



National Institute on Alcohol Abuse and Alcoholism

National Institute on Alcohol Abuse and Alcoholism
Division of Biometry and Epidemiology
Alcohol Epidemiologic Data System

SURVEILLANCE REPORT # 27

APPARENT PER CAPITA ALCOHOL CONSUMPTION: NATIONAL, STATE, AND REGIONAL TRENDS, 1977-91

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HIGHLIGHTS

This surveillance report is the eighth in a series on apparent per capita alcohol consumption produced annually by the National Institute on Alcohol Abuse and Alcoholism. Findings are based on sales of alcoholic beverages, either collected directly by the Alcohol Epidemiologic Data System or provided by beverage industry sources. Population data from the U.S. Bureau of the Census were used to calculate rates. The following points summarize the findings from this report:

- U.S. apparent per capita consumption of ethanol from all alcoholic beverage types combined decreased to 2.31 gallons ethanol in 1991, down 6.1 percent from an estimate of 2.46 gallons in 1990. This decrease follows a 1990 increase that was the result of the January 1, 1991, Federal Excise Tax (FET) on alcoholic beverages that promoted a large increase in sales in the last quarter of 1990. The subsequent 1991 decrease, however, more than offsets the modest increase in 1990 and continues the 1981–89 trend of decreasing per capita alcohol consumption.
- Among the states, decreases in per capita consumption of beer, wine, spirits, and all beverages combined occurred in most states in 1991. Decile rankings on total per capita consumption changed in 15 of the 50 states between 1990 and 1991. At the regional level, 1990–91 per capita consumption decreases were found for each of the beverage types and all beverages combined. Compared to a national overall per capita consumption decrease of 6.1 percent, the regional decreases were 7.7 percent in the West, 6.2 percent in the Northeast, 5.5 percent in the South, and 5.4 percent in the Midwest.
- With the overall per capita ethanol decrease in consumption in 1991, the Year 2000 national objective to decrease alcohol consumption to no more than 2 gallons of ethanol per person appears to be back on target. From an all-time high overall per capita ethanol consumption of 2.76 gallons in 1980 and 1981, the level of consumption in 1991 represents a 16.3-percent decrease. To meet the Year 2000 objective, overall per capita consumption needs to decrease by 13.4 percent through the rest of the 1990s.

INTRODUCTION

This surveillance report is the eighth in a series (Williams et al. 1992; Williams et al. 1991a, b; Brooks et al. 1989; Steffens et al. 1988; Laforge et al. 1987; Doernberg et al. 1986) that examines apparent per capita alcohol consumption on a national, state, and regional basis. The present report extends coverage to include 1991 data. Like the previous reports in the series, it is intended for policymakers, health care providers, researchers, and others concerned about alcohol issues. The report was prepared by the National Institute on Alcohol Abuse and Alcoholism's (NIAAA's) Alcohol Epidemiologic Data System (AEDS) under the supervision of the Division of Biometry and

Epidemiology, NIAAA. Other recent surveillance reports prepared by AEDS include reports on alcohol-related fatal traffic crashes (Zobeck et al. 1993), liver cirrhosis mortality (Savage et al. 1993), and hospital discharges with alcohol-related conditions (Caces and Dufour 1993).

Major findings in this report are presented in four sections. The first section presents data on national consumption trends for beer, wine, and spirits, as well as for all alcoholic beverages combined. The second section presents data on consumption trends for individual states for the same beverage categories. States also are ranked in deciles according to total ethanol consumption. The third section presents data on consumption trends for each type of beverage and all beverages combined for the Northeast,

Midwest, South, and West, which are defined according to criteria of the U.S. Bureau of the Census. The fourth section presents trend data on average alcohol consumption per drinker for those individual states and the District of Columbia that have participated in the Behavioral Risk Factors Survey (BRFS) through the Centers for Disease Control and Prevention (CDC) (Centers for Disease Control 1986, 1987, 1988, 1989, 1990, 1991). These per drinker consumption estimates are calculated by excluding the proportion of nondrinkers, or abstainers, from the population base in each state. Thus, the adjusted estimates of consumption offer a clearer picture of the extent of average drinking among the drinking population in those states that have participated in the BRFS.

Sources and Limitations of Data

In order to make appropriate interpretations of the data in this report, readers should be aware of the following:

- AEDS attempts to obtain alcoholic beverage sales data from every state and the District of Columbia because annual sales data more accurately reflect annual alcoholic beverage consumption than do production and shipments data from beverage industry sources. AEDS received routine reports on beverage sales and/or tax receipts for 1991 from many states and the District of Columbia for the present report (30 states for beer, 31 states for wine, and 28 states for spirits). For the remaining states, shipments data from major beverage industry sources (Beer Institute 1993; Wine Institute 1992; Distilled Spirits Council of the United States 1992) were used for the numerator to estimate per capita consumption. The U.S. Bureau of the Census provides AEDS with the population data that are used for the denominators in the calculations of per capita consumption. Over the years, the panel of states reporting sales data directly to AEDS has remained fairly consistent.
- AEDS uses a drinking population of 14 years and older to calculate per capita consumption rates. Although 14 is below the minimum legal age for the purchase of alcoholic beverages in the United States,

most self-report surveys indicate that many 14-year-olds do drink alcoholic beverages. National Health Interview Survey (NHIS) data in 1983 and 1988 indicate that between 6 and 7 percent of the drinking population aged 18 years and older started drinking before the age of 15 (Alcohol Epidemiologic Data System 1986, 1990). Also, results from the Monitoring the Future survey (Johnston et al. 1992) indicate that 54 percent of eighth graders and 72 percent of tenth graders reported the use of alcohol in 1991.

