CENTER FOR HEALTH POLICY

RESEARCH FOR A HEALTHIER INDIANA

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# Underage Drinking:

# A Culture of Drinking on Indiana's College Campuses?

Alcohol is the drug of choice for many Americans. Approximately one-half of the U.S. population ages 12 and older currently drink [1].<sup>a</sup> While alcohol use is legal and socially acceptable in adults 21 years and older, federal law prohibits minors from buying and consuming alcohol. Numerous studies have shown the detrimental effects of underage drinking and the serious personal, social, and economic consequences it can create for adolescents, their families, communities, and the nation as a whole [2].

The consumption of alcohol by persons under age 21 is a major public health issue. Alcohol is the most commonly used

and abused substance among youth in the United States. Although drinking by persons under the age of 21 is illegal, adolescents broadly engage in this activity, with many starting in their preteens. Studies have shown that adolescents drink less frequently than adults, but when they do drink, they consume alcohol more heavily [2]. It is estimated that over 28 percent of 12- to 20-year-olds have used alcohol in the past month and almost 19 percent engaged in binge drinking [1].<sup>b</sup>

Underage drinking can greatly affect adolescents in numerous ways, and it is more likely to kill young people than all illegal drugs combined [3]. Consequences of underage drinking include:[4]

- School problems, such as higher absence and poor or failing grades;
- Social problems, such as fighting and lack of participation in youth activities;
- Legal problems, such as arrest for driving or physically hurting someone while drunk;
- Physical problems, such as hangovers or illnesses;
- Unwanted, unplanned, and unprotected sexual activity;
- Disruption of normal growth and sexual development;

- Physical and sexual assault;
- Higher risk for suicide and homicide;
- Alcohol-related car crashes and other unintentional injuries, such as burns, falls, and drowning;
- · Memory problems;
- Abuse of other drugs;
- Changes in brain development that may have life-long effects; and
- Death from alcohol poisoning.

Furthermore, young people who start drinking before the age of 15 are five times more likely to develop alcohol dependence or abuse later on in life than those who begin drinking at or after the age of 21 [4].

The U.S. Department of Health and Human Services' Surgeon General's Call to Action to Prevent and Reduce Underage Drinking, 2007, states that underage drinking remains a serious problem despite federal laws aiming to prevent or at least reduce it [2]. Part of the problem is that alcohol use, including underage drinking, is embedded in the American culture. Drinking is often seen as a rite of passage, handed down to the next generation, and many of our American customs and traditions involve the use of alcohol. All this plays a role in the persistence of underage drinking.

Particularly, alcohol use on college

campuses is more pervasive and destructive than many people realize. Environmental and peer influences combine to create a culture of drinking. This culture actively promotes drinking, or passively promotes it, through tolerance, or even tacit approval, of college drinking as a rite of passage. Customs and beliefs are being handed down to the next generation of students, reinforc-

Tnderage drinking is deeply embedded in the American culture, is often viewed as a rite of passage, is frequently facilitated by adults, and has proved stubbornly resistant to change."

The Surgeon General's
Call to Action to Prevent and
Reduce Underage Drinking,
2007 [2]

<sup>a</sup>Current alcohol use is defined as having had at least one drink in the past 30 days.

<sup>&</sup>lt;sup>b</sup>The National Survey on Drug Use and Health defines binge alcohol use as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple hours of each other) on at least 1 day in the past 30 days.



ing students' perception that alcohol is a necessary component of college life and social success. The role of alcohol becomes evident in the advertisements and sales of alcoholic beverages near campuses [5]. What is more, studies have shown that features of the environment, such as residential setting, low price, and high density of alcohol outlets, as well as the prevailing drinking rates at the college are significantly related to the initiation of binge drinking in college [6].

#### **Underage Drinking Prevalence in Indiana**

According to the most recent estimates from the National Survey on Drug Use and Health (NSDUH), about 27 percent of Indiana residents ages 12 to 20 consumed an alcoholic beverage in the past month and almost 19 percent engaged in binge drinking—in other words, approximately 226,000 and 156,000 young Hoosiers, respectively, were affected [1].

Based on data from the Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System (YRBSS), nearly 44 percent of high school students in Indiana reported current alcohol use and 28 percent engaged in binge drinking, in 2007 [7]. Comparing both data sources, NSDUH and YRBSS, Indiana and the nation's prevalence rates were similar.

