



# MICHIGAN BRFS SURVEILLANCE BRIEF

A NEWSLETTER FROM THE CHRONIC DISEASE EPIDEMIOLOGY SECTION, MDHHS

## Dental Insurance Coverage among the Michigan Adult Population

**Background.** Oral health is key to one’s overall health. Regular visits to a dental provider will not only ensure care to ones teeth and mouth, but many dentists also screen their patients for other diseases and medical conditions such as diabetes, hypertension, and oral cancer. Many factors influence dental utilization, including transportation, health literacy, and, one of the largest factors, dental insurance.<sup>1</sup>

Dental insurance coverage has increased across the nation, but still trails medical insurance. For every adult without medical insurance there are three without dental insurance.<sup>1</sup> Some of the most vulnerable populations are left without dental insurance. Many young adults lose their insurance coverage when they leave college or are no longer dependents on their parent’s insurance. In addition, many elderly individuals lose their dental insurance when they retire. Furthermore, Medicare does not reimburse for routine dental care.<sup>1</sup>

Learning the status of dental insurance coverage among the Michigan adult population plays an important role in determining the dental insurance need within the State of Michigan.

**Methods.** Questions related to frequency of dental visits, tooth loss, and demographics were included within the 2014 Michigan Behavioral Risk Factor Survey (MiBRFS). State-added questions focusing on oral cancer screening and dental insurance were also included within the 2014 MiBRFS. The oral cancer screening question asked respondents when they last had an exam for oral cancer in which a doctor or dentist pulls on your tongue sometimes with gauze wrapped around it and feels under the tongue and inside the cheeks. The dental insurance question asked respondents if they were covered for the entire past twelve months by any type of dental insurance. Respondents who indicated that they were covered for only part of the past 12 months were coded as not having dental insurance. The complete questionnaire that contains these 2014 MiBRFS questions can be found on the MiBRFSS website ([www.michigan.gov/brfs](http://www.michigan.gov/brfs)).

These data were used to determine the prevalence of dental insurance among the Michigan adult population and to assess how demographic characteristics impact access to oral health care. Subpopulations based on demographics were compared to determine if significant differences existed among these oral health care indicators.

**Results.** In 2014, an estimated 65.7% of Michigan adults reported having dental insurance for the entire past 12 months (Table 1). The prevalence of dental insurance was highest among adults 35-64 years of age (69.2%) and decreased significantly among adults 65+ years of age (59.5%). Males and females reported similar dental insurance prevalence estimates, and the prevalence of dental insurance was similar among all four racial/ethnic groups. Furthermore, the prevalence of dental insurance among Michigan adults increased with increasing education and household income level.

Table 2 examines the prevalence of various oral health care services by race/ethnicity. In 2014, an estimated 68.6% of Michigan adults reported having had a dental visit within the past year, 15.5% reported that 6 or more of their permanent teeth were missing due to tooth decay or gum disease, and 46.4% reported having had an oral cancer exam within the past year (Table 2).

Although the prevalence of dental insurance is similar by race/ethnicity, there are several differences in the prevalences of oral health care services by race/ethnicity (Table 2). For example, 71.4%

**Table 1. Dental Insurance among Michigan Adults, 2014 Michigan BRFS**

	Had Dental Insurance for the Entire Past 12 Months % (95% CI)
<b>Total (N = 2,508)</b>	<b>65.7 (63.0-68.3)</b>
<b>Age</b>	
18-34 years	63.8 (57.4-69.6)
35-64 years	69.2 (65.6-72.5)
65+ years	59.5 (55.2-63.6)
<b>Gender</b>	
Male	63.1 (59.0-67.0)
Female	68.1 (64.6-71.4)
<b>Race/ethnicity</b>	
White, non-Hispanic	65.6 (62.6-68.4)
Black, non-Hispanic	66.1 (57.4-73.8)
Other, non-Hispanic	75.0 (62.6-84.4)
Hispanic	61.5 (44.6-76.1)
<b>Education</b>	
Less than high school	45.0 (34.7-55.8)
High school graduate	59.1 (54.1-63.9)
Some college	68.4 (64.0-72.4)
College graduate	79.1 (75.4-82.3)
<b>Household Income</b>	
< \$20,000	45.9 (38.6-53.5)
\$20,000 - \$34,999	54.1 (47.5-60.5)
\$35,000 - \$49,999	70.3 (63.7-76.2)
\$50,000 - \$74,999	72.8 (65.3-79.2)
\$75,000+	82.9 (78.6-86.5)

