1)                      |
| District #2                     | 213  | 5.5        | (3.1-9.8)                      |
| District #4                     | 249  | 6.3        | (3.5-11.0)                     |
| Northwest Michigan              | 320  | 7.5        | (4.3-12.7)                     |
| Benzie-Leelanau                 | 104  | 10.6       | (5.6-19.1)                     |
| Grand Traverse                  | 216  | 1.9        | (0.8-4.4)                      |
| <b>Region 10</b>                | 1,143  | 5.7        | (4.3-7.6)                      |
| Bay                             | 260  | 3.7        | (1.6-8.6)                      |
| Huron                           | 96   | 2.7        | (0.7-9.6)                      |
| Saginaw                         | 568  | 7.8        | (5.4-11.1)                     |
| Sanilac                         | 103  | 6.9        | (3.2-14.2)                     |
| Tuscola                         | 116  | 3.8        | (1.7-8.7)                      |
| <b>Region 11</b>                | 684  | 7.1        | (5.0-9.9)                      |
| Central Michigan                | 471  | 8.0        | (5.5-11.6)                     |
| Midland                         | 213  | 5.1        | (2.3-11.0)                     |
| <b>Region 12</b>                | 891  | 5.0        | (3.5-7.2)                      |
| Luce-Mackinac-Alger-Schoolcraft | 130  | 4.2        | (2.0-8.5)                      |
| Western Upper Peninsula         | 179  | 4.4        | (2.3-8.3)                      |
| Delta-Menominee                 | 193  | 9.4        | (4.7-17.8)                     |
| Chippewa                        | 98   | 4.3        | (1.6-11.0)                     |
| Dickinson-Iron                  | 130  | 3.9        | (1.2-12.0)                     |
| Marquette                       | 161  | 2.8        | (1.3-6.1)                      |

<sup>a</sup> The proportion who reported either "Dissatisfied" or "Very Dissatisfied" to the following question: "In general, how satisfied are you with your life?"

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 6: Social and Emotional Support<br/>Michigan BRFSS, 2006-2008 Combined</b> |  |            |                                |
|---|--|------------|--------------------------------|
| <b>Geographic Area</b>  | <b>Rarely or Never Receive Needed Social and Emotional Support<sup>a</sup></b> |            |                                |
|   | <b>N</b>   | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>   | <b>21,696</b>  | <b>6.7</b> | <b>(6.3-7.1)</b>               |
| <b>Region 1</b>   | 9,411  | 6.9        | (6.3-7.6)                      |
| Livingston  | 345  | 5.0        | (3.0-8.1)                      |
| Macomb  | 1,270  | 6.9        | (5.3-9.0)                      |
| Monroe  | 284  | 8.5        | (5.1-13.7)                     |
| Oakland   | 2,249  | 5.9        | (4.8-7.1)                      |
| St. Clair   | 338  | 8.7        | (5.7-12.9)                     |
| Washtenaw   | 647  | 3.8        | (2.4-5.9)                      |
| City of Detroit   | 2,188  | 11.6       | (9.8-13.6)                     |
| Wayne exc. Detroit  | 2,071  | 5.7        | (4.6-7.1)                      |
| <b>Region 2</b>   | 1,320  | 6.4        | (4.9-8.1)                      |
| Genesee   | 978  | 7.6        | (5.7-9.9)                      |
| Lapeer  | 179  | 4.5        | (2.4-8.3)                      |
| Shiawassee  | 163  | 2.0        | (0.8-5.1)                      |
| <b>Region 3</b>   | 610  | 5.6        | (4.0-7.8)                      |
| Jackson   | 384  | 5.7        | (3.7-8.7)                      |
| Lenawee   | 226  | 5.3        | (3.1-9.1)                      |
| <b>Region 4</b>   | 1,264  | 5.8        | (4.5-7.6)                      |
| Barry-Eaton   | 383  | 6.8        | (4.2-10.9)                     |
| Mid-Michigan <sup>b</sup>   | 509  | 6.1        | (4.2-8.8)                      |
| Ingham  | 595  | 5.3        | (3.5-7.9)                      |
| <b>Region 5</b>   | 1,120  | 7.8        | (6.0-10.1)                     |
| Branch-Hillsdale-St. Joseph   | 301  | 7.5        | (4.4-12.3)                     |
| Calhoun   | 279  | 7.7        | (4.3-13.3)                     |
| Kalamazoo   | 540  | 8.1        | (5.7-11.5)                     |
| <b>Region 6</b>   | 757  | 8.0        | (5.7-11.1)                     |
| Van Buren-Cass  | 295  | 7.0        | (3.4-13.9)                     |
| Berrien   | 462  | 8.7        | (6.3-12.1)                     |
| <b>Region 7</b>   | 2,291  | 5.0        | (4.0-6.4)                      |
| Allegan   | 219  | 4.4        | (2.2-8.6)                      |
| Ionia   | 137  | 4.1        | (2.1-8.0)                      |
| Kent  | 1,162  | 5.3        | (3.8-7.4)                      |
| Mid-Michigan <sup>b</sup>   | 509  | 6.1        | (4.2-8.8)                      |
| Ottawa  | 550  | 4.2        | (2.4-7.4)                      |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 6 Cont'd</b>           |  |            |                                |
|---------------------------------|--|------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Rarely or Never Receive the Social and Emotional Support that is Needed<sup>a</sup></b> |            |                                |
|                                 | <b>N</b>   | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>21,696</b>  | <b>6.7</b> | <b>(6.3-7.1)</b>               |
| <b>Region 8</b>                 | 1,133  | 7.5        | (5.8-9.6)                      |
| District #10                    | 709  | 7.4        | (5.6-9.7)                      |
| Muskegon                        | 424  | 7.7        | (4.7-12.2)                     |
| <b>Region 9</b>                 | 1,091  | 7.0        | (5.5-8.9)                      |
| District #2                     | 211  | 6.8        | (4.1-11.2)                     |
| District #4                     | 244  | 5.7        | (3.4-9.4)                      |
| Northwest Michigan              | 316  | 8.9        | (5.7-13.6)                     |
| Benzie-Leelanau                 | 104  | 10.2       | (5.4-18.6)                     |
| Grand Traverse                  | 216  | 4.1        | (2.3-7.3)                      |
| <b>Region 10</b>                | 1,126  | 7.2        | (5.5-9.4)                      |
| Bay                             | 260  | 6.8        | (3.9-11.8)                     |
| Huron                           | 92   | 1.1        | (0.3-4.4)                      |
| Saginaw                         | 556  | 7.9        | (5.3-11.7)                     |
| Sanilac                         | 101  | 12.6       | (6.8-21.9)                     |
| Tuscola                         | 117  | 5.7        | (2.7-11.6)                     |
| <b>Region 11</b>                | 676  | 8.1        | (5.9-11.1)                     |
| Central Michigan                | 466  | 9.8        | (7.0-13.7)                     |
| Midland                         | 210  | 4.3        | (1.7-10.6)                     |
| <b>Region 12</b>                | 877  | 5.2        | (3.8-7.1)                      |
| Luce-Mackinac-Alger-Schoolcraft | 130  | 3.9        | (1.9-8.1)                      |
| Western Upper Peninsula         | 177  | 9.9        | (5.4-17.7)                     |
| Delta-Menominee                 | 187  | 4.8        | (2.5-9.3)                      |
| Chippewa                        | 96   | 3.7        | (1.4-9.3)                      |
| Dickinson-Iron                  | 126  | 3.8        | (1.9-7.6)                      |
| Marquette                       | 161  | 3.7        | (1.6-8.2)                      |

<sup>a</sup> The proportion who reported either "Rarely" or "Never" to the following question: "How often do you get the social and emotional support you need?"

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 7: Disability<br/>Michigan BRFSS, 2006-2008 Combined</b> |                               |             |                                |
|---|-------------------------------|-------------|--------------------------------|
| <b>Geographic Area</b>  | <b>Disability<sup>a</sup></b> |             |                                |
|   | <b>N</b>                      | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>   | <b>22,418</b>                 | <b>23.8</b> | <b>(23.1-24.5)</b>             |
| <b>Region 1</b>   | 9,775                         | 23.0        | (22.0-24.0)                    |
| Livingston  | 353                           | 22.9        | (17.9-28.8)                    |
| Macomb  | 1,313                         | 20.3        | (18.0-22.8)                    |
| Monroe  | 298                           | 24.2        | (18.9-30.4)                    |
| Oakland   | 2,327                         | 22.7        | (20.7-24.9)                    |
| St. Clair   | 347                           | 25.3        | (20.2-31.1)                    |
| Washtenaw   | 661                           | 23.2        | (19.5-27.3)                    |
| City of Detroit   | 2,299                         | 27.4        | (25.0-30.0)                    |
| Wayne exc. Detroit  | 2,132                         | 21.5        | (19.4-23.6)                    |
| <b>Region 2</b>   | 1,368                         | 29.8        | (26.7-33.1)                    |
| Genesee   | 1,019                         | 29.8        | (26.3-33.7)                    |
| Lapeer  | 183                           | 26.8        | (20.2-34.6)                    |
| Shiawassee  | 166                           | 32.8        | (23.4-43.7)                    |
| <b>Region 3</b>   | 621                           | 25.6        | (21.9-29.7)                    |
| Jackson   | 390                           | 24.4        | (19.9-29.5)                    |
| Lenawee   | 231                           | 27.6        | (21.4-34.8)                    |
| <b>Region 4</b>   | 1,297                         | 20.6        | (18.2-23.2)                    |
| Barry-Eaton   | 394                           | 18.9        | (14.9-23.7)                    |
| Mid-Michigan <sup>b</sup>   | 515                           | 24.1        | (19.8-29.0)                    |
| Ingham  | 613                           | 20.8        | (17.4-24.6)                    |
| <b>Region 5</b>   | 1,164                         | 26.1        | (23.1-29.3)                    |
| Branch-Hillsdale-St. Joseph                                       | 313                           | 25.3        | (20.0-31.4)                    |
| Calhoun   | 292                           | 27.7        | (21.4-34.9)                    |
| Kalamazoo   | 559                           | 25.7        | (21.6-30.2)                    |
| <b>Region 6</b>   | 783                           | 21.1        | (18.0-24.4)                    |
| Van Buren-Cass  | 306                           | 20.7        | (16.1-26.1)                    |
| Berrien   | 477                           | 21.3        | (17.5-25.8)                    |
| <b>Region 7</b>   | 2,332                         | 20.2        | (18.2-22.4)                    |
| Allegan   | 219                           | 16.6        | (11.6-23.3)                    |
| Ionia   | 139                           | 14.6        | (10.0-20.7)                    |
| Kent  | 1,188                         | 21.0        | (18.1-24.2)                    |
| Mid-Michigan <sup>b</sup>   | 515                           | 24.1        | (19.8-29.0)                    |
| Ottawa  | 561                           | 19.0        | (15.6-23.0)                    |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 7 Cont'd</b>           |                               |             |                                |
|---------------------------------|-------------------------------|-------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Disability<sup>a</sup></b> |             |                                |
|                                 | <b>N</b>                      | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>22,418</b>                 | <b>23.8</b> | <b>(23.1-24.5)</b>             |
| <b>Region 8</b>                 | 1,163                         | 29.7        | (26.4-33.1)                    |
| District #10                    | 724                           | 29.8        | (25.7-34.3)                    |
| Muskegon                        | 439                           | 29.4        | (24.5-34.9)                    |
| <b>Region 9</b>                 | 1,126                         | 25.7        | (22.8-28.8)                    |
| District #2                     | 220                           | 31.6        | (24.7-39.4)                    |
| District #4                     | 258                           | 30.8        | (24.9-37.4)                    |
| Northwest Michigan              | 324                           | 23.7        | (18.8-29.5)                    |
| Benzie-Leelanau                 | 104                           | 25.9        | (17.0-37.4)                    |
| Grand Traverse                  | 220                           | 17.0        | (12.1-23.4)                    |
| <b>Region 10</b>                | 1,165                         | 22.6        | (20.0-25.4)                    |
| Bay                             | 268                           | 17.9        | (13.6-23.3)                    |
| Huron                           | 100                           | 23.3        | (15.5-33.3)                    |
| Saginaw                         | 577                           | 25.0        | (21.0-29.5)                    |
| Sanilac                         | 103                           | 23.6        | (16.0-33.2)                    |
| Tuscola                         | 117                           | 22.8        | (15.7-31.8)                    |
| <b>Region 11</b>                | 696                           | 26.8        | (23.1-30.8)                    |
| Central Michigan                | 478                           | 28.8        | (24.2-33.8)                    |
| Midland                         | 218                           | 22.4        | (16.8-29.2)                    |
| <b>Region 12</b>                | 908                           | 25.3        | (22.2-28.7)                    |
| Luce-Mackinac-Alger-Schoolcraft | 131                           | 30.7        | (21.3-42.0)                    |
| Western Upper Peninsula         | 187                           | 25.3        | (19.2-32.7)                    |
| Delta-Menominee                 | 195                           | 24.5        | (18.4-31.8)                    |
| Chippewa                        | 100                           | 25.0        | (16.8-35.6)                    |
| Dickinson-Iron                  | 133                           | 28.0        | (19.9-37.8)                    |
| Marquette                       | 162                           | 20.5        | (14.4-28.3)                    |

<sup>a</sup> 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.

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 8: Weight Status<br/>Michigan BRFSS, 2006-2008 Combined</b> |                    |                          |                                |                               |                                |  |                                |
|--|--------------------|--------------------------|--------------------------------|-------------------------------|--------------------------------|--|--------------------------------|
| <b>Geographic Area</b>   | <b>Sample Size</b> | <b>Obese<sup>a</sup></b> |                                | <b>Overweight<sup>b</sup></b> |                                | <b>Not Overweight or Obese<sup>c</sup></b> |                                |
|  | <b>N</b>           | <b>%</b>                 | <b>95% Confidence Interval</b> | <b>%</b>                      | <b>95% Confidence Interval</b> | <b>%</b>                                   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>  | <b>21,463</b>      | <b>29.2</b>              | <b>(28.4-30.0)</b>             | <b>35.7</b>                   | <b>(34.9-36.6)</b>             | <b>35.0</b>                                | <b>(34.2-35.9)</b>             |
| <b>Region 1</b>  | 9,354              | 28.5                     | (27.3-29.8)                    | 35.3                          | (34.0-36.6)                    | 36.2                                       | (34.9-37.5)                    |
| Livingston   | 346                | 20.6                     | (15.9-26.2)                    | 37.3                          | (31.2-43.9)                    | 42.1                                       | (35.5-49.0)                    |
| Macomb   | 1,267              | 28.2                     | (25.1-31.4)                    | 35.7                          | (32.4-39.1)                    | 36.2                                       | (32.6-39.8)                    |
| Monroe   | 286                | 30.7                     | (24.4-37.7)                    | 37.4                          | (30.7-44.7)                    | 31.9                                       | (25.3-39.2)                    |
| Oakland  | 2,226              | 23.8                     | (21.6-26.3)                    | 36.7                          | (34.1-39.4)                    | 39.4                                       | (36.7-42.2)                    |
| St. Clair  | 323                | 30.5                     | (24.7-36.9)                    | 34.1                          | (28.2-40.5)                    | 35.4                                       | (28.9-42.5)                    |
| Washtenaw  | 642                | 26.2                     | (21.9-31.1)                    | 34.5                          | (30.1-39.3)                    | 39.3                                       | (34.6-44.2)                    |
| City of Detroit  | 2,186              | 37.9                     | (35.0-41.0)                    | 32.8                          | (30.0-35.7)                    | 29.3                                       | (26.5-32.4)                    |
| Wayne exc. Detroit   | 2,050              | 28.9                     | (26.3-31.6)                    | 35.0                          | (32.4-37.8)                    | 36.1                                       | (33.3-39.0)                    |
| <b>Region 2</b>  | 1,306              | 33.6                     | (30.1-37.4)                    | 32.1                          | (28.8-35.5)                    | 34.3                                       | (30.8-38.0)                    |
| Genesee  | 970                | 34.5                     | (30.3-39.0)                    | 31.1                          | (27.4-35.2)                    | 34.3                                       | (30.3-38.6)                    |
| Lapeer   | 176                | 35.8                     | (27.3-45.3)                    | 31.4                          | (23.9-40.0)                    | 32.8                                       | (25.0-41.8)                    |
| Shiawassee   | 160                | 26.3                     | (18.8-35.6)                    | 37.8                          | (28.3-48.3)                    | 35.9                                       | (25.8-47.4)                    |
| <b>Region 3</b>  | 597                | 32.5                     | (28.1-37.4)                    | 40.5                          | (35.6-45.5)                    | 27.0                                       | (22.8-31.6)                    |
| Jackson  | 379                | 31.3                     | (25.7-37.5)                    | 39.6                          | (33.9-45.6)                    | 29.1                                       | (23.7-35.2)                    |
| Lenawee  | 218                | 34.7                     | (27.4-42.7)                    | 41.9                          | (33.9-45.6)                    | 23.4                                       | (17.6-30.4)                    |
| <b>Region 4</b>  | 1,240              | 30.2                     | (26.8-33.7)                    | 37.8                          | (34.4-41.4)                    | 32.0                                       | (28.7-35.5)                    |
| Barry-Eaton  | 380                | 30.9                     | (25.3-37.1)                    | 37.2                          | (31.3-43.4)                    | 32.0                                       | (26.2-38.3)                    |
| Mid-Michigan <sup>d</sup>  | 494                | 32.7                     | (27.6-38.3)                    | 32.8                          | (27.7-38.2)                    | 34.5                                       | (29.2-40.2)                    |
| Ingham   | 583                | 27.8                     | (22.8-33.3)                    | 41.1                          | (35.7-46.7)                    | 31.1                                       | (26.4-36.3)                    |
| <b>Region 5</b>  | 1,116              | 29.0                     | (25.6-32.5)                    | 33.1                          | (29.7-36.6)                    | 38.0                                       | (34.3-41.8)                    |
| Branch-Hillsdale-St. Joseph  | 296                | 27.7                     | (22.1-34.0)                    | 39.0                          | (32.4-46.1)                    | 33.3                                       | (26.8-40.5)                    |
| Calhoun  | 279                | 33.4                     | (26.3-41.4)                    | 29.2                          | (23.1-36.2)                    | 37.4                                       | (30.1-45.2)                    |
| Kalamazoo  | 541                | 27.3                     | (22.7-32.5)                    | 31.8                          | (27.1-36.8)                    | 40.9                                       | (35.6-46.5)                    |
| <b>Region 6</b>  | 758                | 26.6                     | (22.9-30.7)                    | 42.2                          | (37.5-47.1)                    | 31.1                                       | (27.0-35.6)                    |
| Van Buren-Cass   | 296                | 25.1                     | (19.6-31.7)                    | 39.7                          | (32.2-47.6)                    | 35.2                                       | (28.3-42.7)                    |
| Berrien  | 462                | 27.8                     | (22.9-33.2)                    | 44.2                          | (38.3-50.3)                    | 28.0                                       | (23.1-33.6)                    |
| <b>Region 7</b>  | 2,226              | 26.2                     | (23.8-28.6)                    | 35.4                          | (32.9-38.0)                    | 38.4                                       | (35.8-41.2)                    |
| Allegan  | 211                | 30.2                     | (21.4-40.8)                    | 32.6                          | (25.0-41.2)                    | 37.2                                       | (28.9-46.3)                    |
| Ionia  | 134                | 28.5                     | (19.9-39.1)                    | 34.5                          | (25.6-44.6)                    | 37.0                                       | (27.5-47.5)                    |
| Kent   | 1,129              | 25.6                     | (22.5-29.0)                    | 36.1                          | (32.5-39.8)                    | 38.3                                       | (34.5-42.1)                    |
| Mid-Michigan <sup>d</sup>  | 494                | 32.7                     | (27.6-38.3)                    | 32.8                          | (27.7-38.2)                    | 34.5                                       | (29.2-40.2)                    |
| Ottawa   | 535                | 23.3                     | (19.0-28.3)                    | 35.9                          | (30.8-41.2)                    | 40.8                                       | (35.4-46.5)                    |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| Table 8 Cont'd                  |               |                    |                    |                         |                    |                                      |                    |
|---------------------------------|---------------|--------------------|--------------------|-------------------------|--------------------|--------------------------------------|--------------------|
| Geographic Area                 | Sample Size   | Obese <sup>a</sup> |                    | Overweight <sup>b</sup> |                    | Not Overweight or Obese <sup>c</sup> |                    |
|                                 |               | N                  | %                  | 95% Confidence Interval | %                  | 95% Confidence Interval              | %                  |
| <b>Michigan Total</b>           | <b>21,463</b> | <b>29.2</b>        | <b>(28.4-30.0)</b> | <b>35.7</b>             | <b>(34.9-36.6)</b> | <b>35.0</b>                          | <b>(34.2-35.9)</b> |
| <b>Region 8</b>                 | 1,117         | 30.4               | (27.1-33.9)        | 36.4                    | (32.8-40.2)        | 33.2                                 | (29.7-36.9)        |
| District #10                    | 705           | 30.3               | (26.3-34.7)        | 37.6                    | (33.1-42.3)        | 32.0                                 | (27.8-36.7)        |
| Muskegon                        | 412           | 30.4               | (25.0-36.4)        | 34.3                    | (28.3-40.9)        | 35.3                                 | (29.3-41.7)        |
| <b>Region 9</b>                 | 1,080         | 29.4               | (26.3-32.8)        | 37.5                    | (34.1-41.1)        | 33.0                                 | (29.6-36.7)        |
| District #2                     | 213           | 35.3               | (28.0-43.5)        | 32.5                    | (25.6-40.1)        | 32.2                                 | (24.5-41.0)        |
| District #4                     | 252           | 30.6               | (24.4-37.7)        | 41.0                    | (34.1-48.2)        | 28.4                                 | (22.2-35.6)        |
| Northwest Michigan              | 307           | 29.1               | (23.6-35.2)        | 34.7                    | (28.5-41.5)        | 36.2                                 | (29.9-43.1)        |
| Benzie-Leelanau                 | 101           | 30.4               | (20.4-42.6)        | 34.6                    | (24.0-47.0)        | 35.0                                 | (23.7-48.4)        |
| Grand Traverse                  | 207           | 22.1               | (15.9-29.8)        | 44.6                    | (36.2-53.2)        | 33.4                                 | (25.5-42.3)        |
| <b>Region 10</b>                | 1,124         | 33.2               | (29.8-36.8)        | 34.4                    | (31.0-38.0)        | 32.4                                 | (28.8-36.2)        |
| Bay                             | 257           | 30.2               | (23.9-37.4)        | 36.3                    | (29.3-43.9)        | 33.4                                 | (26.1-41.7)        |
| Huron                           | 94            | 26.5               | (17.3-38.3)        | 40.7                    | (29.2-53.4)        | 32.8                                 | (21.1-47.0)        |
| Saginaw                         | 556           | 36.8               | (31.6-42.2)        | 32.3                    | (27.4-37.7)        | 30.9                                 | (25.9-36.4)        |
| Sanilac                         | 103           | 37.5               | (27.7-48.4)        | 29.2                    | (20.4-39.9)        | 33.3                                 | (23.7-44.6)        |
| Tuscola                         | 114           | 28.4               | (19.3-39.7)        | 37.3                    | (27.2-48.7)        | 34.3                                 | (23.7-46.7)        |
| <b>Region 11</b>                | 657           | 29.8               | (25.7-34.2)        | 34.5                    | (30.0-39.3)        | 35.7                                 | (30.9-40.7)        |
| Central Michigan                | 455           | 29.4               | (24.6-34.8)        | 36.1                    | (30.6-41.9)        | 34.5                                 | (28.7-40.8)        |
| Midland                         | 202           | 30.6               | (23.5-38.8)        | 31.0                    | (23.4-39.8)        | 38.4                                 | (30.4-47.0)        |
| <b>Region 12</b>                | 870           | 30.7               | (27.0-34.7)        | 38.0                    | (34.1-42.2)        | 31.2                                 | (27.0-34.7)        |
| Luce-Mackinac-Alger-Schoolcraft | 125           | 28.6               | (20.4-38.5)        | 38.6                    | (28.4-49.8)        | 32.9                                 | (22.3-45.5)        |
| Western Upper Peninsula         | 177           | 32.5               | (24.9-41.0)        | 34.9                    | (27.3-43.4)        | 32.6                                 | (24.5-41.9)        |
| Delta-Menominee                 | 190           | 27.9               | (20.5-36.7)        | 36.9                    | (28.1-46.7)        | 35.2                                 | (26.9-44.5)        |
| Chippewa                        | 97            | 32.2               | (21.4-45.5)        | 26.2                    | (17.2-37.7)        | 41.6                                 | (28.4-56.2)        |
| Dickinson-Iron                  | 128           | 33.7               | (23.9-45.1)        | 34.0                    | (24.7-44.7)        | 32.3                                 | (24.0-42.0)        |
| Marquette                       | 153           | 30.5               | (22.3-40.2)        | 52.7                    | (43.3-61.9)        | 16.8                                 | (11.7-23.6)        |

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

<sup>a</sup> The proportion of respondents whose BMI was greater than or equal to 30.0.

