



MICHIGAN BRFS SURVEILLANCE BRIEF

A NEWSLETTER FROM THE CHRONIC DISEASE EPIDEMIOLOGY SECTION, MDCH

Highlights from the 2009 Michigan BRFS

The 2009 Michigan Behavioral Risk Factor Survey (MiBRFS) was conducted for MDCH by the Office for Survey Research, Institute for Public Policy and Social Research at Michigan State University as part of the national Behavioral Risk Factor Surveillance System (BRFSS). The total sample size for the 2009 MiBRFS was 9,259. The response rate for the 2009 MiBRFS was 56.9%, which, for the fourth straight year, was higher than the median response rate for all participating states (52.5%).¹

Table 1 presents selected preliminary estimates from the 2009 MiBRFS. This table indicates that 15% of Michigan adults were estimated to be in fair or poor health, 22.1% to have a disability, and 30.9% to have a self-reported body mass index (BMI) of greater than or equal to 30.0. Furthermore, 16.2% of Michigan adults aged 18 to 64 years reported not having any form of health insurance.

The 2009 MiBRFS also included questions on a variety of health risk behaviors. In 2009, 48.6% of Michigan adults reported inadequate levels of physical activity, while 77.8% reported consuming fruits and vegetables less than five times per day. In addition, 19.8% of Michigan adults were estimated to be current cigarette smokers, 3.4% to be smokeless tobacco users, and 30.4% to have ever been told by a doctor that they have high blood pressure.

Questions related to clinical preventive practices were also included within the 2009 MiBRFS. Among Michigan adults, 38.9% were ever told by a doctor that they had high cholesterol, while 30.9% reported not having had a routine health checkup in the past year. Furthermore, 69.0% of adults aged 65 years and older reported having had a flu vaccination within the past year.

The remainder of the 2009 MiBRFS contained questions focusing on a variety of chronic health conditions. When focusing on current asthma prevalence, an estimated 9.9% of adults and 8.4% of children reported that they currently have the disease. In addition, 31.3% of adults indicated that they had some form of arthritis, 4.5% were ever told they had a heart attack, 2.7% were ever told they had a stroke, 9.4% were ever diagnosed with diabetes, and 9.9% were ever diagnosed with cancer.

Table 1. Preliminary Estimates from 2009 Michigan Behavioral Risk Factor Survey

	%	95% CI
General health fair or poor	15.0	14.1-16.0
Caregiver in past month	25.4	24.2-26.6
Has a disability	22.1	21.0-23.2
Obese (BMI ≥ 30)	30.9	29.6-32.3
No health insurance (18-64 yrs)	16.2	14.8-17.6
Inadequate physical activity	48.6	47.1-50.1
Fruit & vegetables < 5 x/day	77.8	76.6-79.0
Cigarette smoking	19.8	18.6-21.0
Smokeless tobacco use	3.4	2.9-4.0
Binge drinking	16.9	15.8-18.1
Ever told high blood pressure	30.4	29.2-31.6
Ever told high cholesterol	38.9	37.5-40.2
No routine checkup in past year	30.9	29.5-32.3
Vaccinated for flu in past year (≥65)	69.0	67.0-70.9
Ever had HIV test (18-64 yrs)	38.2	36.5-39.9
Lifetime asthma (adults)	15.6	14.6-16.7
Lifetime asthma (children)	11.7	10.2-13.4
Current asthma (adults)	9.9	9.1-10.8
Current asthma (children)	8.4	7.1-9.9
Ever told arthritis	31.3	30.1-32.5
Ever had a heart attack	4.5	4.0-4.9
Ever had a stroke	2.7	2.4-3.0
Ever diagnosed with diabetes	9.4	8.8-10.1
Ever diagnosed with cancer	9.9	9.2-10.6

MiBRFSS News

- National and state-by-state BRFSS estimates for the past several years (1995-2009) can now be found on the CDC BRFSS website at www.cdc.gov/brfss.
- Updated regional and race-specific MiBRFS estimates are now available on our website at www.michigan.gov/brfs.
- Did you miss an issue of *Michigan BRFSS Surveillance Brief*? Back issues are also available on our website.

Weight Status Among Michigan Adults

Despite the wide variety of programs focusing on healthy weight maintenance that have been implemented throughout the State of Michigan over the past several years, the prevalence of obesity and overweight among Michigan adults is still on the rise. In 2009, an estimated 30.9% of Michigan adults were considered to be obese (Body mass index [BMI] of 30.0 or greater), while 35.7% were considered overweight (BMI between 25.0 and 30.0). Over the past several years, the prevalence of obesity and overweight among Michigan adults has been consistently higher than that of the U.S. median.