- With the exception of the average per drinker consumption data in the fourth section of this report, most of the per capita consumption estimates are based on that portion of the total population that has reached an age (14 years and older) at which significant numbers of people drink, not specifically on the population of actual drinkers. Even though the BRFS samples are limited to respondents 18 years and older, per drinker consumption estimates in section four are based upon the population aged 14 years and older (i.e., the same denominators are used for both the per capita and per drinker estimates).
- AEDS uses an estimate of average ethanol content to convert the gallons of sold or shipped beer, wine, and spirits into gallons ethanol (pure alcohol) before calculating the per capita estimates. The conversion coefficients for each alcoholic beverage are 0.045 for beer, 0.129 for wine, and 0.414 for spirits (Doernberg and Stinson 1985), conversions that have been used consistently since 1977. The introduction of products like "light" beer, "light" wines, cordials with lower alcohol levels, and coolers (both wine and spirits) may have resulted in a decline in the average ethanol content in recent years. For example, Kling (1989, 1991) suggests decreases over the years in the ethanol content of spirits. However, such decreases have been offset by the increase in sales of higher ethanol content drinks such as premium brand liquors, fortified wines, malt liquors, and locally produced beers and ales. Any net decrease in ethanol content, therefore, probably has been minimal and not large enough to alter the

fundamental trends in per capita consumption.

- In this report, AEDS uses the year 1977 as the base year for most of the comparative analyses and trends. This is simply because AEDS began collecting and calculating per capita consumption estimates from actual sales and/or tax receipt reports from the individual states in 1977. Also, per capita alcohol consumption estimates in some states are inflated by cross-border sales to buyers from neighboring states, among other factors. Factors that seem to influence per capita consumption differences among states are the age distributions of the state populations; tourist and recreational trade; dry jurisdictions; types of off-premise outlets, e.g., grocery and convenience stores; and general attitudes toward drinking. The extent to which changes in per capita consumption may reflect such changes in behavior and the composition of the population is presented in the discussion section.
- Finally, persons familiar with survey reports and other scientific literature often are accustomed to the presentation of significance tests, or confidence intervals, on any data comparisons or trends. However, when the data are based on total actual sales and/or shipments (100 percent), as is the case in most of this report, there is no sampling. Thus, without sampling error, no confidence intervals or measures of statistical significance need be reported. However, the BRFSS data in this report are based on state samples. The confidence intervals for the abstainer estimates in the BRFSS data are likely to be fairly large, since relatively small samples are used. Caution should be used in making any specific trend or state-by-state comparisons with these data.

NATIONAL DATA

Background

Long-range trend data on apparent per capita ethanol consumption by beverage type provide an historical perspective on national alcoholic beverage consumption patterns. Table 1, presented at the end of this report,

presents estimates of per capita consumption for beer, wine, spirits, and all beverages combined for the years 1850 to 1991, excluding the years of Prohibition.¹

Figure 1 presents an area graph of per capita ethanol consumption in the United States for all alcoholic beverages combined for the years 1935 through 1991. It should be emphasized, however, that a different population base (age 15 and older) was used in per capita estimates through 1969, and different conversions to absolute alcohol were used prior to 1977 for the different beverage types (Doernberg and Stinson 1985).

As shown in table 1, per capita ethanol consumption between 1850 and 1900 varied somewhat, but showed an overall 1.9 percent decrease across those years. Total per capita ethanol consumption decreased again (18.0%) from 1901 to 1919. However, after Prohibition, from 1934 to 1939, total per capita consumption of ethanol increased substantially (55.7%). As shown in figure 1, two distinct peaks in per capita consumption occurred during the 1940s, one in 1942 and one in 1946, resulting in an overall increase (26.9%) in consumption. Through the 1950s (from 1950 through 1959), there were slight annual increases and decreases, with a very small increase (1.0%) in overall ethanol consumption. In the 1960s, however, there was a fairly rapid increase (21.3%) in consumption, and this was followed by a moderate increase (9.1%) in alcohol consumption in the 1970s. During the 1980s per capita alcohol consumption showed a 12-percent decrease, the only sustained decrease since Prohibition. However, apparent overall per capita alcohol consumption in 1990 increased by 1.2 percent from 1989, ending a decline that lasted through the 1980s. This 1990 increase, however, was an anomaly

¹ Since last year's report, two corrections have been made to the historical data in table 1. Hyman and colleagues (1980) estimated per capita consumption of all alcoholic beverages combined at 0.97 gallons ethanol in 1934. Also, their estimate of per capita wine consumption in 1850 was 0.08 gallons ethanol, making per capita consumption 2.10 gallons ethanol from all alcoholic beverages combined (R. Roizen, personal communication, 1993).

