

# Alcohol Use Among Adolescents

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*Several ongoing national surveys, including the Monitoring the Future study, the National Household Survey on Drug Abuse, and the Youth Risk Behavior Survey, are investigating the drinking behaviors of adolescents in the United States. These studies have found that the majority of adolescents under the age of 18 have consumed alcohol, although the minimum legal drinking age is 21. Drinking rates may even have increased in recent years in some age groups. No substantial differences exist among various sociodemographic subgroups with respect to drinking rates, although alcohol consumption generally is lowest among African-Americans and highest among whites. Moreover, alcohol consumption increases sharply throughout adolescence. Various attitudinal and behavioral factors, such as religious involvement, truancy, and average grade level, also influence adolescents' drinking behaviors. Almost two-thirds of 12th graders who report consuming alcohol experience at least one alcohol-related problem. Most adolescents drink to experience the pleasurable effects of alcohol, such as having a good time with friends.* KEY WORDS: AOD use behavior; adolescent; survey; prevalence; trend; demographic characteristics; minimum drinking age; attitude toward AOD; illicit drug; interpersonal AODR (alcohol and other drug related) problems; heavy AOD use; educational environment; causes of AODU (alcohol and other drug use); AOD associated consequences; high school student

**M**any American adolescents use alcohol, even though the minimum legal drinking age is 21. This article describes the extent and nature of alcohol use among American adolescents. In addition, the article provides information on trends in, self-reported reasons for, and consequences of adolescent alcohol use. The article draws on information from the Monitoring the Future (MTF) study, the National Household Survey on Drug Abuse (NHSDA), and the Youth Risk Behavior Survey (YRBS), which are described in the following section. The discussion emphasizes, however, findings from the MTF study (unless otherwise indicated, those findings are summarized in Johnston et al. 1998).

## PREVALENCE OF ALCOHOL USE AMONG ADOLESCENTS

Several major ongoing national surveillance systems collect and evaluate information on alcohol use patterns among adolescents:

- The MTF study, which is conducted under a research grant to the University of Michigan from the National Institute on Drug Abuse
- The NHSDA, which is conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA)

- The YRBS, which is conducted by the Centers for Disease Control and Prevention (CDC).

The MTF study, which uses a school-based sample, has conducted annual surveys of nationally representative samples of high school seniors since 1975 and of 8th and 10th grade students since 1991. It surveys about

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among 9th graders to 84 percent among 12th graders (CDC 1998).

Despite the consistent finding that relatively few Americans are complete abstainers by their late teens, substantial differences exist among the surveys with respect to the specific rates of alcohol consumption for the various age groups. Some of the differences may result from the specific design of each survey. For example, some studies include only students who are still in school (e.g., the MTF study), whereas other studies (e.g., the NHSDA) also include school dropouts, who may be at higher risk for alcohol use. Furthermore, the MTF study and the YRBS are school based, whereas the NHSDA is conducted in a home setting where parents may be present, which may lead to greater reluctance to report deviant behavior. Differences among

the surveys in the wording of the questions and in the way in which the survey is administered (i.e., interview versus self-administered questionnaire) also may affect the outcome and account for some of the discrepancies in the findings obtained.

*Differences Among Demographic Subgroups*

The MTF study assesses both the prevalence of alcohol use and the prevalence of getting drunk among 8th, 10th, and 12th graders. To this end, respondents are asked, "Have you ever had any beer, wine, wine coolers, or liquor to drink—more than just a few sips?" Respondents who answer affirmatively then are asked: "On how many occasions have you had alcoholic beverages to drink—more than just a few sips . . .

during the last 30 days?" and "On how many occasions (if any) have you been drunk or very high from drinking alcoholic beverages . . . during the last 30 days?" From these data, the prevalence of alcohol use and having been drunk can be determined for the entire sample as well as for various demographic subgroups based on gender, race, region of the country where the students live, population density of the area, parental education, and family structure. Among the most recent (i.e., 1997) results obtained for 12th graders, the following were particularly noteworthy (see table 1; also see figure 1 for demographic subgroup differences for 12th graders):

- The prevalence of alcohol use and of having been drunk were remarkably high. More than one-half of the 12th graders reported having