Figure 1 examines the weight status of Michigan adults by gender and race/ethnicity. In 2009, males and females were similar in terms of obesity prevalence (30.8% vs. 31.0%), but males reported a significantly higher prevalence of overweight compared to females (42.0% vs. 29.3%) [Figure 1]. In addition, Black, non-Hispanics (41.6%) and Hispanics (42.6%) reported higher prevalence rates of obesity when compared to White, non-Hispanics (28.7%) [Figure 1]. When investigating weight status by household income level, it was found that Michigan adults with an annual household income of \$75,000 or more were less likely to have reported being obese when compared to adults at lower household income levels [Figure 2].

The important roles that physical activity and nutrition play in maintaining a healthy weight have been evident for many years.² In order to examine the effects of physical activity and nutrition on obesity among Michigan adults we analyzed this data within the 2009 MiBRFS. In 2009, Michigan adults with inadequate levels of physical activity [not participating in moderate physical activity for 30 minutes on five or more days per week or vigorous physical activity for 20 minutes three or more days per week] reported a higher prevalence rate of obesity when compared to adults with adequate physical activity levels (37.7% vs. 24.8%) [Figure 3]. In addition, Michigan adults who consumed fruits and vegetables less than five times per day were also more likely to be obese when compared to adults with adequate fruit and vegetable consumption (32.3% vs. 27.5%) [Figure 3].

Based on the current prevalence of obesity, inadequate physical activity, and inadequate fruit and vegetable consumption among Michigan adults, it is evident that Michigan public health programs have a lot more work to do in the battle against obesity.

References

¹Behavioral Surveillance Branch, CDC. 2009 Behavioral Risk Factor Surveillance System Summary Data Quality Report. ftp://ftp.cdc.gov/pub/Data/Brfss/2009_Summary_Data_Quality_Report.pdf [Accessed June 2010].

²Division of Nutrition, Physical Activity, and Obesity, National Center for Chronic Disease Prevention and Health Promotion. (2010). Obesity and Overweight. <http://www.cdc.gov/obesity> [Accessed June 2010].

Figure 1. Prevalence of Obesity and Overweight by Gender and Race/Ethnicity, 2009 MiBRFS

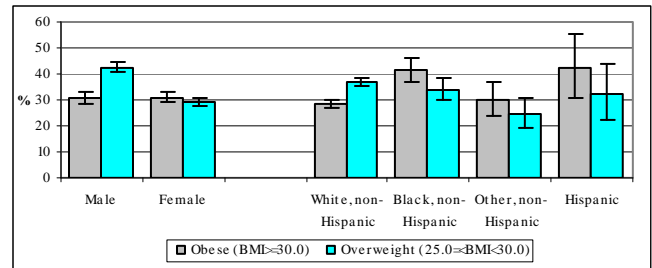


Figure 2. Prevalence of Obesity and Overweight by Household Income, 2009 MiBRFS

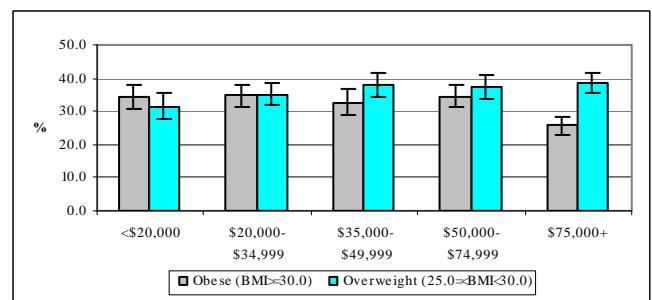
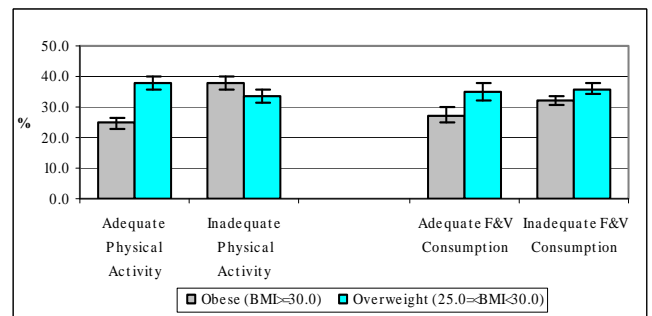


Figure 3. Prevalence of Obesity and Overweight by Physical Activity and Nutrition Status, 2009 MiBRFS



The Michigan Behavioral Risk Factor Surveillance System (MiBRFSS)

The MiBRFSS comprises annual, statewide telephone surveys of Michigan adults aged 18 years and older and is part of the national BRFSS coordinated by the CDC. The annual Michigan Behavioral Risk Factor Surveys (MiBRFS) follow the CDC BRFSS protocol and use the standardized English core questionnaire that focuses on various behaviors, medical conditions, and preventive health care practices related to the leading causes of mortality, morbidity, and disability. Interviews are conducted across each calendar year. Data are weighted to adjust for the probabilities of selection and a poststratification weighting factor that adjusts for the sex, age, and race distribution of the adult Michigan population. All analyses are performed using SAS-callable SUDAAN[®] to account for the complex sampling design.

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