



MICHIGAN BRFSS SURVEILLANCE BRIEF

A NEWSLETTER FROM THE CHRONIC DISEASE EPIDEMIOLOGY UNIT, MDCH

Personal Health Care Provider Access Among Michigan Adults

Background. Health systems put forth a continuous effort toward searching for new ways to improve the efficiency and effectiveness of the care they provide. Evidence included within the January 2004 report from the World Health Organization focusing on primary health care suggests that a higher orientation of primary care within a health system leads to better population health outcomes, at lower cost, and with greater patient satisfaction.¹ Through the use of data from the Michigan Behavioral Risk Factor Surveillance System (MiBRFSS), we sought to estimate the percentage of Michigan adults that currently have access to a personal health care provider.

Methods. Questions related to personal health care provider access, physical activity, fruit & vegetable consumption, cigarette smoking, alcohol consumption, and respondent demographics are included within the MiBRFSS on an annual basis. Self-reported height and weight are also collected for the purposes of calculating body mass index (BMI). Trends in provider access and health-related behaviors were examined in order to investigate relationships between trends. Furthermore, provider/health behavior relationships were analyzed by weight status to determine the potential impact on the overweight and obese population groups.

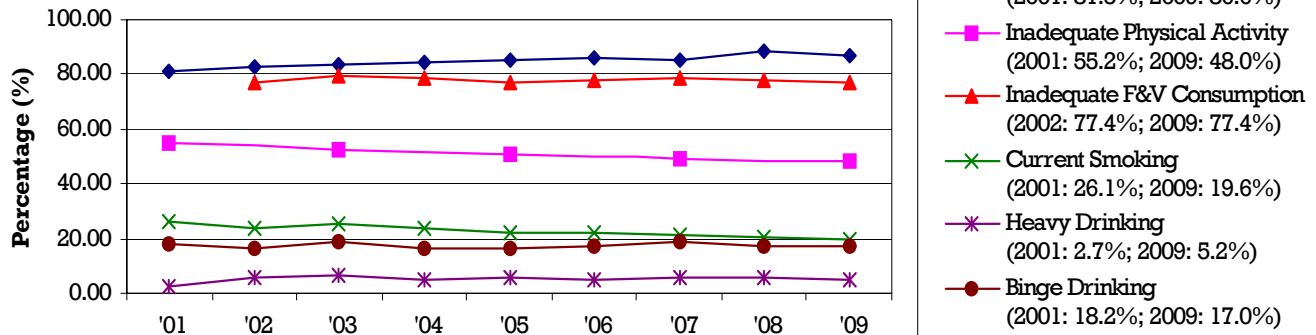
Results. In 2009, an estimated 86.6% of Michigan adults indicated that they had at least one person they consider to be their personal health care provider. These adults were more likely to be 55 years of age and older, White, non-Hispanics, college graduates, and with health insurance (Table 1).

The prevalence of having a personal health care provider has increased in Michigan over the past several years (Figure 1). With this increase in access to primary care providers we also see corresponding decreases in the prevalence of smoking, binge drinking, and inadequate physical activity. We would hope to see decreases in the prevalence of heavy drinking and inadequate fruit & vegetable consumption as well, but the data does not suggest such a trend.

Table 1. Prevalence of Having a Personal Health Care Provider among Michigan Adults, 2009 MiBRFS

	At Least One Personal Health Care Provider	
	%	95% CI
Total	86.6	(85.3-87.7)
Age		
18 - 24	72.8	(66.6-78.2)
25 - 34	77.1	(72.7-80.9)
35 - 44	84.8	(82.1-87.2)
45 - 54	89.7	(87.9-91.2)
55 - 64	94.0	(92.7-95.0)
65 - 74	96.7	(95.5-97.5)
75 +	97.1	(96.0-97.9)
Race-Ethnicity		
White, non-Hispanic	88.2	(87.0-89.4)
Black, non-Hispanic	80.8	(76.4-84.5)
Other, non-Hispanic	77.4	(68.6-84.3)
Hispanic	82.3	(67.1-91.4)
Education		
< High School	81.1	(75.0-86.0)
High school graduate	84.6	(82.1-86.8)
Some college	85.4	(82.9-87.6)
College graduate	90.6	(88.7-92.2)
Health Insurance		
Has insurance	91.4	(90.2-92.4)
No insurance	56.2	(51.4-60.8)

Figure 1. Trends in Health-related Behaviors and Primary Care Provider Access, MiBRFSS



MiBRFSS News

- The 28th Annual BRFSS Conference was held in Atlanta, GA on March 19th-23rd. Detailed handouts from this conference can be found at www.brfss2011conference.com under the "document repository" tab.
- The most up-to-date Michigan BRFS estimates can be found on the Michigan BRFSS website (www.michigan.gov/brfs).
- Did you miss an issue of *Michigan BRFSS Surveillance Brief*? Back issues are also available on our website.