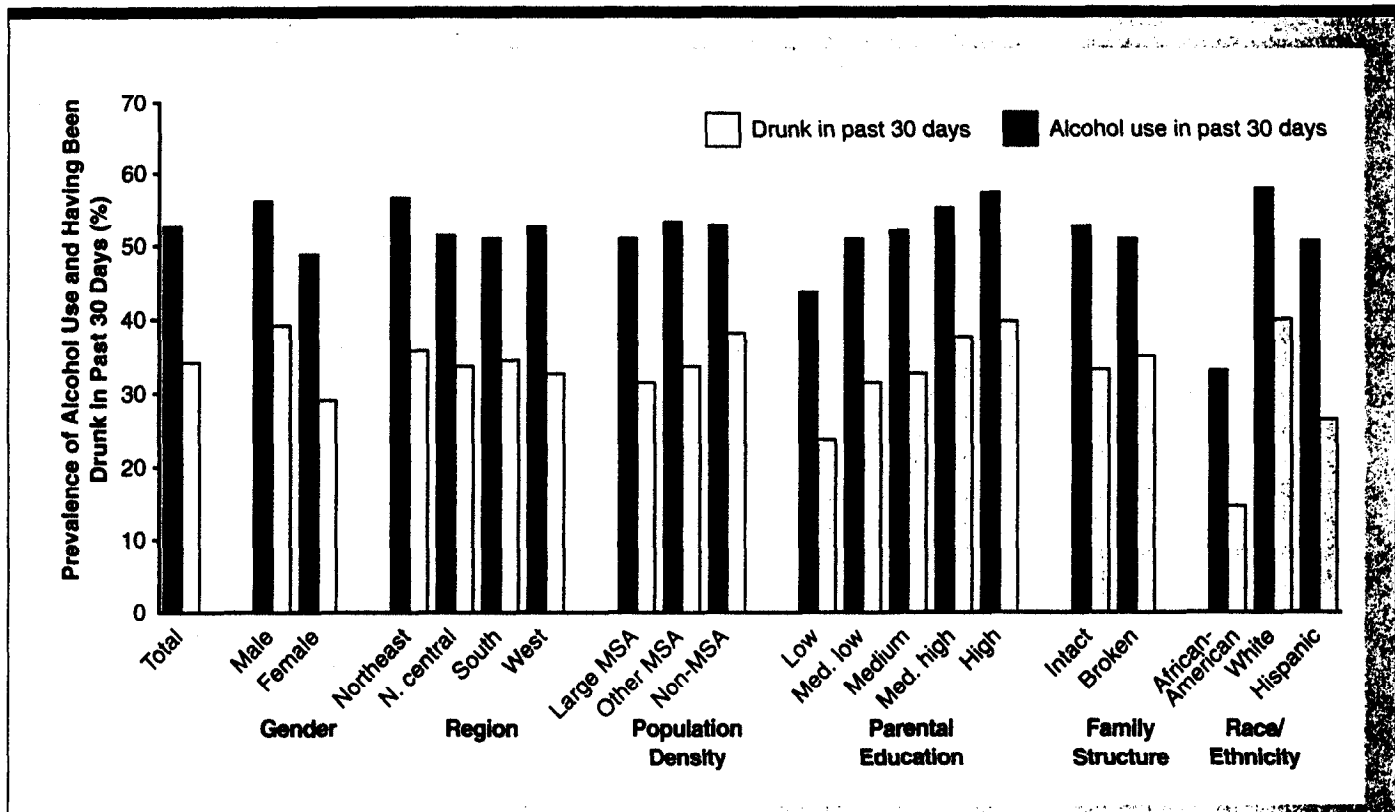


Figure 1 Percentage of 12th graders in various demographic subgroups who had used alcohol and had been drunk in the past 30 days. The students were surveyed in 1997 for the Monitoring the Future study.

MSA = metropolitan statistical area.  
 Intact family structure = students living with two parents.  
 Broken family structure = students living with one or no parents.

table 2). Each of those variables was associated rather strongly with the adolescents' drinking behaviors, either in a positive or a negative manner. Moreover, in contrast to the socio-demographic factors, the influences of these variables were similar for all three age groups, although the associations tended to get stronger with increasing age (see figure 2).