<sup>b</sup> The proportion of respondents whose BMI was greater than or equal to 25.0, but less than 30.0.

<sup>c</sup> The proportion of respondents whose BMI was less than 25.0.

<sup>d</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 9: No Health Care Coverage Among Those Aged 18-64 Years<br/>Michigan BRFSS, 2006-2008 Combined</b> |  |             |                                |
|---|--|-------------|--------------------------------|
| <b>Geographic Area</b>  | <b>No Health Care Coverage<sup>a</sup></b> |             |                                |
|   | <b>N</b>                                   | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>   | <b>15,876</b>                              | <b>14.2</b> | <b>(13.4-14.9)</b>             |
| <b>Region 1</b>   | 6,940                                      | 13.4        | (12.3-14.6)                    |
| Livingston  | 265  | 12.9        | (8.1-19.9)                     |
| Macomb  | 935  | 13.6        | (10.9-16.8)                    |
| Monroe  | 222  | 9.3         | (5.7-14.8)                     |
| Oakland   | 1,603                                      | 8.7         | (6.9-10.7)                     |
| St. Clair   | 263  | 17.1        | (11.8-24.2)                    |
| Washtenaw   | 513  | 7.5         | (5.0-11.2)                     |
| City of Detroit   | 1,597                                      | 25.3        | (22.1-28.8)                    |
| Wayne exc. Detroit  | 1,520                                      | 11.8        | (9.6-14.5)                     |
| <b>Region 2</b>   | 970  | 14.8        | (11.7-18.5)                    |
| Genesee   | 734  | 13.2        | (10.1-17.2)                    |
| Lapeer  | 128  | 19.6        | (11.6-31.0)                    |
| Shiawassee  | 108  | 18.2        | (8.9-33.4)                     |
| <b>Region 3</b>   | 440  | 11.3        | (7.9-15.8)                     |
| Jackson   | 279  | 13.8        | (9.2-20.2)                     |
| Lenawee   | 161  | 7.0         | (3.5-13.4)                     |
| <b>Region 4</b>   | 960  | 10.8        | (8.4-13.7)                     |
| Barry-Eaton   | 295  | 12.9        | (8.6-18.9)                     |
| Mid-Michigan <sup>b</sup>   | 372  | 8.3         | (5.3-12.9)                     |
| Ingham  | 450  | 11.5        | (8.0-16.3)                     |
| <b>Region 5</b>   | 830  | 16.1        | (13.0-19.8)                    |
| Branch-Hillsdale-St. Joseph   | 218  | 15.8        | (10.6-22.9)                    |
| Calhoun   | 213  | 18.9        | (12.8-27.0)                    |
| Kalamazoo   | 399  | 14.7        | (10.3-20.6)                    |
| <b>Region 6</b>   | 553  | 11.7        | (8.4-16.0)                     |
| Van Buren-Cass  | 220  | 11.1        | (6.4-18.6)                     |
| Berrien   | 333  | 12.2        | (8.1-17.8)                     |
| <b>Region 7</b>   | 1,738                                      | 11.8        | (9.9-14.1)                     |
| Allegan   | 167  | 17.3        | (10.8-26.5)                    |
| Ionia   | 103  | 17.3        | (9.0-30.5)                     |
| Kent  | 888  | 11.4        | (8.9-14.6)                     |
| Mid-Michigan <sup>b</sup>   | 372  | 8.3         | (5.3-12.9)                     |
| Ottawa  | 423  | 9.6         | (6.3-14.4)                     |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 9 Cont'd</b>           |  |             |                                |
|---------------------------------|--|-------------|--------------------------------|
| <b>Geographic Area</b>          | <b>No Health Care Coverage<sup>a</sup></b> |             |                                |
|                                 | <b>N</b>                                   | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>15,876</b>                              | <b>14.2</b> | <b>(13.4-14.9)</b>             |
| <b>Region 8</b>                 | 801  | 18.8        | (15.3-23.0)                    |
| District #10                    | 502  | 19.5        | (15.1-24.8)                    |
| Muskegon                        | 299  | 17.7        | (12.3-24.9)                    |
| <b>Region 9</b>                 | 756  | 18.5        | (15.2-22.4)                    |
| District #2                     | 142  | 19.5        | (12.5-29.0)                    |
| District #4                     | 158  | 18.7        | (12.5-26.9)                    |
| Northwest Michigan              | 234  | 18.2        | (13.0-24.8)                    |
| Benzie-Leelanau                 | 68   | 20.7        | (10.1-37.8)                    |
| Grand Traverse                  | 154  | 17.0        | (9.9-27.6)                     |
| <b>Region 10</b>                | 782  | 14.0        | (11.0-17.8)                    |
| Bay                             | 181  | 18.4        | (11.7-27.6)                    |
| Huron                           | 51   | 9.3         | (4.0-20.1)                     |
| Saginaw                         | 403  | 13.6        | (9.5-19.0)                     |
| Sanilac                         | 68   | 12.4        | (6.2-23.3)                     |
| Tuscola                         | 79   | 9.4         | (3.7-21.8)                     |
| <b>Region 11</b>                | 490  | 21.8        | (17.0-27.4)                    |
| Central Michigan                | 335  | 22.8        | (17.2-29.6)                    |
| Midland                         | 155  | 19.4        | (11.6-30.5)                    |
| <b>Region 12</b>                | 608  | 18.3        | (14.5-22.9)                    |
| Luce-Mackinac-Alger-Schoolcraft | 95   | 16.2        | (9.2-26.9)                     |
| Western Upper Peninsula         | 126  | 17.1        | (10.4-26.7)                    |
| Delta-Menominee                 | 121  | 26.4        | (16.3-39.8)                    |
| Chippewa                        | 65   | 19.0        | (8.1-38.3)                     |
| Dickinson-Iron                  | 86   | 10.6        | (4.5-22.8)                     |
| Marquette                       | 115  | 17.9        | (11.4-27.0)                    |

<sup>a</sup> Among those 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.  
<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

**Table 10: Health Care Access  
Michigan BRFSS, 2006-2008 Combined**

| Geographic Area             | No Personal Health Care Provider <sup>a</sup> |             |                         | No Health Care Access During Past 12 Months Due to Cost <sup>b</sup> |             |                         |
|-----------------------------|---|-------------|-------------------------|--|-------------|-------------------------|
|                             | N   | %           | 95% Confidence Interval | N  | %           | 95% Confidence Interval |
| <b>Michigan Total</b>       | <b>22,546</b>                                 | <b>13.3</b> | <b>(12.7-14.0)</b>      | <b>22,572</b>  | <b>12.0</b> | <b>(11.4-12.6)</b>      |
| <b>Region 1</b>             | 9,834   | 13.7        | (12.6-14.7)             | 9,845  | 12.0        | (11.1-12.9)             |
| Livingston                  | 356   | 13.3        | (9.0-19.2)              | 356  | 9.8         | (6.2-15.2)              |
| Macomb                      | 1,327   | 13.3        | (10.9-16.3)             | 1,328  | 12.3        | (10.1-15.0)             |
| Monroe                      | 300   | 10.7        | (6.6-17.0)              | 300  | 7.5         | (4.6-11.9)              |
| Oakland                     | 2,336   | 11.0        | (9.2-13.0)              | 2,334  | 9.3         | (7.8-11.1)              |
| St. Clair                   | 347   | 17.0        | (12.0-23.4)             | 346  | 12.2        | (8.1-17.9)              |
| Washtenaw                   | 665   | 10.7        | (7.6-14.8)              | 666  | 7.6         | (5.4-10.6)              |
| City of Detroit             | 2,303   | 21.5        | (18.8-24.5)             | 2,311  | 18.7        | (16.3-21.4)             |
| Wayne exc. Detroit          | 2,154   | 12.2        | (10.2-14.5)             | 2,154  | 12.3        | (10.4-14.5)             |
| <b>Region 2</b>             | 1,380   | 11.3        | (9.1-14.1)              | 1,378  | 14.0        | (11.6-16.7)             |
| Genesee                     | 1,028   | 12.4        | (9.6-15.9)              | 1,027  | 13.6        | (10.9-16.7)             |
| Lapeer                      | 184   | 11.6        | (6.8-19.2)              | 185  | 13.3        | (8.3-20.5)              |
| Shiawassee                  | 168   | 5.2         | (2.7-9.8)               | 166  | 16.8        | (10.1-26.5)             |
| <b>Region 3</b>             | 626   | 9.3         | (6.5-13.0)              | 627  | 6.8         | (4.7-9.9)               |
| Jackson                     | 395   | 10.6        | (7.0-15.7)              | 395  | 8.0         | (5.2-12.3)              |
| Lenawee                     | 231   | 7.1         | (3.6-13.3)              | 232  | 4.8         | (2.3-9.9)               |
| <b>Region 4</b>             | 1,310   | 14.0        | (11.3-17.3)             | 1,310  | 10.6        | (8.6-13.0)              |
| Barry-Eaton                 | 398   | 11.6        | (7.9-16.7)              | 397  | 12.2        | (8.6-16.9)              |
| Mid-Michigan <sup>c</sup>   | 519   | 8.9         | (6.0-13.2)              | 521  | 8.2         | (5.7-11.8)              |
| Ingham                      | 619   | 18.4        | (13.8-24.1)             | 618  | 10.6        | (7.7-14.3)              |
| <b>Region 5</b>             | 1,166   | 17.5        | (14.5-21.0)             | 1,167  | 11.8        | (9.4-14.6)              |
| Branch-Hillsdale-St. Joseph | 314   | 19.1        | (13.7-26.1)             | 313  | 13.1        | (9.0-18.7)              |
| Calhoun                     | 293   | 15.2        | (10.3-21.8)             | 294  | 12.5        | (8.2-18.7)              |
| Kalamazoo                   | 559   | 17.9        | (13.5-23.3)             | 560  | 10.6        | (7.4-14.9)              |
| <b>Region 6</b>             | 787   | 20.1        | (16.4-24.5)             | 790  | 11.2        | (8.8-14.1)              |
| Van Buren-Cass              | 305   | 22.0        | (16.0-29.6)             | 306  | 10.4        | (7.0-15.1)              |
| Berrien                     | 482   | 18.6        | (14.2-24.0)             | 484  | 11.8        | (8.7-15.8)              |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 10 Cont'd</b>          |   |             |                                |  |             |                                |
|---------------------------------|---|-------------|--------------------------------|--|-------------|--------------------------------|
| <b>Geographic Area</b>          | <b>No Personal Health Care Provider<sup>a</sup></b> |             |                                | <b>No Health Care Access During Past 12 Months Due to Cost<sup>b</sup></b> |             |                                |
|                                 | <b>N</b>  | <b>%</b>    | <b>95% Confidence Interval</b> | <b>N</b>   | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>22,546</b>                                       | <b>13.3</b> | <b>(12.7-14.0)</b>             | <b>22,572</b>  | <b>12.0</b> | <b>(11.4-12.6)</b>             |
| <b>Region 7</b>                 | 2,341   | 9.0         | (7.4-10.9)                     | 2,344  | 11.0        | (9.2-13.1)                     |
| Allegan                         | 220   | 8.8         | (4.8-15.5)                     | 220  | 10.6        | (6.2-17.5)                     |
| Ionia                           | 140   | 14.7        | (8.1-25.1)                     | 140  | 8.9         | (4.3-17.2)                     |
| Kent                            | 1,191   | 9.6         | (7.4-12.5)                     | 1,193  | 12.8        | (10.0-16.2)                    |
| Mid-Michigan <sup>c</sup>       | 519   | 8.9         | (6.0-13.2)                     | 521  | 8.2         | (5.7-11.8)                     |
| Ottawa                          | 564   | 5.8         | (3.6-9.4)                      | 565  | 8.9         | (6.1-12.8)                     |
| <b>Region 8</b>                 | 1,172   | 10.5        | (8.3-13.2)                     | 1,170  | 13.0        | (10.6-15.9)                    |
| District #10                    | 730   | 11.5        | (8.8-15.0)                     | 729  | 13.1        | (10.2-16.8)                    |
| Muskegon                        | 442   | 8.8         | (5.6-13.6)                     | 441  | 12.8        | (9.0-17.9)                     |
| <b>Region 9</b>                 | 1,126   | 12.9        | (10.5-15.9)                    | 1,131  | 15.5        | (12.9-18.5)                    |
| District #2                     | 221   | 14.9        | (9.3-22.9)                     | 221  | 16.0        | (11.1-22.5)                    |
| District #4                     | 256   | 14.8        | (10.1-21.2)                    | 259  | 16.3        | (11.6-22.5)                    |
| Northwest Michigan              | 323   | 12.8        | (8.5-18.7)                     | 324  | 18.3        | (13.0-25.0)                    |
| Benzie-Leelanau                 | 105   | 12.8        | (6.1-25.0)                     | 106  | 16.8        | (8.7-29.7)                     |
| Grand Traverse                  | 221   | 9.4         | (5.5-15.5)                     | 221  | 9.3         | (5.3-15.6)                     |
| <b>Region 10</b>                | 1,174   | 12.6        | (9.9-15.8)                     | 1,174  | 10.9        | (8.8-13.4)                     |
| Bay                             | 268   | 17.2        | (11.1-25.7)                    | 268  | 11.3        | (7.3-17.1)                     |
| Huron                           | 100   | 13.1        | (6.8-23.7)                     | 100  | 6.0         | (2.8-12.7)                     |
| Saginaw                         | 584   | 12.1        | (8.6-16.9)                     | 585  | 12.0        | (8.9-16.1)                     |
| Sanilac                         | 105   | 9.3         | (4.4-18.4)                     | 104  | 13.8        | (7.3-24.5)                     |
| Tuscola                         | 117   | 5.1         | (1.8-13.5)                     | 117  | 7.3         | (3.6-14.1)                     |
| <b>Region 11</b>                | 696   | 18.4        | (14.4-23.2)                    | 701  | 16.7        | (13.1-21.1)                    |
| Central Michigan                | 480   | 19.9        | (15.0-26.0)                    | 482  | 18.5        | (14.1-23.9)                    |
| Midland                         | 216   | 14.8        | (9.2-23.0)                     | 219  | 12.7        | (7.3-21.3)                     |
| <b>Region 12</b>                | 914   | 18.3        | (14.8-22.4)                    | 915  | 11.3        | (8.8-14.4)                     |
| Luce-Mackinac-Alger-Schoolcraft | 132   | 16.5        | (9.0-28.1)                     | 130  | 7.6         | (4.0-14.1)                     |
| Western Upper Peninsula         | 188   | 21.6        | (14.7-30.7)                    | 188  | 12.2        | (7.9-18.4)                     |
| Delta-Menominee                 | 196   | 18.4        | (11.3-28.5)                    | 198  | 17.1        | (10.0-27.7)                    |
| Chippewa                        | 101   | 22.6        | (10.9-40.9)                    | 101  | 11.0        | (5.7-20.2)                     |
| Dickinson-Iron                  | 132   | 10.1        | (4.6-20.8)                     | 133  | 9.0         | (4.3-18.2)                     |
| Marquette                       | 165   | 19.4        | (12.5-28.7)                    | 165  | 8.5         | (4.6-15.2)                     |

<sup>a</sup> The proportion who reported that they did not have anyone that they thought of as their personal doctor or health care provider.  
<sup>b</sup> The proportion who reported that in the past 12 months there was a time when they needed to see a doctor but could not due to the cost.  
<sup>c</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 11: No Leisure-Time Physical Activity<br/>Michigan BRFSS, 2006-2008 Combined</b> |  |             |                                |
|---|--|-------------|--------------------------------|
| <b>Geographic Area</b>  | <b>No Leisure-Time Physical Activity<sup>a</sup></b> |             |                                |
|   | <b>N</b>   | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>   | <b>22,594</b>  | <b>23.1</b> | <b>(22.4-23.8)</b>             |
| <b>Region 1</b>   | 9,854  | 22.5        | (21.5-23.6)                    |
| Livingston  | 355  | 13.6        | (10.1-18.2)                    |
| Macomb  | 1,329  | 22.2        | (19.6-25.0)                    |
| Monroe  | 299  | 24.3        | (18.9-30.8)                    |
| Oakland   | 2,337  | 18.7        | (16.8-20.9)                    |
| St. Clair   | 346  | 19.9        | (15.7-24.9)                    |
| Washtenaw   | 666  | 18.4        | (14.7-22.8)                    |
| City of Detroit   | 2,317  | 31.9        | (29.1-34.7)                    |
| Wayne exc. Detroit  | 2,155  | 23.5        | (21.3-25.9)                    |
| <b>Region 2</b>   | 1,381  | 27.4        | (24.1-30.9)                    |
| Genesee   | 1,028  | 29.1        | (25.2-33.3)                    |
| Lapeer  | 185  | 18.7        | (13.2-25.7)                    |
| Shiawassee  | 168  | 27.1        | (18.3-38.2)                    |
| <b>Region 3</b>   | 627  | 22.4        | (19.0-26.3)                    |
| Jackson   | 396  | 21.4        | (17.1-26.3)                    |
| Lenawee   | 231  | 24.3        | (18.7-30.9)                    |
| <b>Region 4</b>   | 1,313  | 21.1        | (18.5-24.0)                    |
| Barry-Eaton   | 398  | 21.9        | (17.2-27.6)                    |
| Mid-Michigan <sup>b</sup>   | 520  | 22.2        | (18.3-26.7)                    |
| Ingham  | 620  | 19.5        | (15.9-23.6)                    |
| <b>Region 5</b>   | 1,169  | 21.1        | (18.3-24.2)                    |
| Branch-Hillsdale-St. Joseph   | 312  | 21.5        | (16.6-27.5)                    |
| Calhoun   | 294  | 21.5        | (16.2-28.0)                    |
| Kalamazoo   | 563  | 20.5        | (16.5-25.2)                    |
| <b>Region 6</b>   | 790  | 24.2        | (20.8-28.0)                    |
| Van Buren-Cass  | 306  | 25.6        | (20.2-32.0)                    |
| Berrien   | 484  | 23.2        | (19.1-27.9)                    |
| <b>Region 7</b>   | 2,346  | 20.0        | (17.8-22.2)                    |
| Allegan   | 221  | 21.0        | (13.0-32.0)                    |
| Ionia   | 140  | 21.3        | (13.7-31.4)                    |
| Kent  | 1,194  | 20.1        | (17.2-23.3)                    |
| Mid-Michigan <sup>b</sup>   | 520  | 22.2        | (18.3-26.7)                    |
| Ottawa  | 566  | 18.9        | (15.2-23.2)                    |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 11 Cont'd</b>          |  |             |                                |
|---------------------------------|--|-------------|--------------------------------|
| <b>Geographic Area</b>          | <b>No 729 Leisure-Time Physical Activity<sup>a</sup></b> |             |                                |
|                                 | <b>N443</b>  | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>22,594</b>  | <b>23.1</b> | <b>(22.4-23.8)</b>             |
| <b>Region 8</b>                 | 1,172  | 27.4        | (24.2-30.9)                    |
| District #10                    | 729  | 26.5        | (22.6-30.8)                    |
| Muskegon                        | 443  | 29.1        | (23.6-35.2)                    |
| <b>Region 9</b>                 | 1,131  | 26.3        | (23.1-29.7)                    |
| District #2                     | 221  | 33.2        | (25.9-41.4)                    |
| District #4                     | 259  | 28.2        | (22.3-35.1)                    |
| Northwest Michigan              | 324  | 25.9        | (19.9-32.9)                    |
| Benzie-Leelanau                 | 106  | 29.0        | (19.0-41.5)                    |
| Grand Traverse                  | 221  | 16.6        | (11.6-23.2)                    |
| <b>Region 10</b>                | 1,174  | 27.3        | (24.2-30.7)                    |
| Bay                             | 267  | 24.2        | (18.4-31.1)                    |
| Huron                           | 100  | 25.2        | (15.9-37.5)                    |
| Saginaw                         | 585  | 30.5        | (25.8-35.6)                    |
| Sanilac                         | 105  | 27.3        | (18.9-37.7)                    |
| Tuscola                         | 117  | 23.9        | (16.0-34.2)                    |
| <b>Region 11</b>                | 700  | 24.4        | (20.7-28.5)                    |
| Central Michigan                | 481  | 28.9        | (24.1-34.2)                    |
| Midland                         | 219  | 14.5        | (9.8-20.8)                     |
| <b>Region 12</b>                | 917  | 22.4        | (19.4-25.8)                    |
| Luce-Mackinac-Alger-Schoolcraft | 132  | 20.7        | (14.1-29.4)                    |
| Western Upper Peninsula         | 188  | 23.6        | (17.4-31.3)                    |
| Delta-Menominee                 | 198  | 24.2        | (17.6-32.4)                    |
| Chippewa                        | 101  | 26.2        | (16.0-39.8)                    |
| Dickinson-Iron                  | 133  | 15.3        | (9.9-22.8)                     |
| Marquette                       | 165  | 23.6        | (17.0-31.7)                    |

<sup>a</sup> 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.

