

Alcohol Use Among Adults: United States, 1997–98

Charlotte A. Schoenborn, M.P.H., and Patricia F. Adams, Division of Health Interview Statistics

Abstract

Objective—This report presents selected prevalence estimates for alcohol use among U.S. adults, using data from the 1997–98 National Health Interview Survey (NHIS).

Methods—Data for the U.S. civilian noninstitutionalized population were collected using computer-assisted personal interviews (CAPI). A total of 68,556 interviews were completed by sample adults aged 18 years and older, with an overall response rate of 77.2%. NHIS drinking status questions and classification criteria changed beginning in 1997. Statistics shown in this report were tabulated using SUDAAN software and were age adjusted to the 2000 projected U.S. population.

Results—Overall, alcohol consumption practices varied by gender, age, race and ethnicity, educational attainment, poverty status, and marital status. Variations by region and place of residence were modest. About 62.4% of U.S. adults were current drinkers; about 5% of adults were heavier drinkers. About 1 in 5 adults (20.5%) had five or more drinks in 1 day at least once in the past year; men (29.8%) were more than twice as likely as women (11.9%) to have had five or more drinks in 1 day at least once in the past year. Current drinking was most prevalent in the 25–44 year age group for both men (76.9%) and women (66.0%) and declined steadily with age from 45 years on.

Conclusions—Drinking patterns vary among subgroups of the population. Careful attention to sociodemographic patterns in alcohol use may suggest appropriate target groups for alcohol awareness programs.

Keywords: alcohol • drinking status • lifetime abstainers • infrequent drinkers • heavier drinkers • five or more drinks • National Health Interview Survey

Introduction

Alcohol use among U.S. adults is a topic of considerable public health importance. The harm associated with the intake of large amounts of alcohol has been well documented (1,2). At the same time, evidence suggests that intake of small or moderate amounts of alcohol may be beneficial to health (3,4). From a public health perspective, alcohol use is a complex behavior involving biological, psychological, and social processes. Studies of consumption and its consequences have used a variety of methodologies including laboratory experiments, clinical investigations of alcoholic patient populations, and large-scale population-based surveys. Each type of study has contributed to increased understanding of this complex human behavior.

The National Health Interview Survey (NHIS), one of the major data collection systems of the National Center for Health Statistics of the Centers for Disease Control and

Acknowledgments

The authors gratefully acknowledge Gerald D. Williams, Ph.D., CSR, Inc., for his enormous contributions to the development and implementation of the NHIS alcohol questions and for his continuing support in the development of the classification of drinking status shown in this report. The contribution by Deborah Dawson, Ph.D., National Institute on Alcohol Abuse and Alcoholism (NIAAA) of the National Institutes of Health, to the development of the drinking classification scheme used in this report is greatly appreciated.

This report was edited by Klaudia Cox and typeset by Annette F. Holman of the Publications Branch, Division of Data Services.

Prevention, is a large, population-based survey of the U.S. civilian noninstitutionalized population. Since 1977, the NHIS has periodically included questions on alcohol use in supplemental questionnaires (5–8). In 1983 and 1988, the NHIS fielded alcohol supplements, sponsored by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), that included extensive batteries of questions on alcohol use and abuse. In 1985, 1990, and 1991, the NHIS included a few questions about alcohol use in special health promotion and disease prevention supplements that were designed to track national health objectives (9–13). When the National Health Interview Survey was redesigned in 1997, questions related to alcohol use were included in the basic annual core questionnaire for one sample adult per family—for the first time in the 40-year history of the survey. Questions on usual alcohol intake, along with questions on other key health behaviors (smoking, physical activity, and body weight) were included in the core questionnaire in response to increased recognition of the importance of such life style variables for understanding the health of the American people. The recent launching of national health promotion and disease prevention objectives for the year 2010 attests to the continued prominence of such health indicators (14).

The NHIS questions about alcohol are designed to assess general levels of alcohol consumption among adults 18 years of age and older. Annual prevalence estimates of alcohol use for various population subgroups can help identify the most appropriate target groups for alcohol-awareness programs. The inclusion of questions about alcohol in the NHIS also provides opportunities to study correlates of alcohol use among U.S. adults, including health limitations, chronic conditions, injuries, access to and use of health services, and other health-related behaviors. The NHIS questions are not designed to measure alcohol abuse or alcoholism.

This report, the first in a series of reports on adult health behaviors, presents prevalence estimates of alcohol use for a variety of population subgroups. Future reports will provide

the same types of information for smoking, physical activity, and body weight. Together, these reports will begin to provide a health behavior profile of the U.S. adult population.

Methods

The National Health Interview Survey is a survey of a nationally representative sample of the civilian noninstitutionalized household population of the United States. Basic health and demographic information are collected on all household members, by proxy if necessary. Additional information is collected on one sample adult aged 18 years or older and one sample child aged 0–17 years per family. Information on the sample adult is self-reported, and information on the sample child is collected from an adult knowledgeable about the child's health.

The NHIS has been in the field continuously since 1957. About every 10 years, the survey has undergone a redesign of its content to keep pace with changing data needs. In 1997, the survey underwent its most extensive revision to date, changing not only the questionnaire content and structure, but also the mode of administration and data processing procedures. Two important features of the new NHIS are (a) the core questionnaire now covers a wider range of health topics than earlier designs, and (b) more information is available on the sociodemographic characteristics of respondents. Detailed information about the 1997 design is available elsewhere (15).

The statistics shown in this report are based on data from the Sample Adult component of the 1997 and 1998 NHIS (16,17). Two years of data were combined to increase statistical reliability and to allow analysis of some population subgroups that would otherwise be too small to produce statistically reliable estimates. Even with the 2 years of data, the standard errors for some subgroups are quite large. In [tables 1–4](#), estimates with a relative standard error of 30% or greater are identified with an asterisk. The reader should exercise caution when interpreting these statistics. This report is based on data from 68,556 completed

interviews with sample adults aged 18 years and older, representing an overall sample adult response rate of 77.2%.

Questions on adult use of alcohol in the current core module have been used at one time or another in past NHIS supplement questionnaires, but never before in the basic core questionnaire. The inclusion of questions about alcohol in the core questionnaire makes it possible to produce annual estimates for lifetime prevalence, current drinking levels, and prevalence of having five or more drinks in a day for persons aged 18 years and older. (See questions in [Technical notes](#).) Because the questions stay the same from year to year, it is now possible to combine data years to make reliable estimates for some smaller population subgroups and to track changes in prevalence over time. The limitations of the new alcohol questions are that they do not delve into specific patterns of use, types of alcohol, or history of alcohol use or abuse—which are all important to the study of alcohol practices, but beyond the scope of the basic NHIS.

In an effort to assess typical alcohol use practices of U.S. adults with as few questions as possible, questions regarding quantity and frequency of alcohol consumption were phrased in terms of a 12-month reference period and did not specify type of beverage. Although the 12-month recall used in the current design has been used in the past, the NHIS alcohol questions more typically have consisted of a long series of questions having a 2-week reference period. These questions asked about the quantity and frequency of alcohol consumption either during the past 2 weeks or during the 2 weeks in which the respondent most recently drank in the past year. In some years, the questions were beverage-specific and included information on size of each drink. In other years, the questions were more global, asking only about quantity and frequency of any kind of alcohol consumption.

The effect of the change from a 2-week reference period to a 12-month reference period for prevalence estimates is unknown. However, the observed general decline in consumption using the new methods suggests that

using a longer reference period may result in somewhat lower estimates of both quantity and frequency of consumption. Much research has been devoted to alcohol measurement in population-based surveys, and no one “best method” has emerged (18–21). More research is needed.

Lifetime alcohol drinking status (table 1) describes the history of alcohol use and includes four mutually exclusive categories: (a) lifetime abstainers—persons who have had fewer than 12 drinks in their entire life; (b) former infrequent drinkers—persons who have had at least 12 drinks in their lifetime, but fewer than 12 drinks in any one year and no drinks in the past year; (c) former regular drinkers—persons who have had at least 12 drinks in their lifetime and at least 12 drinks in a single year but no drinks in the past year; and (d) current drinkers—persons who have had at least 12 drinks in their lifetime and at least one drink in the past year.

Current drinking status (table 2) describes alcohol consumption during the past year: (a) nondrinkers—persons who had no drinks in the past year (lifetime abstainers and former drinkers); (b) current infrequent drinkers—persons who have had at least 12 drinks in their lifetime and 1–11 drinks during the past year; (c) light drinkers—persons who have had at least 12 drinks in their lifetime, at least 12 drinks in the past year, and 3 drinks or fewer per week, on average; (d) moderate drinkers—persons who have had at least 12 drinks in their lifetime, at least 12 drinks in the past year, and more than 3 drinks per week up to 14 drinks per week (for men) and more than 3 drinks per week up to 7 drinks per week (for women), on average; (e) heavier drinkers—persons who have had at least 12 drinks in their lifetime, at least 12 drinks in the past year, and had either more than 7 drinks per week (women) or more than 14 drinks per week (men). (See [Technical notes](#) for details.)

Five or more drinks in 1 day (tables 3 and 4) is a measure of heavy drinking, which may or may not be episodic, but it is not a measure of binge drinking. Usually binge drinking

is defined as “five or more drinks at one sitting” or “five or more drinks during a 2-hour period.” The NHIS question asks current drinkers how many days in the past year they consumed five or more alcoholic beverages during an entire day. This question followed, but was entirely separate from, the questions about usual drinking practices. Table 3 shows the percent of *all adults* who had five or more drinks in 1 day at least once, and at least 12 times during the past year, thus showing the prevalence of this behavior in the general adult population. Table 4 shows the percent of *current drinkers* who had five or more drinks in 1 day at least once and at least 12 times during the past year.

Figures 1–6 highlight selected findings from tables 1–4. Together these tables and figures provide a summary of alcohol use among U.S. adults. All estimates and associated standard errors in this report were generated using the SUDAAN software package (22), which is designed to handle the complex sample design used by the NHIS. All estimates were weighted to reflect the U.S. civilian noninstitutionalized population aged 18 years and older.

The summary indicator of alcohol use shown in table 2 has the limitation of masking patterns of alcohol use that can be important for assessing alcohol problems. For example, in data presented in this report, a man who consumed 14 drinks in a single day, once a week, would be in the same category as a man who consumed two drinks per day every day, 7 days a week. Similarly, a woman who consumed seven drinks in 1 day, once a week, would be in the same category as a woman who consumed one drink per day every day.

In addition to the reference period, there was another important conceptual change to measuring alcohol consumption starting in 1997. Previously in the NHIS, current drinking questions were asked only of individuals who had reported that they had ever had 12 drinks in a single year. With increasing recognition of the importance of capturing all types of drinking behavior, current questions related to current alcohol consumption are now

asked of anyone who has had 12 drinks in his or her entire life. As a result of this change, the categories “current infrequent drinker” and “former infrequent drinker” include some people who would have been classified as “lifetime abstainers” using data from earlier years of the NHIS.

Current drinkers, including those for whom the amount consumed was unknown, were asked how often they had five or more drinks in 1 day during the past year. This question is an indicator of days of heavy drinking, which may or may not occur regularly. It should not be considered “binge” drinking, as the term “binge drinking” indicates consumption of large amounts of alcohol at one sitting. The NHIS does not ask about binge drinking.

Most estimates presented in tables 1–4 were age adjusted to the 2000 projected U.S. population aged 18 years and older, using SUDAAN’s PROC DESCRIPT procedure (22–24).

Age adjustment was used to allow comparison among various sociodemographic subgroups that have different age structures. For the population totals as well as for many of the sociodemographic subgroups, the age-adjusted and unadjusted estimates were similar. The estimates most affected by age adjusting were education and marital status due to the differences in the age structures of the various education and marital status groups. Tables showing unadjusted estimates by race-ethnicity, education, poverty status, marital status, geographic region, and location of residence, are available on the NCHS Web site (25).

Age-adjusted estimates were compared using two-tailed t-tests at the 0.05 level. No adjustments were made for multiple comparisons. Terms such as “greater than” and “less than” indicate a statistically significant difference. Terms such as “similar” or “no difference” indicate that the statistics being compared were not significantly different. Lack of comment regarding the difference between any two statistics does not necessarily mean that the difference was tested and found to be not significant.

With the exception of information on place of residence (MSA versus

non-MSA), which is not available to the public for reasons of confidentiality, all statistics presented in this report can be replicated using NHIS data files and accompanying documentation available for downloading from the NCHS Web site at <http://www.cdc.gov/nchs/nhis.htm>.