Figure 1. Total Per Capita Ethanol Consumption, 1935-91

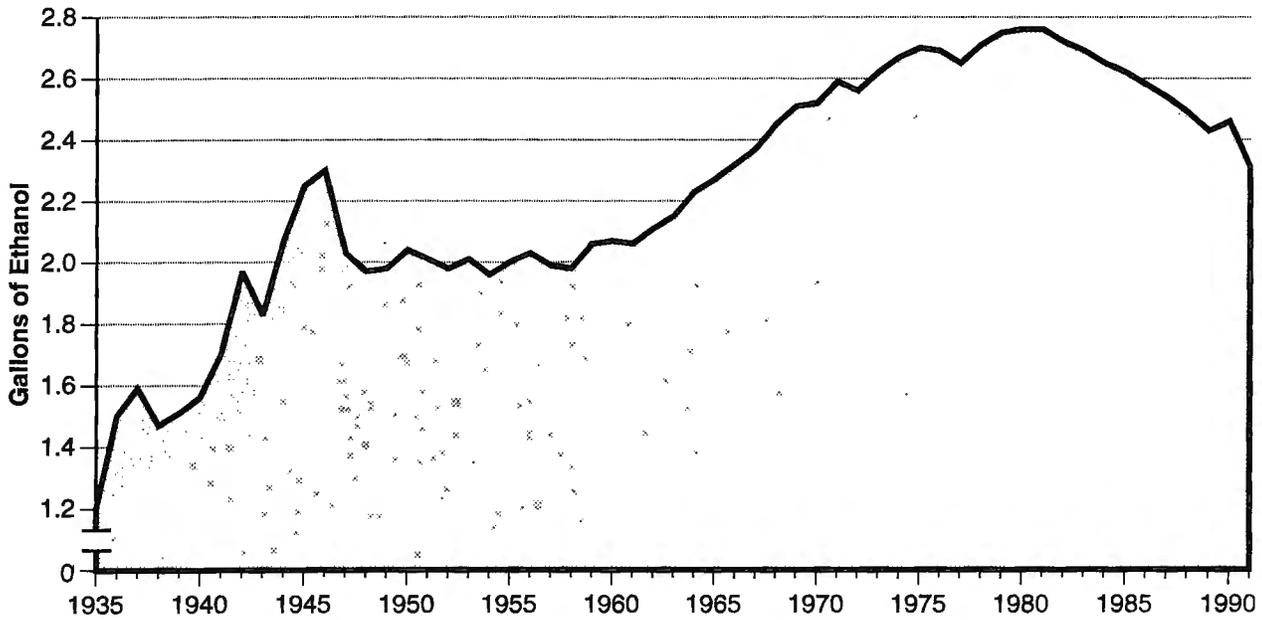
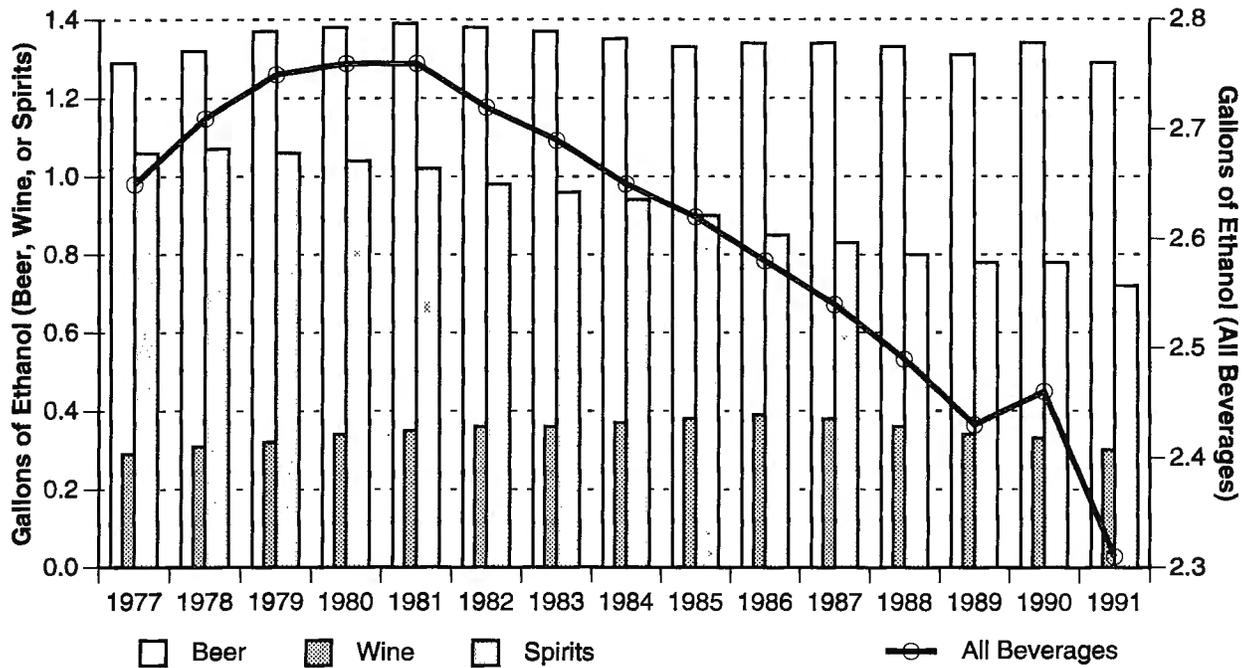


Figure 2. Per Capita Ethanol Consumption by Beverage Type, 1977-91



caused by a late surge in sales in the last quarter of 1990, a result of the new Federal Excise Tax (FET) increases on alcoholic beverages in 1991 (Jobson Publishing Corporation 1992a). Per capita consumption of all alcoholic beverages combined in 1991, therefore, experienced one of its largest annual decreases ever, dropping in 1991 to 2.31 gallons of ethanol from 2.46 gallons in 1990.