The behavioral factor that exhibited the strongest association with drinking behavior was the number of evenings that respondents reported going out for fun and recreation in a typical week. Thus, among 12th graders, 52 percent of those who went out 4 or more evenings a week reported getting drunk during the past 30 days,

compared with 30 percent of those who went out 2 evenings a week and 14 percent of those who went out fewer than 2 nights a week. Similar differences already existed among 8th graders, with rates of getting drunk of 15 percent, 7 percent, and 4 percent among those who went out 4 or more nights, 2 nights, or fewer than 2 nights per week, respectively.

A similar positive association existed between truancy rates and alcohol use: Students with high truancy rates were far more likely than students with low truancy rates to be drinkers or to get drunk. For example, highly truant 12th graders were 2.5 times as likely as 12th graders with low truancy rates to report having been

drunk in the past month (57 percent versus 23 percent).

In contrast to the frequency of going out and truancy, the students' religious commitment (as determined by how important religion is to the student and how often he or she attends religious services) and GPA were negatively associated with the prevalence of drinking and being drunk. For example, only 40 percent of 12th graders with a high degree of religious commitment reported having drunk any alcohol in the past 30 days, compared with 60 percent of students with a low religious commitment. A similar relationship existed with respect to GPA: Whereas 45 percent of 12th grade students whose GPA was "A" drank alcohol in the past 30 days, 58 percent of students with a GPA of "B-minus" or lower did so. The association between GPA and drinking behavior was even stronger among 8th grade students, where approximately twice as many of the students with lower GPAs had consumed alcohol compared with those with the highest GPAs.

#### ASSOCIATION BETWEEN ALCOHOL USE AND USE OF OTHER DRUGS

One important reason for concern about adolescent alcohol use is its close association with the use of other drugs. There is considerable evidence that alcohol use tends to precede use of illicit drugs, and some researchers have argued, based on longitudinal data, that alcohol use serves as a "gateway" to the use of illicit substances (Kandel 1980; Kandel and Yamaguchi 1993). Analyses of the MTF study data have demonstrated that the cross-sectional association between alcohol and other drug use also is strong (see table 3). For example, among 8th graders who had not consumed alcohol at any time in their lives, only 3 percent had smoked cigarettes in the past 30 days or used marijuana in the past 12 months, and fewer than 0.5 percent had used cocaine in the past 12 months. Among 8th graders who had consumed alcohol at

**Table 2** Prevalence of Having Used Alcohol and of Having Been Drunk in the Past 30 Days Among Various Behavioral and Attitudinal Subgroups of 8th, 10th, and 12th Graders in 1997

	30-Day Prevalence of Alcohol Use (%)			30-Day Prevalence of Having Been Drunk (%)		
	Grade					
	8th	10th	12th	8th	10th	12th
<b>Total</b>	24.5	40.1	52.7	8.2	22.4	34.2
<b>Religious Commitment</b>						
Low	32.3	48.1	60.0	13.0	30.7	38.5
Medium	30.0	45.3	56.8	10.3	25.9	36.2
High	18.5	30.3	40.2	5.0	14.5	26.3
<b>Grade Point Average</b>						
B- or lower	32.9	48.0	58.0	13.5	28.5	37.9
B or B+	23.9	38.3	54.0	7.5	20.7	34.6
A or A-	16.7	29.5	44.6	3.9	15.0	27.8
<b>Truancy<sup>1</sup></b>						
Low	19.6	31.5	41.1	5.2	15.4	23.2
Medium low	42.4	52.4	56.4	15.8	30.7	34.4
Medium high	54.3	63.8	68.4	29.7	42.1	49.1
High	63.2	71.8	76.2	38.0	53.2	57.1
<b>Evenings Out per Week</b>						
0 or 1	15.6	25.0	30.6	3.7	11.1	14.0
2	23.5	37.9	48.1	6.6	19.4	30.1
3	29.3	46.6	59.4	10.4	25.0	37.6
4 or more	35.4	56.1	70.6	15.1	38.2	51.9

<sup>1</sup>Levels of truancy are as follows: low = skipped 0 days and 0 classes in the past 4 weeks; medium low = skipped 1 day or 1 to 2 classes in the past 4 weeks; medium high = skipped 0 days and 3 to 10 classes, or 1 day and 1 to 5 classes, or 2 days and 0 to 2 classes, or 3 days and 0 classes in the past 4 weeks; and high = more than medium high.