Results

Findings from tables 1–4 consist of bulleted highlights organized according to population characteristics rather than table number. The number of the table or figure in which the data are presented is shown at the end of each bulleted item. Statistics are cited in the bullets whenever their mention will enhance understanding. In some instances, especially when more general interpretations of the findings are presented, the reader will need to refer to the table for the exact estimates. With the exception of the section describing findings by age, all descriptions refer to age-adjusted estimates.

The race-ethnicity categories shown in tables 1–4 identify persons of Hispanic origin separately from persons not of Hispanic origin. Persons of Hispanic origin can be of any race. Thus, each of the race categories other than “Hispanic” contains the qualifier “non-Hispanic.” Use of the full qualifier every time the category is mentioned in the report would become burdensome for the reader. Thus, in the highlights below, “white, non-Hispanic” is referred to as “white,” “black, non-Hispanic” is referred to as “black,” and “Asian/Pacific Islander, non-Hispanic” is referred to as “Asian/Pacific Islander.” Data for persons of other races are not shown separately due to small sample sizes and associated large standard errors that made it difficult to interpret findings for these other groups with only 2 years of data.

This report highlights only overall estimates and the most striking subgroup differences. The tables contain an enormous amount of information beyond that described. Readers with interests in particular subgroups or aspects of alcohol study are encouraged to examine the tables for findings pertinent to their interests.

All adults

- Overall, 62.4% of U.S. adults were current drinkers (table 1).
- About 16% of adults were former drinkers: 6.8% were former *regular* drinkers; 9.1% were former *infrequent* drinkers (table 1).
- About 1 in 5 adults (21.7%) was a lifetime abstainer (table 1).
- Slightly more than one-third of adults (37.6%) were currently nondrinkers, a category that consists of lifetime abstainers and former drinkers (table 2).
- Somewhat less than one-third (29.1%) of U.S. adults were light drinkers (table 2).
- Somewhat less than one-third of adults (28.5%) were either moderate drinkers (13.8%) or infrequent drinkers (14.7%) (table 2).
- About 5% of adults were classified as heavier drinkers (table 2).
- About 1 in 5 adults (20.5%) had five or more drinks in 1 day at least once in the past year (table 3).
- About 1 in 10 adults (9.2%) had five or more drinks in 1 day on at least 12 days in the past year (table 3).
- Among current drinkers, nearly one-third (31.5%) had five or more drinks in a single day at least once in the past year (table 4).
- About 1 in 7 (14.2%) current drinkers had five or more drinks in 1 day on at least 12 days during the past year (table 4).

Gender

- Men (69.1%) were more likely than women (56.4%) to be current drinkers (table 1).
- Men (8.9%) were more likely than women (5.2%) to be former regular drinkers, whereas women (10.3%) were more likely than men (7.7%) to be former infrequent drinkers (table 1).
- Women (28.1%) were about twice as likely as men (14.3%) to be lifetime abstainers (table 1).
- The prevalence of light drinking was slightly higher for men (30.3%) than for women (28.1%) (table 2).
- Men (21.7%) were considerably more likely than women (6.6%) to be moderate drinkers and somewhat

more likely than women to be heavier drinkers (5.7% and 3.8%, respectively) (table 2).

- Men (29.8%) were more than twice as likely as women (11.9%) to have had five or more drinks in 1 day at least once in the past year and nearly four times as likely (15.0%) as women (3.7%) to have had this much to drink in 1 day on at least 12 days during the past year (table 3).
- Male current drinkers (42.0%) were twice as likely as female current drinkers (19.7%) to have had five or more drinks in 1 day sometime in the past year and three times as likely (21.2% and 6.3%, respectively) to have had this much on 12 days or more in the past year (table 4).

Age

- Lifetime abstinence was highest among young men (27.7%) and young women (37.2%) aged 18–24 years and among women aged 65–74 years (36.2%) and 75 years and older (45.4%) (table 1).
- Rates of lifetime abstinence were lowest among adults aged 25–44 years (table 1).
- Current drinking was most prevalent in the 25–44-year age group for both men (76.9%) and women (66.0%) and declined steadily with age from 45 years of age on (table 1 and figure 1).
- Among both men and women, the youngest adults were the least likely of all the age groups to be former regular drinkers (table 1).
- Men aged 75 years and older (20.7%) were nearly twice as likely as men aged 45–64 years of age (10.6%) to be former regular drinkers (table 1).
- Women aged 75 years and older (8.2%) were only slightly more likely than women aged 45–64 years (5.6%) to be former regular drinkers (table 1).
- The prevalence of being a former infrequent drinker increased fourfold between the youngest and oldest age groups for both men and women (table 1).
- Consumption of five or more drinks in 1 day at least once in the past year was strongly associated with age for

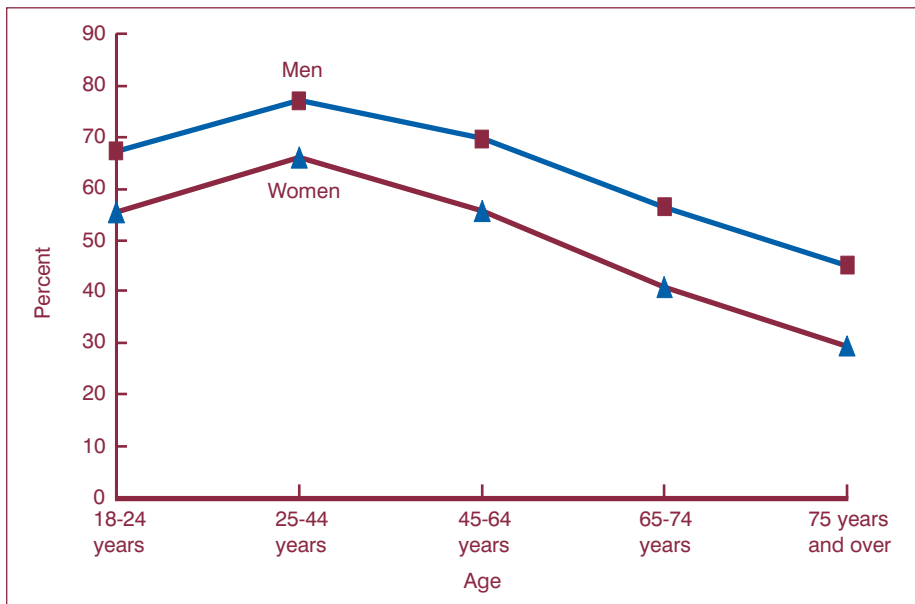


Figure 1. Percent of adults who were current drinkers, by age and gender: United States, 1997-98

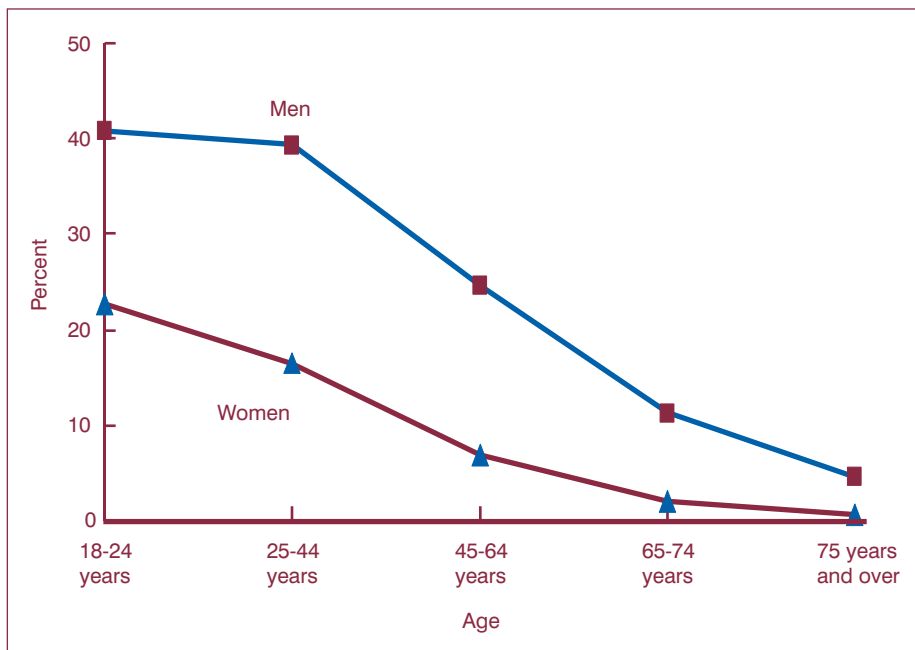


Figure 2. Percent of adults who had five or more drinks in 1 day at least once in past year, by age and gender: United States, 1997-98

both men and women (table 3 and figure 2).

- Among male current drinkers, rates of consuming five or more drinks in 1 day at least once in the past year declined from 6 in 10 (61.8%) in the youngest age group to 1 in 10 (10.3%) in the oldest group (table 4).
- Among female current drinkers, rates of consuming five or more drinks at least once in the past year declined

from 4 in 10 (41.2%) in the youngest age group to 2 in 100 (2.4%) in the oldest group (table 4).

Race-ethnicity

- White men (71.9%) and Hispanic men (64.7%) were more likely than black men (56.5%) and Asian/Pacific Islander men (57.8%) to be current drinkers (table 1 and figure 3).

- White women (62.4%) were more likely to be current drinkers than any other female race-ethnicity group studied (black women, 40.4%; Hispanic women, 40.0%; and Asian/Pacific Islander women, 30.6%) (table 1 and figure 3).
- Lifetime abstinence was higher among Asian/Pacific Islander adults (45.6%) than among Hispanic adults (33.1%), black adults (32.0%) or white adults (17.5%) (table 1).
- Asian/Pacific Islander women (60.0%) were about twice as likely as Asian/Pacific Islander men (30.3%) to be lifetime abstainers (table 1).
- Among race-ethnicity groups studied, heavier drinking was most prevalent among white men (6.1%) and white women (4.3%) and least prevalent among Asian/Pacific Islander men (1.8%) and Asian/Pacific Islander women (1.1%) (table 2).
- At each level of current consumption, white women had much higher rates of alcohol intake than women in the other race-ethnicity groups (table 2).
- Hispanic men (29.9%) were slightly less likely than white men (32.4%) to have had five or more drinks in 1 day at least once in the past year; Hispanic women (8.3%) were considerably less likely than white women (14.0%) to have engaged in this behavior (table 3 and figure 4).
- Among female current drinkers, the prevalence of having five or more drinks in 1 day in the past year was about the same for Hispanic women (20.2%) as for white women (20.8%) (table 4).

Education

- The prevalence of current drinking increased with education for both men and women. The apparent slight dip in prevalence among men and women with professional degrees compared with adults holding a bachelor's degree was not statistically significant (table 1 and figure 5).
- Heavier drinking was inversely associated with education for men, but not for women (table 2).
- Gender differences in current drinking prevalence were greatest among adults with fewer years of education (table 1 and figure 5).

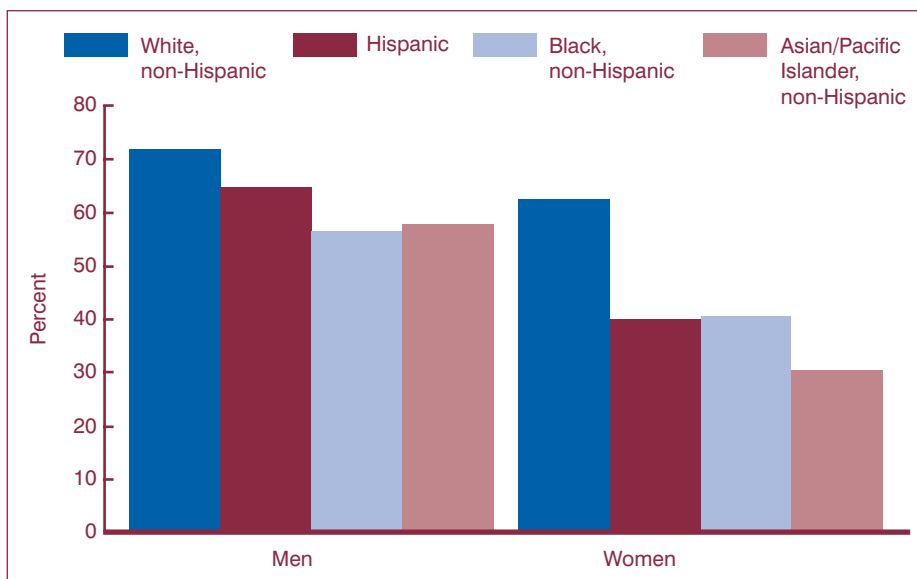


Figure 3. Percent of adults who were current drinkers, by race-ethnicity and gender: United States, 1997-98