Apparent Per Capita Alcohol Consumption, 1977-91

Figure 2 presents per capita ethanol consumption estimates for beer, wine, and spirits separately for 1977 through 1991. Between 1990 and 1991, per capita consumption of each type of alcoholic beverage decreased. Beer consumption decreased by 0.05 gallons ethanol (1.29 vs. 1.34 gallons) per person aged 14 years and older; wine consumption decreased by 0.03 gallons ethanol (0.30 vs. 0.33 gallons); and spirits consumption declined by 0.06 gallons ethanol (0.72 gallons vs. 0.78 gallons). Thus, between 1990 and 1991 overall per capita

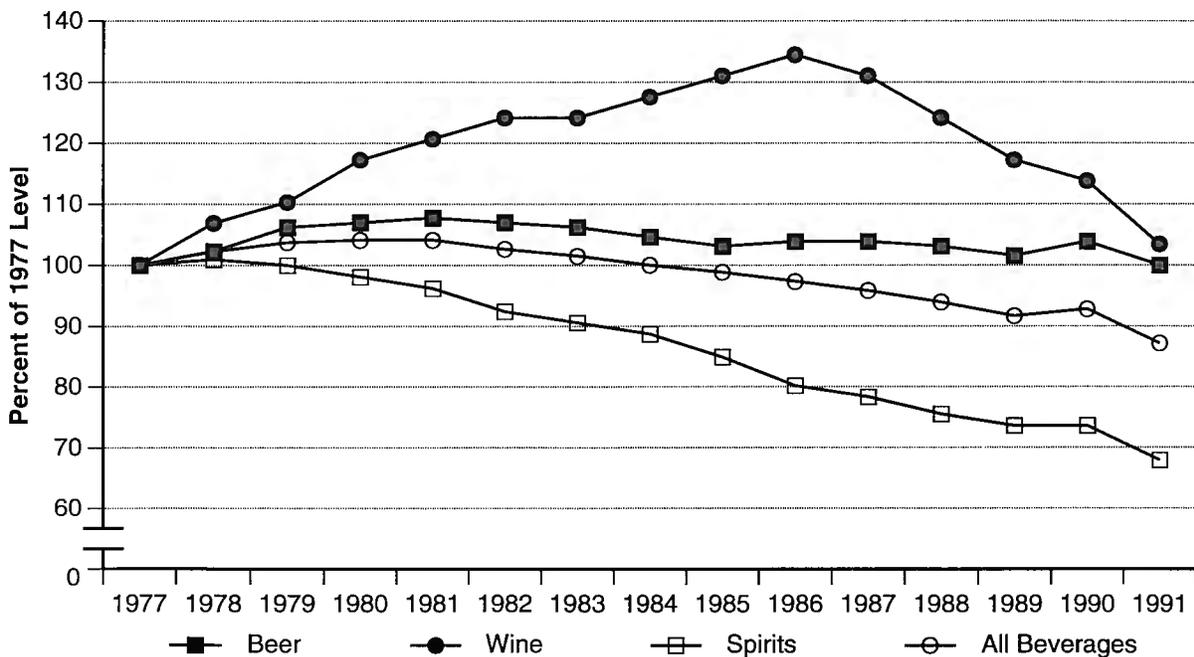
consumption from all alcoholic beverages combined decreased by 0.15 gallons ethanol (2.31 vs. 2.46 gallons). Rounding accounts for the difference between the overall decrease and the sum of the decreases for each beverage type.

From 1977 to 1991, per capita consumption of beer has increased and decreased slightly, but in 1991 it was at the same per capita level as it was in 1977 (1.29 gallons). Wine per capita consumption has increased by only 0.01 gallons ethanol from 0.29 gallons in 1977. For spirits and all beverages combined, however, per capita consumption has declined dramatically, showing a decrease over the last 14 years of 0.34 gallons ethanol for spirits and a decrease of 0.33 gallons ethanol for all beverages combined.

Percent Change in Per Capita Consumption, 1977-91

Figure 3 shows the percent change in per capita consumption for each year and beverage type relative to its 1977 value. The percent change for all alcoholic beverages combined

Figure 3. Percent Change in Per Capita Ethanol Consumption, 1977-91



increased gradually from 1977 to 1980, leveled off in 1980 and 1981, and then began a decline in 1982 that, except for 1990, has persisted each year through 1991. Per capita consumption of beer increased gradually from 1977 to 1981, decreased from 1981 to 1985, increased marginally in 1986, remained the same in 1987, decreased some in 1988 and 1989, increased in 1990, and then decreased again in 1991.

Per capita consumption of wine generally increased each year from 1977 to 1986 but then decreased in 1987 through 1991. Thus, per capita wine consumption was only 3.4 percent higher in 1991 than it was in 1977. Spirits consumption increased marginally from 1977 to 1978, declined through 1989, leveled off in 1990, and then declined again in 1991, ending at 32.1 percent below its 1977 level. In 1991, per capita consumption of spirits was at its lowest level since 1949.

In 1991 beer ranked fourth (behind soft drinks, milk, and coffee) in per capita consumption of any kind of beverage product, a position it has held for many years (Jobson Publishing Corporation 1992a). Despite its large volume, however, market specialists do not expect any substantial increases in the per capita consumption of beer during the decade of the 1990s (M. Shanken Communications, Inc. 1992b).

Until its drop in 1987, wine consumption had been increasing steadily from the base year of 1977. The year 1991 marked the fifth consecutive year of decrease in wine consumption, and over 50 percent of the total wine decrease was attributed to the drop in wine cooler consumption (Jobson Publishing Corporation 1992b). Wine represented 13.0 percent of the total per capita ethanol consumption from alcoholic beverages in 1991. It ranked ninth in 1991 (behind soft drinks, milk, coffee, beer, bottled water, tea, juices, and powdered drinks) in the per capita consumption of all kinds of beverage products (Jobson Publishing Corporation 1992a).