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 12: Inadequate Physical Activity<br/>Michigan BRFSS, 2007 and 2008 Combined</b> |   |             |                                |
|--|---|-------------|--------------------------------|
| <b>Geographic Area</b>   | <b>Inadequate Physical Activity<sup>a</sup></b> |             |                                |
|  | <b>N</b>  | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>  | <b>12,639</b>                                   | <b>49.4</b> | <b>(48.3-50.6)</b>             |
| <b>Region 1</b>  | 5,658   | 50.7        | (48.9-52.5)                    |
| Livingston   | 211   | 45.7        | (37.4-54.3)                    |
| Macomb   | 704   | 50.9        | (46.0-55.7)                    |
| Monroe   | 146   | 43.1        | (34.1-52.6)                    |
| Oakland  | 1,332   | 50.7        | (47.0-54.3)                    |
| St. Clair  | 180   | 52.7        | (43.5-61.7)                    |
| Washtenaw  | 379   | 46.0        | (39.5-52.6)                    |
| City of Detroit  | 1,490   | 55.1        | (51.3-58.9)                    |
| Wayne exc. Detroit   | 1,205   | 50.8        | (46.9-54.7)                    |
| <b>Region 2</b>  | 768   | 48.8        | (43.9-53.8)                    |
| Genesee  | 571   | 48.0        | (42.2-53.9)                    |
| Lapeer   | 103   | 55.0        | (42.9-66.5)                    |
| Shiawassee   | 94  | 46.4        | (34.2-59.0)                    |
| <b>Region 3</b>  | 360   | 48.2        | (41.8-54.7)                    |
| Jackson  | 227   | 45.3        | (34.6-56.4)                    |
| Lenawee  | 133   | 45.3        | (34.6-56.4)                    |
| <b>Region 4</b>  | 698   | 45.2        | (40.4-50.1)                    |
| Barry-Eaton  | 207   | 45.1        | (36.7-53.8)                    |
| Mid-Michigan <sup>b</sup>  | 302   | 46.2        | (39.0-53.5)                    |
| Ingham   | 327   | 48.1        | (40.7-55.6)                    |
| <b>Region 5</b>  | 649   | 47.7        | (43.0-52.5)                    |
| Branch-Hillsdale-St. Joseph  | 180   | 43.8        | (35.3-52.6)                    |
| Calhoun  | 157   | 49.6        | (40.0-59.3)                    |
| Kalamazoo  | 312   | 49.2        | (42.3-56.2)                    |
| <b>Region 6</b>  | 417   | 49.4        | (42.9-55.8)                    |
| Van Buren-Cass   | 152   | 48.9        | (38.3-59.5)                    |
| Berrien  | 265   | 49.7        | (41.8-57.7)                    |
| <b>Region 7</b>  | 1,279   | 49.4        | (45.7-53.0)                    |
| Allegan  | 112   | 43.0        | (32.2-54.4)                    |
| Ionia  | 72  | 51.3        | (37.8-64.6)                    |
| Kent   | 646   | 50.1        | (44.9-55.2)                    |
| Mid-Michigan <sup>b</sup>  | 302   | 46.2        | (39.0-53.5)                    |
| Ottawa   | 311   | 47.7        | (40.4-55.1)                    |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 12 Cont'd</b>          |   |             |                                |
|---------------------------------|---|-------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Inadequate Physical Activity<sup>a</sup></b> |             |                                |
|                                 | <b>N</b>  | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>12,639</b>                                   | <b>49.4</b> | <b>(48.3-50.6)</b>             |
| <b>Region 8</b>                 | 624   | 47.9        | (42.8-53.0)                    |
| District #10                    | 375   | 47.4        | (41.0-53.9)                    |
| Muskegon                        | 249   | 48.6        | (40.2-57.2)                    |
| <b>Region 9</b>                 | 626   | 46.8        | (41.8-51.8)                    |
| District #2                     | 123   | 52.3        | (41.4-63.0)                    |
| District #4                     | 145   | 48.2        | (38.9-57.6)                    |
| Northwest Michigan              | 186   | 43.3        | (33.9-53.2)                    |
| Benzie-Leelanau                 | 51  | 47.6        | (31.0-64.6)                    |
| Grand Traverse                  | 121   | 45.1        | (33.9-56.8)                    |
| <b>Region 10</b>                | 683   | 55.2        | (50.3-60.0)                    |
| Bay                             | 147   | 52.8        | (42.4-63.0)                    |
| Huron                           | 52  | 48.5        | (31.6-65.7)                    |
| Saginaw                         | 357   | 59.8        | (52.9-66.4)                    |
| Sanilac                         | 60  | 42.5        | (28.8-57.5)                    |
| Tuscola                         | 67  | 56.6        | (42.3-69.8)                    |
| <b>Region 11</b>                | 383   | 47.4        | (40.9-54.0)                    |
| Central Michigan                | 255   | 48.0        | (40.0-56.2)                    |
| Midland                         | 128   | 46.1        | (35.4-57.1)                    |
| <b>Region 12</b>                | 487   | 47.6        | (42.0-53.4)                    |
| Luce-Mackinac-Alger-Schoolcraft | 78  | 32.2        | (21.6-45.1)                    |
| Western Upper Peninsula         | 101   | 44.3        | (33.3-55.9)                    |
| Delta-Menominee                 | 93  | 59.4        | (46.1-71.4)                    |
| Chippewa                        | 61  | 44.0        | (27.8-61.5)                    |
| Dickinson-Iron                  | 67  | 52.1        | (37.7-66.1)                    |
| Marquette                       | 87  | 51.3        | (38.7-63.8)                    |

<sup>a</sup> The proportion who reported that they do not usually do moderate physical activities 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.

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 13: Inadequate Fruit and Vegetable Consumption<br/>Michigan BRFSS, 2007 and 2008 Combined</b> |   |             |                                |
|--|---|-------------|--------------------------------|
| <b>Geographic Area</b>   | <b>Inadequate Fruit and Vegetable Consumption<sup>a</sup></b> |             |                                |
|  | <b>N</b>  | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>  | <b>13,401</b>   | <b>78.5</b> | <b>(77.6-79.4)</b>             |
| <b>Region 1</b>  | 6,001   | 76.3        | (74.9-77.7)                    |
| Livingston   | 223   | 79.8        | (72.7-85.5)                    |
| Macomb   | 738   | 77.4        | (73.4-80.9)                    |
| Monroe   | 154   | 77.3        | (68.5-84.3)                    |
| Oakland  | 1,402   | 74.3        | (71.2-77.2)                    |
| St. Clair  | 196   | 82.7        | (76.0-87.8)                    |
| Washtenaw  | 396   | 73.7        | (68.3-78.5)                    |
| City of Detroit  | 1,602   | 74.3        | (71.0-77.3)                    |
| Wayne exc. Detroit   | 1,281   | 78.0        | (75.0-80.7)                    |
| <b>Region 2</b>  | 807   | 82.8        | (79.4-85.8)                    |
| Genesee  | 597   | 83.3        | (79.5-86.6)                    |
| Lapeer   | 108   | 80.4        | (68.2-88.7)                    |
| Shiawassee   | 102   | 82.7        | (73.1-89.4)                    |
| <b>Region 3</b>  | 377   | 80.0        | (74.5-84.5)                    |
| Jackson  | 237   | 82.4        | (76.4-87.1)                    |
| Lenawee  | 140   | 76.1        | (65.1-84.4)                    |
| <b>Region 4</b>  | 737   | 78.8        | (74.4-82.7)                    |
| Barry-Eaton  | 219   | 79.7        | (72.6-85.3)                    |
| Mid-Michigan <sup>b</sup>  | 327   | 83.7        | (78.8-87.6)                    |
| Ingham   | 343   | 74.8        | (67.0-81.3)                    |
| <b>Region 5</b>  | 685   | 79.8        | (76.0-83.2)                    |
| Branch-Hillsdale-St. Joseph  | 195   | 80.3        | (72.8-86.1)                    |
| Calhoun  | 163   | 80.2        | (72.3-86.3)                    |
| Kalamazoo  | 327   | 79.4        | (73.7-84.1)                    |
| <b>Region 6</b>  | 450   | 78.9        | (73.0-83.8)                    |
| Van Buren-Cass   | 163   | 79.8        | (68.5-87.7)                    |
| Berrien  | 287   | 78.2        | (71.5-83.7)                    |

| <b>Table 13 Cont'd</b>          |   |             |                                |
|---------------------------------|---|-------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Inadequate Fruit and Vegetable Consumption<sup>a</sup></b> |             |                                |
|                                 | <b>N</b>  | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>13,401</b>   | <b>78.5</b> | <b>(77.6-79.4)</b>             |
| <b>Region 7</b>                 | 1,345   | 80.1        | (77.1-82.7)                    |
| Allegan                         | 121   | 80.6        | (71.2-87.4)                    |
| Ionia                           | 77  | 80.5        | (69.7-88.1)                    |
| Kent                            | 670   | 78.3        | (73.6-82.3)                    |
| Mid-Michigan <sup>b</sup>       | 327   | 83.7        | (78.8-87.6)                    |
| Ottawa                          | 325   | 83.1        | (77.7-87.4)                    |
| <b>Region 8</b>                 | 664   | 81.6        | (77.7-84.9)                    |
| District #10                    | 402   | 76.5        | (71.0-81.3)                    |
| Muskegon                        | 262   | 90.3        | (86.0-83.3)                    |
| <b>Region 9</b>                 | 663   | 76.3        | (72.1-80.0)                    |
| District #2                     | 126   | 79.1        | (68.1-87.0)                    |
| District #4                     | 155   | 76.8        | (67.4-84.1)                    |
| Northwest Michigan              | 197   | 75.5        | (67.6-82.0)                    |
| Benzie-Leelanau                 | 53  | 81.5        | (67.9-90.1)                    |
| Grand Traverse                  | 132   | 72.0        | (61.9-80.3)                    |
| <b>Region 10</b>                | 724   | 81.7        | (77.8-85.1)                    |
| Bay                             | 155   | 80.7        | (70.3-88.1)                    |
| Huron                           | 56  | 84.8        | (73.5-91.9)                    |
| Saginaw                         | 378   | 82.0        | (76.3-86.5)                    |
| Sanilac                         | 65  | 7.7         | (63.0-85.1)                    |
| Tuscola                         | 70  | 85.6        | (74.3-92.4)                    |
| <b>Region 11</b>                | 410   | 80.1        | (74.7-84.6)                    |
| Central Michigan                | 277   | 82.9        | (76.7-87.7)                    |
| Midland                         | 133   | 74.1        | (63.0-82.7)                    |
| <b>Region 12</b>                | 527   | 79.4        | (74.6-83.4)                    |
| Luce-Mackinac-Alger-Schoolcraft | 80  | 65.5        | (49.1-78.8)                    |
| Western Upper Peninsula         | 112   | 80.4        | (71.5-87.0)                    |
| Delta-Menominee                 | 101   | 78.7        | (67.5-86.9)                    |
| Chippewa                        | 68  | 82.7        | (66.1-92.1)                    |
| Dickinson-Iron                  | 75  | 78.7        | (67.8-86.7)                    |
| Marquette                       | 91  | 87.8        | (77.4-93.8)                    |

<sup>a</sup> The proportion whose total reported consumption of fruits (including juice) and vegetables was less than five times per day.

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

**Table 14: Cigarette Smoking  
Michigan BRFSS, 2006-2008 Combined**

| Geographic Area             | Sample Size   | Current Smoking <sup>a</sup> |                    | Former Smoking <sup>b</sup> |                    | Never Smoked            |                    |
|-----------------------------|---------------|------------------------------|--------------------|-----------------------------|--------------------|-------------------------|--------------------|
|                             |               | N                            | %                  | 95% Confidence Interval     | %                  | 95% Confidence Interval | %                  |
| <b>Michigan Total</b>       | <b>22,512</b> | <b>21.0</b>                  | <b>(20.2-21.7)</b> | <b>25.4</b>                 | <b>(24.7-26.1)</b> | <b>53.6</b>             | <b>(52.8-54.5)</b> |
| <b>Region 1</b>             | 9,809         | 20.0                         | (18.9-21.2)        | 25.7                        | (24.6-26.7)        | 54.3                    | (53.0-55.6)        |
| Livingston                  | 356           | 19.3                         | (14.2-25.7)        | 31.1                        | (25.6-37.3)        | 49.6                    | (43.0-56.2)        |
| Macomb                      | 1,323         | 20.6                         | (17.9-23.5)        | 26.8                        | (24.0-29.7)        | 52.6                    | (49.2-56.1)        |
| Monroe                      | 300           | 18.7                         | (13.8-24.8)        | 30.8                        | (24.8-37.6)        | 50.5                    | (43.4-57.6)        |
| Oakland                     | 2,327         | 16.8                         | (14.7-19.1)        | 27.4                        | (25.3-29.6)        | 55.8                    | (53.2-58.5)        |
| St. Clair                   | 345           | 22.7                         | (17.6-28.9)        | 27.0                        | (21.9-32.7)        | 50.3                    | (43.8-56.8)        |
| Washtenaw                   | 665           | 12.6                         | (9.5-16.6)         | 21.6                        | (18.3-25.2)        | 35.8                    | (61.2-70.1)        |
| City of Detroit             | 2,299         | 24.6                         | (22.0-27.4)        | 17.6                        | (15.8-19.7)        | 57.8                    | (54.8-60.7)        |
| Wayne exc. Detroit          | 2,145         | 22.0                         | (19.6-24.6)        | 28.4                        | (26.0-30.8)        | 49.7                    | (46.8-52.5)        |
| <b>Region 2</b>             | 1,379         | 23.5                         | (20.5-26.7)        | 23.9                        | (21.3-26.6)        | 52.7                    | (49.1-56.2)        |
| Genesee                     | 1,027         | 24.6                         | (21.1-28.5)        | 21.9                        | (19.0-25.0)        | 53.5                    | (49.3-57.7)        |
| Lapeer                      | 185           | 17.3                         | (11.7-24.8)        | 32.7                        | (25.3-40.9)        | 50.1                    | (41.3-58.9)        |
| Shiawassee                  | 167           | 23.9                         | (16.3-33.7)        | 25.2                        | (18.2-33.8)        | 50.8                    | (40.5-61.1)        |
| <b>Region 3</b>             | 627           | 17.2                         | (13.9-21.0)        | 27.8                        | (23.8-32.2)        | 55.1                    | (50.2-59.8)        |
| Jackson                     | 395           | 17.3                         | (13.2-22.3)        | 28.1                        | (23.2-33.6)        | 54.6                    | (48.6-60.5)        |
| Lenawee                     | 232           | 16.9                         | (12.0-23.4)        | 27.3                        | (20.8-34.9)        | 55.8                    | (47.7-63.6)        |
| <b>Region 4</b>             | 1,307         | 19.4                         | (16.5-22.7)        | 24.2                        | (21.7-27.4)        | 56.4                    | (52.8-59.9)        |
| Barry-Eaton                 | 396           | 22.5                         | (17.4-28.5)        | 25.0                        | (20.5-30.2)        | 52.5                    | (46.3-58.6)        |
| Mid-Michigan <sup>c</sup>   | 519           | 18.9                         | (15.1-23.5)        | 23.8                        | (19.8-28.4)        | 57.3                    | (51.8-62.5)        |
| Ingham                      | 617           | 18.9                         | (14.5-24.3)        | 23.7                        | (19.9-28.0)        | 57.4                    | (52.0-62.6)        |
| <b>Region 5</b>             | 1,166         | 22.9                         | (19.7-26.5)        | 24.4                        | (21.7-27.4)        | 52.7                    | (49.0-56.3)        |
| Branch-Hillsdale-St. Joseph | 313           | 20.0                         | (14.8-26.6)        | 25.7                        | (20.5-31.7)        | 54.2                    | (47.4-60.9)        |
| Calhoun                     | 293           | 26.9                         | (20.5-34.4)        | 19.8                        | (15.1-25.5)        | 53.3                    | (45.7-60.7)        |
| Kalamazoo                   | 560           | 22.3                         | (17.6-27.9)        | 26.2                        | (22.3-30.6)        | 51.4                    | (46.1-56.7)        |
| <b>Region 6</b>             | 789           | 18.8                         | (15.4-22.7)        | 24.0                        | (20.7-27.7)        | 57.2                    | (52.6-61.6)        |
| Van Buren-Cass              | 306           | 20.1                         | (14.9-26.5)        | 22.6                        | (17.9-28.3)        | 57.3                    | (50.0-64.2)        |
| Berrien                     | 483           | 17.8                         | (13.6-22.8)        | 25.1                        | (20.7-30.2)        | 57.1                    | (51.3-62.7)        |
| <b>Region 7</b>             | 2,339         | 19.2                         | (17.1-21.5)        | 24.3                        | (22.1-26.6)        | 56.5                    | (53.9-59.2)        |
| Allegan                     | 220           | 20.0                         | (14.1-27.4)        | 29.8                        | (21.2-40.1)        | 50.2                    | (41.1-59.3)        |
| Ionia                       | 140           | 20.4                         | (12.7-31.2)        | 22.3                        | (15.3-31.4)        | 57.2                    | (46.8-67.0)        |
| Kent                        | 1,189         | 20.4                         | (17.3-23.8)        | 23.0                        | (20.2-26.1)        | 56.6                    | (52.9-60.3)        |
| Mid-Michigan <sup>c</sup>   | 519           | 18.9                         | (15.1-23.5)        | 23.8                        | (19.8-28.4)        | 57.3                    | (51.8-62.5)        |
| Ottawa                      | 565           | 14.8                         | (11.3-19.2)        | 25.8                        | (21.6-30.5)        | 59.4                    | (54.1-64.5)        |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| Table 14 Cont'd                 |               |                              |                         |                             |                         |              |                         |
|---------------------------------|---------------|------------------------------|-------------------------|-----------------------------|-------------------------|--------------|-------------------------|
| Geographic Area                 | Sample Size   | Current Smoking <sup>a</sup> |                         | Former Smoking <sup>b</sup> |                         | Never Smoked |                         |
|                                 | N             | %                            | 95% Confidence Interval | %                           | 95% Confidence Interval | %            | 95% Confidence Interval |
| <b>Michigan Total</b>           | <b>22,512</b> | <b>21.0</b>                  | <b>(20.2-21.7)</b>      | <b>25.4</b>                 | <b>(24.7-26.1)</b>      | <b>53.6</b>  | <b>(52.8-54.5)</b>      |
| <b>Region 8</b>                 | 1,168         | 26.9                         | (23.5-30.6)             | 23.2                        | (20.5-26.1)             | 49.9         | (46.1-53.6)             |
| District #10                    | 725           | 24.7                         | (20.7-29.2)             | 24.8                        | (21.3-28.6)             | 50.5         | (45.8-55.2)             |
| Muskegon                        | 443           | 30.7                         | (24.9-37.1)             | 20.5                        | (16.6-25.1)             | 48.8         | (42.6-55.1)             |
| <b>Region 9</b>                 | 1,129         | 22.8                         | (19.8-26.1)             | 28.4                        | (25.5-31.5)             | 48.8         | (45.1-52.5)             |
| District #2                     | 221           | 26.2                         | (19.1-34.7)             | 32.1                        | (25.4-39.6)             | 41.7         | (34.0-49.9)             |
| District #4                     | 258           | 26.9                         | (20.6-34.3)             | 25.3                        | (19.9-31.5)             | 47.8         | (40.7-55.0)             |
| Northwest Michigan              | 325           | 24.2                         | (18.9-30.5)             | 28.1                        | (22.8-34.0)             | 47.7         | (40.7-54.8)             |
| Benzie-Leelanau                 | 105           | 9.7                          | (5.3-17.2)              | 27.5                        | (18.5-38.8)             | 62.8         | (51.1-73.2)             |
| Grand Traverse                  | 220           | 19.3                         | (13.3-27.2)             | 29.4                        | (22.9-36.8)             | 51.3         | (42.7-59.8)             |
| <b>Region 10</b>                | 1,171         | 20.4                         | (17.4-23.7)             | 26.9                        | (24.0-30.1)             | 52.7         | (49.0-56.4)             |
| Bay                             | 268           | 22.2                         | (16.1-29.7)             | 26.2                        | (20.7-32.6)             | 51.6         | (44.0-59.1)             |
| Huron                           | 99            | 15.4                         | (7.3-29.7)              | 26.4                        | (18.0-37.0)             | 58.2         | (45.6-69.8)             |
| Saginaw                         | 583           | 20.5                         | (16.3-25.5)             | 27.3                        | (22.9-32.1)             | 52.2         | (46.8-57.6)             |
| Sanilac                         | 105           | 24.8                         | (16.6-35.4)             | 32.9                        | (23.3-44.2)             | 42.3         | (32.2-53.1)             |
| Tuscola                         | 116           | 15.8                         | (9.6-24.8)              | 23.0                        | (15.1-33.4)             | 61.2         | (50.0-71.4)             |
| <b>Region 11</b>                | 696           | 25.4                         | (21.0-30.4)             | 25.9                        | (22.3-29.8)             | 48.7         | (43.9-53.5)             |
| Central Michigan                | 479           | 26.0                         | (20.7-32.1)             | 29.3                        | (24.7-34.3)             | 44.8         | (39.0-50.6)             |
| Midland                         | 217           | 24.1                         | (16.7-33.4)             | 18.5                        | (13.5-24.8)             | 57.4         | (48.9-65.6)             |
| <b>Region 12</b>                | 913           | 24.1                         | (20.5-28.1)             | 27.6                        | (24.4-31.1)             | 48.3         | (44.2-52.4)             |
| Luce-Mackinac-Alger-Schoolcraft | 132           | 26.6                         | (17.4-38.5)             | 26.4                        | (18.7-35.9)             | 47.0         | (36.3-58.0)             |
| Western Upper Peninsula         | 188           | 16.0                         | (10.5-23.7)             | 37.7                        | (29.9-46.1)             | 46.3         | (37.8-55.1)             |
| Delta-Menominee                 | 198           | 28.7                         | (20.5-38.7)             | 17.0                        | (12.2-23.2)             | 54.3         | (45.0-63.2)             |
| Chippewa                        | 98            | 30.0                         | (19.0-43.8)             | 25.2                        | (16.6-36.5)             | 44.8         | (31.7-58.6)             |
| Dickinson-Iron                  | 133           | 28.0                         | (18.9-39.4)             | 26.2                        | (18.8-35.4)             | 45.8         | (35.8-56.1)             |
| Marquette                       | 164           | 19.1                         | (12.9-27.2)             | 32.2                        | (24.5-41.0)             | 48.8         | (39.8-57.8)             |

<sup>a</sup> 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.