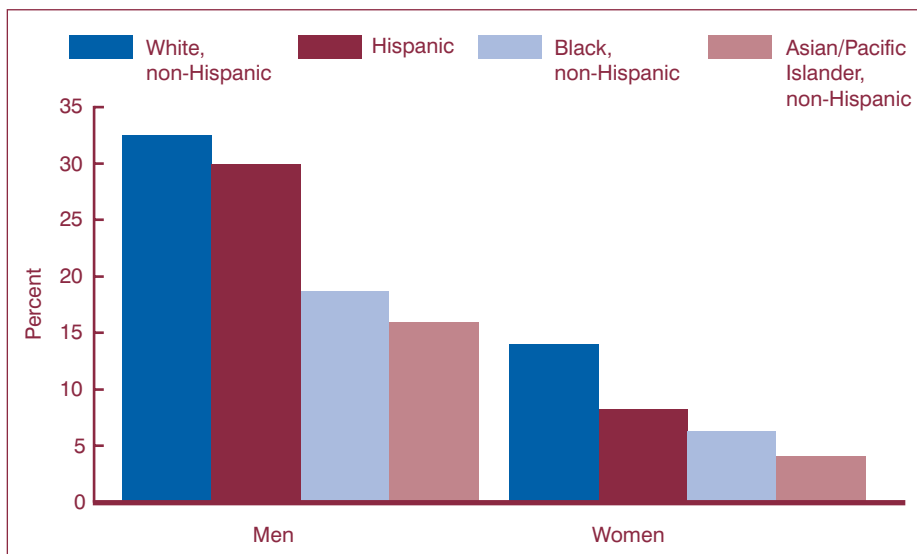


Figure 4. Percent of adults who had five or more drinks in 1 day at least once in past year, by race-ethnicity and gender: United States, 1997-98

- Among adults with less than a high school diploma, 58.0% of men and 36.4% of women were current drinkers (table 1 and figure 5).
- Among adults who had attended college, over 70% of men and over 60% of women were current drinkers (table 1 and figure 5).
- Men with less than a high school diploma (12.2%) were nearly three times as likely as men who held advanced degrees (4.3%) to be former regular drinkers (table 1).

- Women with less than a high school diploma (6.1%) were almost twice as likely as women who had advanced degrees (3.5%) to be former regular drinkers (table 1).
- Adults who have earned a General Educational Development (GED) diploma (26.1%) were more likely than adults with any other level of education to have had five or more drinks in a single day at least once during the past year (table 3 and figure 6).

Poverty status

- The prevalence of current drinking increased dramatically with income: 45.5% of adults having incomes below poverty were current drinkers compared with 75.6% of adults who had incomes of 400% or more above poverty (table 1).
- Persons with incomes below poverty (33.4%) were more than twice as likely as adults with incomes of 400% or more above poverty (12.7%) to be lifetime abstainers (table 1).
- Although adults in the upper income groups were more likely to drink alcohol and to have had five or more drinks in 1 day at least once in the past year than were adults in the lower income groups, no significant differences were found among the various income groups in prevalence of heavier drinking (tables 1-3).
- Among current drinkers, men with incomes below the poverty level (28.9%) were more likely than those in the highest income group (19.3%) to have had five or more drinks in 1 day on at least 12 days in the past year (table 4).
- Female current drinkers having incomes below the poverty level (13.4%) were more than twice as likely as the most affluent group of female current drinkers (5.2%) to have had five or more drinks in 1 day on at least 12 days during the past year (table 4).

Marital status

- The prevalence of lifetime abstinence was highest among never married adults (25.1%) and widowed adults (25.1%) and lowest among cohabiting adults (10.9%) (table 1).
- Cohabiting adults (9.4%) were more than twice as likely as married adults (3.8%) to be heavier drinkers (table 2).
- Widowed adults (44.1%) were more likely than adults in any other marital status group to be nondrinkers (table 2).

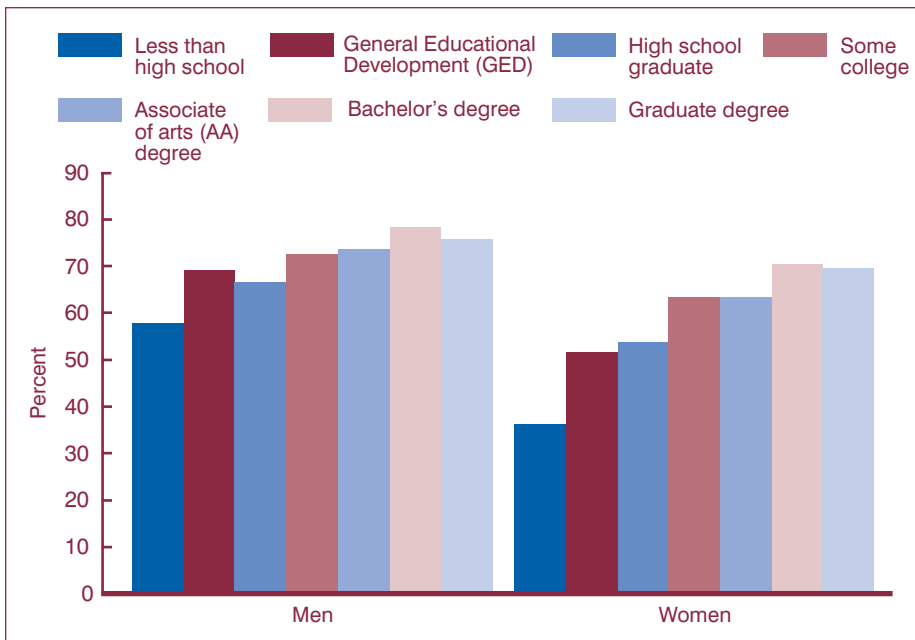


Figure 5. Percent of adults who were current drinkers by education and gender: United States, 1997-98

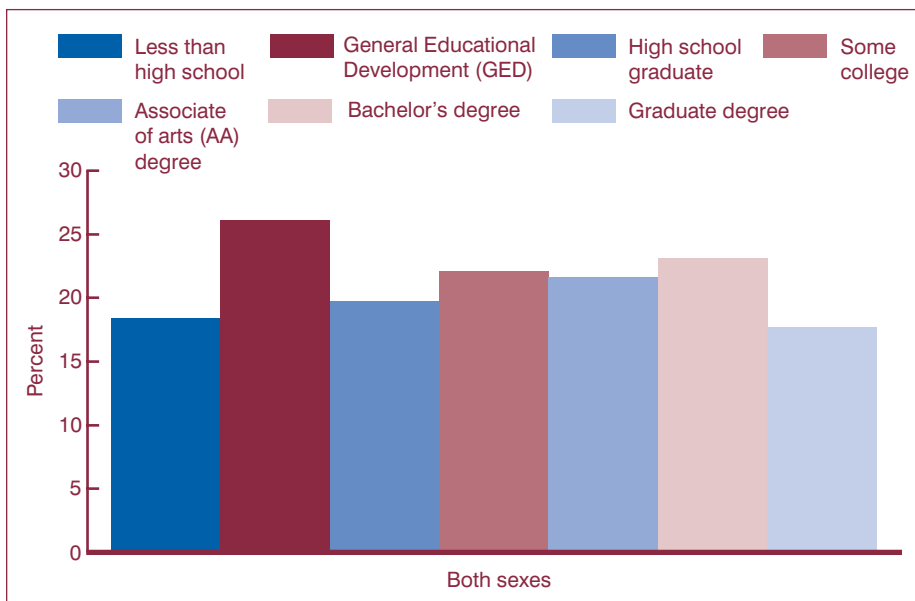


Figure 6. Percent of adults who had five or more drinks in 1 day at least once in past year, by education: United States, 1997-98

- Separated and divorced adults (6.4%) and cohabiting adults (9.4%) were more likely than married adults (3.8%) to be heavier drinkers (table 2).
- Cohabiting adults (32.6%) were almost twice as likely as married adults (18.1%) to have had five or more drinks in 1 day at least once in the past year (table 3).

Geographic region

- Adults living in the South (55.2%) were less likely to be current drinkers than adults living in the Northeast (68.3%), the Midwest (66.7%), or the West (64.0%) (table 1).
- Adults living in the Northeast (3.9%) were less likely to be heavier drinkers than adults in the Midwest (4.7%),

South (4.8%), and West (5.4%) (table 2).

Place of residence

- Adults living outside of a metropolitan statistical area (MSA) (55.2%) were less likely to be current drinkers than those living in an MSA, whether in a central city (61.4%) or not in a central city (66.2%) (table 1).
- Adults living in the central city of an MSA (5.3%) had a higher rate of heavier drinking than adults living in an MSA but outside the central city (4.5%) and adults living outside an MSA (4.4%) (table 2).

Discussion

This report presents prevalence estimates for alcohol use among U.S. adults, using data from the 1997-98 National Health Interview Survey (NHIS). It provides important benchmark information for studying trends in alcohol use among U.S. adults, as well as studying the relationship between alcohol use and other health indicators. Combining 2 years of data allowed analysis of alcohol use practices in some population subgroups that would otherwise be too small to analyze. For smaller subgroups, additional years of data will be required before reliable estimates can be produced.

In the past 20 years, with the advent of the national health promotion and disease prevention objectives—initially the “1990 Health Objectives for the Nation,” followed by the *Healthy People 2000*, and currently *Healthy People 2010*—recognition of the importance of health behaviors, including alcohol use, for health and well-being, has increased dramatically (12-14). This recognition was responsible for questions related to alcohol consumption gaining a place on the NHIS core questionnaire for the first time in the survey’s history. Although progress in the field of alcohol research has been great, much remains to be learned about the relationship between alcohol use and health. The inclusion of basic alcohol indicators on the annual National Health Interview Survey

provides an opportunity for exploring many important health-related questions. The findings presented in this report provide background for such future analyses.

The sociodemographic differentials in alcohol use found among U.S. adults in the 1997–98 National Health Interview Survey are generally consistent with those found in earlier years of the NHIS in which the reference period was the past 2 weeks (9,10). Overall, alcohol consumption practices varied by gender, age, race and ethnicity, educational attainment, poverty status, and marital status. Variations by region and place of residence were modest. Although there were some exceptions, adults *most likely* to be current drinkers, to drink more heavily, and to have had five or more drinks in 1 day at least once in the past year were male, younger, white, and/or cohabiting, or formerly married. Findings for education and poverty status suggest that although persons with higher socioeconomic status were more likely to drink alcohol, they were also more likely to be light or moderate drinkers as opposed to heavier drinkers. Adults with fewer years of education were the most likely to be heavier drinkers and to have five or more drinks in 1 day at least 12 days in the past year. Although the South has somewhat lower rates of alcohol consumption among the four regions in terms of rates of current drinking and rates of having had five or more drinks in 1 day at least once, on the whole, geographic variations in alcohol consumption were unremarkable.

In addition to the inclusion of alcohol indicators in the redesigned NHIS, changes to some of the basic sociodemographic measures have further enhanced opportunities for understanding key factors that may be associated with health behaviors, including use of alcohol. For example, prior to 1997, the National Health Interview Survey did not distinguish types of marital relationships. Unmarried partners living together were generally classified either as “married” or as “unrelated individuals,” depending on how they self-identified. Beginning in 1997, respondents have a choice of

Table A. Age-adjusted, crude, and age-specific prevalence of current drinking and having five or more drinks in 1 day at least once in the past year and age-specific population estimates among widowed adults: United States, 1997–98

Selected characteristic	Widowed adults (in thousands) ¹	Current drinkers ²	Five or more drinks ^{2,3}
	Number	Percent (standard error)	
All widowed adults (age-adjusted) ⁴	55.9 (1.85)	24.9 (1.82)
All widowed adults (crude)	13,388	37.4 (0.69)	4.5 (0.28)
Age			
18–24 years	26	89.3 (8.13)	84.0 (9.82)
25–44 years	424	58.4 (3.61)	26.2 (3.15)
45–64 years	2,465	50.3 (1.75)	10.4 (1.01)
65–74 years	3,947	38.4 (1.16)	3.6 (0.37)
75 years and over	6,527	30.4 (0.87)	1.1 (0.18)

... Category not applicable.

¹Population estimates for widowed adults are based on the NHIS Sample Adult component.

²Denominator excludes widowed adults with unknown current drinking status.

³Percent of widowed adults who had five or more drinks in 1 day at least once in the past year. Denominator excludes widowed adults with unknown five or more drinks in past year.

⁴Age adjusted to the 2000 projected U.S. population using age groups 18–24 years, 25–44 years, 45–64 years, 65–74 years, and 75 years and over (see table B).

marital status categories that include “living with partner.” Persons who said they were “living with partner” were, for the first time, considered part of the same family. The category “cohabiting” refers to persons who were living with a domestic partner. It is interesting to note that persons whose marital status was classified as “cohabiting” displayed noticeably different patterns of alcohol consumption compared with married individuals.