In 1991 per capita consumption of spirits declined from its 1990 level, continuing a decline that started in 1979 except for a

temporary halt in 1990. Per capita ethanol consumption from distilled spirits in 1991 was at its lowest level in 42 years. Still, in 1991 spirits consumption accounted for 31.2 percent of the total ethanol consumed from all alcoholic beverages combined in the United States. Spirits beverages ranked tenth in 1991 (behind soft drinks, milk, coffee, beer, bottled water, tea, juices, powdered drinks, and wine) in the per capita consumption of all kinds of beverage products (Jobson Publishing Corporation 1992a).

The relative consumption of different types of alcoholic beverages has also been shown in national survey data. Data from the NHIS of 1988 indicated that 64 percent of current drinkers aged 18 years and older drank beer, 43 percent drank wine, and 40 percent drank spirits (Alcohol Epidemiologic Data System 1990). Current drinkers in the NHIS were defined as persons who consumed 12 or more drinks in the year prior to their interview.

Except for 1990, the 14-year decline in overall per capita consumption (2.64 gallons ethanol in 1977 vs. 2.31 gallons in 1991) is largely a reflection of the 32.1-percent decline in the per capita consumption of spirits (1.06 gallons ethanol in 1977 vs. 0.72 gallons in 1991). For 1990 to 1991, per capita consumption of beer declined 3.7 percent in ethanol gallons, wine consumption declined 9.1 percent, and spirits consumption declined 7.7 percent.

Per capita decreases in beer, wine, and total consumption are expected to continue throughout the 1990s. The surge in sales for all alcoholic beverages in late 1990 was an anomaly, a result of wholesalers, retailers, and consumers trying to avoid price increases from the 1991 FET increases on alcoholic beverages. Market analysts suggest that future trends in per capita consumption of beer, wine, and spirits will continue to fall, as illustrated in the large decreases in 1991 (Jobson Publishing Corporation 1992a, b; M. Shanken Communications, Inc. 1992a, b, c).

STATE DATA

Apparent Consumption for 1991

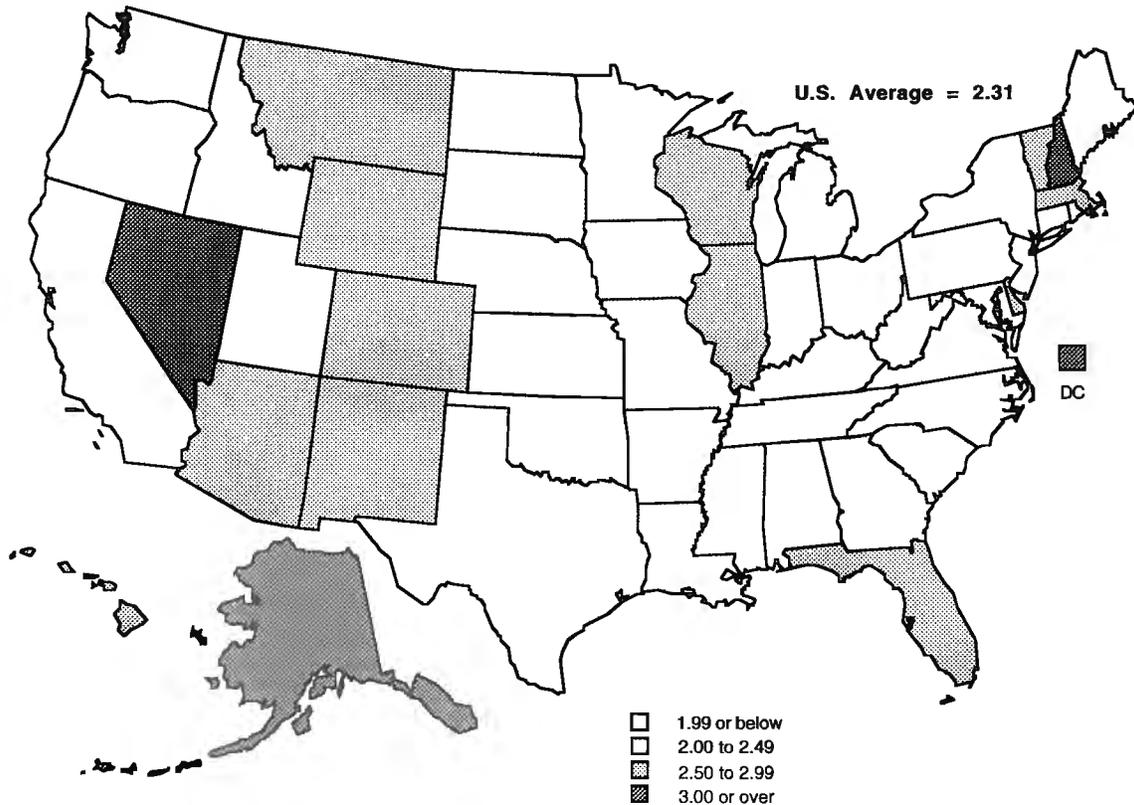
Table 2 presents the 1991 consumption data on total beverage volume, total ethanol volume, and per capita ethanol volume of beer, wine, spirits, and total beverages for each of the 50 states and the District of Columbia. The data are also aggregated into census regions (the Northeast, Midwest, South, and West) and the United States as a whole. Data in this table are comparable with consumption data presented in the seven previous surveillance reports on apparent alcohol consumption.

