



MICHIGAN BRFSS SURVEILLANCE BRIEF

Michigan BRFSS

A NEWSLETTER FROM THE CHRONIC DISEASE EPIDEMIOLOGY UNIT, MDCH

Tobacco Use and Mental Health Status among Michigan Adults

Background. Tobacco use is the single most preventable cause of disease, disability, and death in the United States. Each year approximately 443,000 premature deaths in the U.S. are the result of smoking or exposure to secondhand smoke, with an additional 8.6 million people having been diagnosed with a serious illness caused by smoking (such as chronic bronchitis, emphysema, heart attack, cancer, and stroke).¹⁻² On average, smoking reduces life expectancy by 14 years.¹⁻²

The prevalence of smoking among people with a mental illness is substantially higher than that of the general population. A 2013 study from the Centers for Disease Control and Prevention found that Americans with a mental illness were 70% more likely to smoke than a person without a mental disorder.³ People with mental health problems were also found to smoke more and have increased levels of nicotine dependence, thus putting them at even greater risk of smoking-related health issues.³

People who have serious mental illness die much earlier than the average American. According to a new report released by the Journal of the American Medical Association Psychiatry, it is not the primary mental illness that shortens their lives, but rather, complications caused by smoking (such as heart disease, lung disease and cancer).⁴ This is a significant health disparity that requires robust, evidence-based public health interventions that seek systems and policy change.

Methods. Questions related to cigarette smoking, secondhand smoke (SHS) exposure, mental health status, and respondent demographics were included within the 2012 Michigan Behavioral Risk Factor Survey (MiBRFS).

SHS exposure was defined as tobacco smoke exposure in your home or a car within the past 7 days. Mental health status was defined in three different ways. The first mental health indicator was based on ever being told by a doctor that the respondent had a depressive disorder. The second indicator was based on the number of days within the past 30 days in which a mental health condition prevented the respondent from doing their work or other usual activities. The last mental health indicator focused on whether or not the respondent was currently taking medications or receiving treatment for a mental health condition.

Education and household income responses were used to construct low and high socioeconomic status (SES) groups. Respondents within the low SES group reported having less than a high school education and an annual household income of less than \$20,000. The high SES group consisted of respondents who reported having a college degree and an annual household income of \$75,000 or more.

Table 1. Current Cigarette Smoking, Secondhand Smoke Exposure, and Mental Health Status among Michigan Adults, 2012 Michigan BRFSS

	%	95% CI
Current Cigarette Smoking	23.3	(22.1-24.6)
Secondhand Smoke Exposure	27.9	(26.6-29.2)
Ever Told Depressive Disorder	20.6	(19.5-21.7)
Mental Health Condition Prevented Usual Activities on 7 or More Days in the Past 30 Days	5.6	(4.9-6.3)
Currently Taking Medications or Receiving Treatment for a Mental Health Condition	13.8	(12.9-14.8)

Table 2. Current Cigarette Smoking and Secondhand Smoke Exposure by Mental Health Status, 2012 Michigan BRFSS

	Current Cigarette Smoking		Secondhand Smoke Exposure	
	%	95% CI	%	95% CI
Ever Told Depressive Disorder				
Yes	36.0	(33.0-39.2)	37.4	(34.3-40.6)
No	20.0	(18.7-21.4)	25.3	(23.9-26.8)
Mental Health Condition Prevented Usual Activities on 7 or More Days in the Past 30 Days				
Yes	53.4	(46.9-59.8)	51.8	(45.2-58.3)
No	21.0	(19.8-22.3)	26.3	(19.8-22.3)
Currently Taking Medications or Receiving Treatment for a Mental Health Condition				
Yes	33.4	(29.9-37.1)	35.9	(32.4-39.6)
No	21.2	(19.9-22.5)	26.5	(25.1-27.9)

MiBRFSS News

- Data collection for the 2013 MiBRFS is expected to be completed in early January 2014. Updated prevalence estimates from these data should be available in June or July 2014 depending on when the final weighted data file is provided to us by the CDC.
- Data collection for the 2014 MiBRFS is scheduled to begin in early January 2014.
- Did you miss an issue of *Michigan BRFSS Surveillance Brief*? Back issues are available on our website (www.michigan.gov/brfs).