Monitoring the Future (MTF) and Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents (ATOD)

are annual school-based surveys that provide prevalence estimates on substance use among students—MTF provides national-level data and ATOD provides state-level data for Indiana. Comparisons of the results show that (a) for all students alcohol use increased with age, (b) 8th grade students in Indiana had higher consumption rates compared to their national counterparts, and (c) alcohol use by 10th and 12th graders was more prevalent among U.S. than Indiana students – except for daily use (see Figure 1) [8,9].<sup>c</sup>

The Core Alcohol and Drug Survey was developed to measure alcohol and other drug usage, attitudes, and perceptions among college students at two- and four-year institutions. Key findings of the 2008 survey at

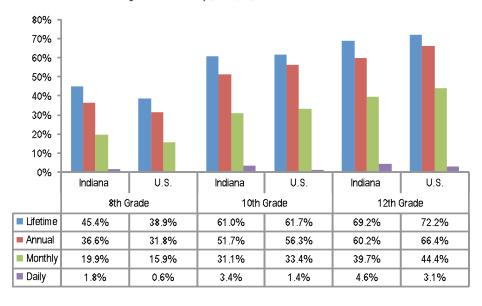
Indiana college campuses regarding alcohol use among 16- to 20-year old students have shown that:

- 63 percent used alcohol in the past month,
- 4 percent had six or more binge drinking episodes in the past two weeks, and
- 14 percent drove a car while under the influence in the past year.

Additional key findings from all respondents included:

- 72 percent of students consumed alcohol in the past 30 days.
- 90 percent of students believed the average student on campus uses alcohol once a week or more,
- 25 percent of students indicated they would prefer not to have alcohol available at parties they attend,
- 90 percent of the respondents said they saw drinking as central in the social life of male students,
- 78 percent of the respondents said they saw drinking as central in the social life of female students, and
- 67 percent of the students said they believe the social atmosphere on campus promotes alcohol use.

**Figure 1:** Lifetime, Annual, Monthly, and Daily Prevalence of Alcohol Use among 8th, 10th, and 12th Grade Students in Indiana and the United States (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents and Monitoring the Future surveys, 2007) [8,9]



<sup>&</sup>lt;sup>c</sup>Comparisons between national data (MTF) and Indiana data (ATOD) should be interpreted with caution as the ATOD survey is based on a nonrandom sample of Indiana students and, therefore, not representative.



The vast majority of survey respondents (83 percent) were in the typical college age range of 18 to 22 years. However, even though these findings do not solely refer to underage students, it gives us an idea about prevalence of and perceptions about alcohol use on college campuses (see Table 1) [10].

#### **Current Underage Drinking Policies in Indiana**

Based on the National Minimum Drinking Age Act of 1984, all states prohibit possession of alcoholic beverages by individuals under the age of 21 to some extent. However, states can apply various statutory exceptions. In Indiana, the consumption and possession of alcohol by minors is prohibited, without explicit exceptions noted in the law. Although Indiana does not have a statute that specifically prohibits underage purchase, it does prohibit purchasing or attempting to purchase alcohol in connection with making a false statement or using false evidence of age (the use of a false ID to obtain alcohol is a criminal offense). In addition, the furnishing of alcoholic beverages to minors is prohibited. Indiana has a zero-tolerance law for drivers under the age of 21, i.e., the legal blood alcohol content (BAC) limit lies at 0.02 g/dL or less. A zero-tolerance law makes it illegal for persons under the age of 21 to drive with any measurable amount of alcohol in their blood; using a 0.02 BAC to define zero-tolerance allows for variation in alcohol-testing instruments. Furthermore, Indiana law does not allow the possession of unregistered, unlabeled kegs.<sup>d</sup> Currently, there are no criminal social host laws against hosting underage drinking parties in the state [11].

## Should We Lower the Minimum Drinking Age?

The debate on lowering the current minimum drinking age to 18 is ongoing. College presidents from some of the nation's best-known universities, including Duke, Dartmouth, and Ohio State, are calling on lawmakers to consider lowering the drinking age from 21 to 18, saying current laws actually encourage dangerous binge drinking on campus. This movement, called the Amethyst Initiative, was launched in July 2008. Chancellors and presidents of universities and colleges across the United States have signed their names to a public statement in hopes of provoking a national debate about the legal drinking age. The initiative states that the legal drinking age of 21 is not effective in preventing or reducing underage drinking and that it is time for a serious debate among elected officials whether current policies are in line with current realities. The goal is to develop new ideas and strategies to prepare young adults to make responsible decisions about alcohol use [12].