Table 2 ranks the states and the District of Columbia into 10 groups (deciles) based upon high-to-low distributions of total per capita ethanol consumption. Placement in the first decile indicates that the state ranks among the top 10 percent of the states in total per capita ethanol consumption, placement in the second

decile indicates the top 20 percent, and so on. In 1991 the states in the highest decile on total per capita consumption were Nevada (4.36), New Hampshire (4.34), the District of Columbia (3.96), Alaska (3.11), and Wisconsin (2.77), the same as in 1990. Except for New Hampshire, all the top-ranked states and the District of Columbia showed a decrease in per capita consumption between 1990 and 1991. Those states in the lowest decile in 1990 were Kentucky (1.79), Alabama (1.78), Oklahoma (1.76), West Virginia (1.70), and Utah (1.36). All of the states in the lowest decile also showed decreases in total per capita alcohol consumption between 1990 and 1991.

Figure 4 shows overall per capita consumption in 1991 for each state and the District of Columbia. This map indicates four levels of per capita consumption, levels that are consistent with figures in the *U.S. Alcohol Epidemiologic Data Reference Manual, Volume 1* (Doernberg and Stinson 1985) and all the previous surveillance reports on

Figure 4. Total Per Capita Consumption in Gallons of Ethanol by State, 1991



apparent per capita alcohol consumption. The use of consistent scales in the maps permits users of this report to make quick visual comparisons between 1991 and the previous years. In 1991 only three states and the District of Columbia had total per capita consumption levels in the top category of 3.00 or more gallons ethanol; this compares to 1980, when 18 states and the District of Columbia fell into this top category of average ethanol consumption.

Trends in Apparent Consumption, 1977-91

Table 3 (at the end of this report) presents state per capita consumption data from 1977 to 1991 for each alcoholic beverage type and for all beverages combined. In addition, table 3 presents aggregations of the per capita consumption data for the census regions and the United States as a whole. Decile rankings for the states have been computed only for total per capita ethanol consumption. Nonetheless, users should interpret decile changes with caution and with special reference to the actual figures of per capita consumption. Very small increases or decreases in per capita consumption values can result in changes in the decile rankings of the states. Fifteen states in 1991 exhibited changes from 1990 in their decile rankings, and most states experienced decreases in per capita consumption. Forty-seven states and the District of Columbia dropped in total per capita alcohol consumption between 1990 and 1991. Only three states (New Hampshire, Colorado, and Kansas) experienced a 1990-91 increase in their overall per capita alcohol consumption. This contrasts sharply with 1989-90, when 34 states experienced an increase in per capita consumption from all alcoholic beverages combined.

Forty-two states (82%, inclusive of the District of Columbia) between 1990 and 1991

had decreases in their per capita consumption of beer, 43 (84%) had decreases in their per capita consumption of wine, and 47 (92%) had decreases in their per capita consumption of spirits. This, again, contrasts sharply with 1989-90, when 78 percent, 20 percent, and 59 percent of the states and the District of Columbia experienced consumption increases in beer, wine, and spirits, respectively. Twenty-nine states (57%, including the District of Columbia) experienced decreases of 0.10 gallons ethanol or more between 1990 and 1991 in their overall per capita alcohol consumption.

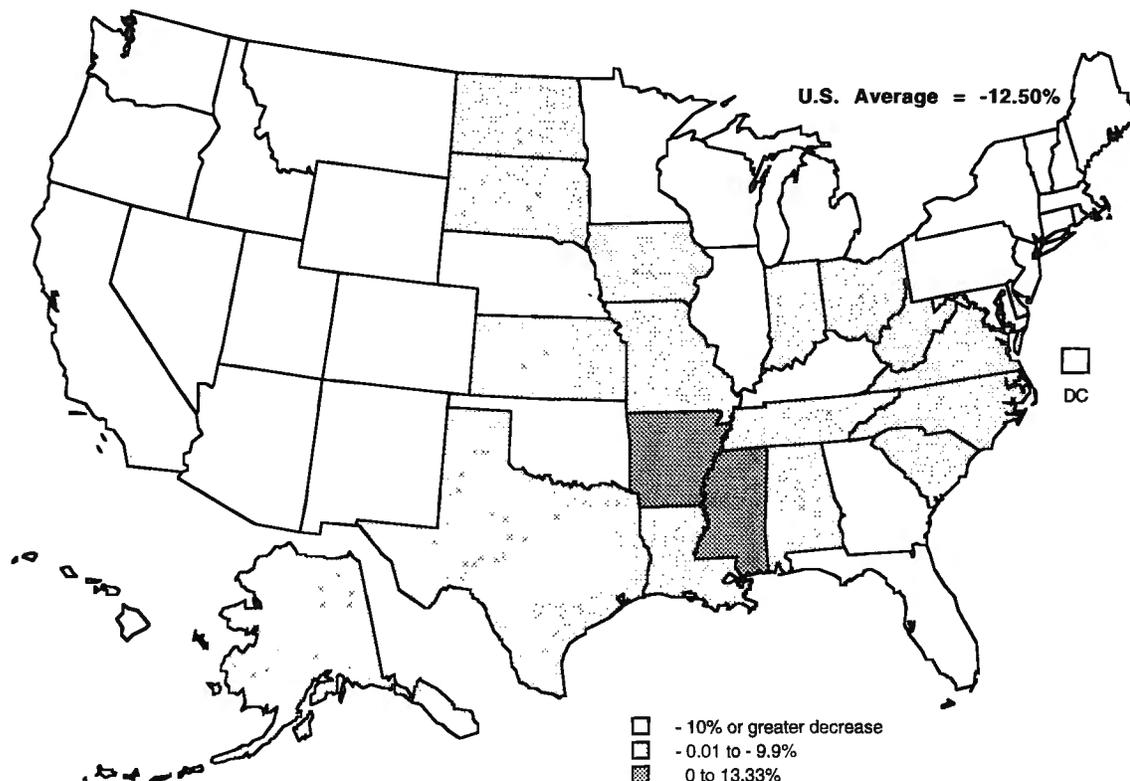
Figure 5 presents a map of percentage increases or decreases between 1977 and 1991 in overall per capita consumption among the individual states and the District of Columbia. Between 1977 and 1991, the 50 states and the District of Columbia averaged an overall 12.5-percent decrease in per capita ethanol consumption. Only two states (Mississippi and Arkansas), or 4 percent of the states and the District of Columbia, had an increase or no change in their total per capita alcohol consumption between 1977 and 1991; 17 (33%) had a percentage decrease of 0.01 to 9.9 percent; and 32 (63%) had a percentage decrease of 10 or more.

