ORAL HEALTH AMONG MICHIGAN ADULTS

VOLUME 7, NUMBER 4
SEPTEMBER 2013

MICHIGAN BRFSS SURVEILLANCE BRIEF

A NEWSLETTER FROM THE CHRONIC DISEASE EPIDEMIOLOGY UNIT, MDCH

Utilization of Oral Health Services Among Michigan Adults

Background. Studies throughout the years have shown that oral health is intimately related to the health of the rest of the body. Evidence is mounting that suggests infections in the mouth, such as periodontal disease, can increase the risk for heart disease, can put pregnant women at greater risk for premature delivery, and can complicate control of blood sugar for people living with diabetes.[1] Maintaining good oral health requires ongoing efforts from the individual, caregivers, and health care providers. Regular preventive dental care can reduce the development of disease and facilitate early diagnosis and treatment.

The 2000 Surgeon General report on oral health included an action step to remove known barriers between people and oral health services.[1] This aim is also reflected in the Healthy People 2020 objective that focuses on increasing the proportion of people who use the oral health care system. This Healthy People 2020 objective was also selected as one of the 26 leading health indicators for communicating high-priority health issues.[2] Community water fluoridation, dental sealants, and access to dental care are the most recognized evidenced based prevention efforts to reduce dental decay for adults.[1]

Methods. Questions related to dental care and demographics were included within the 2012 Michigan Behavioral Risk Factor Survey (MiBRFS). These data were used to assess the prevalence of dental visits within the past year and cost-prevented dental care among Michigan adults. In addition, the prevalences of these indicators among demographic groups were analyzed in order to identify vulnerable subpopulations.

The MiBRFS indicator for dental visits within the past year was calculated based on responses to the following question: "How long has it been since you last visited a dentist or a dental clinic for any reason?" Furthermore, the cost-prevented dental care indicator was constructed based on responses to the following question: "During the past 12 months, was there any time you needed dental care, but didn't get it because you couldn't afford it?"

Results. In 2012, an estimated 68.0% of Michigan adults reported having a dental visit within the past year (Table 1). Among age groups, with exception of the 25-34 year old age group, the prevalence of having a dental visit within the past year was relatively consistent. Females (72.0%), White, non-Hispanics (70.9%), and insured adults (72.4%) reported significantly higher prevalences of having a dental visit within the past year as compared to males (63.8%), Black, non-Hispanics (55.2%), and uninsured adults (39.8%), respectively. The prevalence of having a dental visit within the past year also increased with education level. Furthermore, cigarette smokers (49.8%) and smokeless tobacco users (51.7%) were less likely to have reported having a dental visit within the past year as compared to their non-using counterparts (73.3% and 68.5%, respectively) [data not shown].

In 2012, an estimated 15.9% of Michigan adults reported needing dental care within the past 12 months, but not getting it because they couldn't afford it (Figure 1). The prevalence of cost-prevented dental care was significantly higher among adults who did not have a dental visit within the past year (29.1%) compared to those who

Table 1. Dental Visit Within the Past Year among Michigan Adults, 2012 Michigan BRFS

	%	95% CI
Total	**68.0**	**(66.7-69.3)**
Age		
18-24	68.7	(64.1-72.9)
25-34	58.2	(54.1-62.3)
35-44	66.3	(62.7-69.6)
45-54	68.4	(65.5-71.2)
55-64	73.4	(70.9-75.7)
65-74	72.5	(69.7-75.1)
75+	70.6	(67.5-73.5)
Gender		
Male	63.8	(61.7-65.8)
Female	72.0	(70.4-73.6)
Race/Ethnicity		
White, non-Hispanic	70.9	(69.5-72.2)
Black, non-Hispanic	55.2	(51.1-59.3)
Other, non-Hispanic	58.1	(51.8-64.1)
Hispanic	63.1	(54.2-71.2)
Education		
Less than high school	44.8	(39.4-50.3)
High school graduate	65.1	(62.9-67.3)
Some college	68.8	(66.6-70.9)
College graduate	82.6	(80.9-84.2)
Health Insurance		
Insured	72.4	(71.1-73.7)
Uninsured	39.8	(35.8-43.8)

MiBRFSS News

- The 2012 MiBRFS Annual Report is currently in development and will be released by the end of October. This report will be distributed via email once it has been completed.
- The 2013 CDC BRFSS Training Workshop was held in Atlanta, GA on September 5-6, 2013.
- Did you miss an issue of *Michigan BRFSS Surveillance Brief?* Back issues are available on our website (www.michigan.gov/brfs).

did (9.7%). Furthermore, females (18.9%), Black, non-Hispanics (21.0%), and uninsured adults (44.0%) reported significantly higher prevalences of cost-prevented dental care than males (12.7%), White, non-Hispanics (14.7%), and insured adults (11.9%), respectively (Figure 1).