These data were used to assess the prevalence of current smoking and SHS exposure among Michigan adults by mental health status.

Demographic subpopulations were compared to determine if significant differences existed in smoking status and SHS exposure.

Results. In 2012, an estimated 23.3% of Michigan adults reported that they currently smoke cigarettes, 27.9% reported SHS exposure within the past 7 days, 20.6% were ever told they had a depressive disorder, 5.6% reported that a mental health condition prevented them from doing their usual activities on 7 or more of the past 30 days, and 13.8% reported currently taking medications or receiving treatment for a mental health condition (Table 1).

The prevalence of current smoking and SHS exposure was significantly different by mental health status (Table 2). For all three mental health indicators, the prevalence of current smoking and SHS exposure was higher among adults with a mental health condition compared to those without.

Adults who reported ever being told that they had a depressive disorder always reported higher prevalences of current smoking and SHS exposure, but the prevalences of these indicators by depression status were similar among males and females (Table 3). The prevalence of current smoking and SHS exposure was very high among adults with a low SES regardless of depression status, but the prevalence of these indicators among depressed adults with a low SES was significantly higher when compared to depressed adults with a high SES.

Conclusions. The results indicate that Michigan is similar to the U.S. in that people with a mental illness have significantly higher smoking rates than those without a mental illness. This relationship persisted among each of the mental health status indicators used within this analysis.

The time is now to address this tobacco use disparity in all mental health treatment settings. There is an immediate need to both challenge and reverse the long-term attitude of the past that tobacco use has been accepted and even used as an incentive/reward for those being treated for mental or substance abuse disorders.

Increased awareness around the disproportionately high prevalence of smoking among this group is also needed for both providers and the people with these mental illnesses. For healthcare professionals, it is recommended to provide a routine tobacco use screening for people with mental illness and when appropriate to offer evidence-based cessation treatments which have been proven to be effective. For those with mental illness or in recovery, it is important to increase awareness around how being smoke-free and tobacco-free can decrease their risk of multiple adverse behavioral and health outcomes.

References

- ¹ Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General, 2012.
- ² Centers for Disease Control and Prevention. Cigarette Smoking-Attributable Morbidity --- United States, 2000. MMWR 2003; 52(35): 842-844.
- ³ Centers for Disease Control and Prevention. Press Release: Smoking Among U.S. Adults With Mental Illness 70 Percent Higher than for Adults with No Mental Illness. Released February 5, 2013.
- ⁴ Williams JM, Willett JG, Miller G. 2013. Partnership Between Tobacco Control Programs and Offices of Mental Health Needed to Reduce Smoking Rates in the United States. JAMA Psychiatry. DOI: 10.1001/jamapsychiatry.2013.2182. [Epub ahead of print].

Table 3. Current Cigarette Smoking and Secondhand Smoke Exposure by Gender, Socioeconomic Status, and Mental Health Status, 2012 Michigan BRFSS

	Current Cigarette Smoking		Secondhand Smoke Exposure	
	%	95% CI	%	95% CI
Male				
Ever Told Depressive Disorder	37.2	(32.0-42.7)	40.8	(35.3-46.5)
No Depression	21.4	(19.5-23.5)	29.3	(27.1-31.6)
Female				
Ever Told Depressive Disorder	35.4	(31.7-39.2)	35.6	(31.8-39.4)
No Depression	18.5	(16.9-20.2)	21.1	(19.4-23.0)
Low SES				
Ever Told Depressive Disorder	71.8	(56.7-83.2)	50.7	(35.0-66.3)
No Depression	49.2	(38.9-59.6)	52.3	(41.6-62.7)
High SES				
Ever Told Depressive Disorder	32.9	(30.0-36.0)	36.3	(33.2-39.4)
No Depression	19.0	(17.7-20.3)	24.4	(22.9-25.8)

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, Shamo F, Kiley J. Cigarette Smoking and Secondhand Smoke Exposure among Michigan Adults by Mental Health Status. *Michigan BRFSS Surveillance Brief*. Vol. 7, No. 6. Lansing, MI: Michigan Department of Community Health, Lifecourse Epidemiology and Genomics Division, Surveillance and Program Evaluation Section, Chronic Disease Epidemiology Unit, December 2013.

