

MICHIGAN BRFSS SURVEILLANCE BRIEF

A NEWSLETTER FROM THE CHRONIC DISEASE EPIDEMIOLOGY SECTION, MDCH

Alcohol Consumption Among Michigan Youth and Adults

Background. Within the United States, alcohol is used by more young people than tobacco and illicit drugs¹ and its use among youth has been linked to unintentional injuries, academic/occupational problems, and illegal behavior.² In addition, long-term alcohol use among adults is associated with chronic disease, psychiatric problems, and neurological damage.³ The following section compares alcohol consumption among Michigan youth and adults through the use of data from the 2009 Michigan Youth Risk Behavior Survey (MiYRBS) and the 2009 Michigan Behavioral Risk Factor Survey (MiBRFS).

Methods. Questions related to alcohol consumption were included within the 2009 MiYRBS and 2009 MiBRFS. The alcohol consumption indicators used within the figures to the right were comparable with only the binge drinking indicator being slightly different within the two surveys. Within the MiYRBS, the binge drinking variable was based on whether a respondent consumed 5 or more drinks within one occasion during the past 30 days, while the MiBRFS binge drinking indicator was based on 5 or more drinks for males and 4 or more drinks for females. This difference may result in a slight underestimate of binge drinking among youth females in Michigan.

Results. In 2009, an estimated 34.7% of Michigan youth (12-17 years) and 54.9% of Michigan adults (18+ years) reported consuming alcohol at least once in the past 30 days (Figure 1). Alcohol consumption was similar by gender among Michigan youth, but was significantly different among adult males and females thus indicating that more males begin consuming alcohol after age 17 when compared to females. The prevalence of binge drinking was significantly higher among Michigan youth (21.4%) than adults (16.9%) [Figure 2]. Binge drinking among males remained stable from youthhood to adulthood, while binge drinking among females decreased significantly from youthhood to adulthood. Furthermore, the prevalence of 3 or more binge drinking events within the past 30 days was significantly higher for adults (13.1%) when compared to youth (8.7%) [Figure 3]. In addition, female youth and adults were similar in terms of binge drinking occasions, while male adults (17.6%) reported significantly higher levels compared to male youth (8.7%).

Conclusions. These data indicate that alcohol consumption, particularly binge drinking, remains a problem among both Michigan youth and adults. Alcohol education programs that target Michigan youth will need to continue in order to help curb further alcohol consumption later in life. In addition, these programs should focus on those who are most at risk of adult alcohol use (e.g. white males).

Figure 1. Alcohol Consumption Within the Past 30 Days, 2009 Michigan YRBS and 2009 Michigan BRFS

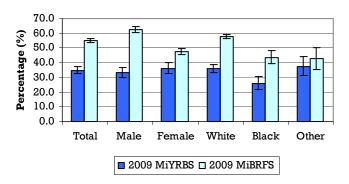


Figure 2. Binge Drinking Within the Past 30 Days, 2009 Michigan YRBS and 2009 Michigan BRFS

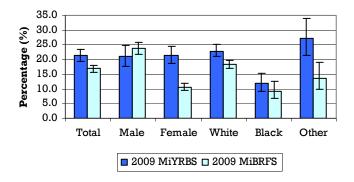
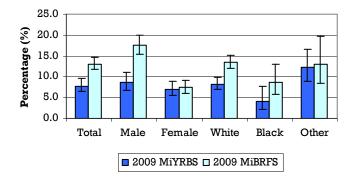


Figure 3. 3+ Binge Drinking Events Within the Past 30 Days, 2009 Michigan YRBS and 2009 Michigan BRFS



<u>MiBRFSS News</u>

- 2009 SMART BRFSS City and County Data and 2009 BRFSS National and State-level Interactive Maps can now be found on the CDC BRFSS website at www.cdc.gov/brfss.
- Did you miss an issue of Michigan BRFSS Surveillance Brief?
 Back issues are also available on our website.