Table 2. Prevalence of Health Behaviors by Provider and Weight Status, 2009 MiBRFS

	Obesity (BMI ≥ 30.0)		Overweight (25.0 ≤ BMI < 30.0)		Not Overweight or Obese (BMI < 25.0)	
	%	95% CI	%	95% CI	%	95% CI
Inadequate Physical Activity						
≥ 1 Personal Health Care Provider	41.0	(38.3-43.8)	46.5	(43.9-49.1)	42.0	(39.2-44.9)
No Personal Health Care Provider	42.3	(33.7-51.5)	35.4	(28.0-43.7)	41.4	(31.7-51.9)
Inadequate Fruit & Vegetable Consumption						
≥ 1 Personal Health Care Provider	79.6	(77.4-81.6)	77.4	(75.3-79.4)	74.0	(71.4-76.3)
No Personal Health Care Provider	85.2	(77.0-90.4)	83.2	(76.1-88.6)	77.8	(68.7-84.8)
Current Smoking						
≥ 1 Personal Health Care Provider	16.2	(14.2-18.5)	17.3	(15.4-19.4)	19.6	(17.4-21.9)
No Personal Health Care Provider	38.4	(30.4-47.1)	29.8	(23.1-37.4)	37.8	(29.6-46.8)
Heavy Drinking						
≥ 1 Personal Health Care Provider	3.8	(2.9-4.9)	4.1	(3.3-5.2)	5.9	(4.6-7.5)
No Personal Health Care Provider	11.9	(7.3-18.8)	7.7	(4.2-13.5)	10.0	(6.1-16.2)
Binge Drinking						
≥ 1 Personal Health Care Provider	13.7	(11.9-15.8)	17.0	(15.0-19.1)	15.6	(13.5-17.9)
No Personal Health Care Provider	30.2	(22.8-38.8)	30.1	(22.8-38.6)	28.7	(21.0-37.8)

In hopes of providing further insight into the relationships between personal health care provider access and health behaviors additional comparisons were made stratifying by weight status (Table 2). Across all three weight status groups, the prevalence of current smoking and binge drinking was significantly lower for adults that reported having a personal health care provider, thus adding strength to the trends shown in Figure 1. A significant difference in the prevalence of heavy drinking by provider status only existed within the obese population. Furthermore, the prevalence rates of inadequate physical activity and inadequate fruit & vegetable consumption among adults with and without a personal health care provider were comparable across weight groups, with the exception of the overweight population having a personal health care provider who reported a significantly higher prevalence of inadequate physical activity when compared to overweight adults without a personal health care provider.

Conclusions. Overall, these results suggest that having a personal health care provider can have a positive impact on decreasing risky health behaviors such as smoking and alcohol consumption. However, the data also suggest that personal health care providers may fall short in their messages related to nutrition and physical activity. For improvements to occur within nutrition and physical activity we will need focused messages from personal health care providers coupled with a personal desire for change. Furthermore, changes to improve nutrition and physical activity will come at a higher cost to the population when compared to a reduction in smoking and alcohol use that may actually lead to a cost savings. The purchasing of healthy foods, as well as participation in programs that provide advice on how to eat healthy and exercise appropriately can be very expensive. With the current economic crisis, many people do not have the means to participate in such activities. Messages from personal health care providers and personal desire for change can help improve nutrition and physical activity, but we will need to make these changes more affordable before we will see vast improvements in the health of Michigan residents.

References

- Atun R (2004) *What are the advantages and disadvantages of restructuring a health care system to be more focused on primary care services?* Copenhagen, WHO Regional Office for Europe (Health Evidence Network Report; <http://www.euro.who.int/document/e82997.pdf>, accessed 16 March 2011).

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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