SOURCE: Johnston et al. 1998.

drank alcoholic beverages, 12th graders primarily emphasized the pleasurable aspects of drinking. For example, almost three-fourths of all 12th graders who had ever consumed alcohol gave "to have a good time with friends" as one of their reasons (table 5). Other commonly cited motivations related to alcohol's pleasurable effects referred to alcohol's good taste, its ability to make you feel good or high, and its ability to relax or relieve tension. Also high on the list of reasons for alcohol consumption was curiosity about alcohol and its effects, which was cited by approximately one-half of the respondents.

In contrast, substantially fewer adolescents reported using alcohol for coping with problematic situations. Thus, approximately one-fourth of 12th graders who ever consumed alcohol indicated that they drank because of boredom or because alcohol helped them escape their problems. This pattern of reasons for alcohol use is very similar to that given for marijuana use (Johnston and O'Malley 1986).

### TRENDS IN ALCOHOL-RELATED BEHAVIORS

Recent trends in alcohol-related behaviors provide little cause for optimism

regarding the current generation of American adolescents. For example, the percentages of 8th, 10th, and 12th graders who reported having been drunk at least once in the previous 12 months have not declined substantially within the past decade, but may, in fact, have increased in some age groups between 1992 and 1997 (figure 3). Similarly, the prevalence of another indicator of excessive adolescent drinking—heavy drinking (i.e., having five or more drinks in a row during the past 2 weeks)—appears to have increased among 12th graders in recent years, after declining consistently between 1982 and 1992 (figure 4). Conversely, two indicators of the beliefs and attitudes related to heavy drinking (i.e., disapproval of regular heavy drinking and the perception that heavy drinking is harmful) have declined since the early 1990s, after increasing during the 1980s. These findings suggest that a close association exists between adolescents' attitudes toward and beliefs about drinking and their alcohol-related behavior.

### CONCLUSIONS

The findings presented in this article confirm that alcohol use and abuse, as

well as alcohol-related problems, continue to be highly prevalent among American youth and a major source for concern. In fact, excessive alcohol use and its associated problems appear to have increased in recent years, following an earlier period during which both the rates of heavy drinking and the incidence of driving after drinking declined significantly among 12th graders. Moreover, the observations indicate that rates of alcohol use are equally high in almost all demographic subgroups. Finally, the beliefs and attitudes of adolescents toward drinking (and drinking and driving) show a close association with drinking behavior. What are the implications of these observations?

To date, researchers have not shown definitively whether changes in beliefs and attitudes actually play an active role in changing drinking behavior; whether changes in behavior produce changes in beliefs and attitudes about drinking; or whether other factors may affect beliefs, attitudes and behavior. Numerous analyses reported elsewhere, however, have supported the hypothesis that changes in attitudes and beliefs may have contributed to changes in the trends associated with both marijuana and cocaine use (for discussions of this hypothesis, see

**Table 3** Prevalence of Cigarette, Marijuana, and Cocaine Use Among 8th, 10th, and 12th Graders With Various Levels of Lifetime Alcohol Use in 1997