### MiBRFSS News

- The 2014 MiBRFSS annual tables should be released on the MiBRFSS website ([www.michigan.gov/brfs](http://www.michigan.gov/brfs)) by the end of this month.
- The 2014 MiBRFSS Annual Report is currently being developed.
- A draft of the 2016 MiBRFSS questionnaire will soon be available.
- Did you miss an issue of *Michigan BRFS Surveillance Brief*? Back issues are available on the MiBRFSS website.

of White, non-Hispanic adults reported having a dental visit with the past year, but only 54.9% of Black, non-Hispanic adults reported having the same service within the past year. Black, non-Hispanic adults also reported a higher prevalence of 6 or more teeth lost compared to White, non-Hispanic adults (23.4% vs. 14.5%). Furthermore, both Black, non-Hispanic and Other, non-Hispanic adults (27.9% and 27.1%, respectively) reported significantly lower oral cancer screening prevalences than White, non-Hispanic adults (51.1%).

**Conclusions.** As expected, the prevalence of dental insurance increased with education and income levels.

However, despite having similar dental insurance rates across races, Black, non-Hispanic adults reported having a significantly higher prevalence of poor oral health conditions and behaviors (i.e., no dental visit in the past year, missing 6+ teeth, and no oral cancer exam) than White, non-Hispanic adults. This finding leads to the conclusion that despite having dental insurance there are larger barriers to obtaining oral health care for Black, non-Hispanic adults that are not mentioned within this brief. Further investigation of these additional barriers may be necessary.

Over the past several years, Michigan has had a focus on expanding dental insurance coverage among Medicaid-eligible children to 80 of its 83 counties. There is still a need in the state to expand dental insurance coverage among adults as well. With the implementation of the Healthy Michigan Plan, the Medicaid expansion program, starting April 1, 2014, more adults in Michigan have been able to receive medical and dental insurance coverage. Due to differences in the MiBRFS data collection (entire 2014 calendar year) and Healthy Michigan Plan enrollment periods (April 1, 2014 and moving forward), the dental insurance coverage results included within this brief may be an underestimate. Over 34% of Michigan adults reported not having dental insurance coverage over the most recent twelve month period. Seniors 65 years and older (59.5%) had the lowest reported dental insurance prevalence. Again, seniors on Medicare do not have dental insurance as Medicare does not cover dental services. Due to less decay, the Medicare-aged population has more of their natural dentition than earlier generations, and the number of Michigan adults in need of oral care will only increase as the number of adults over 65 years of age increases to over 2 million by 2030.<sup>2</sup> While this brief focused on whether or not Michigan adults had any type of dental coverage for the previous twelve months, it is also important to differentiate between private versus public dental insurance. Further analyses focusing on dental insurance coverage types, especially among those 65 years of age and older, are scheduled to take place in the near future.

#### References

<sup>1</sup> US Department of Health and Human Services, Public Health Service, Office of the Surgeon General. Oral health in America: A report of the Surgeon General. Rockville, MD: National Institutes of Health, National Institute of Dental and Craniofacial Research; 2000.

<sup>2</sup> U.S. Census Bureau, Interim Population Projections for Five-Year Age Groups and Selected Age Groups by Sex for States: July 2004-July 2030. Released April 21, 2005.

**Table 2. Oral Health among Michigan Adults by Race/ethnicity, 2014 Michigan BRFS**

	Dental Visit Within the Past Year % (95% CI)	6+ Teeth Missing % (95% CI)	Oral Cancer Exam Within the Past Year % (95% CI)
<b>Total</b>	<b>68.6 (67.3-69.9)</b>	<b>15.5 (14.6-16.4)</b>	<b>46.4 (43.7-49.2)</b>
<b>Race/ethnicity</b>			
White, non-Hispanic	71.4 (70.0-72.8)	14.5 (13.5-15.5)	51.1 (48.1-54.1)
Black, non-Hispanic	54.9 (50.5-59.3)	23.4 (20.2-26.9)	27.9 (20.2-37.3)
Other, non-Hispanic	66.2 (60.1-71.9)	12.5 (9.3-16.6)	27.1 (17.3-39.8)
Hispanic	63.2 (53.4-72.0)	--- <sup>a</sup>	33.1 (20.0-49.4)

<sup>a</sup> Suppressed due to an N < 50 and/or a relative standard error of > 30%.

## 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 is used to adjust for the distribution of the Michigan adult population based on eight demographic variables. All analyses are performed using SAS-callable SUDAAN<sup>®</sup> to account for the complex sampling design.

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