REGIONAL DATA

Several AEDS analyses have been conducted over the years using the Census Bureau regions² as the unit of analysis. One advantage in using census regions is that the per capita consumption data often can be compared with other Census Bureau data and with national surveys (e.g., drinking and food frequency surveys) that can be grouped by region, but not by smaller geopolitical units.

² The following are the U.S. Bureau of the Census regions and the states they comprise: Northeast: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont. Midwest: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin. South: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia. West: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming.

Figure 5. Percent Change in Total Per Capital Ethanol Consumption by State, 1977-91



Trends in Consumption for All Beverages, 1977-91

Figure 6 presents regional trends in apparent per capita ethanol consumption for all beverages combined over the years 1977 to 1991. As shown in the figure, overall per capita consumption tends to be highest in the West, followed by the Northeast, and lastly by the Midwest and South. The latter two regions show relatively little difference in their patterns of overall per capita ethanol consumption.

In the West the decline in per capita consumption of all alcoholic beverages combined since 1981 has been rather precipitous through 1989, evidenced no change in 1990, and then decreased again in 1991. Comparatively, per capita consumption changes in the Northeast, Midwest, and South over the years have been rather gradual. In 1991 decreases in overall per capita consumption from 1990 were evident in each

of the different geographic regions. In comparison to the national decrease of 12.5 percent in overall per capita ethanol consumption between 1977 and 1991, the regions experienced the following decreases: West (20.3%), Northeast (15.2%), Midwest (9.2%), and South (8.2%). Thus, the West and Northeast have had declines in overall per capita ethanol consumption that are above the national average, while the Midwest and South have had declines below the national average.

Trends in Consumption for Individual Beverage Types, 1977-91

National trends in consumption of all beverages combined often mask regional differences in the consumption of specific beverage types. Figure 7 presents 1977-91 apparent per capita consumption estimates for beer in each of the four census regions. Beer consumption tends to be highest in the West, followed by the Midwest, South, and Northeast. From 1977 to 1991, the West also