The prevalence of cost-prevented dental care also decreased significantly with increasing household income level (Figure 2). Furthermore, the prevalences of cost-prevented dental care among adults with a household income of either less than $20,000 or between $20,000 and $34,999 were both significantly greater than that of the total Michigan adult population.

Conclusions. Most oral disease is preventable if measures are initiated early enough in a person's life cycle. A visit with a dental provider offers preventive interventions, such as determining the risk for oral disease, teeth cleaning, fluoride treatments, discussing tobacco use or smoking cessation, oral cancer screening, and testing or referral for glycemic control. Discussing medical concerns with a dental provider can also aid in preventing future oral health problems. Furthermore, oral health exams often help discover other medical problems which may aid a primary caregiver in making a diagnosis.

However, in Michigan there are still significant disparities that prevent people from getting to a dental office. Low SES, transportation problems, availability of area dental providers, cost of dental treatment, lack of insurance, and lack of knowledge about the importance of oral care, all play a significant role in how people access dental care. Furthermore, a very small percentage of dental providers accept Medicaid dental benefits for adults, partially due to low reimbursement rates, and many working people may have medical insurance but lack dental insurance. As a result, more adults are visiting emergency rooms for dental pain.

Figure 1. Cost Prevented Dental Care by Demographics, 2012 Michigan BRFS

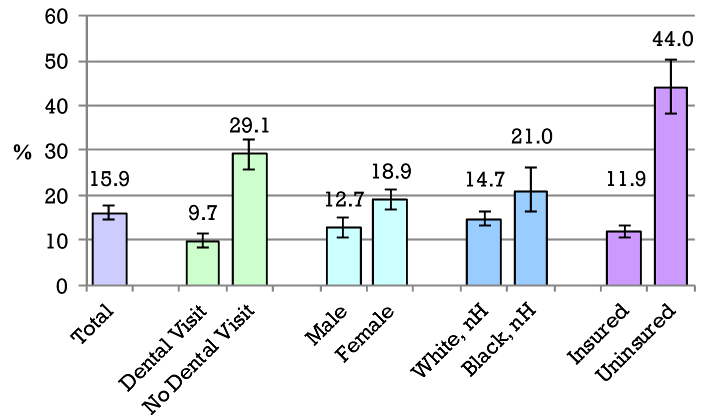
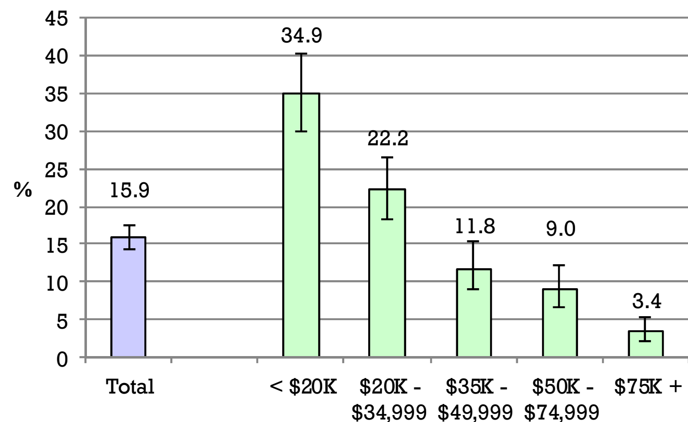


Figure 2. Cost Prevented Dental Care by Household Income, 2012 Michigan BRFS



References

[1] U.S. Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.

[2] U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington DC. Available at http://healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=32. Accessed August 19, 2013.

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 health behaviors, medical conditions, and preventive health care practices related to the leading causes of mortality, morbidity, and disability. Landline and cell phone interviews are conducted across each calendar year. Data are weighted to adjust for the probabilities of selection and a raking weighting factor that adjusts for the distribution of the Michigan adult population based on eight demographic variables. All analyses are performed using SAS-callable SUDAAN® to account for the complex sampling design.

Suggested citation: Fussman C, Anderson B, Deming S. Oral Health Among Michigan Adults. *Michigan BRFSS Surveillance Brief*. Vol. 7, No. 4. Lansing, MI: Michigan Department of Community Health, Lifecourse Epidemiology and Genomics Division, Surveillance and Program Evaluation Section, Chronic Disease Epidemiology Unit, September 2013.