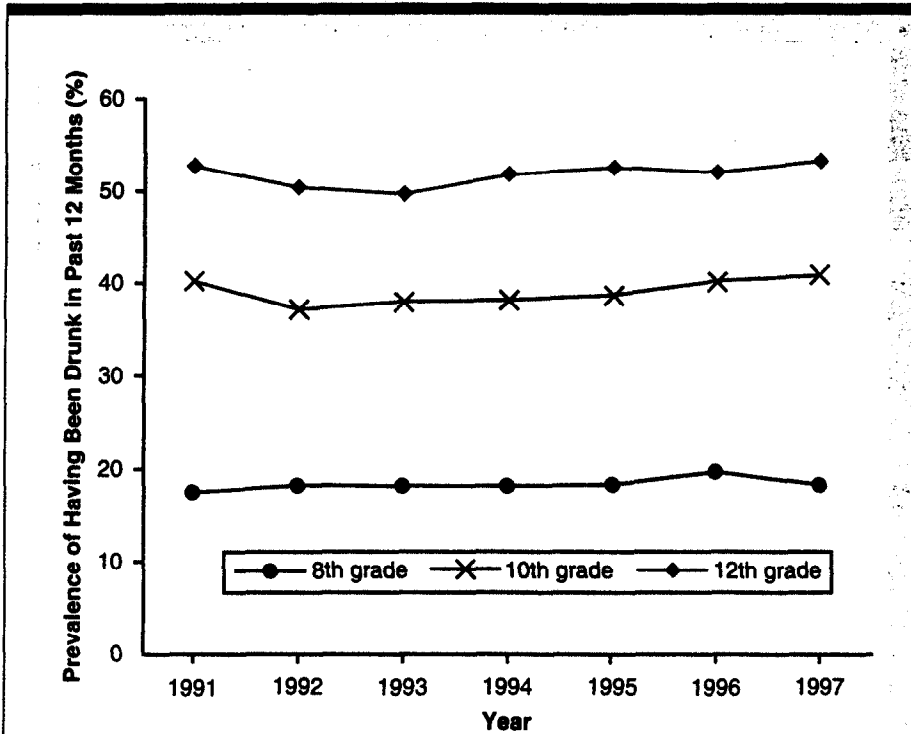
	Lifetime Alcohol Use (Occasions)								
	8th Graders			10th Graders			12th Graders		
	None (n=8,066)*	1-39 (n=8,313)	40+ (n=1,083)	None (n=4,178)	1-39 (n=8,526)	40+ (n=2,225)	None (n=2,724)	1-39 (n=8,005)	40+ (n=4,196)
Used cigarettes in the past 30 days (%)	3	28	64	4	32	67	5	32	66
Used marijuana in the past 12 months (%)	3	26	66	5	39	76	4	33	72
Used cocaine in the past 12 months (%)	**	4	18	**	3	18	**	2	15

\*Numbers of students are approximations.

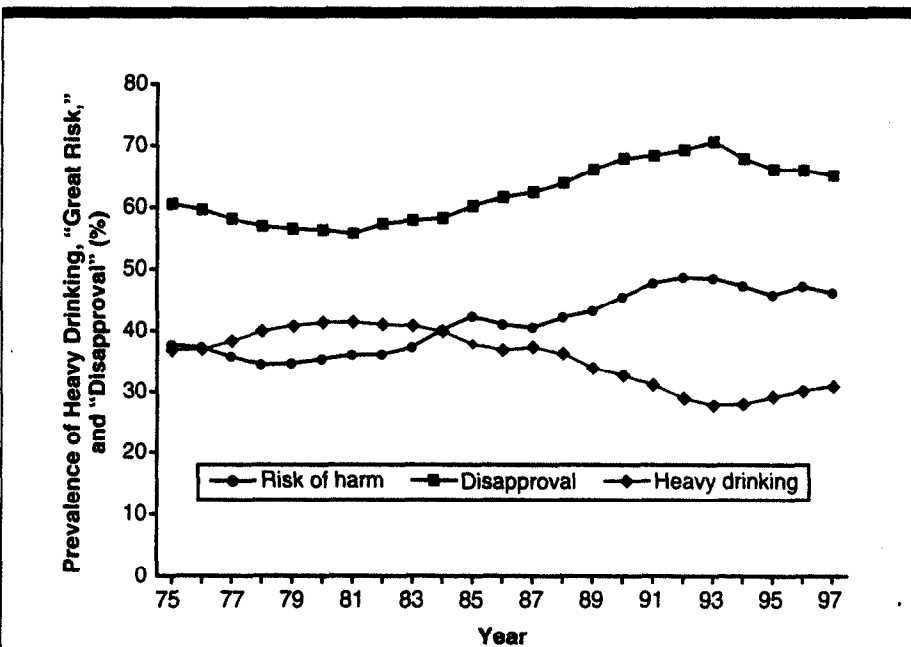
\*\* < 0.5 percent.

NOTE: An example for interpreting entries is as follows: Among the 8th graders who had used alcohol on 40 or more occasions in their lifetime, 64 percent had used cigarettes in the past 30 days.

SOURCE: Johnston et al. 1998.



**Figure 3** Trends in the percentage of 8th, 10th, and 12th graders who had been drunk during the past 12 months. The students were surveyed between 1991 and 1997 for the ongoing Monitoring the Future study.



**Figure 4** Trends in the percentage of 12th graders who had drunk heavily (i.e., five or more drinks on one occasion) in the past 2 weeks, who disapproved of heavy drinking, and who perceived a great risk of harm from heavy drinking. The students were surveyed between 1975 and 1997 for the ongoing Monitoring the Future study.

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