ALCOHOL CONSUMPTION AND CURRENT SMOKING AMONG MICHIGAN YOUTH AND ADULTS

Current Smoking Among Michigan Youth and Adults

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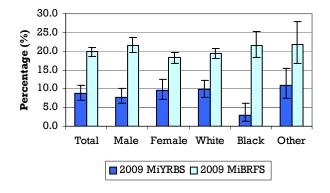
Background. Cigarette smoking is the leading cause of preventable death within the United States. It is estimated that cigarette smoking accounts for roughly 443,000 deaths each year within the U.S. Cigarette smoking is almost always initiated during adolescence. Each day in the U.S., approximately 3,900 young people between 12 and 17 years of age smoke their first cigarette, while an estimated 1,000 youth become daily cigarette smokers. Tobacco use during adolescence is associated with high-risk sexual behavior, alcohol use, and the use of other drugs. Cigarette smoking also remains a problem among the U.S. adult population. An estimated 20.6% of all adults (18+ years) in the U.S. currently smoke cigarettes. This translates into an estimated 46 million adults within the United States who are current smokers. The following section compares current cigarette smoking among Michigan youth and adults through the use of data from the 2009 MiYRBS and the 2009 MiBRFS.

Methods. Questions related to current cigarette smoking were included within the 2009 MiYRBS and 2009 MiBRFS. Unlike the alcohol consumption indicators within the previous section, the cigarette smoking questions used within these surveys were asked in different ways. As a result, we were forced to attempt to develop comparable indicators for current cigarette smoking based on the questions included within each survey. For the purposes of this analysis, current cigarette smoking among Michigan youth was defined as persons who reported that they had smoked at least one cigarette on 10 or more days within the past month. On the other hand, current cigarette smoking among Michigan adults was defined as persons who reported smoking at least 100 cigarettes during their lifetime and currently smoke cigarettes now, either every day or on some days.

Results. In 2009, an estimated 8.7% of Michigan youth (12-17 years) and 19.8% of Michigan adults (18+ years) reported current cigarette smoking (Figure 4). These numbers represent a 128% increase in current smoking from youthhood to adulthood. In addition, significant increases in current cigarette smoking from youthhood to adulthood were reported for both males and females. Furthermore, the racial disparity in current cigarette smoking among the Michigan youth population (i.e. blacks reporting a significantly lower prevalence) seems to completely disappear among the Michigan adult population.

Conclusions. These data confirm that cigarette smoking originates in Michigan youth and increases into the Michigan adult population. Similar to alcohol consumption, anti-smoking education programs that target Michigan youth will need to continue in order to help curb the increasing trend in current smoking among Michigan adults.

Figure 4. Current Cigarette Smoking, 2009 Michigan YRBS and 2009 Michigan BRFS



References

- ¹ U.S. Department of Health and Human Services. The Surgeon General's Call to Action to Prevent and Reduce Underage Drinking. U.S. Department of Health and Human Services, Office of the Surgeon General, 2007.
- ² Substance Abuse and Mental Health Services Administration. The relationship between mental health and substance abuse among Adolescents. Rockville, MD: Substance Abuse and Mental Health Services Administration, 1999.
- ³ Naimi TS, Brewer RD, Mokdad A, Denny C, Serdula MK, Marks JS. Binge drinking among US adults. *JAMA* 2003;289:70-75.
- ⁴ Centers for Disease Control and Prevention. Smoking-Attributable Mortality, Years of Potential Life Lost, and Productivity Losses—United States, 2000-2004. Morbidity and Mortality Weekly Report 2008;57(45):1226-1228 [accessed 2010 Aug 31].
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- ⁶ U.S. Department of Health and Human Services. Preventing Tobacco Use Among Young People: A Report of the Surgeon General. U.S. Department of Health and Human Services, Office on Smoking in Health, 1994.
- ⁷ Substance Abuse and Mental Health Services Administration. Results from the 2008 National Survey on Drug Use and Health: Detailed Tables. Substance Abuse and Mental Health Services Administration, 2008 [accessed 2010 Aug 31].
- ⁸ Centers for Disease Control and Prevention. Cigarette Smoking Among Adults and Trends in Smoking Cessation—United States, 2008. Morbidity and Mortality Weekly Report 2008;58(44):1227-1232 [accessed 2010 Aug 31].

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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