<sup>b</sup> The proportion who reported that they had ever smoked at least 100 cigarettes (five packs) in their life, but they do not smoke cigarettes now.

<sup>c</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

**Table 15: Alcohol Consumption  
Michigan BRFSS, 2006-2008 Combined**

| Geographic Area             | Heavy Drinking <sup>a</sup> |            |                         | Binge Drinking <sup>b</sup> |             |                         |
|-----------------------------|-----------------------------|------------|-------------------------|-----------------------------|-------------|-------------------------|
|                             | N                           | %          | 95% Confidence Interval | N                           | %           | 95% Confidence Interval |
| <b>Michigan Total</b>       | <b>21,913</b>               | <b>5.6</b> | <b>(5.1-6.0)</b>        | <b>22,119</b>               | <b>17.9</b> | <b>(17.1-18.6)</b>      |
| <b>Region 1</b>             | 9,537                       | 5.6        | (5.0-6.3)               | 9,633                       | 17.5        | (16.3-18.6)             |
| Livingston                  | 340                         | 10.9       | (7.0-16.6)              | 344                         | 23.4        | (17.6-30.3)             |
| Macomb                      | 1,290                       | 7.2        | (5.4-9.7)               | 1,301                       | 18.6        | (15.8-21.8)             |
| Monroe                      | 291                         | 3.5        | (1.9-6.5)               | 295                         | 23.4        | (17.3-30.9)             |
| Oakland                     | 2,266                       | 4.8        | (3.7-6.3)               | 2,293                       | 17.6        | (15.4-20.1)             |
| St. Clair                   | 338                         | 9.0        | (5.3-14.8)              | 344                         | 18.6        | (13.7-24.9)             |
| Washtenaw                   | 648                         | 4.1        | (2.7-5.9)               | 652                         | 13.5        | (10.2-17.8)             |
| City of Detroit             | 2,244                       | 4.5        | (3.3-6.0)               | 2,264                       | 12.3        | (10.3-14.5)             |
| Wayne exc. Detroit          | 2,100                       | 5.4        | (4.2-6.8)               | 2,120                       | 19.3        | (16.9-21.8)             |
| <b>Region 2</b>             | 1,330                       | 4.2        | (2.9-5.9)               | 1,350                       | 16.2        | (13.5-19.3)             |
| Genesee                     | 989                         | 5.0        | (3.4-7.3)               | 1,004                       | 16.2        | (13.2-19.9)             |
| Lapeer                      | 178                         | 1.0        | (0.3-4.2)               | 180                         | 16.5        | (10.1-25.9)             |
| Shiawassee                  | 163                         | 2.8        | (1.0-8.0)               | 166                         | 15.7        | (9.5-24.8)              |
| <b>Region 3</b>             | 615                         | 6.5        | (4.1-10.1)              | 622                         | 20.7        | (16.4-25.9)             |
| Jackson                     | 387                         | 5.5        | (3.4-8.7)               | 390                         | 20.3        | (15.1-26.6)             |
| Lenawee                     | 228                         | 8.2        | (3.6-17.6)              | 232                         | 21.5        | (14.4-30.9)             |
| <b>Region 4</b>             | 1,273                       | 4.8        | (3.3-6.9)               | 1,288                       | 18.2        | (15.2-21.6)             |
| Barry-Eaton                 | 384                         | 2.7        | (1.5-4.9)               | 387                         | 17.4        | (12.7-23.4)             |
| Mid-Michigan <sup>c</sup>   | 513                         | 3.9        | (2.0-7.6)               | 514                         | 15.1        | (11.3-19.8)             |
| Ingham                      | 601                         | 6.9        | (4.1-11.2)              | 611                         | 19.4        | (14.7-25.2)             |
| <b>Region 5</b>             | 1,131                       | 4.9        | (3.4-6.9)               | 1,153                       | 16.4        | (13.5-19.7)             |
| Branch-Hillsdale-St. Joseph | 305                         | 5.4        | (2.7-10.6)              | 307                         | 15.5        | (10.9-21.7)             |
| Calhoun                     | 285                         | 3.3        | (1.8-6.2)               | 290                         | 14.0        | (9.3-20.7)              |
| Kalamazoo                   | 541                         | 5.5        | (3.3-8.9)               | 556                         | 18.1        | (13.8-23.4)             |
| <b>Region 6</b>             | 769                         | 4.9        | (3.2-7.4)               | 772                         | 16.9        | (13.2-21.3)             |
| Van Buren-Cass              | 299                         | 4.8        | (2.6-8.8)               | 300                         | 19.9        | (13.8-27.9)             |
| Berrien                     | 470                         | 4.9        | (2.7-8.8)               | 472                         | 14.5        | (10.5-19.7)             |
| <b>Region 7</b>             | 2,293                       | 4.8        | (3.7-6.2)               | 2,309                       | 17.1        | (15.1-19.4)             |
| Allegan                     | 216                         | 6.2        | (3.1-11.7)              | 218                         | 20.2        | (13.9-28.3)             |
| Ionia                       | 136                         | 5.7        | (2.4-12.7)              | 138                         | 20.4        | (13.1-30.2)             |
| Kent                        | 1,168                       | 4.7        | (3.4-6.6)               | 1,174                       | 16.8        | (14.0-20.0)             |
| Mid-Michigan <sup>c</sup>   | 513                         | 3.9        | (2.0-7.6)               | 514                         | 15.1        | (11.3-19.8)             |
| Ottawa                      | 548                         | 4.2        | (2.3-7.5)               | 555                         | 17.4        | (13.4-22.3)             |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 15 Cont'd</b>          |                                   |            |                                |                                   |             |                                |
|---------------------------------|-----------------------------------|------------|--------------------------------|-----------------------------------|-------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Heavy Drinking<sup>a</sup></b> |            |                                | <b>Binge Drinking<sup>b</sup></b> |             |                                |
|                                 | <b>N</b>                          | <b>%</b>   | <b>95% Confidence Interval</b> | <b>N</b>                          | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>21,913</b>                     | <b>5.6</b> | <b>(5.1-6.0)</b>               | <b>22,119</b>                     | <b>17.9</b> | <b>(17.1-18.6)</b>             |
| <b>Region 8</b>                 | 1,137                             | 7.5        | (5.6-10.0)                     | 1,145                             | 21.5        | (18.3-25.1)                    |
| District #10                    | 711                               | 7.5        | (5.0-10.9)                     | 713                               | 18.5        | (14.9-22.7)                    |
| Muskegon                        | 426                               | 7.5        | (4.8-11.5)                     | 432                               | 26.7        | (20.9-33.5)                    |
| <b>Region 9</b>                 | 1,099                             | 7.5        | (5.8-9.7)                      | 1,103                             | 17.3        | (14.4-20.5)                    |
| District #2                     | 215                               | 6.7        | (3.3-13.3)                     | 216                               | 16.8        | (10.8-25.3)                    |
| District #4                     | 250                               | 7.0        | (4.2-11.4)                     | 251                               | 21.6        | (15.7-29.0)                    |
| Northwest Michigan              | 318                               | 6.5        | (3.9-10.8)                     | 318                               | 16.9        | (12.1-22.9)                    |
| Benzie-Leelanau                 | 104                               | 10.6       | (5.1-20.9)                     | 102                               | 15.6        | (7.9-28.5)                     |
| Grand Traverse                  | 212                               | 8.8        | (5.1-14.7)                     | 216                               | 14.3        | (9.2-21.6)                     |
| <b>Region 10</b>                | 1,140                             | 5.5        | (4.0-7.6)                      | 1,147                             | 19.4        | (16.4-22.8)                    |
| Bay                             | 262                               | 8.2        | (4.5-14.3)                     | 260                               | 23.6        | (17.4-31.3)                    |
| Huron                           | 96                                | 4.0        | (1.4-10.6)                     | 98                                | 13.1        | (7.1-22.9)                     |
| Saginaw                         | 569                               | 5.2        | (3.4-7.9)                      | 569                               | 18.8        | (14.5-24.1)                    |
| Sanilac                         | 101                               | 0.0        | (---)                          | 103                               | 21.3        | (12.9-33.2)                    |
| Tuscola                         | 112                               | 5.9        | (2.5-13.1)                     | 117                               | 15.1        | (8.5-25.3)                     |
| <b>Region 11</b>                | 687                               | 3.8        | (2.2-6.4)                      | 691                               | 15.4        | (11.9-19.7)                    |
| Central Michigan                | 472                               | 4.4        | (2.4-8.1)                      | 474                               | 14.4        | (10.5-19.4)                    |
| Midland                         | 215                               | 2.3        | (0.9-5.6)                      | 217                               | 17.6        | (11.2-26.6)                    |
| <b>Region 12</b>                | 884                               | 7.9        | (5.6-11.1)                     | 887                               | 23.4        | (19.7-27.6)                    |
| Luce-Mackinac-Alger-Schoolcraft | 130                               | 12.0       | (5.2-25.5)                     | 131                               | 24.6        | (15.5-36.9)                    |
| Western Upper Peninsula         | 179                               | 10.9       | (6.2-18.2)                     | 180                               | 28.5        | (20.9-37.6)                    |
| Delta-Menominee                 | 192                               | 3.6        | (1.6-7.8)                      | 194                               | 22.0        | (14.6-31.7)                    |
| Chippewa                        | 93                                | 11.5       | (3.5-31.7)                     | 93                                | 32.1        | (19.3-48.3)                    |
| Dickinson-Iron                  | 130                               | 3.9        | (1.8-8.3)                      | 130                               | 18.1        | (10.9-28.5)                    |
| Marquette                       | 160                               | 7.7        | (3.7-15.3)                     | 159                               | 17.8        | (11.6-26.2)                    |

<sup>a</sup> 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.

<sup>b</sup> The proportion who reported consuming five or more drinks per occasion at least once in the previous month.

<sup>c</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 16: Drove Motor Vehicle After Drinking<br/>Michigan BRFSS, 2006 and 2008 Combined</b> |   |            |                                |
|--|---|------------|--------------------------------|
| <b>Geographic Area</b>   | <b>Drove Motor Vehicle After Drinking<sup>a</sup></b> |            |                                |
|  | <b>N</b>  | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>  | <b>14,906</b>   | <b>2.7</b> | <b>(2.3-3.0)</b>               |
| <b>Region 1</b>  | 6,373   | 2.8        | (2.3-3.5)                      |
| Livingston   | 235   | 3.6        | (1.1-10.8)                     |
| Macomb   | 907   | 3.3        | (1.8-6.1)                      |
| Monroe   | 208   | 3.3        | (1.0-11.0)                     |
| Oakland  | 1,532   | 2.8        | (1.8-4.3)                      |
| St. Clair  | 224   | 1.5        | (0.5-4.0)                      |
| Washtenaw  | 447   | 2.0        | (0.9-4.2)                      |
| City of Detroit  | 1,392   | 1.5        | (0.8-2.7)                      |
| Wayne exc. Detroit   | 1,410   | 3.7        | (2.6-5.3)                      |
| <b>Region 2</b>  | 917   | 2.6        | (1.5-4.2)                      |
| Genesee  | 683   | 2.9        | (1.7-4.9)                      |
| Lapeer   | 121   | 0.9        | (0.1-6.0)                      |
| Shiawassee   | 113   | 2.7        | (0.5-14.0)                     |
| <b>Region 3</b>  | 415   | 3.1        | (1.6-6.0)                      |
| Jackson  | 258   | 3.6        | (1.6-7.9)                      |
| Lenawee  | 157   | 2.2        | (0.6-7.5)                      |
| <b>Region 4</b>  | 881   | 1.7        | (0.9-3.2)                      |
| Barry-Eaton  | 266   | 2.4        | (0.8-6.6)                      |
| Mid-Michigan <sup>b</sup>  | 327   | 2.2        | (1.0-4.8)                      |
| Ingham   | 423   | 1.3        | (0.5-3.5)                      |
| <b>Region 5</b>  | 781   | 2.4        | (1.2-4.9)                      |
| Branch-Hillsdale-St. Joseph  | 210   | 1.3        | (0.3-5.3)                      |
| Calhoun  | 195   | 0.3        | (0.0-1.9)                      |
| Kalamazoo  | 376   | 4.2        | (1.8-9.4)                      |
| <b>Region 6</b>  | 530   | 1.4        | (0.5-3.5)                      |
| Van Buren-Cass   | 206   | 0.9        | (0.1-6.3)                      |
| Berrien  | 324   | 1.7        | (0.6-4.9)                      |
| <b>Region 7</b>  | 1,584   | 2.3        | (1.5-3.5)                      |
| Allegan  | 161   | 1.5        | (0.2-10.1)                     |
| Ionia  | 93  | 6.1        | (1.9-18.0)                     |
| Kent   | 805   | 2.8        | (1.7-4.7)                      |
| Mid-Michigan <sup>b</sup>  | 327   | 2.2        | (1.0-4.8)                      |
| Ottawa   | 390   | 0.7        | (0.2-2.2)                      |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 16 Cont'd</b>          |   |            |                                |
|---------------------------------|---|------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Drove Motor Vehicle After Drinking<sup>a</sup></b> |            |                                |
|                                 | <b>N</b>  | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>14,906</b>   | <b>2.7</b> | <b>(2.3-3.0)</b>               |
| <b>Region 8</b>                 | 801   | 4.2        | (2.7-6.5)                      |
| District #10                    | 513   | 2.6        | (1.4-4.7)                      |
| Muskegon                        | 288   | 7.2        | (4.0-12.8)                     |
| <b>Region 9</b>                 | 750   | 2.2        | (1.2-4.0)                      |
| District #2                     | 149   | 0.6        | (0.1-4.2)                      |
| District #4                     | 169   | 5.2        | (2.2-11.4)                     |
| Northwest Michigan              | 205   | 2.3        | (0.7-7.4)                      |
| Benzie-Leelanau                 | 83  | 0.9        | (0.1-6.2)                      |
| Grand Traverse                  | 144   | 0.9        | (0.1-6.2)                      |
| <b>Region 10</b>                | 777   | 3.0        | (1.7-5.4)                      |
| Bay                             | 184   | 4.2        | (1.4-11.5)                     |
| Huron                           | 66  | 5.1        | (1.3-18.3)                     |
| Saginaw                         | 372   | 2.1        | (0.7-6.0)                      |
| Sanilac                         | 74  | 5.5        | (1.7-17.0)                     |
| Tuscola                         | 81  | 0.0        | (---)                          |
| <b>Region 11</b>                | 472   | 1.5        | (0.7-3.0)                      |
| Central Michigan                | 328   | 1.2        | (0.5-2.8)                      |
| Midland                         | 144   | 2.1        | (0.6-7.0)                      |
| <b>Region 12</b>                | 605   | 3.5        | (2.0-6.1)                      |
| Luce-Mackinac-Alger-Schoolcraft | 84  | 3.0        | (0.6-14.1)                     |
| Western Upper Peninsula         | 121   | 6.6        | (2.5-16.2)                     |
| Delta-Menominee                 | 136   | 2.4        | (0.8-7.3)                      |
| Chippewa                        | 65  | 1.2        | (0.2-8.2)                      |
| Dickinson-Iron                  | 89  | 2.0        | (0.5-8.4)                      |
| Marquette                       | 110   | 4.7        | (1.4-14.9)                     |

<sup>a</sup> Proportion who reported that they had driven when they'd had too much to drink at least once in the previous month.  
<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 17: Seatbelt Use</b>                 |   |             |                                |
|---|---|-------------|--------------------------------|
| <b>Michigan BRFSS, 2006 and 2008 Combined</b> |   |             |                                |
| <b>Geographic Area</b>                        | <b>Always Uses a Seatbelt<sup>a</sup></b> |             |                                |
|   | <b>N</b>                                  | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>                         | <b>14,863</b>                             | <b>88.3</b> | <b>(87.5-89.0)</b>             |
| <b>Region 1</b>                               | 6,355                                     | 90.0        | (88.8-91.0)                    |
| Livingston                                    | 235                                       | 82.0        | (72.2-88.9)                    |
| Macomb  | 905                                       | 91.1        | (88.2-93.4)                    |
| Monroe  | 207                                       | 91.3        | (85.1-95.1)                    |
| Oakland                                       | 1,526                                     | 90.5        | (88.2-92.5)                    |
| St. Clair                                     | 225                                       | 91.0        | (85.2-94.7)                    |
| Washtenaw                                     | 448                                       | 93.5        | (89.3-96.2)                    |
| City of Detroit                               | 1,385                                     | 88.8        | (85.9-91.1)                    |
| Wayne exc. Detroit                            | 1,407                                     | 89.3        | (86.6-91.5)                    |
| <b>Region 2</b>                               | 916                                       | 86.9        | (83.0-90.0)                    |
| Genesee                                       | 682                                       | 85.6        | (80.7-89.4)                    |
| Lapeer  | 121                                       | 89.4        | (79.2-94.9)                    |
| Shiawassee                                    | 113                                       | 91.7        | (80.7-96.7)                    |
| <b>Region 3</b>                               | 414                                       | 92.8        | (89.2-95.3)                    |
| Jackson                                       | 258                                       | 97.1        | (94.2-98.5)                    |
| Lenawee                                       | 156                                       | 85.8        | (77.3-91.4)                    |
| <b>Region 4</b>                               | 879                                       | 88.1        | (84.7-90.8)                    |
| Barry-Eaton                                   | 266                                       | 86.2        | (79.5-90.9)                    |
| Mid-Michigan <sup>b</sup>                     | 327                                       | 87.0        | (79.8-91.9)                    |
| Ingham  | 421                                       | 89.0        | (83.8-92.6)                    |
| <b>Region 5</b>                               | 774                                       | 89.2        | (85.8-91.9)                    |
| Branch-Hillsdale-St. Joseph                   | 207                                       | 87.7        | (80.6-92.4)                    |
| Calhoun                                       | 195                                       | 91.7        | (85.3-95.5)                    |
| Kalamazoo                                     | 372                                       | 88.7        | (82.8-92.8)                    |
| <b>Region 6</b>                               | 527                                       | 84.2        | (79.2-88.2)                    |
| Van Buren-Cass                                | 207                                       | 80.9        | (71.4-87.8)                    |
| Berrien                                       | 320                                       | 86.7        | (81.2-90.8)                    |
| <b>Region 7</b>                               | 1,582                                     | 89.4        | (87.0-91.4)                    |
| Allegan                                       | 161                                       | 84.5        | (74.5-91.0)                    |
| Ionia   | 93  | 92.4        | (80.1-97.3)                    |
| Kent  | 802                                       | 88.9        | (85.4-91.6)                    |
| Mid-Michigan <sup>b</sup>                     | 327                                       | 87.0        | (79.8-91.9)                    |
| Ottawa  | 391                                       | 93.4        | (89.8-95.7)                    |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 17 Cont'd</b>          |   |             |                                |
|---------------------------------|---|-------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Always Uses a Seatbelt<sup>a</sup></b> |             |                                |
|                                 | <b>N</b>                                  | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>14,863</b>                             | <b>88.3</b> | <b>(87.5-89.0)</b>             |
| <b>Region 8</b>                 | 796                                       | 86.2        | (82.7-89.2)                    |
| District #10                    | 511                                       | 86.2        | (81.7-89.8)                    |
| Muskegon                        | 285                                       | 86.3        | (79.8-90.9)                    |
| <b>Region 9</b>                 | 750                                       | 85.0        | (81.2-88.2)                    |
| District #2                     | 148                                       | 85.0        | (74.9-91.5)                    |
| District #4                     | 168                                       | 89.0        | (82.1-93.5)                    |
| Northwest Michigan              | 206                                       | 84.7        | (77.6-89.8)                    |
| Benzie-Leelanau                 | 84  | 68.4        | (52.7-80.8)                    |
| Grand Traverse                  | 144                                       | 91.4        | (81.9-96.2)                    |
| <b>Region 10</b>                | 773                                       | 86.1        | (82.5-89.1)                    |
| Bay                             | 183                                       | 87.5        | (80.8-92.3)                    |
| Huron                           | 66  | 72.3        | (54.4-85.1)                    |
| Saginaw                         | 369                                       | 88.3        | (83.0-92.1)                    |
| Sanilac                         | 74  | 77.8        | (65.7-86.4)                    |
| Tuscola                         | 81  | 91.4        | (73.5-97.6)                    |
| <b>Region 11</b>                | 473                                       | 83.0        | (77.5-87.4)                    |
| Central Michigan                | 328                                       | 82.4        | (75.7-87.5)                    |
| Midland                         | 145                                       | 84.5        | (73.6-91.4)                    |
| <b>Region 12</b>                | 605                                       | 82.7        | (78.5-86.1)                    |
| Luce-Mackinac-Alger-Schoolcraft | 84  | 86.0        | (74.4-92.8)                    |
| Western Upper Peninsula         | 121                                       | 78.8        | (67.8-86.8)                    |
| Delta-Menominee                 | 137                                       | 80.5        | (70.8-87.5)                    |
| Chippewa                        | 65  | 89.4        | (79.6-94.8)                    |
| Dickinson-Iron                  | 89  | 83.8        | (71.9-91.3)                    |
| Marquette                       | 109                                       | 81.8        | (70.5-89.4)                    |