Critics of the Amethyst Initiative argue that the main concern of these educational institutions is to avoid taking responsibility for underage drinking on their campuses. Opponents include Mothers Against Drunk Driving (MADD), the Insurance Institute for Highway Safety (IIHS), the American Medical Association (AMA), National Transportation Safety Board (NTSB), Governors Highway Safety Association and other science, medical and public health organizations, as well as all members of the Support 21 Coalition [13]. These agencies and organizations cite numerous research studies that have shown that keeping the minimum legal drinking age (MLDA) at 21 and enforcement of this law help reduce prevalence and negative outcomes of underage drinking.

Table 1: Prevalence of Alcohol Use and Driving under the Influence among College Students, by Gender and Age Group (Core Alcohol and Drug Survey, 2008)

	Gender		Age Group	
	Female	Male	16-20 Years	21+ Years
Sample Size	4,711	3,508	4,636	3,587
Current Alcohol Use	70.0%	74.0%	63.3%	82.5%
Had 6 or more binges in the past 2 weeks	2.7%	6.1%	3.5%	4.9%
Have driven a car while under the influence during past year	15.0%	21.2%	14.3%	21.9%

Source: Indiana Collegiate Action Network, 2008 [10]

<sup>&</sup>lt;sup>d</sup>A keg is defined as containing at least 7.75 gallons of alcohol.



## **Thoughts for Policymakers**

Clearly, underage drinking, especially binge drinking, is a problem in Indiana, and current alcohol policies have not been effective in reducing prevalence. The economic costs attributed to alcohol use among Hoosier youth were an estimated \$1.3 billion in 2005. This included direct costs associated with medical care (\$148 million) and loss of work (\$306 million) as well as indirect costs due to pain and suffering associated with the multiple problems as a result of underage drinking (\$867 million) [14]. Research suggests that minimum legal drinking age, price of and access to alcohol (retail and social availability), and visible enforcement of alcohol policies are linked to youth alcohol consumption.

#### Minimum legal drinking age (MLDA)

An extensive body of research exists that shows a relationship between the legal drinking age and alcohol-related consequences. Researchers have found that a higher MLDA is effective in preventing alcohol-related deaths and injuries among youth. When the MLDA has been lowered, injury and death rates increase, and when the MLDA is increased, death and injury rates decline [15,16]. A higher MLDA results in fewer alcohol-related problems among youth, and the 21-year-old MLDA saves the lives of well over 1,000 youth each year [16]. A common argument among critics of the current MLDA is that the law does not work because youth continue to purchase and consume alcohol. However, evidence shows that even though underage drinking is prevalent in the United States, young people drink less and experience fewer alcohol-related injuries and deaths based on the minimum drinking age of 21 [15].

Alcohol consumption, attitudes, and policies vary greatly among different countries and cultures, and international comparisons of patterns and consequences can prove difficult. In most European countries, the minimum legal drinking age is 16 for beer and wine, and 18 for spirits, and prevalence rates for youth alcohol use are generally higher than in United States. A study by Ahlstrom (2004) showed that the percentage of 15-and 16-year-olds who had been intoxicated at least three times in the past month was higher in most European countries (especially Denmark, 26 percent, and United Kingdom, 23 percent) compared to the United States (7 percent) [17].

However, it is difficult to compare consequences of alcohol use between Europe and the United States. Europe is not a homogeneous place; prevalence rates and long-term outcomes of alcohol use greatly differ by country. Past-year alcohol abstinence rates in 2003 among 15- and 16-year-olds ranged from 65 percent in Turkey to 5 percent in the Czech Republic and Denmark; similarly, the percentage of adolescents in that age group who had consumed alcohol at least 40 times in their lives

**T**e all should be very concerned about the extent and consequences of underage drinking. The fact is when youth drink, they tend to drink heavily. Today, we know more about the effects of underage alcohol use on health than ever before. For example, the science tells us that underage drinking can have serious health and safety consequences, such as motor vehicle crashes and sexual assaults. New research is also emerging on the potential harm alcohol may have on the developing brain which continues to mature well into the 20s. So based on the most recent research and the information contained in the Surgeon General's Call to Action to Prevent and Reduce Underage Drinking, I believe that drinking under the age of 21 is not worth the risk."