Another example of the additional analytic information available in the new NHIS is the availability of the previously unclassified education category of “GED” (General Educational Development high school equivalency diploma). This subgroup of the population is prominent for its higher rates of alcohol consumption when compared with nonhigh school graduates, the group to which it had been previously assigned. Explanations for these findings are beyond the scope of this report. It is sufficient to note that much remains to be understood about why people adopt healthy lifestyles, including prudent use of alcohol.

Given the strong relationship between alcohol consumption and age, all rates were age adjusted. In one case involving comparisons across marital status, it is instructive to consider the age-specific rates. [Table A](#) shows the age-specific rates for widowed adults for

current drinking and for consuming five or more drinks in 1 day at least once in the past year. The association between age and alcohol use was consistent across the marital status groups, (i.e., in each of the marital status groups, younger adults were more likely to be current drinkers and more likely to have had five or more alcoholic drinks in 1 day than were older adults)(data not shown). However, while widowhood was rare in the youngest age group, alcohol consumption among the few young widowed adults in the sample was unusually high. Among older widowed adults (the age groups most commonly associated with widowhood), rates of alcohol consumption were quite low. Thus, the age-adjusted rate is influenced by the high rates in the younger age groups as reflected in the large difference between the age-adjusted and crude rates. This somewhat masks the very low rates among the older widowed population. If a broader age grouping had been used for the younger adults (18–44 years), age-adjusted estimates for widowed adults for current drinking and for having five or more drinks in 1 day would have been somewhat lower, although still substantially higher than the crude estimates.

Conclusions

Drinking patterns vary among subgroups of the adult U.S. population. Careful attention to sociodemographic patterns in alcohol use will assist in appropriately targeting public health prevention. The descriptive statistics and highlights presented in this report are a foundation for future studies of health behavior profiles as they relate to health and disease among various population subgroups.

References

- National Institute on Alcohol Abuse and Alcoholism. Ninth Special Report to the U.S. Congress on Alcohol and Health, from the Secretary of Health and Human Services. Highlights from current research. U.S. Department of Health and Human Services. Rockville, MD. 1997.
- National Institute on Alcohol Abuse and Alcoholism. 10th Special Report to the U.S. Congress on Alcohol and Health, from the Secretary of Health and Human Services. U.S. Department of Health and Human Services. Rockville, MD. 2000.
- National Institute on Alcohol Abuse and Alcoholism. Alcohol and coronary heart disease. Alcohol Alert. No. 45. October 1999.
- Moore RD, Pearson TA. Moderate alcohol consumption and coronary artery disease. A review. *Medicine*. 65(4) 242–267. 1986.
- Schoenborn CA, Danchik KM. Health practices among adults: United States, 1977. Advance data from vital and health statistics; no 64. Hyattsville, Maryland: National Center for Health Statistics. 1980.
- Schoenborn CA, Cohen BH. Trends in smoking, alcohol consumption, and other health practices among U.S. adults, 1977 and 1983. Advance data from vital and health statistics; no 118. Hyattsville, Maryland: National Center for Health Statistics. 1986.
- National Center for Health Statistics. Current estimates from the National Health Interview Survey, United States, 1983. National Center for Health Statistics. *Vital Health Stat* 10(154). 1986.
- Adams PF, Hardy AM. Current estimates from the National Health Interview Survey, 1988. National Center for Health Statistics. *Vital Health Stat* 10(173). 1989.
- Schoenborn CA. Health promotion and disease prevention, United States, 1985. National Center for Health Statistics. *Vital Health Stat* 10(163). 1988.
- Piani A, Schoenborn CA. Health promotion and disease prevention: United States, 1990. National Center for Health Statistics. *Vital Health Stat* 10(185). 1993.
- Adams PF, Benson V. Current estimates from the National Health Interview Survey, 1991. National Center for Health Statistics. *Vital Health Stat* 10(184). 1992.
- U.S. Department of Health and Human Services. Promoting Health, Preventing Disease. Objectives for the Nation. DHHS. Public Health Service. U.S. Government Printing Office. Washington, D.C. 1980.
- U.S. Department of Health and Human Services. Healthy People 2000. National Health Promotion and Disease Prevention Objectives. DHHS Publication No. (PHS) 91–50212. U.S. Government Printing Office. Washington. 1991.
- U.S. Department of Health and Human Services. Healthy People 2010. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington: U.S. Government Printing Office, November, 2000.
- National Center for Health Statistics. <http://www.cdc.gov/nchs/about/major/nhis/hisdesgn.htm>
- National Center for Health Statistics. 1997 National Health Interview Survey (NHIS). Public Use Data Release. NHIS Survey Description. ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/1997/srvydesc.pdf
- National Center for Health Statistics. 1998 National Health Interview Survey (NHIS). Public Use Data Release. NHIS Survey Description. ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/1998/srvydesc.pdf
- Midanik LT. Validity of self-reported alcohol use: a literature review and assessment. *British J. Addiction* 83:1019–1029. 1988.
- Midanik LT, Klatsky AL, Armstrong MA. A comparison of 7-day recall with two summary measures of alcohol use. *Drug and Alcohol Dependence*. 24:127–134. 1989.
- Williams GD, Proudfit AH, Quinn EA, Campbell KE. Variations in quantity-frequency measures of alcohol consumption from a general population survey. *Addiction*. 89:413–420. 1994.
- Wyllie A, Zhang J, Casswell S. Comparison of six alcohol consumption measures from survey data. *Addiction*. 89:425–430. 1994.
- Shah BV, Barnwell BG, and Bieler GS. SUDAAN, Software for the Statistical Analysis of Correlated Data. SUDAAN User's Manual, Release 7.5. Research Triangle Park, NC. Research Triangle Institute. 1997. Additional information available at: <http://www.rti.org/patents/sudaan/sudaan.html> (Dec 2000).
- Day JC. Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1995 to 2050. U.S. Bureau of the Census, Current Population Reports, P25–1130. U.S. Government Printing Office, Washington. 1996. <http://www.census.gov/prod/1/pop/p25-1130/>
- Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Healthy People Statistical Notes, no. 20. Hyattsville, Maryland. National Center for Health Statistics. January 2001.
- National Center for Health Statistics. <http://www.cdc.gov/nchs/>
- Department of Commerce, U.S. Bureau of the Census. Poverty in the United States, 1996. Washington. U.S. Department of Commerce. U.S. Bureau of the Census. 1997.
- U.S. Census Bureau. <http://www.census.gov/population/www/estimates/aboutmetro.html>

Table 1. Percent distribution of lifetime alcohol drinking status for adults 18 years of age and older according to selected characteristics: United States, average annual, 1997–98

Selected characteristic	Total	Lifetime alcohol drinking status ¹			
		Lifetime abstainer	Former infrequent	Former regular	Current
Percent distribution (standard error)					
Both sexes					
Ages 18 years and older (age-adjusted) ^{2,3}	100.00	21.7 (0.24)	9.1 (0.15)	6.8 (0.14)	62.4 (0.29)
Ages 18 years and older (crude) ²	100.00	21.5 (0.24)	9.0 (0.15)	6.7 (0.14)	62.8 (0.29)
Age:					
18–24 years	100.00	32.4 (0.72)	3.7 (0.27)	2.5 (0.23)	61.4 (0.77)
25–44 years	100.00	16.4 (0.30)	7.1 (0.18)	5.1 (0.17)	71.3 (0.35)
45–64 years	100.00	18.8 (0.37)	10.7 (0.29)	8.0 (0.27)	62.4 (0.49)
65–74 years	100.00	26.6 (0.64)	14.2 (0.45)	11.2 (0.45)	48.0 (0.69)
75 years and older	100.00	35.5 (0.74)	15.8 (0.55)	13.1 (0.55)	35.7 (0.74)
Race-ethnicity ³ :					
Hispanic	100.00	33.1 (0.68)	8.8 (0.39)	5.7 (0.33)	52.3 (0.60)
White, non-Hispanic	100.00	17.5 (0.29)	8.6 (0.17)	7.0 (0.16)	66.9 (0.35)
Black, non-Hispanic	100.00	32.0 (0.72)	12.6 (0.38)	7.9 (0.37)	47.4 (0.77)
Asian/Pacific Islander, non-Hispanic	100.00	45.6 (1.53)	7.6 (0.75)	2.9 (0.52)	43.9 (1.49)
Education ³ :					
Less than high school graduate	100.00	32.1 (0.52)	12.0 (0.36)	8.9 (0.30)	47.0 (0.56)
GED diploma ⁴	100.00	18.5 (1.16)	10.0 (0.83)	10.4 (0.85)	61.2 (1.39)
High school graduate	100.00	23.0 (0.43)	10.4 (0.27)	6.9 (0.25)	59.6 (0.47)
Some college - no degree	100.00	17.2 (0.45)	8.0 (0.28)	7.0 (0.28)	67.8 (0.53)
Associate of arts degree	100.00	18.0 (0.66)	7.6 (0.42)	6.5 (0.39)	67.9 (0.74)
Bachelor of arts, science degree	100.00	14.6 (0.48)	6.2 (0.29)	4.8 (0.27)	74.5 (0.57)
Masters, doctorate, medical degree	100.00	17.3 (1.25)	5.5 (0.32)	4.0 (0.31)	73.2 (1.30)
Poverty status ³ :					
Below poverty	100.00	33.4 (0.75)	12.4 (0.49)	8.7 (0.46)	45.5 (0.67)
Poverty–199% above	100.00	27.5 (0.58)	11.8 (0.38)	8.8 (0.35)	52.0 (0.59)
200–399% above	100.00	20.4 (0.39)	9.5 (0.28)	7.4 (0.24)	62.8 (0.50)
400% or more above	100.00	12.7 (0.37)	6.4 (0.23)	5.3 (0.20)	75.6 (0.44)
Marital status ³ :					
Never married	100.00	25.1 (0.59)	7.7 (0.37)	6.8 (0.40)	60.4 (0.71)
Married	100.00	20.8 (0.34)	9.6 (0.22)	7.2 (0.20)	62.3 (0.38)
Cohabiting	100.00	10.9 (1.03)	8.3 (0.91)	7.7 (0.90)	73.1 (1.25)
Divorced or separated	100.00	18.2 (0.65)	9.7 (0.40)	8.5 (0.41)	63.6 (0.76)
Widowed	100.00	25.1 (1.80)	11.2 (0.91)	7.7 (0.84)	55.9 (1.85)
Geographic region ³ :					
Northeast	100.00	17.0 (0.40)	9.1 (0.33)	5.6 (0.31)	68.3 (0.58)
Midwest	100.00	17.8 (0.54)	9.1 (0.25)	6.5 (0.25)	66.7 (0.57)
South	100.00	27.3 (0.44)	9.7 (0.29)	7.7 (0.27)	55.2 (0.54)
West	100.00	21.2 (0.47)	7.8 (0.29)	7.0 (0.26)	64.0 (0.49)
Place of residence ^{3,5} :					
MSA, central city	100.00	23.3 (0.43)	8.9 (0.24)	6.4 (0.21)	61.4 (0.49)
MSA, not central city	100.00	18.9 (0.33)	8.5 (0.20)	6.3 (0.19)	66.2 (0.44)
Not MSA	100.00	25.5 (0.55)	10.6 (0.38)	8.7 (0.35)	55.2 (0.57)

See footnotes at end of table.

Table 1. Percent distribution of lifetime alcohol drinking status for adults 18 years of age and older according to selected characteristics: United States, average annual, 1997–98—Con.