<sup>a</sup> The proportion who reported always using a seatbelt when driving or riding in a car.  
<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 18: No Routine Checkup in Past Year<br/>Michigan BRFSS, 2006-2008 Combined</b> |  |             |                                |
|---|--|-------------|--------------------------------|
| <b>Geographic Area</b>  | <b>Had No Routine Checkup in Past Year<sup>a</sup></b> |             |                                |
|   | <b>N</b>   | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>   | <b>22,326</b>  | <b>31.4</b> | <b>(30.6-32.3)</b>             |
| <b>Region 1</b>   | 9,747  | 29.6        | (28.4-30.9)                    |
| Livingston  | 350  | 34.1        | (28.1-40.8)                    |
| Macomb  | 1,315  | 31.3        | (28.0-34.7)                    |
| Monroe  | 293  | 30.7        | (24.1-38.1)                    |
| Oakland   | 2,319  | 28.4        | (26.0-31.0)                    |
| St. Clair   | 341  | 41.7        | (35.1-48.6)                    |
| Washtenaw   | 662  | 34.2        | (29.5-39.2)                    |
| City of Detroit   | 2,287  | 23.1        | (20.6-25.9)                    |
| Wayne exc. Detroit  | 2,132  | 29.9        | (27.3-32.7)                    |
| <b>Region 2</b>   | 1,366  | 32.5        | (29.0-36.3)                    |
| Genesee   | 1,021  | 32.9        | (28.5-37.5)                    |
| Lapeer  | 182  | 34.4        | (26.2-43.7)                    |
| Shiawassee  | 163  | 28.6        | (20.7-38.0)                    |
| <b>Region 3</b>   | 615  | 33.2        | (28.6-38.3)                    |
| Jackson   | 386  | 33.4        | (27.7-39.6)                    |
| Lenawee   | 229  | 33.0        | (25.3-41.8)                    |
| <b>Region 4</b>   | 1,291  | 33.6        | (30.1-37.2)                    |
| Barry-Eaton   | 392  | 38.5        | (32.3-45.1)                    |
| Mid-Michigan <sup>b</sup>   | 515  | 30.1        | (25.1-35.6)                    |
| Ingham  | 609  | 33.6        | (28.5-39.2)                    |
| <b>Region 5</b>   | 1,160  | 32.0        | (28.5-35.7)                    |
| Branch-Hillsdale-St. Joseph   | 311  | 31.4        | (25.3-38.4)                    |
| Calhoun   | 292  | 30.4        | (23.6-38.0)                    |
| Kalamazoo   | 557  | 33.2        | (28.1-38.7)                    |
| <b>Region 6</b>   | 779  | 32.6        | (28.2-37.4)                    |
| Van Buren-Cass  | 303  | 40.4        | (33.0-48.2)                    |
| Berrien   | 476  | 26.5        | (21.4-32.3)                    |
| <b>Region 7</b>   | 2,326  | 32.9        | (30.4-35.6)                    |
| Allegan   | 219  | 37.8        | (29.5-46.8)                    |
| Ionia   | 138  | 39.2        | (29.5-49.9)                    |
| Kent  | 1,183  | 30.3        | (26.9-33.9)                    |
| Mid-Michigan <sup>b</sup>   | 515  | 30.1        | (25.1-35.6)                    |
| Ottawa  | 561  | 34.8        | (29.7-40.4)                    |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 18 Cont'd</b>          |  |             |                                |
|---------------------------------|--|-------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Had No Routine Checkup in Past Year<sup>a</sup></b> |             |                                |
|                                 | <b>N</b>   | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>22,326</b>  | <b>31.4</b> | <b>(30.6-32.3)</b>             |
| <b>Region 8</b>                 | 1,156  | 31.3        | (27.7-35.1)                    |
| District #10                    | 719  | 32.0        | (27.6-36.7)                    |
| Muskegon                        | 437  | 30.1        | (24.2-36.7)                    |
| <b>Region 9</b>                 | 1,124  | 31.1        | (27.7-34.8)                    |
| District #2                     | 218  | 32.6        | (25.5-40.6)                    |
| District #4                     | 258  | 33.0        | (26.3-40.4)                    |
| Northwest Michigan              | 324  | 31.2        | (24.9-38.3)                    |
| Benzie-Leelanau                 | 105  | 26.7        | (17.3-38.8)                    |
| Grand Traverse                  | 219  | 29.7        | (21.9-39.0)                    |
| <b>Region 10</b>                | 1,162  | 29.5        | (26.1-33.2)                    |
| Bay                             | 265  | 33.0        | (25.8-41.1)                    |
| Huron                           | 99   | 33.3        | (22.9-45.6)                    |
| Saginaw                         | 580  | 27.2        | (22.5-32.5)                    |
| Sanilac                         | 102  | 31.2        | (22.0-42.2)                    |
| Tuscola                         | 116  | 26.0        | (17.3-37.3)                    |
| <b>Region 11</b>                | 685  | 36.1        | (31.4-41.0)                    |
| Central Michigan                | 469  | 35.7        | (30.1-41.7)                    |
| Midland                         | 216  | 37.0        | (29.0-45.8)                    |
| <b>Region 12</b>                | 896  | 36.1        | (32.1-40.4)                    |
| Luce-Mackinac-Alger-Schoolcraft | 130  | 36.5        | (26.5-47.7)                    |
| Western Upper Peninsula         | 185  | 36.6        | (28.4-45.6)                    |
| Delta-Menominee                 | 191  | 39.9        | (30.6-50.0)                    |
| Chippewa                        | 97   | 37.9        | (25.0-52.7)                    |
| Dickinson-Iron                  | 130  | 32.2        | (23.2-42.7)                    |
| Marquette                       | 163  | 33.3        | (24.9-43.0)                    |

<sup>a</sup> The proportion who reported that they did not have a routine checkup in the past year.  
<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 19: Breast Cancer Screening Among Women Age 40 and Older<br/>Michigan BRFS, 2006 and 2008 Combined</b> |  |                  |                                |
|---|--|------------------|--------------------------------|
| <b>Geographic Area</b>  | <b>Had Clinical Breast Exam and Mammogram in Past Year<sup>a</sup></b> |                  |                                |
|   | <b>N</b>   | <b>%</b>         | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>   | <b>7,497</b>   | <b>56.4</b>      | <b>(55.1-57.7)</b>             |
| <b>Region 1</b>   | 3,252  | 56.2             | (54.1-58.2)                    |
| Livingston  | 107  | 60.3             | (49.9-69.9)                    |
| Macomb  | 462  | 57.0             | (51.8-62.0)                    |
| Monroe  | 106  | 63.7             | (53.3-72.9)                    |
| Oakland   | 768  | 54.9             | (50.8-59.0)                    |
| St. Clair   | 110  | 54.3             | (44.0-64.1)                    |
| Washtenaw   | 209  | 62.3             | (54.7-69.4)                    |
| City of Detroit   | 764  | 50.5             | (45.6-55.4)                    |
| Wayne exc. Detroit  | 717  | 57.6             | (53.2-61.8)                    |
| <b>Region 2</b>   | 443  | 58.1             | (52.7-63.3)                    |
| Genesee   | 331  | 62.2             | (56.0-68.0)                    |
| Lapeer  | 49   | --- <sup>c</sup> | --- <sup>c</sup>               |
| Shiawassee  | 63   | 54.2             | (40.8-66.9)                    |
| <b>Region 3</b>   | 203  | 64.6             | (57.1-71.5)                    |
| Jackson   | 125  | 66.3             | (56.7-74.7)                    |
| Lenawee   | 78   | 61.7             | (49.5-72.7)                    |
| <b>Region 4</b>   | 442  | 53.1             | (47.7-58.4)                    |
| Barry-Eaton   | 124  | 47.9             | (38.3-57.7)                    |
| Mid-Michigan <sup>b</sup>   | 161  | 55.4             | (46.4-63.9)                    |
| Ingham  | 222  | 54.4             | (46.8-61.8)                    |
| <b>Region 5</b>   | 399  | 54.4             | (48.9-59.8)                    |
| Branch-Hillsdale-St. Joseph   | 104  | 57.6             | (47.1-67.4)                    |
| Calhoun   | 104  | 66.2             | (55.4-75.5)                    |
| Kalamazoo   | 191  | 46.2             | (38.4-54.1)                    |
| <b>Region 6</b>   | 286  | 53.1             | (46.4-59.6)                    |
| Van Buren-Cass  | 111  | 54.0             | (43.5-64.2)                    |
| Berrien   | 175  | 52.3             | (43.8-60.8)                    |
| <b>Region 7</b>   | 749  | 56.1             | (52.1-60.1)                    |
| Allegan   | 83   | 56.4             | (44.5-67.7)                    |
| Ionia   | 50   | 59.3             | (41.2-75.1)                    |
| Kent  | 364  | 53.5             | (47.6-59.2)                    |
| Mid-Michigan <sup>b</sup>   | 161  | 55.4             | (46.4-63.9)                    |
| Ottawa  | 187  | 61.4             | (53.5-68.7)                    |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 19 Cont'd</b>          |  |                  |                                |
|---------------------------------|--|------------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Had Clinical Breast Exam and Mammogram in Past Year<sup>a</sup></b> |                  |                                |
|                                 | <b>N</b>   | <b>%</b>         | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>7,497</b>   | <b>56.4</b>      | <b>(55.1-57.7)</b>             |
| <b>Region 8</b>                 | 402  | 58.0             | (52.6-63.3)                    |
| District #10                    | 263  | 56.4             | (49.7-62.8)                    |
| Muskegon                        | 139  | 61.4             | (51.7-70.3)                    |
| <b>Region 9</b>                 | 368  | 56.9             | (51.2-62.4)                    |
| District #2                     | 83   | 49.7             | (38.1-61.4)                    |
| District #4                     | 71   | 52.2             | (39.3-64.8)                    |
| Northwest Michigan              | 90   | 54.5             | (39.3-64.8)                    |
| Benzie-Leelanau                 | 42   | --- <sup>c</sup> | --- <sup>c</sup>               |
| Grand Traverse                  | 82   | 67.8             | (55.8-77.7)                    |
| <b>Region 10</b>                | 393  | 57.4             | (51.4-63.1)                    |
| Bay                             | 86   | 55.7             | (43.6-67.2)                    |
| Huron                           | 34   | --- <sup>c</sup> | --- <sup>c</sup>               |
| Saginaw                         | 184  | 64.0             | (54.9-72.2)                    |
| Sanilac                         | 45   | --- <sup>c</sup> | --- <sup>c</sup>               |
| Tuscola                         | 44   | --- <sup>c</sup> | --- <sup>c</sup>               |
| <b>Region 11</b>                | 221  | 56.8             | (49.5-63.9)                    |
| Central Michigan                | 157  | 52.9             | (44.2-61.4)                    |
| Midland                         | 64   | 66.9             | (53.2-78.2)                    |
| <b>Region 12</b>                | 329  | 59.2             | (53.3-64.9)                    |
| Luce-Mackinac-Alger-Schoolcraft | 45   | --- <sup>c</sup> | --- <sup>c</sup>               |
| Western Upper Peninsula         | 70   | 44.0             | (32.0-56.7)                    |
| Delta-Menominee                 | 80   | 66.6             | (54.9-76.6)                    |
| Chippewa                        | 37   | --- <sup>c</sup> | --- <sup>c</sup>               |
| Dickinson-Iron                  | 43   | --- <sup>c</sup> | --- <sup>c</sup>               |
| Marquette                       | 54   | 72.8             | (58.6-83.6)                    |

Note: Data included diagnostic tests.

<sup>a</sup> Among women aged 40 years and older, the proportion who had both a clinical breast exam and mammogram in the previous year.

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

<sup>c</sup> Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.

| <b>Table 20: Cervical Cancer Screening Among Women Aged 18 Years and Older<br/>Michigan BRFSS, 2006 and 2008 Combined</b> |   |             |                                |
|---|---|-------------|--------------------------------|
| <b>Geographic Area</b>  | <b>Had Appropriately Timed Pap Test<sup>a</sup></b> |             |                                |
|   | <b>N</b>  | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>   | <b>9,235</b>  | <b>81.3</b> | <b>(80.3-82.4)</b>             |
| <b>Region 1</b>   | 4,004   | 81.8        | (80.1-83.4)                    |
| Livingston  | 128   | 87.4        | (80.5-92.1)                    |
| Macomb  | 561   | 79.4        | (74.6-83.5)                    |
| Monroe  | 130   | 83.6        | (76.2-89.0)                    |
| Oakland   | 955   | 83.2        | (79.9-86.1)                    |
| St. Clair   | 142   | 81.2        | (71.6-88.0)                    |
| Washtenaw   | 264   | 88.2        | (83.2-91.9)                    |
| City of Detroit   | 926   | 77.6        | (72.9-81.7)                    |
| Wayne exc. Detroit  | 888   | 82.1        | (78.3-85.4)                    |
| <b>Region 2</b>   | 582   | 82.0        | (77.0-86.2)                    |
| Genesee   | 433   | 81.8        | (75.5-86.7)                    |
| Lapeer  | 71  | 76.7        | (61.1-87.3)                    |
| Shiawassee  | 78  | 89.1        | (80.0-94.4)                    |
| <b>Region 3</b>   | 247   | 85.9        | (80.3-90.1)                    |
| Jackson   | 159   | 85.5        | (78.0-90.8)                    |
| Lenawee   | 88  | 86.6        | (77.4-92.4)                    |
| <b>Region 4</b>   | 549   | 80.3        | (75.7-84.1)                    |
| Barry-Eaton   | 153   | 80.5        | (72.5-86.7)                    |
| Mid-Michigan <sup>b</sup>   | 201   | 85.1        | (77.8-90.3)                    |
| Ingham  | 276   | 78.3        | (71.2-84.1)                    |
| <b>Region 5</b>   | 486   | 79.4        | (74.9-83.2)                    |
| Branch-Hillsdale-St. Joseph   | 125   | 79.9        | (71.8-86.1)                    |
| Calhoun   | 129   | 82.4        | (74.1-88.5)                    |
| Kalamazoo   | 232   | 77.4        | (70.1-83.4)                    |
| <b>Region 6</b>   | 338   | 74.7        | (67.8-80.5)                    |
| Van Buren-Cass  | 135   | 73.7        | (62.4-82.5)                    |
| Berrien   | 203   | 75.5        | (66.5-82.7)                    |
| <b>Region 7</b>   | 956   | 82.2        | (78.6-85.4)                    |
| Allegan   | 101   | 89.2        | (82.0-93.7)                    |
| Ionia   | 58  | 79.9        | (65.2-89.4)                    |
| Kent  | 487   | 82.8        | (77.4-87.2)                    |
| Mid-Michigan <sup>b</sup>   | 201   | 85.1        | (77.8-90.3)                    |
| Ottawa  | 229   | 76.7        | (68.3-83.4)                    |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 20 Cont'd</b>          |   |                  |                                |
|---------------------------------|---|------------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Had Appropriately Timed Pap Test<sup>a</sup></b> |                  |                                |
|                                 | <b>N</b>  | <b>%</b>         | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>9,235</b>  | <b>81.3</b>      | <b>(80.3-82.4)</b>             |
| <b>Region 8</b>                 | 499   | 79.9             | (75.1-84.0)                    |
| District #10                    | 317   | 79.8             | (74.2-84.5)                    |
| Muskegon                        | 182   | 80.0             | (70.6-87.0)                    |
| <b>Region 9</b>                 | 434   | 81.0             | (76.4-84.8)                    |
| District #2                     | 95  | 75.1             | (64.6-83.3)                    |
| District #4                     | 87  | 84.0             | (72.8-91.2)                    |
| Northwest Michigan              | 121   | 74.4             | (64.1-82.6)                    |
| Benzie-Leelanau                 | 47  | --- <sup>c</sup> | --- <sup>c</sup>               |
| Grand Traverse                  | 84  | 87.4             | (78.1-93.1)                    |
| <b>Region 10</b>                | 478   | 83.0             | (78.7-86.5)                    |
| Bay                             | 107   | 85.8             | (77.9-91.2)                    |
| Huron                           | 41  | --- <sup>c</sup> | --- <sup>c</sup>               |
| Saginaw                         | 228   | 84.8             | (77.6-90.0)                    |
| Sanilac                         | 51  | 80.5             | (68.0-88.8)                    |
| Tuscola                         | 51  | 75.1             | (59.3-86.1)                    |
| <b>Region 11</b>                | 271   | 83.8             | (78.5-88.1)                    |
| Central Michigan                | 189   | 83.2             | (76.7-88.2)                    |
| Midland                         | 82  | 85.4             | (74.6-92.1)                    |
| <b>Region 12</b>                | 380   | 77.1             | (71.9-81.5)                    |
| Luce-Mackinac-Alger-Schoolcraft | 52  | 70.6             | (55.5-82.2)                    |
| Western Upper Peninsula         | 75  | 72.6             | (59.9-82.5)                    |
| Delta-Menominee                 | 89  | 82.1             | (72.6-88.9)                    |
| Chippewa                        | 45  | --- <sup>c</sup> | --- <sup>c</sup>               |
| Dickinson-Iron                  | 53  | 59.2             | (41.9-74.5)                    |
| Marquette                       | 66  | 80.2             | (67.7-88.6)                    |

Note: Data included diagnostic tests.

<sup>a</sup> Among women aged 18 years and older, the proportion who had a Pap test within the previous three years.

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

<sup>c</sup> Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.

| <b>Table 21: Prostate Cancer Screening Among Men Aged 50 and Older<br/>Michigan BRFSS, 2006 and 2008 Combined</b> |   |                  |                                |
|---|---|------------------|--------------------------------|
| <b>Geographic Area</b>  | <b>Had PSA in Past Year<sup>a</sup></b> |                  |                                |
|   | <b>N</b>                                | <b>%</b>         | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>   | <b>3,076</b>                            | <b>60.8</b>      | <b>(58.8-62.7)</b>             |
| <b>Region 1</b>   | 1,281                                   | 63.2             | (60.1-66.3)                    |
| Livingston  | 48                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Macomb  | 183                                     | 67.4             | (59.7-74.2)                    |
| Monroe  | 43                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Oakland   | 340                                     | 64.6             | (58.6-70.3)                    |
| St. Clair   | 46                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Washtenaw   | 101                                     | 69.0             | (58.1-78.1)                    |
| City of Detroit   | 250                                     | 56.6             | (47.8-65.0)                    |
| Wayne exc. Detroit  | 266                                     | 63.9             | (56.9-70.3)                    |
| <b>Region 2</b>   | 190                                     | 66.7             | (58.6-74.0)                    |
| Genesee   | 136                                     | 68.4             | (58.9-76.7)                    |
| Lapeer  | 34                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Shiawassee  | 20                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| <b>Region 3</b>   | 94                                      | 58.8             | (47.7-69.2)                    |
| Jackson   | 53                                      | 56.5             | (41.7-70.2)                    |
| Lenawee   | 41                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| <b>Region 4</b>   | 183                                     | 58.7             | (50.5-66.5)                    |
| Barry-Eaton   | 66                                      | 62.8             | (50.2-73.9)                    |
| Mid-Michigan <sup>b</sup>   | 71                                      | 65.7             | (51.2-77.8)                    |
| Ingham  | 74                                      | 53.9             | (41.1-66.2)                    |
| <b>Region 5</b>   | 137                                     | 59.8             | (50.3-68.5)                    |
| Branch-Hillsdale-St. Joseph   | 39                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Calhoun   | 23                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Kalamazoo   | 75                                      | 66.2             | (54.0-76.6)                    |
| <b>Region 6</b>   | 100                                     | 51.4             | (40.3-62.4)                    |
| Van Buren-Cass  | 35                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Berrien   | 65                                      | 51.2             | (37.0-65.3)                    |
| <b>Region 7</b>   | 302                                     | 58.4             | (51.9-64.6)                    |
| Allegan   | 22                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Ionia   | 18                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Kent  | 158                                     | 56.0             | (47.1-64.5)                    |
| Mid-Michigan <sup>b</sup>   | 71                                      | 65.7             | (51.2-77.8)                    |
| Ottawa  | 76                                      | 62.2             | (49.5-73.3)                    |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 21 Cont'd</b>          |   |                  |                                |
|---------------------------------|---|------------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Had PSA in Past Year<sup>a</sup></b> |                  |                                |
|                                 | <b>N</b>                                | <b>56%</b>       | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>3,076</b>                            | <b>60.8</b>      | <b>(58.8-62.7)</b>             |
| <b>Region 8</b>                 | 162                                     | 56.4             | (47.9-64.6)                    |
| District #10                    | 106                                     | 60.0             | (49.6-69.5)                    |
| Muskegon                        | 56                                      | 49.8             | (35.4-64.3)                    |
| <b>Region 9</b>                 | 209                                     | 65.2             | (57.9-71.8)                    |
| District #2                     | 43                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| District #4                     | 54                                      | 69.6             | (55.1-81.0)                    |
| Northwest Michigan              | 58                                      | 67.1             | (53.0-78.6)                    |
| Benzie-Leelanau                 | 24                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Grand Traverse                  | 30                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| <b>Region 10</b>                | 174                                     | 59.6             | (50.8-67.8)                    |
| Bay                             | 44                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Huron                           | 18                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Saginaw                         | 84                                      | 57.4             | (44.1-69.7)                    |
| Sanilac                         | 13                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Tuscola                         | 15                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| <b>Region 11</b>                | 109                                     | 54.9             | (44.8-64.7)                    |
| Central Michigan                | 79                                      | 50.2             | (38.7-61.6)                    |
| Midland                         | 30                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| <b>Region 12</b>                | 129                                     | 51.1             | (41.7-60.5)                    |
| Luce-Mackinac-Alger-Schoolcraft | 20                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Western Upper Peninsula         | 32                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Delta-Menominee                 | 26                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Chippewa                        | 10                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Dickinson-Iron                  | 18                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Marquette                       | 23                                      | --- <sup>c</sup> | --- <sup>c</sup>               |

Note: Men who had been diagnosed with prostate cancer were excluded.