> U.S. Surgeon General Rear Admiral Steven K. Galson, n.d. [15]



Table 2: Age-adjusted Mortality Rate for Liver Cirrhosis and Directly Alcohol-related Causes, per 100,000, in Population Ages 15 and Older, 1995

	Europe		U.S.		Indiana	
	Male	Female	Male	Female	Male	Female
Liver cirrhosis	22.3	8.9	18.0	7.8	13.4	5.3
Explicitly alcohol-related causes	7.8	1.8	16.5	4.5	11.9	2.7

Sources: Ramstedt, 2002 [18]; Centers for Disease Control and Prevention, 2009 [19]

Notes: ICD-9 codes for liver cirrhosis (571) and directly alcohol-related causes (291, 303, 305.0, 357.5, 425.5, 535.3, 571.0-571.3, E860)

ranged from 7 percent in Turkey to 50 percent in Denmark (for comparison purposes, the U.S. rates were 41 percent and 12 percent, respectively) [17]. Furthermore, in a study by Ramstedt (2002), the age-adjusted mortality rate directly attributable to alcohol was computed for 15 European countries. The overall rate, 7.8 per 100,000 European men ages 15 and older, varied considerably from 1.1 in Greece to 28.6 in Finland (for alcoholattributable mortality rates in Europe, the United States, and Indiana, see Table 2) [18].

#### Price of alcohol

Studies have shown that young people are more responsive to price increases than adults; frequency and quantity of underage alcohol consumption are inversely related to the price of alcohol. Researchers found that higher alcohol taxes increase the probability of attending and graduating from a four-year college or university. Furthermore, it is estimated that a beer-tax increase of 20 cents per six-pack reduces gonorrhea rates by 8.9 percent and syphilis rates by 32.7 percent; and higher beer taxes are associated with lower rates of traffic fatalities. An added benefit is that a designated portion of the funds generated by the taxes can be earmarked for prevention programs [20,21].

#### Alcohol availability (commercial and social access)

There is a strong correlation between availability of alcohol and prevalence of use. Numerous studies found a relationship between alcohol outlets, sale of alcoholic beverages, heavy and frequent drinking, and drinking-related problems [21,22,23]. Research suggests that underage drinking can be reduced by limiting commercial access through a variety of strategies including regulating the number of alcohol outlets around colleges and universities; conduct-

ing compliance checks with on- and off-premise sellers; increasing fines and license suspensions for establishments that repeatedly sell or serve to minors; providing training for servers of alcohol on underage drinking laws and how to detect false identification [21,24,25].

However, retail outlets are not the only source of alcohol for young people. According to the National Survey on Drug Use and Health, 26 percent of underage drinkers got their last drink from a nonrelative of legal drinking age; 15 percent got it from another underage person; 9 percent got it from another relative who was of legal drinking age; and 6 percent got it from a parent or guardian [1]. Research suggests that social host laws, which hold individuals liable for underage drinking events on property they own, lease, or otherwise control, reduce the occurrence of underage drinking parties [21]. Indiana currently does not have a criminal social host law [11].







#### Visible law enforcement

The effectiveness of underage drinking laws is heavily influenced by law enforcement efforts. Some studies found that MLDA enforcement rates are very low, and more vigorous enforcement would reduce underage drinking [26,27]. Efforts are most effective when they focus on adults (retailers, parents, older friends) who provide alcohol to underage drinkers. Nevertheless, enforcement aimed at young people themselves can send a message about community norms and may deter them from attempting to buy and drink alcohol [28]. Law enforcement strategies to reduce commercial and social availability of alcohol to minors could include [26]:

- Vigorous use of retail compliance checks and applying appropriate sanctions to merchants who sell to underage individuals
- Educating merchants regarding their responsibilities under the law
- Developing media coverage and community support for enforcement

- Enforcing laws that prohibit buying alcohol for minors and citing adults who purchase for them
- Holding adults responsible if alcohol is served to minors in their homes or on their premises
- Conducting enforcement campaigns to prevent or safely disperse parties where minors are drinking

Alcohol is the drug of choice for many Americans, above and below the age of 21. Alcoholic beverages are widely available, easily accessible, and aggressively promoted throughout society. Underage drinking is a complex problem in communities across the nation, as it continues to be regarded, by many people, as a normal part of growing up. However, comprehensive, evidence-based policy strategies can help reduce Indiana's underage drinking problem and lessen the social and economic consequences for our state.



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The Indiana University Center for Health Policy is a nonpartisan applied research organization in the School of Public and Environmental Affairs at Indiana University—Purdue University Indianapolis. Researchers at CHP work on critical policy issues that affect the quality of health care delivery and access to health care. The Center for Health Policy is part of the Indiana University Public Policy Institute. The other partner centers are the Center for Urban Policy and the Environment and the Center for Criminal Justice Research.

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State of Indiana

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