Selected characteristic	Total	Lifetime alcohol drinking status ¹			
		Lifetime abstainer	Former infrequent	Former regular	Current
Percent distribution (standard error)					
Men					
Ages 18 years and older (age-adjusted ^{2,3})	100.00	14.3 (0.27)	7.7 (0.19)	8.9 (0.21)	69.1 (0.34)
Ages 18 years and older (crude) ²	100.00	14.2 (0.27)	7.5 (0.18)	8.4 (0.20)	69.9 (0.34)
Age:					
18–24 years	100.00	27.7 (1.02)	2.9 (0.38)	2.2 (0.35)	67.2 (1.10)
25–44 years	100.00	11.5 (0.35)	5.9 (0.25)	5.8 (0.25)	76.9 (0.46)
45–64 years	100.00	10.8 (0.41)	9.1 (0.38)	10.6 (0.40)	69.6 (0.62)
65–74 years	100.00	14.6 (0.68)	12.8 (0.63)	16.1 (0.77)	56.5 (1.00)
75 years and older	100.00	19.9 (1.05)	14.2 (0.88)	20.7 (1.09)	45.2 (1.29)
Race-ethnicity ³ :					
Hispanic	100.00	18.5 (0.86)	8.8 (0.56)	8.0 (0.57)	64.7 (0.84)
White, non-Hispanic	100.00	11.9 (0.31)	7.1 (0.21)	9.0 (0.25)	71.9 (0.41)
Black, non-Hispanic	100.00	21.4 (0.87)	11.4 (0.66)	10.7 (0.65)	56.5 (1.15)
Asian/Pacific Islander, non-Hispanic	100.00	30.3 (2.09)	7.6 (1.00)	4.3 (1.06)	57.8 (2.12)
Education ³ :					
Less than high school graduate	100.00	18.6 (0.58)	11.2 (0.48)	12.2 (0.49)	58.0 (0.79)
GED diploma ⁴	100.00	8.7 (1.06)	9.2 (1.18)	13.0 (1.37)	69.1 (1.82)
High school graduate	100.00	15.4 (0.56)	8.6 (0.37)	9.6 (0.40)	66.5 (0.63)
Some college - no degree	100.00	12.0 (0.54)	6.2 (0.35)	9.1 (0.50)	72.7 (0.75)
Associate of arts degree	100.00	12.2 (0.88)	6.2 (0.66)	8.0 (0.68)	73.6 (1.09)
Bachelor of arts, science degree	100.00	10.9 (0.59)	5.5 (0.41)	5.3 (0.43)	78.3 (0.75)
Masters, doctorate, medical degree	100.00	15.1 (1.90)	4.7 (0.40)	4.3 (0.43)	75.9 (1.97)
Poverty status ³ :					
Below poverty	100.00	21.3 (1.12)	11.1 (0.75)	11.7 (0.85)	55.9 (1.19)
Poverty–199% above	100.00	17.1 (0.65)	10.4 (0.54)	12.2 (0.59)	60.4 (0.85)
200–399% above	100.00	13.9 (0.44)	8.6 (0.40)	9.7 (0.38)	67.8 (0.61)
400% or more above	100.00	9.6 (0.45)	5.0 (0.25)	6.4 (0.31)	79.1 (0.54)
Marital status ³ :					
Never married	100.00	17.4 (0.79)	7.4 (0.56)	9.0 (0.71)	66.2 (1.09)
Married	100.00	13.6 (0.39)	8.6 (0.29)	8.9 (0.28)	69.0 (0.48)
Cohabiting	100.00	8.0 (1.10)	5.6 (0.85)	8.8 (1.16)	77.5 (1.54)
Divorced or separated	100.00	9.2 (0.77)	6.4 (0.44)	12.0 (0.82)	72.4 (1.10)
Widowed	100.00	9.1 (1.85)	4.5 (0.66)	12.5 (2.17)	73.9 (2.73)
Geographic region ³ :					
Northeast	100.00	11.1 (0.47)	6.8 (0.38)	7.5 (0.45)	74.6 (0.69)
Midwest	100.00	12.8 (0.60)	7.1 (0.34)	8.0 (0.39)	72.1 (0.61)
South	100.00	17.3 (0.50)	9.2 (0.37)	10.5 (0.39)	62.9 (0.64)
West	100.00	14.1 (0.48)	6.7 (0.37)	8.5 (0.44)	70.8 (0.64)
Place of residence ^{3,5} :					
MSA, central city	100.00	14.9 (0.52)	7.7 (0.34)	8.4 (0.34)	69.0 (0.62)
MSA, not central city	100.00	12.9 (0.35)	7.0 (0.25)	8.1 (0.29)	71.9 (0.50)
Not MSA	100.00	16.6 (0.63)	9.4 (0.42)	11.4 (0.50)	62.6 (0.66)

See footnotes at end of table.

Table 1. Percent distribution of lifetime alcohol drinking status for adults 18 years of age and older according to selected characteristics: United States, average annual, 1997–98—Con.

Selected characteristic	Total	Lifetime alcohol drinking status ¹			
		Lifetime abstainer	Former infrequent	Former regular	Current
Percent distribution (standard error)					
Women					
Ages 18 years and older (age-adjusted) ^{2,3}	100.00	28.1 (0.34)	10.3 (0.19)	5.2 (0.16)	56.4 (0.38)
Ages 18 years and older (crude) ²	100.00	28.1 (0.34)	10.3 (0.20)	5.2 (0.16)	56.4 (0.38)
Age:					
18–24 years	100.00	37.2 (1.03)	4.4 (0.40)	2.8 (0.31)	55.6 (1.08)
25–44 years	100.00	21.2 (0.41)	8.3 (0.26)	4.5 (0.21)	66.0 (0.48)
45–64 years	100.00	26.4 (0.54)	12.2 (0.39)	5.6 (0.28)	55.8 (0.64)
65–74 years	100.00	36.2 (0.88)	15.4 (0.62)	7.3 (0.47)	41.1 (0.85)
75 years and older	100.00	45.4 (0.98)	16.8 (0.69)	8.2 (0.50)	29.5 (0.85)
Race-ethnicity ³ :					
Hispanic	100.00	47.2 (0.90)	9.0 (0.47)	3.8 (0.32)	40.0 (0.83)
White, non-Hispanic	100.00	22.3 (0.40)	9.9 (0.23)	5.4 (0.19)	62.4 (0.46)
Black, non-Hispanic	100.00	40.1 (0.88)	13.6 (0.53)	5.9 (0.41)	40.4 (0.87)
Asian/Pacific Islander, non-Hispanic	100.00	60.0 (1.95)	7.7 (1.07)	1.8 (0.48)	30.6 (1.86)
Education ³ :					
Less than high school graduate	100.00	44.7 (0.75)	12.9 (0.46)	6.1 (0.32)	36.4 (0.68)
GED diploma ⁴	100.00	29.8 (1.90)	10.8 (1.33)	7.7 (1.07)	51.7 (1.95)
High school graduate	100.00	29.1 (0.57)	12.0 (0.37)	5.1 (0.26)	53.9 (0.62)
Some college - no degree	100.00	21.9 (0.63)	9.6 (0.42)	5.1 (0.29)	63.4 (0.71)
Associate of arts degree	100.00	22.5 (0.90)	8.8 (0.52)	5.4 (0.46)	63.4 (0.98)
Bachelor of arts, science degree	100.00	18.5 (0.70)	6.9 (0.41)	4.2 (0.33)	70.5 (0.84)
Masters, doctorate, medical degree	100.00	20.3 (1.68)	6.5 (0.55)	3.5 (0.40)	69.6 (1.77)
Poverty status ³ :					
Below poverty	100.00	40.4 (0.86)	13.4 (0.64)	7.3 (0.49)	38.9 (0.77)
Poverty—199% above	100.00	35.8 (0.79)	13.0 (0.50)	6.3 (0.39)	44.9 (0.77)
200–399% above	100.00	26.6 (0.59)	10.4 (0.36)	5.1 (0.28)	57.9 (0.67)
400% or more above	100.00	16.3 (0.55)	8.0 (0.39)	4.0 (0.25)	71.7 (0.64)
Marital status ³ :					
Never married	100.00	32.6 (0.87)	8.2 (0.51)	4.9 (0.40)	54.2 (0.95)
Married	100.00	28.0 (0.48)	10.6 (0.29)	5.2 (0.23)	56.1 (0.50)
Cohabiting	100.00	16.1 (3.03)	14.7 (2.88)	3.9 (0.59)	65.3 (1.56)
Divorced or separated	100.00	23.7 (0.88)	11.7 (0.55)	6.6 (0.42)	58.0 (0.94)
Widowed	100.00	29.3 (2.47)	12.9 (1.12)	6.6 (0.93)	51.2 (2.51)
Geographic region ³ :					
Northeast	100.00	22.0 (0.55)	11.0 (0.43)	4.1 (0.36)	62.9 (0.75)
Midwest	100.00	22.1 (0.70)	10.9 (0.38)	5.3 (0.30)	61.7 (0.80)
South	100.00	36.1 (0.60)	10.2 (0.35)	5.4 (0.27)	48.3 (0.66)
West	100.00	27.7 (0.74)	8.8 (0.37)	5.6 (0.29)	57.9 (0.72)
Place of residence ^{3,5} :					
MSA, central city	100.00	30.4 (0.56)	10.0 (0.31)	4.9 (0.22)	54.7 (0.61)
MSA, not central city	100.00	24.3 (0.46)	9.8 (0.26)	4.8 (0.22)	61.0 (0.57)
Not MSA	100.00	33.5 (0.81)	11.9 (0.53)	6.4 (0.39)	48.2 (0.82)

¹Lifetime alcohol drinking status: Lifetime abstainer is defined as a person who had less than 12 drinks in lifetime; former infrequent is defined as having had 12 or more drinks in lifetime, but less than 12 in 1 year, and none in past year; former regular is defined as having had 12 or more drinks in 1 year but none in past year; current is defined as having had 12 or more drinks in lifetime and 1 or more drinks in past year.

²Persons of other races and unknown race and ethnicity, unknown education, unknown poverty status, and unknown marital status are included in the total.

³Age adjusted to the 2000 projected U.S. population using age groups 18–24 years, 25–44 years, 45–64 years, 65–74 years, and 75 years and over.

⁴GED is General Educational Development high school equivalency diploma.

⁵MSA is metropolitan statistical area (see Technical notes).

NOTE: Denominator for each percent distribution excludes persons with unknown lifetime drinking status.

Table 2. Percent distribution of current alcohol drinking status for adults 18 years of age and older according to selected characteristics: United States, average annual, 1997–98

Selected characteristic	Total	Current alcohol drinking status ¹				
		Nondrinker	Infrequent	Light	Moderate	Heavier
Percent distribution (standard error)						
Both sexes						
Ages 18 years and older (age-adjusted ^{2,3}	100.00	37.6 (0.29)	14.7 (0.16)	29.1 (0.24)	13.8 (0.18)	4.7 (0.10)
Ages 18 years and older (crude) ²	100.00	37.2 (0.29)	14.8 (0.16)	29.4 (0.24)	13.9 (0.18)	4.7 (0.10)
Age:						
18–24 years	100.00	38.6 (0.77)	12.2 (0.49)	31.4 (0.71)	12.7 (0.52)	5.1 (0.34)
25–44 years	100.00	28.7 (0.35)	15.9 (0.23)	35.3 (0.33)	15.4 (0.27)	4.9 (0.15)
45–64 years	100.00	37.6 (0.49)	15.5 (0.32)	27.5 (0.39)	14.1 (0.32)	5.3 (0.18)
65–74 years	100.00	52.0 (0.69)	13.7 (0.48)	18.5 (0.57)	11.9 (0.44)	3.9 (0.26)
75 years and older	100.00	64.3 (0.74)	11.8 (0.48)	13.0 (0.47)	9.1 (0.45)	1.8 (0.19)
Race-ethnicity ³ :						
Hispanic	100.00	47.7 (0.60)	12.8 (0.44)	25.4 (0.53)	10.5 (0.40)	3.6 (0.25)
White, non-Hispanic	100.00	33.1 (0.35)	15.2 (0.20)	31.3 (0.30)	15.2 (0.22)	5.2 (0.12)
Black, non-Hispanic	100.00	52.6 (0.77)	13.2 (0.47)	21.0 (0.57)	9.6 (0.40)	3.6 (0.21)
Asian/Pacific Islander, non-Hispanic	100.00	56.1 (1.49)	13.9 (1.00)	21.4 (1.19)	7.2 (0.75)	1.4 (0.30)
Education ³ :						
Less than high school graduate	100.00	53.0 (0.56)	12.6 (0.35)	19.4 (0.44)	9.8 (0.32)	5.1 (0.24)
GED diploma ⁴	100.00	38.8 (1.39)	16.3 (1.10)	24.7 (1.16)	13.0 (0.92)	7.2 (0.70)
High school graduate	100.00	40.4 (0.47)	16.2 (0.35)	25.9 (0.40)	12.6 (0.31)	4.9 (0.20)
Some college - no degree	100.00	32.2 (0.53)	16.4 (0.36)	31.2 (0.49)	15.1 (0.37)	5.2 (0.22)
Associate of arts degree	100.00	32.1 (0.74)	15.8 (0.60)	33.1 (0.75)	14.8 (0.57)	4.3 (0.30)
Bachelor of arts, science degree	100.00	25.5 (0.57)	13.3 (0.38)	38.6 (0.62)	18.3 (0.47)	4.3 (0.27)
Masters, doctorate, medical degree	100.00	26.8 (1.30)	11.2 (0.58)	40.3 (1.28)	18.3 (0.81)	3.5 (0.43)
Poverty status ³ :						
Below poverty	100.00	54.5 (0.67)	11.6 (0.42)	20.1 (0.50)	9.0 (0.41)	4.8 (0.29)
Poverty–199% above	100.00	48.0 (0.59)	14.5 (0.42)	22.6 (0.45)	10.2 (0.37)	4.7 (0.24)
200–399% above	100.00	37.2 (0.50)	16.3 (0.34)	28.6 (0.43)	13.1 (0.31)	4.8 (0.18)
400% or more above	100.00	24.4 (0.44)	13.9 (0.29)	36.8 (0.45)	19.7 (0.39)	5.2 (0.20)
Marital status ³ :						
Never married	100.00	39.6 (0.71)	12.7 (0.46)	27.7 (0.59)	14.8 (0.46)	5.2 (0.28)
Married	100.00	37.7 (0.38)	15.8 (0.24)	29.6 (0.35)	13.2 (0.23)	3.8 (0.13)
Cohabiting	100.00	26.9 (1.25)	13.1 (0.94)	32.2 (1.09)	18.4 (1.15)	9.4 (0.76)
Divorced or separated	100.00	36.4 (0.76)	15.4 (0.55)	27.6 (0.61)	14.2 (0.55)	6.4 (0.38)
Widowed	100.00	44.1 (1.85)	12.0 (1.08)	31.2 (1.87)	8.0 (0.97)	4.7 (0.79)
Region ³ :						
Northeast	100.00	31.7 (0.58)	15.9 (0.44)	33.1 (0.60)	15.4 (0.43)	3.9 (0.21)
Midwest	100.00	33.3 (0.57)	16.4 (0.30)	31.2 (0.54)	14.4 (0.35)	4.7 (0.18)
South	100.00	44.8 (0.54)	13.1 (0.26)	25.2 (0.39)	12.1 (0.30)	4.8 (0.18)
West	100.00	36.0 (0.49)	14.3 (0.36)	29.6 (0.43)	14.7 (0.36)	5.4 (0.25)
Place of residence ^{3,5} :						
MSA, central city	100.00	38.6 (0.49)	13.7 (0.30)	28.1 (0.38)	14.3 (0.34)	5.3 (0.19)
MSA, not central city	100.00	33.8 (0.44)	15.4 (0.25)	31.7 (0.36)	14.6 (0.26)	4.5 (0.15)
Not MSA	100.00	44.8 (0.57)	14.7 (0.32)	24.5 (0.45)	11.5 (0.32)	4.4 (0.20)

