

# UNDERAGE DRINKING IN MICHIGAN

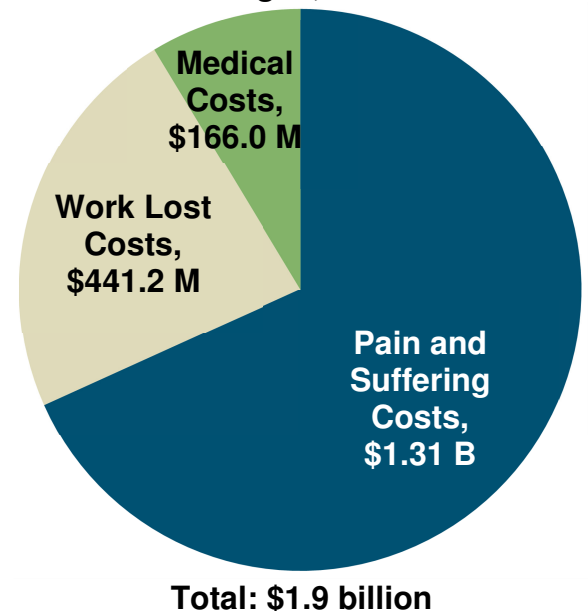
## The Facts

Tragic health, social, and economic problems result from the use of alcohol by youth. Underage drinking is a causal factor in a host of serious problems, including homicide, suicide, traumatic injury, drowning, burns, violent and property crime, high-risk sex, fetal alcohol syndrome, alcohol poisoning, and the need for treatment of alcohol abuse and dependence.

### Problems and Costs Associated with Underage Drinking in Michigan

In 2013, underage drinking cost the citizens of Michigan \$1.9 billion. These costs include medical care, work loss, and pain and suffering associated with the multiple problems resulting from the use of alcohol by youth.<sup>1</sup> This translates to \$1,946 per year for each youth in the state or \$4.20 per drink consumed underage. Excluding pain and suffering from these costs, tangible costs of underage drinking including medical care, criminal justice, property damage, and loss of work in Michigan totaled \$599.41 million each year or \$1.32 per drink. In contrast, a drink in Michigan retails for \$0.80.

**Costs of Underage Drinking Michigan, 2013 \$**



**Costs of Underage Drinking by Problem, Michigan, 2013 \$**

Problem	Total Costs (in millions)
Youth violence	\$1,282.2
Youth traffic crashes	\$237.8
High-risk sex, Ages 14–20 years	\$78.5
Property and public order crime	\$5.7
Youth injury	\$89.4
Poisonings and psychoses	\$17.9
Fetal alcohol syndrome among mothers aged 15–20 years	\$36.1
Youth alcohol treatment	\$48.0
<b>Total</b>	<b>\$1,928.4 (e.g. \$1.9 B)</b>

Youth violence (homicide, suicide, aggravated assault) and traffic crashes attributable to alcohol use by underage youth in Michigan represent the largest costs for the state. However, a host of other problems contribute substantially to the overall cost. Among teen mothers, fetal alcohol syndrome alone costs Michigan \$36 million.

In 2012, 1,230 youth aged 12 to 20 years were admitted for alcohol treatment in Michigan, accounting for 6% of all treatment admissions for alcohol abuse in the state.<sup>2</sup> Young people who begin drinking before age 15 are four times more likely to develop alcohol dependence and are two and a half times more likely to become

abusers of alcohol than those who begin drinking at age 21.<sup>3</sup> We did not cost these adult problems.

## **Alcohol Consumption by Youth in Michigan**

Underage drinking is widespread in Michigan. Approximately 299,000 underage customers drink each year in Michigan. In 2013, Michigan students in grades 9 to 12 reported the following:<sup>4</sup>

- 60.2% had at least one drink of alcohol on one or more days during their life.
- 14.0% had their first drink of alcohol, other than a few sips, before age 13.
- 28.3% had at least one drink of alcohol on one or more occasions in the past 30 days.
- 16.7% had five or more drinks of alcohol in a row (binge drinking) in the past 30 days.

In 2012, underage customers consumed 9.5% of all alcohol sold in Michigan, totaling \$365 million in sales (in 2013 dollars). These sales provided profits of \$179 million to the alcohol industry.<sup>1</sup> Ranking states based on the percentage of alcohol consumed underage, with 1 the highest, Michigan ranked number 27. This percentage is affected by both adult and youth drinking levels.

Annual sales of alcohol consumed by youth in Michigan averaged \$1,221 per underage customer. Underage customers were heavier consumers than adults. They drank an average of 4.2 drinks per day; in contrast, legal customers consumed only 1.6.

## **Harm Associated with Underage Drinking in Michigan**

Underage drinking in Michigan leads to substantial harm due to traffic crashes, violent crime, property crime, unintentional injury, and high-risk sex.

- During 2012, an estimated 32 traffic fatalities and 1,700 nonfatal traffic injuries were attributable to driving after underage drinking.
- In 2012, an estimated 44 homicides; 23,100 nonfatal violent crimes such as rape, robbery, and assault; 23,600 property crimes including burglary, larceny, and car theft; and 442,000 public order crimes including vandalism, disorderly conduct, loitering, and curfew violations were attributable to underage drinking.
- In 2011, an estimated 10 alcohol-involved fatal burns, drownings, and suicides were attributable to underage drinking.
- In 2013, an estimated 745 teen pregnancies and 24,135 teens having high-risk sex were attributable to underage drinking.

For comparison with other states, in U.S. rather than state prices, the harm from underage drinking per youth in Michigan averages \$1,497. Such comparisons require caution. In part, they may reflect differences in crime and crash rates, problem-reporting to police, and co-occurring drug use.

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<sup>1</sup> Taylor DM, Miller TR. (2015). Methodology: Underage Drinking Fact Sheets. Calverton, MD: PIRE, <http://www.udetc.org/documents/Underage-Cost-Methods-082807.pdf>

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<sup>2</sup> Office of Applied Studies, Substance Abuse and Mental Health Services Administration. Treatment Episode Data Set. (2013). *Substance Abuse Treatment by Primary Substance of Abuse, According to Sex, Age, Race, and Ethnicity, 2011*. Available [Online]: <http://www.icpsr.umich.edu/icpsrweb/SAMHDA/studies/30462>

<sup>3</sup> Grant, B.F., & Dawson, D.A. (1997). Age at onset of alcohol use and its association with DSM-IV alcohol abuse and dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey. *Journal of Substance Abuse* 9: 103-110.

<sup>4</sup> Centers for Disease Control (CDC). (2013). Youth Risk Behavior Surveillance System (YRBSS). Available [Online]: <http://nccd.cdc.gov/youthonline/App/Default.aspx>. Or an equivalent state data system.