<sup>a</sup> Among men aged 50 years and older, the proportion who reported having a PSA in the past year.

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

<sup>c</sup> Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.

| <b>Table 22: Colorectal Cancer Screening Among Adults 50 Years and Older<br/>Michigan BRFS, 2006 and 2008 Combined</b> |   |             |                                    |
|--|---|-------------|------------------------------------|
| <b>Geographic Area</b>   | <b>Had Sigmoidoscopy or<br/>Colonoscopy in Past 5 Years<sup>a</sup></b> |             |                                    |
|  | <b>N</b>  | <b>%</b>    | <b>95% Confidence<br/>Interval</b> |
| <b>Michigan Total</b>  | <b>8,865</b>  | <b>56.9</b> | <b>(55.7-58.1)</b>                 |
| <b>Region 1</b>  | 3,767   | 57.6        | (55.6-59.5)                        |
| Livingston   | 123   | 47.5        | (37.7-57.5)                        |
| Macomb   | 530   | 57.4        | (52.6-62.2)                        |
| Monroe   | 128   | 46.6        | (36.9-56.6)                        |
| Oakland  | 929   | 59.3        | (55.4-63.0)                        |
| St. Clair  | 126   | 55.7        | (46.0-65.0)                        |
| Washtenaw  | 246   | 63.3        | (56.1-69.9)                        |
| City of Detroit  | 852   | 56.1        | (51.3-60.8)                        |
| Wayne exc. Detroit   | 821   | 59.0        | (54.9-62.9)                        |
| <b>Region 2</b>  | 525   | 59.6        | (54.7-64.4)                        |
| Genesee  | 386   | 59.9        | (54.0-65.5)                        |
| Lapeer   | 69  | 60.7        | (47.6-72.4)                        |
| Shiawassee   | 70  | 56.8        | (43.9-68.9)                        |
| <b>Region 3</b>  | 260   | 49.7        | (43.0-56.4)                        |
| Jackson  | 150   | 50.8        | (41.9-59.5)                        |
| Lenawee  | 110   | 48.2        | (38.1-58.5)                        |
| <b>Region 4</b>  | 503   | 62.2        | (57.2-66.9)                        |
| Barry-Eaton  | 161   | 66.5        | (58.0-74.1)                        |
| Mid-Michigan <sup>b</sup>  | 184   | 58.8        | (50.1-67.0)                        |
| Ingham   | 231   | 62.6        | (55.3-69.4)                        |
| <b>Region 5</b>  | 464   | 54.0        | (48.8-59.0)                        |
| Branch-Hillsdale-St. Joseph  | 129   | 46.4        | (36.9-56.2)                        |
| Calhoun  | 112   | 52.9        | (42.6-63.0)                        |
| Kalamazoo  | 223   | 59.4        | (52.1-66.4)                        |
| <b>Region 6</b>  | 328   | 45.6        | (39.5-51.8)                        |
| Van Buren-Cass   | 128   | 39.6        | (30.8-49.1)                        |
| Berrien  | 200   | 49.9        | (41.8-58.1)                        |
| <b>Region 7</b>  | 852   | 61.9        | (58.1-65.6)                        |
| Allegan  | 82  | 51.3        | (39.0-63.4)                        |
| Ionia  | 57  | 58.2        | (43.2-71.8)                        |
| Kent   | 425   | 63.3        | (57.9-68.4)                        |
| Mid-Michigan <sup>b</sup>  | 184   | 58.8        | (50.1-67.0)                        |
| Ottawa   | 215   | 63.2        | (55.7-70.2)                        |

| <b>Table 22 Cont'd</b>          |   |                  |                                |
|---------------------------------|---|------------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Had Sigmoidoscopy or Colonoscopy in Past 5 Years<sup>a</sup></b> |                  |                                |
|                                 | <b>N</b>  | <b>%</b>         | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>8,865</b>  | <b>56.9</b>      | <b>(55.7-58.1)</b>             |
| <b>Region 8</b>                 | 488   | 53.2             | (48.2-58.2)                    |
| District #10                    | 321   | 51.4             | (45.4-57.4)                    |
| Muskegon                        | 167   | 56.6             | (47.5-65.3)                    |
| <b>Region 9</b>                 | 499   | 55.7             | (50.8-60.4)                    |
| District #2                     | 109   | 50.0             | (39.9-60.1)                    |
| District #4                     | 109   | 60.6             | (50.4-70.0)                    |
| Northwest Michigan              | 134   | 52.3             | (43.0-61.4)                    |
| Benzie-Leelanau                 | 56  | 56.2             | (41.9-69.7)                    |
| Grand Traverse                  | 91  | 61.4             | (49.9-71.7)                    |
| <b>Region 10</b>                | 476   | 60.0             | (54.7-65.1)                    |
| Bay                             | 111   | 62.4             | (51.6-72.0)                    |
| Huron                           | 46  | --- <sup>c</sup> | --- <sup>c</sup>               |
| Saginaw                         | 220   | 64.1             | (55.8-71.7)                    |
| Sanilac                         | 45  | --- <sup>c</sup> | --- <sup>c</sup>               |
| Tuscola                         | 54  | 43.1             | (29.4-57.9)                    |
| <b>Region 11</b>                | 295   | 49.1             | (42.9-55.3)                    |
| Central Michigan                | 216   | 44.8             | (37.8-52.0)                    |
| Midland                         | 79  | 60.7             | (48.5-71.7)                    |
| <b>Region 12</b>                | 397   | 54.2             | (48.8-59.6)                    |
| Luce-Mackinac-Alger-Schoolcraft | 55  | 54.9             | (40.8-68.2)                    |
| Western Upper Peninsula         | 91  | 43.4             | (32.6-54.8)                    |
| Delta-Menominee                 | 94  | 53.4             | (42.0-64.4)                    |
| Chippewa                        | 42  | --- <sup>c</sup> | --- <sup>c</sup>               |
| Dickinson-Iron                  | 52  | 60.4             | (44.4-74.5)                    |
| Marquette                       | 63  | 64.7             | (23.6-49.0)                    |

<sup>a</sup> Among those aged 50 years and older, the proportion who had a sigmoidoscopy or colonoscopy within the past five years.  
<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.  
<sup>c</sup> Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.

**Table 23: Oral Health  
Michigan BRFSS, 2006 and 2008 Combined**

| Geographic Area             | No Dental Visit in Past Year <sup>a</sup> |             |                         | Lost 6+ Teeth <sup>b</sup> |             |                         |
|-----------------------------|---|-------------|-------------------------|----------------------------|-------------|-------------------------|
|                             | N   | %           | 95% Confidence Interval | N                          | %           | 95% Confidence Interval |
| <b>Michigan Total</b>       | <b>14,981</b>                             | <b>74.7</b> | <b>(73.8-75.6)</b>      | <b>14,779</b>              | <b>14.6</b> | <b>(14.0-15.2)</b>      |
| <b>Region 1</b>             | 6,409                                     | 76.3        | (74.8-77.6)             | 6,321                      | 13.9        | (13.0-14.9)             |
| Livingston                  | 238                                       | 82.2        | (74.9-87.7)             | 238                        | 8.1         | (5.4-12.0)              |
| Macomb                      | 916                                       | 80.6        | (77.1-83.8)             | 902                        | 13.5        | (11.3-15.9)             |
| Monroe                      | 210                                       | 76.1        | (67.4-83.0)             | 208                        | 11.2        | (7.8-15.8)              |
| Oakland                     | 1,546                                     | 81.4        | (78.6-83.9)             | 1,526                      | 11.6        | (10.0-13.4)             |
| St. Clair                   | 222                                       | 72.5        | (64.2-79.4)             | 217                        | 15.1        | (11.0-20.5)             |
| Washtenaw                   | 447                                       | 80.7        | (75.1-85.3)             | 442                        | 5.6         | (3.8-8.3)               |
| City of Detroit             | 1,379                                     | 57.4        | (53.5-61.2)             | 1,362                      | 24.0        | (21.2-27.0)             |
| Wayne exc. Detroit          | 1,407                                     | 79.1        | (76.1-81.8)             | 1,387                      | 14.0        | (12.2-16.1)             |
| <b>Region 2</b>             | 924                                       | 72.4        | (68.3-76.2)             | 917                        | 16.6        | (14.2-19.5)             |
| Genesee                     | 690                                       | 71.6        | (66.6-76.0)             | 683                        | 17.2        | (14.2-20.6)             |
| Lapeer                      | 121                                       | 71.5        | (60.7-80.3)             | 121                        | 17.7        | (11.4-26.5)             |
| Shiawassee                  | 113                                       | 78.0        | (66.2-86.6)             | 113                        | 12.4        | (7.8-19.2)              |
| <b>Region 3</b>             | 416                                       | 73.7        | (67.6-79.0)             | 414                        | 15.6        | (12.2-19.7)             |
| Jackson                     | 259                                       | 70.2        | (62.5-76.8)             | 259                        | 15.6        | (11.3-21.1)             |
| Lenawee                     | 157                                       | 79.4        | (68.3-87.4)             | 155                        | 15.6        | (10.5-22.4)             |
| <b>Region 4</b>             | 885                                       | 77.8        | (74.1-81.1)             | 876                        | 12.1        | (10.0-14.7)             |
| Barry-Eaton                 | 271                                       | 75.9        | (68.7-81.9)             | 267                        | 11.8        | (8.7-15.9)              |
| Mid-Michigan <sup>c</sup>   | 328                                       | 72.6        | (65.5-78.7)             | 323                        | 15.1        | (11.0-20.4)             |
| Ingham                      | 422                                       | 78.6        | (73.2-83.2)             | 421                        | 9.0         | (6.7-12.1)              |
| <b>Region 5</b>             | 785                                       | 72.0        | (67.6-76.0)             | 774                        | 14.3        | (11.9-17.1)             |
| Branch-Hillsdale-St. Joseph | 206                                       | 67.4        | (59.0-74.8)             | 204                        | 17.3        | (12.4-23.7)             |
| Calhoun                     | 198                                       | 70.4        | (61.1-78.3)             | 196                        | 12.3        | (8.5-17.4)              |
| Kalamazoo                   | 381                                       | 75.4        | (69.0-80.9)             | 374                        | 13.8        | (10.5-17.8)             |
| <b>Region 6</b>             | 531                                       | 73.2        | (68.0-77.8)             | 514                        | 19.9        | (16.5-23.7)             |
| Van Buren-Cass              | 209                                       | 76.0        | (67.2-83.0)             | 204                        | 19.9        | (14.8-26.1)             |
| Berrien                     | 322                                       | 71.0        | (64.3-76.9)             | 310                        | 19.8        | (15.6-24.9)             |

2006 - 2008 Michigan BRFS Regional & Local Health Department Estimates  
August 4, 2009

| Table 23 Cont'd                 |   |             |                         |                            |             |                         |
|---------------------------------|---|-------------|-------------------------|----------------------------|-------------|-------------------------|
| Geographic Area                 | No Dental Visit in Past Year <sup>a</sup> |             |                         | Lost 6+ Teeth <sup>b</sup> |             |                         |
|                                 | N   | %           | 95% Confidence Interval | N                          | %           | 95% Confidence Interval |
| <b>Michigan Total</b>           | <b>14,981</b>                             | <b>74.7</b> | <b>(73.8-75.6)</b>      | <b>14,779</b>              | <b>14.6</b> | <b>(14.0-15.2)</b>      |
| <b>Region 7</b>                 | 1,591                                     | 77.3        | (74.4-80.0)             | 1,580                      | 9.1         | (7.9-10.6)              |
| Allegan                         | 159                                       | 74.6        | (64.7-82.4)             | 158                        | 11.1        | (7.3-16.4)              |
| Ionia                           | 93  | 84.1        | (71.8-91.7)             | 91                         | 11.4        | (6.7-18.7)              |
| Kent                            | 812                                       | 76.9        | (72.7-80.6)             | 808                        | 9.8         | (8.0-12.0)              |
| Mid-Michigan <sup>c</sup>       | 328                                       | 72.6        | (65.5-78.7)             | 323                        | 15.1        | (11.0-20.4)             |
| Ottawa                          | 391                                       | 82.2        | (76.7-86.6)             | 388                        | 6.6         | (4.5-9.5)               |
| <b>Region 8</b>                 | 801                                       | 69.3        | (65.1-73.3)             | 782                        | 19.4        | (16.4-22.7)             |
| District #10                    | 512                                       | 67.4        | (62.0-72.4)             | 495                        | 21.1        | (17.4-25.3)             |
| Muskegon                        | 289                                       | 72.8        | (65.8-78.9)             | 287                        | 16.3        | (11.7-22.3)             |
| <b>Region 9</b>                 | 758                                       | 70.7        | (66.5-74.6)             | 752                        | 17.6        | (15.0-20.6)             |
| District #2                     | 152                                       | 72.2        | (63.2-79.7)             | 150                        | 25.7        | (18.5-34.7)             |
| District #4                     | 171                                       | 63.7        | (54.7-71.8)             | 171                        | 22.8        | (17.1-29.7)             |
| Northwest Michigan              | 207                                       | 72.5        | (64.2-79.5)             | 204                        | 16.3        | (11.9-22.0)             |
| Benzie-Leelanau                 | 84  | 69.4        | (54.7-81.0)             | 83                         | 10.3        | (6.0-17.1)              |
| Grand Traverse                  | 144                                       | 75.8        | (65.6-83.7)             | 144                        | 9.7         | (5.8-15.6)              |
| <b>Region 10</b>                | 779                                       | 79.1        | (75.4-82.4)             | 758                        | 15.1        | (12.6-18.1)             |
| Bay                             | 183                                       | 83.4        | (75.3-89.2)             | 179                        | 9.8         | (6.5-14.6)              |
| Huron                           | 68  | 82.2        | (70.4-89.9)             | 65                         | 18.3        | (9.6-32.2)              |
| Saginaw                         | 375                                       | 78.7        | (72.8-83.5)             | 367                        | 16.6        | (12.7-21.4)             |
| Sanilac                         | 73  | 60.7        | (47.5-72.5)             | 69                         | 22.4        | (13.2-35.3)             |
| Tuscola                         | 80  | 82.2        | (72.5-89.0)             | 78                         | 14.7        | (8.8-23.4)              |
| <b>Region 11</b>                | 474                                       | 68.5        | (63.0-73.5)             | 468                        | 19.4        | (15.8-23.6)             |
| Central Michigan                | 328                                       | 64.6        | (57.7-70.8)             | 322                        | 23.3        | (18.5-28.8)             |
| Midland                         | 146                                       | 77.4        | (68.0-84.6)             | 146                        | 10.9        | (6.6-17.4)              |
| <b>Region 12</b>                | 609                                       | 67.4        | (62.5-72.0)             | 604                        | 18.9        | (15.9-22.4)             |
| Luce-Mackinac-Alger-Schoolcraft | 83  | 62.9        | (48.9-75.1)             | 81                         | 20.8        | (13.1-31.3)             |
| Western Upper Peninsula         | 124                                       | 71.8        | (61.7-80.2)             | 120                        | 20.6        | (14.1-29.0)             |
| Delta-Menominee                 | 137                                       | 61.4        | (50.9-71.0)             | 136                        | 22.0        | (15.4-30.5)             |
| Chippewa                        | 65  | 64.1        | (45.3-79.4)             | 66                         | 22.4        | (13.5-34.7)             |
| Dickinson-Iron                  | 90  | 77.4        | (66.3-85.6)             | 90                         | 21.3        | (13.5-31.8)             |
| Marquette                       | 110                                       | 67.3        | (56.3-76.6)             | 111                        | 9.4         | (5.2-16.2)              |

<sup>a</sup> The proportion who reported that they had not visited a dentist or dental clinic for any reason in the previous year.

<sup>b</sup> 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.

<sup>c</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

**Table 24: Immunizations Among Adults Aged 65 Years and Older  
Michigan BRFSS, 2006-2008 Combined**

| Geographic Area             | Had Flu Vaccine in Past Year <sup>a</sup> |             |                         | Ever Had Pneumonia Vaccine <sup>b</sup> |             |                         |
|-----------------------------|---|-------------|-------------------------|---|-------------|-------------------------|
|                             | N   | %           | 95% Confidence Interval | N                                       | %           | 95% Confidence Interval |
| <b>Michigan Total</b>       | <b>6,419</b>                              | <b>70.7</b> | <b>(69.4-71.9)</b>      | <b>6,223</b>                            | <b>65.7</b> | <b>(64.4-67.0)</b>      |
| <b>Region 1</b>             | 2,744                                     | 69.5        | (67.4-71.5)             | 2,651                                   | 63.1        | (60.9-65.3)             |
| Livingston                  | 81  | 57.0        | (45.0-68.3)             | 80                                      | 59.8        | (47.7-70.9)             |
| Macomb                      | 375                                       | 74.8        | (69.7-79.3)             | 359                                     | 66.4        | (60.7-71.6)             |
| Monroe                      | 78  | 73.9        | (62.0-83.1)             | 78                                      | 69.4        | (57.2-79.4)             |
| Oakland                     | 687                                       | 73.8        | (69.9-77.4)             | 663                                     | 65.4        | (61.1-69.4)             |
| St. Clair                   | 83  | 61.1        | (49.6-71.5)             | 81                                      | 65.8        | (54.3-75.7)             |
| Washtenaw                   | 145                                       | 78.4        | (69.8-85.1)             | 136                                     | 71.9        | (62.8-79.5)             |
| City of Detroit             | 667                                       | 54.5        | (49.2-59.7)             | 643                                     | 46.5        | (41.2-51.8)             |
| Wayne exc. Detroit          | 615                                       | 71.3        | (66.8-75.4)             | 599                                     | 67.0        | (62.3-71.3)             |
| <b>Region 2</b>             | 393                                       | 68.9        | (63.6-73.8)             | 375                                     | 63.6        | (58.0-68.9)             |
| Genesee                     | 281                                       | 71.2        | (64.9-76.8)             | 270                                     | 64.8        | (58.0-71.0)             |
| Lapeer                      | 54  | 53.4        | (39.0-67.1)             | 50                                      | 60.0        | (44.9-73.5)             |
| Shiawassee                  | 58  | 73.4        | (59.7-83.7)             | 55                                      | 61.8        | (47.2-74.6)             |
| <b>Region 3</b>             | 181                                       | 72.9        | (65.5-79.3)             | 178                                     | 67.5        | (59.6-74.5)             |
| Jackson                     | 112                                       | 73.5        | (63.9-81.3)             | 111                                     | 71.0        | (61.1-79.3)             |
| Lenawee                     | 69  | 72.1        | (59.5-82.0)             | 67                                      | 61.8        | (48.6-73.4)             |
| <b>Region 4</b>             | 341                                       | 74.7        | (69.3-79.5)             | 330                                     | 71.0        | (65.4-76.1)             |
| Barry-Eaton                 | 101                                       | 67.3        | (56.7-76.3)             | 97                                      | 73.1        | (62.6-81.5)             |
| Mid-Michigan <sup>c</sup>   | 144                                       | 71.0        | (62.1-78.5)             | 137                                     | 93.2        | (53.8-71.8)             |
| Ingham                      | 162                                       | 81.9        | (74.7-87.4)             | 158                                     | 70.9        | (62.6-78.1)             |
| <b>Region 5</b>             | 327                                       | 70.7        | (65.1-75.8)             | 318                                     | 68.8        | (63.0-74.1)             |
| Branch-Hillsdale-St. Joseph | 93  | 70.0        | (59.3-78.8)             | 90                                      | 67.7        | (56.7-77.1)             |
| Calhoun                     | 78  | 65.9        | (53.2-76.7)             | 76                                      | 69.9        | (57.5-79.9)             |
| Kalamazoo                   | 156                                       | 73.5        | (65.5-80.2)             | 152                                     | 68.9        | (60.3-76.4)             |
| <b>Region 6</b>             | 228                                       | 63.8        | (56.3-70.7)             | 222                                     | 65.1        | (57.5-71.9)             |
| Van Buren-Cass              | 83  | 61.4        | (49.0-72.4)             | 84                                      | 62.7        | (50.3-73.5)             |
| Berrien                     | 145                                       | 65.7        | (56.1-74.1)             | 138                                     | 67.0        | (57.6-75.3)             |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| Table 24 Cont'd                 |   |                  |                         |   |                  |                         |
|---------------------------------|---|------------------|-------------------------|---|------------------|-------------------------|
| Geographic Area                 | Had Flu Vaccine in Past Year <sup>a</sup> |                  |                         | Ever Had Pneumonia Vaccine <sup>b</sup> |                  |                         |
|                                 | N   | %                | 95% Confidence Interval | N                                       | %                | 95% Confidence Interval |
| <b>Michigan Total</b>           | <b>6,419</b>                              | <b>70.7</b>      | <b>(69.4-71.9)</b>      | <b>6,223</b>                            | <b>65.7</b>      | <b>(64.4-67.0)</b>      |
| <b>Region 7</b>                 | 585                                       | 72.7             | (68.6-76.4)             | 566                                     | 69.8             | (65.5-73.8)             |
| Allegan                         | 52  | 74.7             | (60.2-85.3)             | 51                                      | 71.8             | (55.8-83.7)             |
| Ionia                           | 34  | --- <sup>d</sup> | --- <sup>d</sup>        | 35                                      | --- <sup>d</sup> | --- <sup>d</sup>        |
| Kent                            | 297                                       | 72.5             | (66.7-77.7)             | 287                                     | 74.3             | (68.5-79.4)             |
| Mid-Michigan <sup>c</sup>       | 144                                       | 71.0             | (62.1-78.5)             | 137                                     | 93.2             | (53.8-71.8)             |
| Ottawa                          | 136                                       | 74.8             | (66.4-81.7)             | 131                                     | 69.0             | (59.7-76.9)             |
| <b>Region 8</b>                 | 357                                       | 76.3             | (71.1-80.9)             | 345                                     | 68.1             | (62.4-73.3)             |
| District #10                    | 221                                       | 74.8             | (68.1-80.5)             | 214                                     | 68.5             | (61.2-74.9)             |
| Muskegon                        | 136                                       | 79.1             | (70.1-86.0)             | 131                                     | 67.4             | (57.6-75.9)             |
| <b>Region 9</b>                 | 365                                       | 75.8             | (70.8-80.2)             | 356                                     | 68.4             | (63.0-73.4)             |
| District #2                     | 79  | 77.5             | (66.4-85.8)             | 78                                      | 62.5             | (50.3-73.3)             |
| District #4                     | 94  | 77.4             | (66.9-85.3)             | 93                                      | 74.6             | (63.6-83.1)             |
| Northwest Michigan              | 90  | 75.2             | (64.9-83.3)             | 84                                      | 68.8             | (57.5-78.3)             |
| Benzie-Leelanau                 | 38  | --- <sup>d</sup> | --- <sup>d</sup>        | 35                                      | --- <sup>d</sup> | --- <sup>d</sup>        |
| Grand Traverse                  | 64  | 78.7             | (66.3-87.4)             | 66                                      | 69.9             | (57.1-80.1)             |
| <b>Region 10</b>                | 381                                       | 66.8             | (61.3-72.0)             | 375                                     | 65.9             | (60.3-71.1)             |
| Bay                             | 86  | 67.6             | (55.1-78.0)             | 85                                      | 66.0             | (54.2-76.2)             |
| Huron                           | 45  | --- <sup>d</sup> | --- <sup>d</sup>        | 45                                      | --- <sup>d</sup> | --- <sup>d</sup>        |
| Saginaw                         | 176                                       | 68.1             | (59.6-75.5)             | 172                                     | 66.1             | (57.2-74.0)             |
| Sanilac                         | 36  | --- <sup>d</sup> | --- <sup>d</sup>        | 36                                      | --- <sup>d</sup> | --- <sup>d</sup>        |
| Tuscola                         | 38  | --- <sup>d</sup> | --- <sup>d</sup>        | 37                                      | --- <sup>d</sup> | --- <sup>d</sup>        |
| <b>Region 11</b>                | 204                                       | 75.6             | (68.8-81.2)             | 201                                     | 68.3             | (61.2-74.7)             |
| Central Michigan                | 143                                       | 76.8             | (68.7-83.3)             | 140                                     | 66.6             | (57.9-74.2)             |
| Midland                         | 61  | 72.5             | (59.5-82.6)             | 61                                      | 72.3             | (59.0-82.6)             |
| <b>Region 12</b>                | 302                                       | 65.8             | (59.9-71.3)             | 294                                     | 63.6             | (57.5-69.3)             |
| Luce-Mackinac-Alger-Schoolcraft | 37  | --- <sup>d</sup> | --- <sup>d</sup>        | 33                                      | --- <sup>d</sup> | --- <sup>d</sup>        |
| Western Upper Peninsula         | 61  | 67.2             | (53.4-78.5)             | 60                                      | 74.7             | (61.3-84.6)             |
| Delta-Menominee                 | 75  | 58.5             | (45.9-70.0)             | 75                                      | 60.5             | (47.9-71.8)             |
| Chippewa                        | 35  | --- <sup>d</sup> | --- <sup>d</sup>        | 33                                      | --- <sup>d</sup> | --- <sup>d</sup>        |
| Dickinson-Iron                  | 47  | --- <sup>d</sup> | --- <sup>d</sup>        | 46                                      | --- <sup>d</sup> | --- <sup>d</sup>        |
| Marquette                       | 47  | --- <sup>d</sup> | --- <sup>d</sup>        | 47                                      | --- <sup>d</sup> | --- <sup>d</sup>        |