See footnotes at end of table.

Table 2. Percent distribution of current alcohol drinking status for adults 18 years of age and older according to selected characteristics: United States, average annual, 1997–98—Con.

Selected characteristic	Total	Current alcohol drinking status ¹				
		Nondrinker	Infrequent	Light	Moderate	Heavier
Percent distribution (standard error)						
Men						
Ages 18 years and older (age-adjusted) ^{2,3}	100.00	30.9 (0.34)	11.3 (0.22)	30.3 (0.32)	21.7 (0.30)	5.7 (0.15)
Ages 18 years and older (crude) ²	100.00	30.1 (0.34)	11.3 (0.22)	30.9 (0.33)	21.9 (0.30)	5.8 (0.15)
Age:						
18–24 years	100.00	32.8 (1.10)	9.4 (0.66)	32.1 (1.01)	19.7 (0.89)	6.0 (0.55)
25–44 years	100.00	23.1 (0.46)	11.1 (0.31)	35.8 (0.49)	23.9 (0.44)	6.0 (0.24)
45–64 years	100.00	30.4 (0.62)	12.6 (0.43)	28.8 (0.58)	21.9 (0.54)	6.4 (0.28)
65–74 years	100.00	43.5 (1.00)	11.6 (0.69)	21.1 (0.88)	18.9 (0.80)	4.8 (0.41)
75 years and older	100.00	54.8 (1.29)	10.4 (0.78)	16.4 (0.90)	16.4 (0.92)	2.0 (0.37)
Race-ethnicity ³ :						
Hispanic	100.00	35.3 (0.84)	10.2 (0.50)	31.4 (0.83)	17.9 (0.72)	5.2 (0.42)
White, non-Hispanic	100.00	28.1 (0.41)	11.6 (0.27)	31.0 (0.40)	23.2 (0.36)	6.1 (0.18)
Black, non-Hispanic	100.00	43.5 (1.15)	10.1 (0.62)	24.5 (0.93)	17.2 (0.81)	4.6 (0.33)
Asian/Pacific Islander, non-Hispanic	100.00	42.2 (2.12)	13.9 (1.50)	30.0 (1.87)	12.1 (1.51)	1.8 (0.40)
Education ³ :						
Less than high school graduate	100.00	42.0 (0.79)	10.8 (0.46)	23.2 (0.65)	16.4 (0.54)	7.5 (0.41)
GED diploma ⁴	100.00	30.9 (1.82)	11.6 (1.18)	28.6 (1.74)	19.6 (1.56)	9.4 (1.08)
High school graduate	100.00	33.5 (0.63)	12.1 (0.45)	27.3 (0.57)	20.7 (0.60)	6.4 (0.32)
Some college - no degree	100.00	27.3 (0.75)	12.4 (0.52)	31.4 (0.74)	22.8 (0.64)	6.1 (0.36)
Associate of arts degree	100.00	26.4 (1.09)	11.4 (0.81)	33.8 (1.14)	24.2 (1.09)	4.4 (0.42)
Bachelor of arts, science degree	100.00	21.7 (0.75)	10.2 (0.52)	37.7 (0.86)	26.5 (0.74)	3.9 (0.37)
Masters, doctorate, medical degree	100.00	24.1 (1.97)	8.5 (0.58)	38.8 (2.03)	26.0 (1.54)	2.6 (0.34)
Poverty status ³ :						
Below poverty	100.00	44.1 (1.19)	9.5 (0.65)	23.8 (0.94)	15.9 (0.77)	6.7 (0.60)
Poverty–199% above	100.00	39.6 (0.85)	11.2 (0.61)	25.0 (0.71)	17.3 (0.69)	6.9 (0.42)
200–399% above	100.00	32.2 (0.61)	11.5 (0.42)	29.9 (0.63)	20.2 (0.51)	6.2 (0.32)
400% or more above	100.00	20.9 (0.54)	10.3 (0.40)	35.5 (0.61)	28.0 (0.63)	5.3 (0.27)
Marital status ³ :						
Never married	100.00	33.8 (1.09)	10.2 (0.59)	28.0 (0.97)	22.0 (0.75)	6.1 (0.42)
Married	100.00	31.0 (0.48)	12.3 (0.35)	32.0 (0.56)	20.3 (0.40)	4.4 (0.20)
Cohabiting	100.00	22.5 (1.54)	11.5 (1.22)	28.5 (1.50)	26.6 (1.62)	10.9 (1.07)
Divorced or separated	100.00	27.6 (1.10)	10.9 (0.92)	26.9 (1.10)	26.0 (1.16)	8.6 (0.70)
Widowed	100.00	26.1 (2.73)	8.2 (2.16)	33.9 (3.88)	21.3 (3.20)	10.4 (3.08)
Region ³ :						
Northeast	100.00	25.4 (0.69)	12.1 (0.56)	34.0 (0.84)	24.2 (0.74)	4.3 (0.32)
Midwest	100.00	27.9 (0.61)	12.6 (0.42)	31.4 (0.70)	22.3 (0.59)	5.9 (0.28)
South	100.00	37.1 (0.64)	10.2 (0.37)	27.2 (0.48)	19.5 (0.48)	6.0 (0.27)
West	100.00	29.2 (0.64)	10.9 (0.53)	31.2 (0.67)	22.4 (0.59)	6.2 (0.30)
Place of residence ^{3,5} :						
MSA, central city	100.00	31.0 (0.62)	10.5 (0.38)	29.5 (0.55)	22.6 (0.56)	6.4 (0.28)
MSA, not central city	100.00	28.1 (0.50)	11.6 (0.34)	32.5 (0.47)	22.5 (0.44)	5.3 (0.23)
Not MSA	100.00	37.4 (0.66)	11.8 (0.47)	26.5 (0.62)	18.6 (0.52)	5.8 (0.31)

See footnotes at end of table.

Table 2. Percent distribution of current alcohol drinking status for adults 18 years of age and older according to selected characteristics: United States, average annual, 1997–98—Con.

Selected characteristic	Total	Current alcohol drinking status ¹				
		Nondrinker	Infrequent	Light	Moderate	Heavier
Percent distribution (standard error)						
Women						
Ages 18 years and older (age-adjusted) ^{2,3}	100.00	43.6 (0.38)	18.0 (0.23)	28.1 (0.32)	6.6 (0.16)	3.8 (0.13)
Ages 18 years and older (crude) ²	100.00	43.6 (0.38)	18.0 (0.23)	28.1 (0.32)	6.6 (0.16)	3.7 (0.13)
Age:						
18–24 years	100.00	44.4 (1.08)	14.9 (0.72)	30.8 (0.94)	5.7 (0.48)	4.2 (0.36)
25–44 years	100.00	34.0 (0.48)	20.4 (0.36)	34.7 (0.45)	7.1 (0.24)	3.8 (0.19)
45–64 years	100.00	44.2 (0.64)	18.2 (0.44)	26.3 (0.52)	6.9 (0.28)	4.3 (0.22)
65–74 years	100.00	58.9 (0.85)	15.4 (0.61)	16.3 (0.69)	6.3 (0.40)	3.2 (0.34)
75 years and older	100.00	70.5 (0.85)	12.7 (0.60)	10.8 (0.54)	4.5 (0.38)	1.6 (0.22)
Race-ethnicity ³ :						
Hispanic	100.00	60.0 (0.83)	15.6 (0.66)	19.4 (0.61)	3.1 (0.28)	2.0 (0.24)
White, non-Hispanic	100.00	37.6 (0.46)	18.8 (0.29)	31.7 (0.40)	7.7 (0.21)	4.3 (0.17)
Black, non-Hispanic	100.00	59.6 (0.87)	15.7 (0.62)	18.3 (0.64)	3.6 (0.32)	2.8 (0.27)
Asian/Pacific Islander, non-Hispanic	100.00	69.4 (1.86)	14.0 (1.32)	13.1 (1.40)	2.4 (0.57)	*1.1 (0.38)
Education ³ :						
Less than high school graduate	100.00	63.6 (0.68)	14.6 (0.55)	15.7 (0.54)	3.3 (0.28)	2.8 (0.24)
GED diploma ⁴	100.00	48.3 (1.95)	21.2 (1.80)	20.3 (1.34)	5.7 (0.81)	4.5 (0.76)
High school graduate	100.00	46.1 (0.62)	19.7 (0.47)	24.7 (0.55)	5.8 (0.25)	3.6 (0.23)
Some college - no degree	100.00	36.6 (0.71)	20.0 (0.53)	31.1 (0.64)	8.0 (0.41)	4.2 (0.27)
Associate of arts degree	100.00	36.6 (0.98)	19.6 (0.82)	32.5 (1.01)	7.1 (0.53)	4.1 (0.44)
Bachelor of arts, science degree	100.00	29.5 (0.84)	16.3 (0.62)	39.4 (0.86)	10.0 (0.51)	4.7 (0.36)
Masters, doctorate, medical degree	100.00	30.4 (1.77)	14.2 (0.97)	41.8 (1.63)	9.2 (0.68)	4.4 (0.67)
Poverty status ³ :						
Below poverty	100.00	61.1 (0.77)	13.0 (0.56)	17.7 (0.60)	4.5 (0.36)	3.6 (0.31)
Poverty–199% above	100.00	55.1 (0.77)	17.3 (0.57)	20.6 (0.60)	4.1 (0.31)	2.9 (0.25)
200–399% above	100.00	42.1 (0.67)	21.1 (0.52)	27.3 (0.55)	6.1 (0.29)	3.4 (0.20)
400% or more above	100.00	28.3 (0.64)	17.9 (0.50)	38.2 (0.64)	10.4 (0.40)	5.2 (0.32)
Marital status ³ :						
Never married	100.00	45.8 (0.95)	15.4 (0.65)	27.8 (0.73)	6.8 (0.41)	4.2 (0.35)
Married	100.00	43.9 (0.50)	19.2 (0.34)	27.5 (0.42)	6.3 (0.21)	3.2 (0.16)
Cohabiting	100.00	34.7 (1.56)	13.5 (0.92)	35.7 (1.56)	8.9 (1.08)	7.3 (0.79)
Divorced or separated	100.00	42.0 (0.94)	18.3 (0.65)	28.1 (0.76)	6.6 (0.46)	4.9 (0.39)
Widowed	100.00	48.8 (2.51)	13.2 (1.32)	29.4 (2.62)	5.3 (1.29)	3.3 (0.69)
Region ³ :						
Northeast	100.00	37.1 (0.75)	19.4 (0.55)	32.5 (0.71)	7.5 (0.36)	3.6 (0.26)
Midwest	100.00	38.3 (0.80)	20.0 (0.47)	31.2 (0.73)	7.0 (0.32)	3.5 (0.24)
South	100.00	51.7 (0.66)	15.9 (0.37)	23.5 (0.50)	5.3 (0.26)	3.6 (0.21)
West	100.00	42.1 (0.72)	17.6 (0.53)	28.0 (0.60)	7.5 (0.35)	4.7 (0.37)
Place of residence ^{3,5} :						
MSA, central city	100.00	45.3 (0.61)	16.7 (0.42)	27.0 (0.50)	6.8 (0.29)	4.3 (0.22)
MSA, not central city	100.00	39.0 (0.57)	19.0 (0.35)	31.1 (0.48)	7.2 (0.24)	3.7 (0.19)
Not MSA	100.00	51.8 (0.82)	17.6 (0.43)	22.7 (0.62)	4.8 (0.29)	3.1 (0.24)

* Figure does not meet standards of reliability or precision (see Technical notes).

¹Current alcohol drinking status: Nondrinker is defined as a person who had no drinks in past year (includes both former drinkers and lifetime abstainers); infrequent is defined as having had 12 or more drinks in lifetime and 1–11 drinks in past year; light is defined as having had 12 or more drinks in lifetime, at least 12 drinks in the past year, and 3 drinks or fewer per week, on average; moderate is defined as having had more than 3 drinks per week up to 14 drinks per week (for men) and more than 3 drinks per week up to 7 drinks per week (for women), on average; heavier is defined as having had more than 14 drinks per week (for men), and more than 7 drinks per week (for women), on average.

²Persons of other races and unknown race and ethnicity, unknown education, unknown poverty status, and unknown marital status are included in the total.

³Age adjusted to the 2000 projected U.S. population using age groups 18–24 years, 25–44 years, 45–64 years, 65–74 years, and 75 years and over.

⁴GED is General Educational Development high school equivalency diploma.

⁵MSA is metropolitan statistical area (see Technical notes).

NOTE: Denominator for each percent distribution excludes persons with unknown lifetime and unknown current drinking status.

Table 3. Percent of adults 18 years of age and older who had five or more drinks in a day at least once in the past year and percent of adults 18 years of age and older who had five or more drinks in a day on at least 12 days in the past year, by selected characteristics: United States, average annual, 1997–98

Selected characteristic	5 or more drinks in a day at least once			5 or more drinks in a day on at least 12 days		
	Both sexes	Men	Women	Both sexes	Men	Women
	Percent of adults (standard error)					
Ages 18 years and older (age-adjusted) ^{1,2}	20.5 (0.23)	29.8 (0.35)	11.9 (0.23)	9.2 (0.15)	15.0 (0.25)	3.7 (0.12)
Ages 18 years and older (crude) ¹	20.9 (0.25)	30.9 (0.37)	11.8 (0.24)	9.3 (0.16)	15.5 (0.27)	3.7 (0.13)
Age						
18–24 years	31.8 (0.80)	40.9 (1.22)	22.7 (0.93)	15.3 (0.61)	23.0 (1.04)	7.6 (0.54)
25–44 years	27.6 (0.35)	39.3 (0.51)	16.5 (0.38)	11.9 (0.25)	19.3 (0.42)	4.8 (0.20)
45–64 years	15.4 (0.33)	24.7 (0.58)	6.9 (0.27)	7.1 (0.22)	12.1 (0.41)	2.5 (0.17)
65–74 years	6.1 (0.33)	11.3 (0.65)	2.0 (0.25)	2.8 (0.23)	5.5 (0.49)	0.6 (0.13)
75 years and older	2.2 (0.21)	4.6 (0.52)	0.7 (0.15)	1.1 (0.14)	2.3 (0.37)	*0.3 (0.09)
Race-ethnicity ²						
Hispanic	19.2 (0.56)	29.9 (0.98)	8.3 (0.41)	10.7 (0.43)	17.9 (0.81)	3.3 (0.24)
White, non-Hispanic	22.9 (0.29)	32.4 (0.44)	14.0 (0.30)	9.8 (0.18)	15.7 (0.29)	4.2 (0.16)
Black, non-Hispanic	11.8 (0.43)	18.7 (0.78)	6.3 (0.40)	6.4 (0.33)	10.8 (0.61)	2.9 (0.31)
Asian/Pacific Islander, non-Hispanic	10.0 (1.13)	15.9 (1.85)	4.2 (0.75)	3.9 (0.65)	6.4 (1.19)	*1.4 (0.49)
Education ²						
Less than high school graduate	18.4 (0.47)	27.4 (0.77)	9.3 (0.41)	11.0 (0.40)	17.5 (0.69)	4.3 (0.29)
GED diploma ³	26.1 (1.27)	36.5 (1.94)	14.7 (1.19)	14.7 (1.03)	22.1 (1.53)	6.7 (0.87)
High school graduate	19.7 (0.36)	29.4 (0.64)	11.3 (0.37)	9.7 (0.28)	16.3 (0.54)	3.8 (0.23)
Some college, no degree	22.1 (0.42)	32.1 (0.68)	13.1 (0.45)	9.5 (0.30)	15.6 (0.51)	4.0 (0.27)
Associate of arts degree	21.7 (0.64)	32.8 (1.15)	12.3 (0.66)	9.1 (0.46)	15.3 (0.88)	3.8 (0.40)
Bachelor of arts, science degree	23.1 (0.50)	32.2 (1.81)	14.1 (0.55)	7.9 (0.35)	12.5 (0.65)	3.6 (0.34)
Masters, doctorate, medical degree	17.7 (1.03)	24.0 (1.66)	10.8 (1.26)	5.7 (0.60)	9.2 (1.17)	*2.0 (0.60)
Poverty status ²						
Below poverty	17.6 (0.53)	27.5 (0.98)	11.1 (0.57)	10.0 (0.43)	16.8 (0.80)	5.5 (0.44)
Poverty–199% above	18.9 (0.50)	28.1 (0.85)	10.8 (0.50)	10.0 (0.39)	16.9 (0.70)	3.9 (0.30)
200–399% above	21.4 (0.37)	30.7 (0.59)	12.3 (0.37)	9.6 (0.26)	15.5 (0.47)	3.9 (0.21)
400% or more above	25.1 (0.40)	34.4 (0.62)	14.9 (0.48)	9.9 (0.29)	15.4 (0.48)	3.7 (0.28)
Marital status ²						
Never married	23.0 (0.50)	30.9 (0.78)	14.0 (0.53)	11.3 (0.35)	16.8 (0.59)	4.9 (0.32)
Married	18.1 (0.28)	27.3 (0.48)	9.7 (0.28)	7.1 (0.18)	12.2 (0.36)	2.5 (0.14)
Cohabiting	32.6 (1.07)	41.6 (1.45)	22.5 (1.26)	15.9 (0.86)	23.0 (1.31)	8.2 (0.83)
Divorced or separated	22.5 (0.66)	36.2 (1.26)	13.7 (0.71)	11.9 (0.56)	22.5 (1.21)	5.2 (0.45)
Widowed	24.9 (1.82)	40.0 (4.01)	20.0 (2.51)	6.9 (1.10)	19.3 (3.61)	*4.4 (1.33)
Geographic region ²						
Northeast	21.2 (0.59)	31.1 (0.85)	12.3 (0.54)	8.5 (0.36)	13.8 (0.61)	3.7 (0.29)
Midwest	23.8 (0.45)	33.4 (0.71)	14.6 (0.52)	10.5 (0.30)	16.8 (0.48)	4.6 (0.27)
South	17.5 (0.37)	25.9 (0.60)	9.6 (0.34)	8.7 (0.26)	14.2 (0.42)	3.5 (0.20)
West	21.3 (0.41)	31.0 (0.62)	12.0 (0.48)	9.0 (0.31)	15.3 (0.54)	3.1 (0.23)
Place of residence ^{2,4}						
MSA, central city	19.8 (0.37)	29.1 (0.57)	11.3 (0.39)	9.7 (0.25)	15.8 (0.46)	4.0 (0.21)
MSA, not central city	21.1 (0.35)	30.3 (0.51)	12.5 (0.33)	8.7 (0.22)	14.2 (0.35)	3.4 (0.16)
Not MSA	20.2 (0.51)	29.7 (0.82)	11.2 (0.50)	9.9 (0.34)	16.0 (0.55)	4.1 (0.31)

* Figure does not meet standards of reliability or precision (see Technical notes).

¹Persons of other races and unknown race and ethnicity, unknown education, unknown poverty status, and unknown marital status are included in the total.

²Age adjusted to the 2000 projected U.S. population using age groups 18–24 years, 25–44 years, 45–64 years, 65–74 years, and 75 years and over.

³GED is General Educational Development high school equivalency diploma.

⁴MSA is metropolitan statistical area (see Technical notes).

NOTES: Question was asked only of current drinkers, but prevalence is shown here as percent of all adults. Denominator for each cell excludes persons with unknown lifetime drinking status and/or unknown five or more drinks in 1 day.

Table 4. Percent of current drinkers 18 years of age and older who had five or more drinks in a day at least once in the past year and percent who had five or more drinks in a day on at least 12 days in the past year, by selected characteristics: United States, average annual, 1997–98

Selected characteristic	5 or more drinks in a day at least once			5 or more drinks in a day on at least 12 days		
	Current drinkers	Men	Women	Current drinkers	Men	Women
	Percent of current drinkers (standard error)					
Ages 18 years and older (age-adjusted) ^{1,2}	31.5 (0.31)	42.0 (0.44)	19.7 (0.36)	14.2 (0.22)	21.2 (0.33)	6.3 (0.21)
Ages 18 years and older (crude) ¹	33.5 (0.35)	44.6 (0.46)	21.0 (0.40)	15.0 (0.25)	22.4 (0.36)	7.0 (0.24)
Age						
18–24 years	52.4 (1.05)	61.8 (1.39)	41.2 (1.42)	25.2 (0.94)	34.7 (1.42)	13.8 (0.93)
25–44 years	39.0 (0.44)	51.5 (0.60)	25.1 (0.55)	16.8 (0.34)	25.3 (0.52)	7.4 (0.31)
45–64 years	24.9 (0.48)	35.8 (0.76)	12.4 (0.47)	11.4 (0.34)	17.5 (0.56)	4.5 (0.30)
65–74 years	12.9 (0.67)	20.1 (1.08)	5.0 (0.61)	5.8 (0.48)	9.9 (0.84)	1.4 (0.31)
75 years and older	6.3 (0.59)	10.3 (1.12)	2.4 (0.49)	3.0 (0.41)	5.0 (0.81)	1.1 (0.32)
Race-ethnicity ²						
Hispanic	35.5 (0.99)	45.0 (1.42)	20.2 (1.02)	19.8 (0.83)	27.2 (1.25)	8.0 (0.63)
White, non-Hispanic	32.5 (0.36)	43.5 (0.41)	20.8 (0.41)	14.0 (0.24)	21.1 (0.36)	6.2 (0.23)
Black, non-Hispanic	23.8 (0.90)	31.8 (1.37)	14.9 (1.00)	13.1 (0.71)	18.6 (1.07)	7.1 (0.77)
Asian/Pacific Islander, non-Hispanic	22.6 (2.51)	28.2 (3.12)	12.4 (1.99)	8.9 (1.48)	11.6 (2.08)	*4.3 (1.39)
Education ²						
Less than high school graduate	37.3 (0.77)	45.8 (1.04)	23.8 (0.96)	22.3 (0.70)	29.3 (1.02)	11.3 (0.72)
GED diploma ³	40.9 (1.89)	51.4 (2.58)	25.7 (2.08)	23.3 (1.61)	31.2 (2.10)	11.7 (1.60)
High school graduate	31.8 (0.52)	43.0 (0.84)	20.2 (0.62)	15.5 (0.42)	23.9 (0.73)	6.7 (0.40)
Some college, no degree	31.8 (0.58)	43.4 (0.89)	20.0 (0.63)	13.6 (0.43)	21.0 (0.69)	6.1 (0.40)
Associate of arts degree	30.6 (0.83)	43.3 (1.38)	18.2 (0.93)	12.8 (0.61)	20.2 (1.09)	5.6 (0.58)
Bachelor of arts, science degree	30.0 (0.62)	40.1 (0.96)	13.0 (0.71)	10.2 (0.44)	15.5 (0.77)	4.7 (0.45)
Masters, doctorate, medical degree	24.3 (1.47)	31.8 (2.31)	15.5 (1.85)	7.9 (0.94)	12.6 (1.75)	*3.0 (1.01)
Poverty status ²						
Below poverty	36.2 (0.99)	47.5 (1.47)	26.0 (1.31)	20.8 (0.85)	28.9 (1.36)	13.4 (1.07)
Poverty–199% above	34.0 (0.81)	44.4 (1.17)	22.1 (0.98)	18.0 (0.66)	26.8 (1.02)	8.0 (0.61)
200–399% above	32.6 (0.53)	43.8 (0.76)	19.8 (0.59)	14.7 (0.40)	22.1 (0.66)	6.4 (0.35)
400% or more above	32.7 (0.49)	42.9 (0.71)	20.3 (0.63)	12.9 (0.38)	19.3 (0.59)	5.2 (0.40)
Marital status ²						
Never married	35.8 (0.78)	44.7 (1.13)	23.8 (0.93)	17.6 (0.57)	24.2 (0.88)	8.4 (0.58)
Married	28.3 (0.40)	38.4 (0.59)	16.7 (0.49)	11.2 (0.28)	17.2 (0.50)	4.4 (0.25)
Cohabiting	43.2 (1.80)	52.2 (2.01)	33.6 (2.05)	21.2 (1.48)	28.8 (1.88)	4.4 (1.24)
Divorced or separated	33.7 (0.84)	48.5 (1.38)	22.0 (1.06)	17.9 (0.76)	30.1 (1.40)	8.4 (0.72)
Widowed	37.7 (2.20)	50.5 (4.54)	32.3 (2.82)	12.3 (1.72)	25.4 (4.34)	8.1 (1.92)
Geographic region ²						
Northeast	30.3 (0.80)	41.2 (1.05)	18.9 (0.75)	12.2 (0.50)	18.4 (0.76)	5.8 (0.44)
Midwest	33.7 (0.57)	44.4 (0.82)	22.0 (0.74)	14.9 (0.41)	22.3 (0.61)	6.9 (0.40)
South	29.9 (0.55)	39.7 (0.79)	18.1 (0.59)	15.0 (0.44)	21.8 (0.60)	6.7 (0.39)
West	32.4 (0.56)	43.2 (0.81)	20.1 (0.77)	13.8 (0.43)	21.3 (0.73)	5.2 (0.39)
Place of residence ^{2,4}						
MSA, central city	30.9 (0.53)	41.1 (0.74)	19.4 (0.63)	15.1 (0.39)	22.3 (0.62)	7.0 (0.37)
MSA, not central city	30.9 (0.43)	41.3 (0.59)	19.6 (0.46)	12.7 (0.29)	19.4 (0.45)	5.4 (0.25)
Not MSA	34.2 (0.77)	45.1 (1.05)	20.9 (0.84)	16.9 (0.54)	24.4 (0.75)	7.8 (0.56)