<sup>a</sup> Among those 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.

<sup>b</sup> Among those aged 65 years and older, the proportion who reported that they ever had a pneumococcal vaccine.

<sup>c</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

<sup>d</sup> Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.

| <b>Table 25: HIV Testing Among Adults Aged 18-64 Years<br/>Michigan BRFSS, 2006- 2008 Combined</b> |   |             |                                |
|--|---|-------------|--------------------------------|
| <b>Geographic Area</b>   | <b>Ever Had an HIV Test<sup>a</sup></b> |             |                                |
|  | <b>N</b>                                | <b>%</b>    | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>  | <b>15,261</b>                           | <b>37.2</b> | <b>(36.2-38.2)</b>             |
| <b>Region 1</b>  | 6,661                                   | 41.8        | (40.3-43.4)                    |
| Livingston   | 255                                     | 31.2        | (24.5-38.8)                    |
| Macomb   | 897                                     | 36.2        | (32.3-40.3)                    |
| Monroe   | 215                                     | 36.6        | (29.1-44.9)                    |
| Oakland  | 1,532                                   | 39.0        | (35.9-42.2)                    |
| St. Clair  | 252                                     | 33.7        | (27.1-41.0)                    |
| Washtenaw  | 500                                     | 39.1        | (33.8-44.6)                    |
| City of Detroit  | 1,531                                   | 61.1        | (57.6-64.5)                    |
| Wayne exc. Detroit   | 1,473                                   | 40.2        | (36.9-43.6)                    |
| <b>Region 2</b>  | 925                                     | 36.5        | (32.5-40.8)                    |
| Genesee  | 699                                     | 38.8        | (34.0-43.9)                    |
| Lapeer   | 121                                     | 26.0        | (18.1-35.8)                    |
| Shiawassee   | 105                                     | 34.9        | (24.4-47.1)                    |
| <b>Region 3</b>  | 428                                     | 36.9        | (31.2-42.9)                    |
| Jackson  | 274                                     | 35.5        | (28.9-42.8)                    |
| Lenawee  | 154                                     | 39.2        | (29.3-50.0)                    |
| <b>Region 4</b>  | 919                                     | 40.1        | (36.1-44.3)                    |
| Barry-Eaton  | 281                                     | 36.1        | (29.3-43.4)                    |
| Mid-Michigan <sup>b</sup>  | 359                                     | 32.6        | (26.8-39.0)                    |
| Ingham   | 431                                     | 46.2        | (40.0-52.6)                    |
| <b>Region 5</b>  | 795                                     | 35.6        | (31.5-39.9)                    |
| Branch-Hillsdale-St. Joseph  | 214                                     | 30.2        | (23.6-37.7)                    |
| Calhoun  | 201                                     | 45.2        | (36.4-54.3)                    |
| Kalamazoo  | 380                                     | 33.3        | (27.7-39.5)                    |
| <b>Region 6</b>  | 532                                     | 33.6        | (28.5-39.0)                    |
| Van Buren-Cass   | 211                                     | 33.9        | (25.9-43.0)                    |
| Berrien  | 321                                     | 33.3        | (27.2-40.1)                    |
| <b>Region 7</b>  | 1,688                                   | 32.6        | (28.0-36.4)                    |
| Allegan  | 164                                     | 39.5        | (29.3-50.8)                    |
| Ionia  | 100                                     | 22.1        | (14.4-32.2)                    |
| Kent   | 862                                     | 34.1        | (30.1-38.4)                    |
| Mid-Michigan <sup>b</sup>  | 359                                     | 32.6        | (26.8-39.0)                    |
| Ottawa   | 410                                     | 28.4        | (23.5-33.9)                    |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 25 Cont'd</b>          |   |                  |                                |
|---------------------------------|---|------------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Ever Had an HIV Test<sup>a</sup></b> |                  |                                |
|                                 | <b>N</b>                                | <b>%</b>         | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>15,261</b>                           | <b>37.2</b>      | <b>(36.2-38.2)</b>             |
| <b>Region 8</b>                 | 765                                     | 32.1             | (28.0-36.4)                    |
| District #10                    | 483                                     | 31.7             | (26.8-37.1)                    |
| Muskegon                        | 282                                     | 32.8             | (26.0-40.4)                    |
| <b>Region 9</b>                 | 731                                     | 31.7             | (27.7-36.1)                    |
| District #2                     | 135                                     | 26.6             | (18.6-36.5)                    |
| District #4                     | 150                                     | 32.4             | (24.6-41.4)                    |
| Northwest Michigan              | 232                                     | 36.5             | (28.8-45.0)                    |
| Benzie-Leelanau                 | 66                                      | 36.2             | (24.1-50.4)                    |
| Grand Traverse                  | 148                                     | 25.8             | (18.1-35.4)                    |
| <b>Region 10</b>                | 758                                     | 30.7             | (26.7-35.1)                    |
| Bay                             | 175                                     | 27.8             | (20.6-36.5)                    |
| Huron                           | 49                                      | --- <sup>c</sup> | --- <sup>c</sup>               |
| Saginaw                         | 390                                     | 33.4             | (27.5-39.8)                    |
| Sanilac                         | 67                                      | 32.5             | (20.6-47.3)                    |
| Tuscola                         | 77                                      | 31.2             | (19.6-45.8)                    |
| <b>Region 11</b>                | 473                                     | 33.1             | (27.9-38.8)                    |
| Central Michigan                | 322                                     | 32.7             | (26.4-39.7)                    |
| Midland                         | 151                                     | 34.0             | (25.3-43.9)                    |
| <b>Region 12</b>                | 578                                     | 30.6             | (26.0-35.6)                    |
| Luce-Mackinac-Alger-Schoolcraft | 90                                      | 35.3             | (22.8-50.1)                    |
| Western Upper Peninsula         | 118                                     | 22.0             | (14.2-32.3)                    |
| Delta-Menominee                 | 117                                     | 29.3             | (19.8-40.9)                    |
| Chippewa                        | 61                                      | 40.4             | (25.7-57.0)                    |
| Dickinson-Iron                  | 80                                      | 33.5             | (22.1-47.2)                    |
| Marquette                       | 112                                     | 29.2             | (20.4-39.8)                    |

Note: "Don't know" was considered a valid response.

<sup>a</sup> Among those 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.

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

<sup>c</sup> Sample size was too small (< 50) to compute a prevalence in this subgroup, but respondents from this local health department were included in the regional prevalence estimate.

**Table 26: Asthma**  
**Michigan BRFSS, 2006-2008 Combined**

| Geographic Area             | Ever Told Have Asthma <sup>a</sup> |             |                         | Still Have Asthma <sup>b</sup> |            |                         |
|-----------------------------|------------------------------------|-------------|-------------------------|--------------------------------|------------|-------------------------|
|                             | N                                  | %           | 95% Confidence Interval | N                              | %          | 95% Confidence Interval |
| <b>Michigan Total</b>       | <b>22,523</b>                      | <b>14.8</b> | <b>(14.2-15.4)</b>      | <b>22,399</b>                  | <b>9.7</b> | <b>(9.2-10.2)</b>       |
| <b>Region 1</b>             | 9,821                              | 15.9        | (14.9-17.0)             | 9,769                          | 10.5       | (9.7-11.4)              |
| Livingston                  | 355                                | 17.4        | (12.6-23.4)             | 354                            | 9.6        | (6.6-13.8)              |
| Macomb                      | 1,325                              | 14.4        | (12.0-17.1)             | 1,316                          | 9.3        | (7.4-11.6)              |
| Monroe                      | 299                                | 12.9        | (8.8-18.6)              | 298                            | 9.1        | (5.6-14.4)              |
| Oakland                     | 2,327                              | 13.8        | (12.0-15.8)             | 2,318                          | 8.8        | (7.5-10.4)              |
| St. Clair                   | 344                                | 16.2        | (11.8-21.7)             | 341                            | 11.5       | (7.8-16.5)              |
| Washtenaw                   | 664                                | 19.8        | (15.9-24.5)             | 660                            | 14.2       | (10.6-18.7)             |
| City of Detroit             | 2,308                              | 17.6        | (15.3-20.1)             | 2,296                          | 13.0       | (11.0-15.2)             |
| Wayne exc. Detroit          | 2,149                              | 17.0        | (14.8-19.5)             | 2,137                          | 10.4       | (8.7-12.5)              |
| <b>Region 2</b>             | 1,379                              | 15.5        | (12.6-19.0)             | 1,370                          | 9.5        | (7.2-12.6)              |
| Genesee                     | 1,027                              | 14.9        | (11.6-19.0)             | 1,020                          | 9.3        | (6.7-12.8)              |
| Lapeer                      | 185                                | 14.9        | (9.0-23.7)              | 183                            | 5.0        | (2.4-10.4)              |
| Shiawassee                  | 167                                | 19.4        | (10.9-32.1)             | 167                            | 15.5       | (7.7-28.7)              |
| <b>Region 3</b>             | 626                                | 16.0        | (12.9-19.7)             | 620                            | 10.4       | (8.1-13.4)              |
| Jackson                     | 394                                | 15.1        | (11.6-19.5)             | 389                            | 10.9       | (7.9-14.9)              |
| Lenawee                     | 232                                | 17.5        | (12.1-24.6)             | 231                            | 9.6        | (6.1-14.9)              |
| <b>Region 4</b>             | 1,307                              | 12.3        | (10.2-14.8)             | 1,301                          | 9.0        | (7.2-11.2)              |
| Barry-Eaton                 | 396                                | 12.9        | (9.3-17.6)              | 392                            | 10.4       | (7.2-14.9)              |
| Mid-Michigan <sup>c</sup>   | 522                                | 11.7        | (8.5-15.9)              | 520                            | 8.4        | (5.7-12.3)              |
| Ingham                      | 616                                | 12.4        | (9.4-16.1)              | 615                            | 8.3        | (5.9-11.4)              |
| <b>Region 5</b>             | 1,165                              | 14.8        | (12.2-17.7)             | 1,158                          | 10.1       | (8.0-12.7)              |
| Branch-Hillsdale-St. Joseph | 314                                | 13.8        | (9.3-19.9)              | 314                            | 11.6       | (7.5-17.7)              |
| Calhoun                     | 293                                | 19.3        | (14.1-25.9)             | 289                            | 11.5       | (7.7-16.7)              |
| Kalamazoo                   | 558                                | 12.8        | (9.4-17.2)              | 555                            | 8.5        | (5.9-12.2)              |
| <b>Region 6</b>             | 786                                | 11.7        | (10.1-13.5)             | 783                            | 7.1        | (5.1-9.9)               |
| Van Buren-Cass              | 305                                | 9.5         | (5.9-15.0)              | 305                            | 8.2        | (4.8-13.7)              |
| Berrien                     | 481                                | 13.5        | (9.8-18.3)              | 478                            | 6.3        | (4.2-9.3)               |
| <b>Region 7</b>             | 2,339                              | 11.7        | (10.1-13.5)             | 2,329                          | 6.7        | (5.5-8.1)               |
| Allegan                     | 221                                | 9.1         | (5.9-13.9)              | 221                            | 4.1        | (1.9-10.8)              |
| Ionia                       | 139                                | 8.7         | (4.4-16.3)              | 138                            | 4.6        | (1.9-10.8)              |
| Kent                        | 1,188                              | 12.7        | (10.4-15.4)             | 1,181                          | 7.1        | (5.5-9.2)               |
| Mid-Michigan <sup>c</sup>   | 522                                | 11.7        | (8.5-15.9)              | 520                            | 8.4        | (5.7-12.3)              |
| Ottawa                      | 564                                | 11.3        | (8.3-15.1)              | 563                            | 6.7        | (4.6-9.7)               |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 26 Cont'd</b>          |  |             |                                |                                      |            |                                |
|---------------------------------|--|-------------|--------------------------------|--------------------------------------|------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Ever Told Have Asthma<sup>a</sup></b> |             |                                | <b>Still Have Asthma<sup>b</sup></b> |            |                                |
|                                 | <b>N</b>                                 | <b>%</b>    | <b>95% Confidence Interval</b> | <b>N</b>                             | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>22,523</b>                            | <b>14.8</b> | <b>(14.2-15.4)</b>             | <b>22,399</b>                        | <b>9.7</b> | <b>(9.2-10.2)</b>              |
| <b>Region 8</b>                 | 1,169                                    | 13.2        | (10.9-15.9)                    | 1,164                                | 9.9        | (7.8-12.4)                     |
| District #10                    | 727                                      | 12.4        | (9.8-15.6)                     | 724                                  | 9.9        | (7.5-12.9)                     |
| Muskegon                        | 442                                      | 14.4        | (10.4-19.7)                    | 440                                  | 9.9        | (6.5-14.9)                     |
| <b>Region 9</b>                 | 1,128                                    | 13.2        | (10.9-15.9)                    | 1,121                                | 8.9        | (7.0-11.1)                     |
| District #2                     | 220                                      | 14.7        | (9.5-22.1)                     | 216                                  | 9.9        | (6.1-15.8)                     |
| District #4                     | 258                                      | 16.4        | (11.6-22.7)                    | 255                                  | 10.9       | (6.9-17.0)                     |
| Northwest Michigan              | 325                                      | 11.6        | (8.0-16.4)                     | 325                                  | 9.0        | (6.0-13.5)                     |
| Benzie-Leelanau                 | 105                                      | 5.3         | (2.5-10.9)                     | 105                                  | 4.3        | (1.8-9.8)                      |
| Grand Traverse                  | 220                                      | 14.4        | (9.1-22.1)                     | 220                                  | 7.6        | (4.1-13.4)                     |
| <b>Region 10</b>                | 1,172                                    | 16.0        | (13.3-19.2)                    | 1,166                                | 9.6        | (7.5-12.2)                     |
| Bay                             | 267                                      | 17.1        | (11.5-24.6)                    | 264                                  | 10.0       | (6.0-16.2)                     |
| Huron                           | 100                                      | 17.4        | (8.9-31.2)                     | 99                                   | 10.6       | (4.1-24.8)                     |
| Saginaw                         | 584                                      | 15.9        | (12.1-20.7)                    | 582                                  | 8.7        | (6.0-12.5)                     |
| Sanilac                         | 105                                      | 13.5        | (8.0-21.9)                     | 105                                  | 13.0       | (7.5-21.4)                     |
| Tuscola                         | 116                                      | 14.7        | (8.7-23.8)                     | 116                                  | 8.8        | (4.7-16.0)                     |
| <b>Region 11</b>                | 699                                      | 17.6        | (14.0-21.9)                    | 695                                  | 11.0       | (8.4-14.4)                     |
| Central Michigan                | 481                                      | 19.6        | (14.9-25.3)                    | 478                                  | 11.7       | (8.4-16.2)                     |
| Midland                         | 218                                      | 13.3        | (9.0-19.2)                     | 217                                  | 9.6        | (6.1-14.6)                     |
| <b>Region 12</b>                | 912                                      | 17.8        | (14.8-21.2)                    | 903                                  | 13.3       | (10.7-16.3)                    |
| Luce-Mackinac-Alger-Schoolcraft | 131                                      | 20.0        | (12.4-30.5)                    | 130                                  | 15.3       | (8.6-25.8)                     |
| Western Upper Peninsula         | 187                                      | 13.5        | (8.8-20.2)                     | 184                                  | 11.5       | (7.2-17.9)                     |
| Delta-Menominee                 | 198                                      | 16.0        | (10.7-23.3)                    | 196                                  | 11.9       | (7.5-18.3)                     |
| Chippewa                        | 100                                      | 12.1        | (7.0-20.0)                     | 99                                   | 10.4       | (5.7-18.3)                     |
| Dickinson-Iron                  | 132                                      | 23.1        | (14.5-34.6)                    | 131                                  | 14.4       | (8.0-24.6)                     |
| Marquette                       | 164                                      | 22.1        | (14.9-31.5)                    | 163                                  | 16.0       | (10.1-24.6)                    |

<sup>a</sup> The proportion who reported that they were ever told by a doctor, nurse, or other health care professional that they had asthma.  
<sup>b</sup> Among all respondents, the proportion who reported that they still had asthma.  
<sup>c</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 27: Heart Attack<br/>Michigan BRFSS, 2006-2008 Combined</b> |   |            |                                |
|--|---|------------|--------------------------------|
| <b>Geographic Area</b>   | <b>Ever Told Heart Attack<sup>a</sup></b> |            |                                |
|  | <b>N</b>                                  | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>  | <b>22,495</b>                             | <b>4.7</b> | <b>(4.4-5.0)</b>               |
| <b>Region 1</b>  | 9,806                                     | 4.4        | (4.0-4.8)                      |
| Livingston   | 355                                       | 3.6        | (2.1-6.1)                      |
| Macomb   | 1,326                                     | 3.7        | (2.9-4.8)                      |
| Monroe   | 298                                       | 4.4        | (2.4-7.9)                      |
| Oakland  | 2,330                                     | 4.3        | (3.6-5.2)                      |
| St. Clair  | 344                                       | 3.8        | (2.2-6.7)                      |
| Washtenaw  | 661                                       | 4.7        | (3.2-7.0)                      |
| City of Detroit  | 2,294                                     | 5.3        | (4.3-6.4)                      |
| Wayne exc. Detroit   | 2,148                                     | 4.2        | (3.5-5.1)                      |
| <b>Region 2</b>  | 1,378                                     | 5.6        | (4.5-7.0)                      |
| Genesee  | 1,026                                     | 5.8        | (4.4-7.6)                      |
| Lapeer   | 185                                       | 5.6        | (3.3-9.2)                      |
| Shiawassee   | 167                                       | 4.8        | (2.3-9.6)                      |
| <b>Region 3</b>  | 624                                       | 5.7        | (4.1-7.8)                      |
| Jackson  | 392                                       | 5.3        | (3.5-8.1)                      |
| Lenawee  | 232                                       | 6.3        | (3.8-10.4)                     |
| <b>Region 4</b>  | 1,309                                     | 3.7        | (2.9-4.9)                      |
| Barry-Eaton  | 397                                       | 5.2        | (3.5-7.7)                      |
| Mid-Michigan <sup>b</sup>  | 520                                       | 4.1        | (2.7-6.2)                      |
| Ingham   | 619                                       | 3.2        | (2.1-4.7)                      |
| <b>Region 5</b>  | 1,162                                     | 5.1        | (4.0-6.5)                      |
| Branch-Hillsdale-St. Joseph  | 312                                       | 6.0        | (3.9-9.1)                      |
| Calhoun  | 293                                       | 3.9        | (2.4-6.2)                      |
| Kalamazoo  | 557                                       | 5.2        | (3.5-7.7)                      |
| <b>Region 6</b>  | 786                                       | 4.7        | (3.4-6.3)                      |
| Van Buren-Cass   | 305                                       | 4.1        | (2.4-6.9)                      |
| Berrien  | 481                                       | 5.1        | (3.5-7.4)                      |
| <b>Region 7</b>  | 2,341                                     | 3.2        | (2.6-3.9)                      |
| Allegan  | 221                                       | 2.7        | (1.5-5.0)                      |
| Ionia  | 139                                       | 2.2        | (0.7-6.8)                      |
| Kent   | 1,189                                     | 2.9        | (2.2-3.8)                      |
| Mid-Michigan <sup>b</sup>  | 520                                       | 4.1        | (2.7-6.2)                      |
| Ottawa   | 565                                       | 3.3        | (1.9-5.7)                      |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 27 Cont'd</b>          |   |            |                                |
|---------------------------------|---|------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Ever Told Heart Attack<sup>a</sup></b> |            |                                |
|                                 | <b>N</b>                                  | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>22,495</b>                             | <b>4.7</b> | <b>(4.4-5.0)</b>               |
| <b>Region 8</b>                 | 1,164                                     | 5.7        | (4.4-7.3)                      |
| District #10                    | 725                                       | 5.6        | (4.1-7.6)                      |
| Muskegon                        | 439                                       | 5.7        | (3.6-8.9)                      |
| <b>Region 9</b>                 | 1,127                                     | 6.9        | (5.5-8.7)                      |
| District #2                     | 221                                       | 11.5       | (7.4-17.5)                     |
| District #4                     | 257                                       | 5.5        | (3.4-8.8)                      |
| Northwest Michigan              | 324                                       | 7.8        | (5.3-11.2)                     |
| Benzie-Leelanau                 | 105                                       | 3.2        | (1.0-9.8)                      |
| Grand Traverse                  | 220                                       | 4.6        | (2.4-8.8)                      |
| <b>Region 10</b>                | 1,168                                     | 5.6        | (4.4-7.1)                      |
| Bay                             | 268                                       | 4.0        | (2.4-6.8)                      |
| Huron                           | 99  | 5.3        | (2.2-12.0)                     |
| Saginaw                         | 583                                       | 6.8        | (4.8-9.5)                      |
| Sanilac                         | 103                                       | 5.9        | (2.7-12.6)                     |
| Tuscola                         | 115                                       | 4.7        | (2.3-9.4)                      |
| <b>Region 11</b>                | 698                                       | 6.5        | (4.9-8.6)                      |
| Central Michigan                | 479                                       | 6.0        | (4.3-8.5)                      |
| Midland                         | 219                                       | 7.4        | (4.5-12.0)                     |
| <b>Region 12</b>                | 912                                       | 5.6        | (4.2-7.5)                      |
| Luce-Mackinac-Alger-Schoolcraft | 131                                       | 5.7        | (2.8-11.3)                     |
| Western Upper Peninsula         | 187                                       | 4.9        | (2.7-8.9)                      |
| Delta-Menominee                 | 198                                       | 6.4        | (3.3-12.1)                     |
| Chippewa                        | 100                                       | 4.6        | (1.9-10.3)                     |
| Dickinson-Iron                  | 131                                       | 6.5        | (3.6-11.4)                     |
| Marquette                       | 165                                       | 5.3        | (2.3-11.6)                     |

<sup>a</sup> Among all adults, the proportion who had ever been told by a doctor that they had a heart attack or myocardial infarction.

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 28: Angina or Coronary Heart Disease<br/>Michigan BRFSS, 2006-2008 Combined</b> |   |            |                                    |
|--|---|------------|------------------------------------|
| <b>Geographic Area</b>   | <b>Ever Told Angina or<br/>Coronary Heart Disease<sup>a</sup></b> |            |                                    |
|  | <b>N</b>  | <b>%</b>   | <b>95% Confidence<br/>Interval</b> |
| <b>Michigan Total</b>  | <b>22,349</b>   | <b>4.9</b> | <b>(4.6-5.2)</b>                   |
| <b>Region 1</b>  | 9,748   | 4.8        | (4.4-5.3)                          |
| Livingston   | 354   | 4.1        | (2.5-6.8)                          |
| Macomb   | 1,311   | 5.3        | (4.2-6.7)                          |
| Monroe   | 298   | 4.5        | (2.8-7.1)                          |
| Oakland  | 2,308   | 4.9        | (4.1-5.9)                          |
| St. Clair  | 346   | 7.4        | (4.9-11.2)                         |
| Washtenaw  | 662   | 3.3        | (2.2-4.9)                          |
| City of Detroit  | 2,287   | 4.9        | (4.0-6.2)                          |
| Wayne exc. Detroit   | 2,133   | 4.3        | (3.6-5.2)                          |
| <b>Region 2</b>  | 1,368   | 5.3        | (4.2-6.6)                          |
| Genesee  | 1,016   | 5.3        | (4.0-6.9)                          |
| Lapeer   | 184   | 5.5        | (3.0-9.9)                          |
| Shiawassee   | 168   | 5.1        | (2.5-9.9)                          |
| <b>Region 3</b>  | 621   | 5.3        | (3.8-7.4)                          |
| Jackson  | 392   | 5.7        | (3.8-8.6)                          |
| Lenawee  | 229   | 4.5        | (2.6-8.0)                          |
| <b>Region 4</b>  | 1,298   | 4.1        | (3.2-5.3)                          |
| Barry-Eaton  | 393   | 5.2        | (3.4-7.8)                          |
| Mid-Michigan <sup>b</sup>  | 520   | 4.1        | (2.8-5.9)                          |
| Ingham   | 611   | 3.9        | (2.7-5.6)                          |
| <b>Region 5</b>  | 1,153   | 5.1        | (3.9-6.6)                          |
| Branch-Hillsdale-St. Joseph  | 313   | 8.1        | (5.3-12.2)                         |
| Calhoun  | 288   | 4.9        | (3.0-7.9)                          |
| Kalamazoo  | 552   | 3.4        | (2.2-5.3)                          |
| <b>Region 6</b>  | 778   | 5.3        | (3.9-7.2)                          |
| Van Buren-Cass   | 301   | 5.9        | (3.7-9.4)                          |
| Berrien  | 477   | 4.8        | (3.2-7.0)                          |
| <b>Region 7</b>  | 2,329   | 3.1        | (2.6-3.8)                          |
| Allegan  | 217   | 1.9        | (0.9-4.0)                          |
| Ionia  | 138   | 0.0        | (---)                              |
| Kent   | 1,185   | 3.5        | (2.7-4.6)                          |
| Mid-Michigan <sup>b</sup>  | 520   | 4.1        | (2.8-5.9)                          |
| Ottawa   | 563   | 2.6        | (1.6-4.2)                          |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 28 Cont'd</b>          |   |            |                                    |
|---------------------------------|---|------------|------------------------------------|
| <b>Geographic Area</b>          | <b>Ever Told Angina or<br/>Coronary Heart Disease<sup>a</sup></b> |            |                                    |
|                                 | <b>N</b>  | <b>%</b>   | <b>95% Confidence<br/>Interval</b> |
| <b>Michigan Total</b>           | <b>22,349</b>   | <b>4.9</b> | <b>(4.6-5.2)</b>                   |
| <b>Region 8</b>                 | 1,165   | 4.0        | (3.0-5.2)                          |
| District #10                    | 725   | 4.7        | (3.4-6.4)                          |
| Muskegon                        | 440   | 2.8        | (1.7-4.6)                          |
| <b>Region 9</b>                 | 1,116   | 6.4        | (5.1-8.0)                          |
| District #2                     | 218   | 11.0       | (7.3-16.3)                         |
| District #4                     | 257   | 7.4        | (4.7-11.5)                         |
| Northwest Michigan              | 317   | 5.1        | (3.3-7.8)                          |
| Benzie-Leelanau                 | 106   | 3.7        | (1.5-8.7)                          |
| Grand Traverse                  | 218   | 3.9        | (1.9-8.0)                          |
| <b>Region 10</b>                | 1,161   | 6.8        | (5.4-8.5)                          |
| Bay                             | 265   | 5.3        | (3.0-9.4)                          |
| Huron                           | 97  | 8.2        | (4.3-15.0)                         |
| Saginaw                         | 578   | 7.5        | (5.4-10.3)                         |
| Sanilac                         | 105   | 5.2        | (2.5-10.8)                         |
| Tuscola                         | 116   | 7.3        | (3.8-13.5)                         |
| <b>Region 11</b>                | 690   | 7.8        | (6.0-10.0)                         |
| Central Michigan                | 472   | 8.4        | (6.2-11.3)                         |
| Midland                         | 218   | 6.3        | (3.8-10.2)                         |
| <b>Region 12</b>                | 902   | 5.4        | (4.1-7.0)                          |
| Luce-Mackinac-Alger-Schoolcraft | 128   | 4.7        | (2.3-9.2)                          |
| Western Upper Peninsula         | 186   | 6.5        | (3.7-11.1)                         |
| Delta-Menominee                 | 197   | 3.8        | (1.9-7.5)                          |
| Chippewa                        | 98  | 5.8        | (2.6-12.2)                         |
| Dickinson-Iron                  | 131   | 7.4        | (4.3-12.4)                         |
| Marquette                       | 162   | 4.6        | (2.4-8.9)                          |

<sup>a</sup> Among all adults, the proportion who had ever been told by a doctor that they had angina or coronary heart disease.  
<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 29: Stroke<br/>Michigan BRFSS, 2006-2008 Combined</b> |                                     |            |                                |
|--|-------------------------------------|------------|--------------------------------|
| <b>Geographic Area</b>   | <b>Ever Told Stroke<sup>a</sup></b> |            |                                |
|  | <b>N</b>                            | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>  | <b>22,529</b>                       | <b>2.9</b> | <b>(2.7-3.1)</b>               |
| <b>Region 1</b>  | 9,825                               | 2.9        | (2.6-3.3)                      |
| Livingston   | 353                                 | 1.1        | (0.5-2.7)                      |
| Macomb   | 1,323                               | 2.9        | (2.1-4.1)                      |
| Monroe   | 301                                 | 2.4        | (0.9-6.0)                      |
| Oakland  | 2,333                               | 2.6        | (1.9-3.5)                      |
| St. Clair  | 345                                 | 1.8        | (0.8-4.0)                      |
| Washtenaw  | 662                                 | 1.1        | (0.6-2.2)                      |
| City of Detroit  | 2,307                               | 5.1        | (4.1-6.3)                      |
| Wayne exc. Detroit   | 2,152                               | 3.0        | (2.2-4.0)                      |
| <b>Region 2</b>  | 1,376                               | 3.2        | (2.4-4.3)                      |
| Genesee  | 1,023                               | 2.9        | (2.0-4.1)                      |
| Lapeer   | 185                                 | 4.8        | (2.6-8.5)                      |
| Shiawassee   | 168                                 | 3.6        | (1.5-8.2)                      |
| <b>Region 3</b>  | 622                                 | 2.4        | (1.5-3.7)                      |
| Jackson  | 393                                 | 2.5        | (1.4-4.4)                      |
| Lenawee  | 229                                 | 2.1        | (0.9-4.8)                      |
| <b>Region 4</b>  | 1,308                               | 1.9        | (1.3-2.8)                      |
| Barry-Eaton  | 396                                 | 1.3        | (0.7-2.6)                      |
| Mid-Michigan <sup>b</sup>                                      | 520                                 | 2.7        | (1.4-5.1)                      |
| Ingham   | 618                                 | 2.3        | (1.4-3.9)                      |
| <b>Region 5</b>  | 1,168                               | 2.4        | (1.7-3.3)                      |
| Branch-Hillsdale-St. Joseph                                    | 313                                 | 3.1        | (1.8-5.2)                      |
| Calhoun  | 292                                 | 1.9        | (0.9-4.0)                      |
| Kalamazoo  | 563                                 | 2.2        | (1.3-3.9)                      |
| <b>Region 6</b>  | 787                                 | 3.6        | (2.4-5.2)                      |
| Van Buren-Cass   | 303                                 | 4.9        | (2.8-8.5)                      |
| Berrien  | 484                                 | 2.5        | (1.5-4.2)                      |
| <b>Region 7</b>  | 2,341                               | 2.1        | (1.6-2.9)                      |
| Allegan  | 220                                 | 2.0        | (0.8-4.7)                      |
| Ionia  | 140                                 | 0.6        | (0.1-2.6)                      |
| Kent   | 1,190                               | 2.3        | (1.6-3.5)                      |
| Mid-Michigan <sup>b</sup>                                      | 520                                 | 2.7        | (1.4-5.1)                      |
| Ottawa   | 565                                 | 1.4        | (0.8-2.4)                      |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 29 Cont'd</b>          |                                     |            |                                |
|---------------------------------|-------------------------------------|------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Ever Told Stroke<sup>a</sup></b> |            |                                |
|                                 | <b>N</b>                            | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>22,529</b>                       | <b>2.9</b> | <b>(2.7-3.1)</b>               |
| <b>Region 8</b>                 | 1,167                               | 3.3        | (2.5-4.5)                      |
| District #10                    | 728                                 | 3.7        | (2.6-5.2)                      |
| Muskegon                        | 439                                 | 2.7        | (1.6-4.5)                      |
| <b>Region 9</b>                 | 1,130                               | 3.6        | (2.7-4.8)                      |
| District #2                     | 221                                 | 4.6        | (2.5-8.4)                      |
| District #4                     | 258                                 | 2.6        | (1.3-5.0)                      |
| Northwest Michigan              | 325                                 | 4.1        | (2.3-7.1)                      |
| Benzie-Leelanau                 | 106                                 | 2.6        | (0.9-7.5)                      |
| Grand Traverse                  | 220                                 | 3.5        | (1.8-6.5)                      |
| <b>Region 10</b>                | 1,172                               | 3.5        | (2.5-4.8)                      |
| Bay                             | 267                                 | 2.6        | (1.3-5.3)                      |
| Huron                           | 99                                  | 1.9        | (0.6-6.4)                      |
| Saginaw                         | 584                                 | 4.4        | (2.8-6.8)                      |
| Sanilac                         | 105                                 | 3.7        | (1.3-9.8)                      |
| Tuscola                         | 117                                 | 3.2        | (1.3-7.2)                      |
| <b>Region 11</b>                | 700                                 | 3.5        | (2.4-5.0)                      |
| Central Michigan                | 481                                 | 3.6        | (2.3-5.4)                      |
| Midland                         | 219                                 | 3.3        | (1.6-6.8)                      |
| <b>Region 12</b>                | 913                                 | 3.9        | (2.9-5.3)                      |
| Luce-Mackinac-Alger-Schoolcraft | 132                                 | 5.8        | (3.1-10.3)                     |
| Western Upper Peninsula         | 187                                 | 3.9        | (2.0-7.2)                      |
| Delta-Menominee                 | 198                                 | 1.9        | (0.8-4.5)                      |
| Chippewa                        | 101                                 | 4.5        | (2.1-9.6)                      |
| Dickinson-Iron                  | 131                                 | 4.4        | (1.8-10.7)                     |
| Marquette                       | 164                                 | 4.1        | (2.1-8.0)                      |

<sup>a</sup> Among all adults, the proportion who had ever been told by a doctor that they had a stroke.

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.

| <b>Table 30: Diabetes</b>                 |                                       |            |                                |
|---|---------------------------------------|------------|--------------------------------|
| <b>Michigan BRFSS, 2006-2008 Combined</b> |                                       |            |                                |
| <b>Geographic Area</b>                    | <b>Ever Told Diabetes<sup>a</sup></b> |            |                                |
|   | <b>N</b>                              | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>                     | <b>22,585</b>                         | <b>9.0</b> | <b>(8.6-9.4)</b>               |
| <b>Region 1</b>                           | 9,848                                 | 9.1        | (8.5-9.8)                      |
| Livingston                                | 356                                   | 6.1        | (4.1-9.0)                      |
| Macomb                                    | 1,326                                 | 7.8        | (6.5-9.4)                      |
| Monroe                                    | 300                                   | 9.0        | (6.3-12.8)                     |
| Oakland                                   | 2,337                                 | 7.8        | (6.7-9.1)                      |
| St. Clair                                 | 347                                   | 6.9        | (4.8-9.7)                      |
| Washtenaw                                 | 663                                   | 8.3        | (6.0-11.3)                     |
| City of Detroit                           | 2,316                                 | 13.5       | (11.8-15.4)                    |
| Wayne exc. Detroit                        | 2,153                                 | 9.6        | (8.3-11.2)                     |
| <b>Region 2</b>                           | 1,380                                 | 10.3       | (8.7-12.1)                     |
| Genesee                                   | 1,028                                 | 10.7       | (8.9-12.9)                     |
| Lapeer                                    | 184                                   | 10.2       | (6.4-16.0)                     |
| Shiawassee                                | 168                                   | 8.1        | (4.7-13.5)                     |
| <b>Region 3</b>                           | 627                                   | 9.2        | (7.2-11.7)                     |
| Jackson                                   | 395                                   | 8.8        | (6.4-11.9)                     |
| Lenawee                                   | 232                                   | 10.0       | (6.7-14.6)                     |
| <b>Region 4</b>                           | 1,312                                 | 8.0        | (6.5-9.7)                      |
| Barry-Eaton                               | 397                                   | 7.9        | (5.6-11.1)                     |
| Mid-Michigan <sup>b</sup>                 | 522                                   | 12.4       | (9.2-16.7)                     |
| Ingham                                    | 620                                   | 6.4        | (4.7-8.6)                      |
| <b>Region 5</b>                           | 1,171                                 | 7.8        | (6.4-9.6)                      |
| Branch-Hillsdale-St. Joseph               | 314                                   | 6.7        | (4.5-9.9)                      |
| Calhoun                                   | 294                                   | 8.1        | (5.5-11.9)                     |
| Kalamazoo                                 | 563                                   | 8.3        | (6.2-11.1)                     |
| <b>Region 6</b>                           | 790                                   | 9.1        | (7.1-11.6)                     |
| Van Buren-Cass                            | 306                                   | 8.6        | (5.6-12.9)                     |
| Berrien                                   | 484                                   | 9.5        | (7.1-12.7)                     |
| <b>Region 7</b>                           | 2,344                                 | 7.8        | (6.7-9.1)                      |
| Allegan                                   | 221                                   | 6.9        | (4.2-11.2)                     |
| Ionia                                     | 140                                   | 5.4        | (2.9-9.6)                      |
| Kent                                      | 1,192                                 | 7.5        | (6.0-9.3)                      |
| Mid-Michigan <sup>b</sup>                 | 522                                   | 12.4       | (9.2-16.7)                     |
| Ottawa                                    | 564                                   | 7.2        | (5.3-9.8)                      |

2006 - 2008 Michigan BRFSS Regional & Local Health Department Estimates  
August 4, 2009

| <b>Table 30 Cont'd</b>          |                                       |            |                                |
|---------------------------------|---------------------------------------|------------|--------------------------------|
| <b>Geographic Area</b>          | <b>Ever Told Diabetes<sup>a</sup></b> |            |                                |
|                                 | <b>N</b>                              | <b>%</b>   | <b>95% Confidence Interval</b> |
| <b>Michigan Total</b>           | <b>22,585</b>                         | <b>9.0</b> | <b>(8.6-9.4)</b>               |
| <b>Region 8</b>                 | 1,172                                 | 10.3       | (8.5-12.4)                     |
| District #10                    | 729                                   | 9.9        | (7.8-12.5)                     |
| Muskegon                        | 443                                   | 10.9       | (7.9-14.8)                     |
| <b>Region 9</b>                 | 1,130                                 | 8.6        | (7.1-10.5)                     |
| District #2                     | 220                                   | 10.9       | (7.2-16.3)                     |
| District #4                     | 258                                   | 10.4       | (7.1-15.1)                     |
| Northwest Michigan              | 325                                   | 6.6        | (4.4-9.8)                      |
| Benzie-Leelanau                 | 106                                   | 9.6        | (5.2-17.1)                     |
| Grand Traverse                  | 221                                   | 7.1        | (4.4-11.2)                     |
| <b>Region 10</b>                | 1,175                                 | 10.4       | (8.6-12.6)                     |
| Bay                             | 268                                   | 11.1       | (7.8-15.4)                     |
| Huron                           | 100                                   | 5.3        | (2.4-11.5)                     |
| Saginaw                         | 586                                   | 11.9       | (9.0-15.5)                     |
| Sanilac                         | 104                                   | 12.7       | (7.1-15.7)                     |
| Tuscola                         | 117                                   | 5.5        | (2.7-10.6)                     |
| <b>Region 11</b>                | 700                                   | 8.7        | (6.8-11.0)                     |
| Central Michigan                | 481                                   | 7.8        | (5.7-10.5)                     |
| Midland                         | 219                                   | 10.7       | (7.1-15.7)                     |
| <b>Region 12</b>                | 916                                   | 10.2       | (8.2-12.6)                     |
| Luce-Mackinac-Alger-Schoolcraft | 132                                   | 10.7       | (6.4-17.4)                     |
| Western Upper Peninsula         | 188                                   | 11.1       | (7.2-16.7)                     |
| Delta-Menominee                 | 197                                   | 13.0       | (8.5-19.5)                     |
| Chippewa                        | 101                                   | 8.3        | (4.2-15.7)                     |
| Dickinson-Iron                  | 133                                   | 9.5        | (4.7-18.2)                     |
| Marquette                       | 165                                   | 7.6        | (4.0-13.8)                     |

<sup>a</sup> 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.

<sup>b</sup> The Mid-Michigan District Health Department consists of Clinton, Gratiot, and Montcalm. Clinton and Gratiot are Region 4 counties, while Montcalm is a Region 7 county. All three counties were included in the Mid-Michigan estimate, but only the respective counties were included in the regional estimates.