* Figure does not meet standards of reliability or precision (see Technical notes).

¹Persons of other races and unknown race and ethnicity, unknown education, unknown poverty status, and unknown marital status are included in the total.²Age adjusted to the 2000 projected U.S. population using age groups 18–24 years, 25–44 years, 45–64 years, 65–74 years, and 75 years and over.³GED is General Educational Development high school equivalency diploma.⁴MSA is metropolitan statistical area (see Technical notes).

NOTE: Denominator for each cell excludes persons with unknown lifetime drinking status, nondrinkers, and current drinkers with unknown five or more drinks in 1 day.

Technical notes

Sample design

The National Health Interview Survey (NHIS) is a cross-sectional household interview survey of the U.S. civilian noninstitutionalized population. Data are collected continuously throughout the year in all 50 States and the District of Columbia. The NHIS uses a multistage, clustered sample design to produce national estimates for a variety of health indicators. Information on basic health topics is collected for all household members, by proxy from one family member if necessary. Additional information is collected for one sample adult and one sample child in each family, with self-response required for the Sample Adult questionnaire. Interviews are conducted in the home using a computer-assisted personal interview (CAPI) questionnaire with telephone permitted for followup if necessary.

Response rates

In 1997, interviews were completed in 39,832 households and 40,623 families, with 36,116 adults completing the Sample Adult portion of the interview. The final response rate for the Sample Adult questionnaire in 1997 was 80.4% (16). In 1998, interviews were completed in 38,209 households and 38,773 families, with 32,440 adults completing the Sample Adult component. The final response rate for the Sample Adult questionnaire in 1998 was 73.9% (17). Combining years 1997 and 1998, NHIS interviews were completed in 78,041 households, with 79,396 interviewed families and 68,556 interviewed sample adults aged 18 years and older. The final response rate for the 1997–98 combined sample adult files was 77.2%. Procedures used in calculating response rates are described in detail in appendix I of the Survey Description of the NHIS data files (16,17). Item nonresponse for the alcohol data shown in this report ranged from 1% to 3%. Item nonresponse was even lower for the sociodemographic indicators (less than 1%), with the exception of questions related to

income. Item nonresponse for detailed income was about 19.5%.

Age adjustment

Data shown in tables 1–4 were age adjusted using the projected year 2000 population provided by the U.S. Bureau of the Census (23,24). Age adjustment was used to allow comparison among various population subgroups that have different age structures. This is particularly important for demographic characteristics such as race and ethnicity, education, and marital status. It is also helpful for other characteristics. The following age groups were used for age adjustment: 18–24 years, 25–44 years, 45–64 years, 65–74 years, and 75 years and older (table B).

Estimates were calculated using Software for Statistical Analysis of Correlated Data (SUDAAN) (22). The SUDAAN procedure PROC DESCRIPT was used to produce age-adjusted percents and their standard errors.

Tests of significance

Statistical tests performed to assess significance of differences in the estimates were two-tailed with no adjustments for multiple comparisons. The test statistic used to determine statistical significance of differences between two percents was:

$$z = \frac{|X_a - X_b|}{\sqrt{S_a^2 + S_b^2}}$$

Here X_a and X_b are the two percents being compared, and S_a and S_b are the standard errors of the percents. The critical value used for two-sided tests at the 0.05 level of significance was 1.96.

Relative standard error

The relative standard error (RSE) of an estimate is obtained by dividing the standard error (SE) of the estimate by the estimate x itself. This quantity is expressed as a percent of the estimate:

$$RSE = \frac{SE(x)}{x}$$

Table B. Age distribution and age-adjustment weights used in age-adjusting data shown in tables 1–4 and figures 3–6

Age	Standard population in thousands
18 years and older	203,851
18–24 years	26,258
25–44 years	81,892
45–64 years	60,991
65–74 years	18,136
75 years and older	16,574

Definition of terms

Demographic terms

Age—Age at last birthday is initially asked of the household respondent for all family members. Age was subsequently verified with the sample adult respondent.

Race-ethnicity—The questions related to race and ethnicity initially were asked of the household respondent and subsequently verified with the sample adult. A flash card showing the response categories was shown to the respondent. Persons reporting any Hispanic ethnicity were classified as “Hispanic” regardless of racial identification. Respondents were asked to report as many racial identifications as they thought applicable, with a followup question asking which race best described them. The “best race” question was used in this report to classify persons according to a limited set of race groups. The categories “white, non-Hispanic” and “black, non-Hispanic” are single race categories. The category “Asian/Pacific Islander, non-Hispanic” includes Chinese, Filipino, Hawaiian, Vietnamese, Japanese, Korean, Samoan, Guamanian, Asian Indian, and any other Asian/Pacific Islander group. For increased readability, the term “non-Hispanic” was omitted when describing the three non-Hispanic groups in the text. Several race-ethnic groups identified in the NHIS were not shown separately in this report due to small sample sizes and large standard errors associated with most statistics for these groups. These include American Indian, Aleut, Eskimo, multiple races with no main race specified, and other

unspecified races. These groups are included in the totals in each table.

Education—This question was asked of the household respondent and not verified with the sample adult. The question asks for the highest level of school attended or highest degree received. Respondents were shown a flash card to choose an appropriate category. Greater detail is available on the data file; categories were combined due to small sample size in some groups.

Poverty status—Percent above and below the official U.S. poverty level was calculated using income and family size reported in the Family questionnaire. Poverty criteria were obtained from the U.S. Bureau of the Census (26).

Marital status—Respondents were asked to choose a marital status category and, for the first time beginning in 1997, one of the choices was “living with partner,” which is also termed “cohabiting.” Adults could select the category they felt most appropriate for their marital situation. The major differences in the new NHIS design is that persons who were “living with partner” were considered members of the same family whereas in the pre-1997 NHIS, they were considered separate families.

Geographic region—The four major regions of the United States are defined by the U.S. Bureau of the Census.

MSA—MSA or metropolitan statistical area, a term first used in 1983, was defined by the U. S. Office of Management and Budget and is used by the U.S. Bureau of the Census to classify geographic areas (27). The categories shown in this report are: (a) “MSA, central city,” which generally refers to cities with populations of 50,000 or more; (b) “MSA, not central city,” which refers to communities adjacent to the central city of an MSA that have a high degree of economic and social integration with the central city; and (c) “Not MSA,” which refers to more rural areas of the country. The classification of areas in the 1997–98 NHIS is based on data from the 1990 decennial census.

Alcohol use terms

Lifetime abstainer—Has had fewer than 12 drinks in entire lifetime. (Prior to 1997, the NHIS definition of a lifetime abstainer was a person who had fewer than 12 drinks in *any one year*).

Former infrequent drinker—Has had 12 drinks or more in lifetime, but never as many as 12 drinks in a single year, and has had no drinks in the past year.

Former regular drinker—Has had 12 drinks or more in lifetime, 12 drinks or more in 1 year, but no drinks in the past year.

Current drinker—Has had at least 12 drinks in lifetime and at least one drink in the past year. (Prior to 1997, the criterion for current drinker was having had at least 12 drinks *in 1 year* and at least one drink in the past year.)

Current drinking levels—Levels were based on self-reports of the average frequency of alcohol consumption during the past year (could be reported in terms of days per week, per month, or per year), and the number of drinks the respondent drank on the days he or she drank. Neither size nor type of beverage was specified. In calculating current drinking levels, the number of days the respondent drank was converted from the time unit initially reported (days per week, per month, or per year) to number of days per year. Then, average number of drinks per week was calculated as follows:

$$\left(\frac{\# \text{ of days per year} \times \# \text{ of drinks per day}}{365 \text{ days}} \right)^7$$

Current drinkers were classified as:

Infrequent: At least 12 drinks in lifetime and 1–11 drinks in the past year.

Light: At least 12 drinks in the past year and 3 drinks or fewer per week, on average.

Moderate: Men—more than 3 drinks up to 14 drinks per week, on average; women—more than 3 drinks up to 7 drinks per week, on average.

Heavier: Men—more than 14 drinks per week, on average (more

than two per day); women— more than seven drinks per week, on average (more than one per day).

Nondrinker— Person who has not had any drinks in the past year, including former drinkers and lifetime abstainers.

Five or more drinks in 1 day in the past year—Current drinkers were asked how many times in the past year they had five or more alcoholic beverages in a single day. Answers to this question were in the time units volunteered by the respondent and could have been reported in terms of days per week, per month, or per year.

Alcohol questions

The 1997 and 1998 National Health Interview Survey Sample Adult questionnaires contained the five questions on alcohol use shown below. Each question is preceded by its question number, beginning with AHB. AHB is the acronym for Adult Health Behavior, one of the sections of the Sample Adult questionnaire. The complete NHIS Sample Adult questionnaire as well as information about other components of the NHIS are available at: <http://www.cdc.gov/nchs/>.

AHB.140 In any ONE year, have you had at least 12 drinks of any type of alcoholic beverage?

AHB.150 In your ENTIRE LIFE, have you had at least 12 drinks of any type of alcoholic beverage?

AHB.160 In the PAST YEAR, how often did you drink any type of alcoholic beverage? {Days per week/month/year}

AHB.170 In the PAST YEAR, on those days that you drank alcoholic beverages, on the average, how many drinks did you have?

AHB.180 In the PAST YEAR, on how many days did you have 5 or more drinks of any alcoholic beverage?

Suggested citation

Schoenborn CA, Adams PF. Alcohol use among adults: United States, 1997–98. Advance data from vital and health statistics; no. 324. Hyattsville, Maryland: National Center for Health Statistics. 2001.

Copyright information

All material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

National Center for Health Statistics

Director
Edward J. Sondik, Ph.D.

Deputy Director
Jack R. Anderson

**DEPARTMENT OF
HEALTH & HUMAN SERVICES**

Centers for Disease Control and Prevention
National Center for Health Statistics
6525 Belcrest Road
Hyattsville, Maryland 20782-2003

MEDIA MAIL POSTAGE & FEES PAID CDC/NCHS PERMIT NO. G-284

**OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300**

To receive this publication regularly, contact the National Center for Health Statistics by calling 301-458-4636
E-mail: nchsquery@cdc.gov
Internet: www.cdc.gov/nchs

DHHS Publication No. (PHS) 2001-1250
01-0558 (9/01)