Figure 6. Total Per Capita Ethanol Consumption by Region, 1977-91

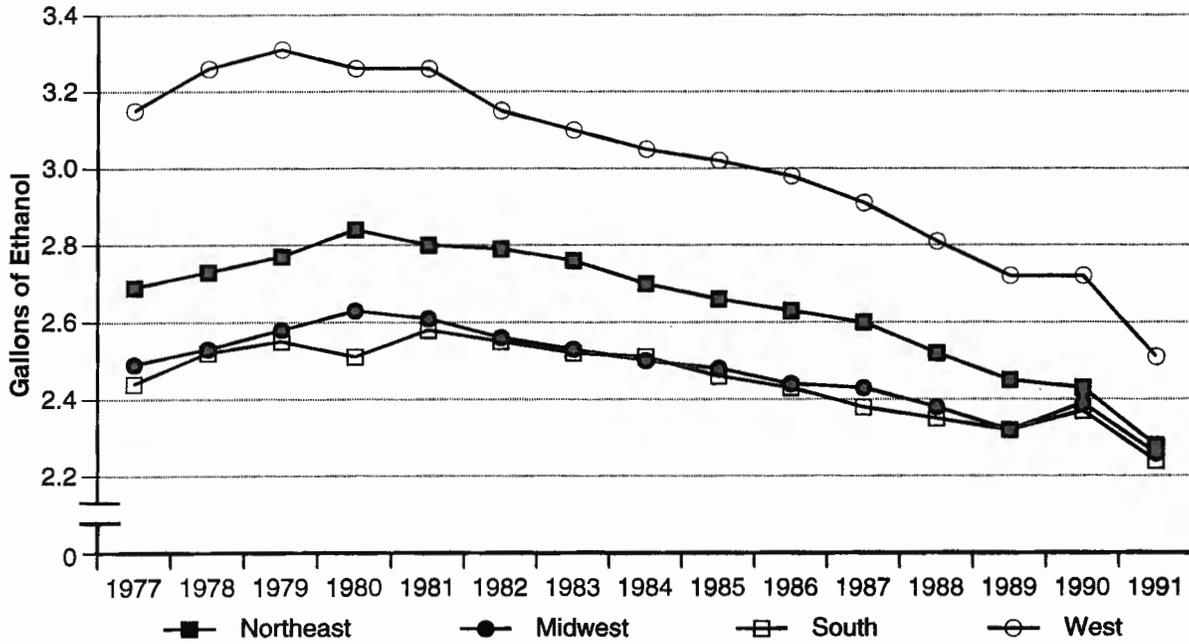


Figure 7. Per Capita Ethanol Consumption from Beer by Region, 1977-91

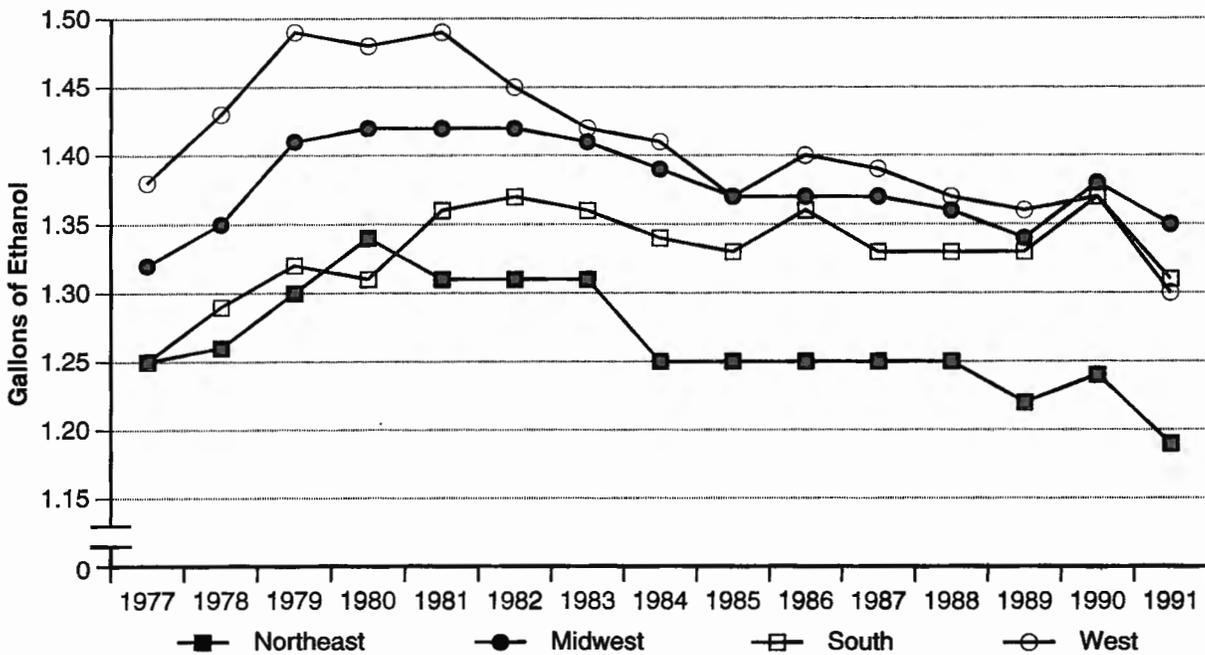


Figure 8. Per Capita Ethanol Consumption from Wine by Region, 1977-91

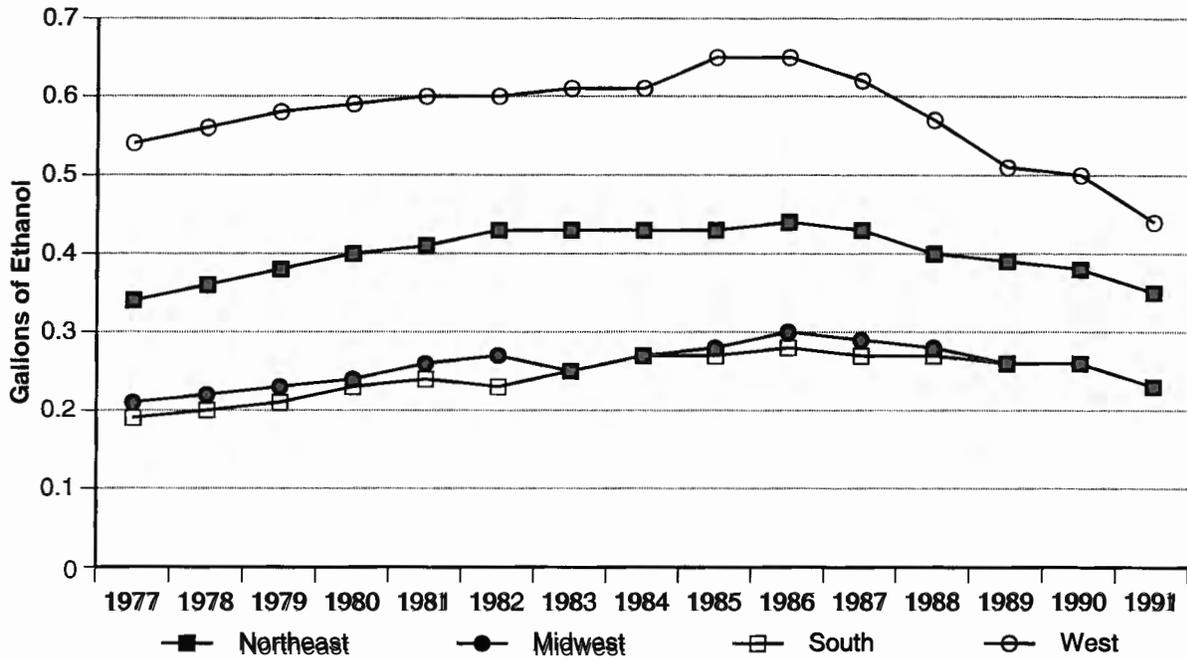
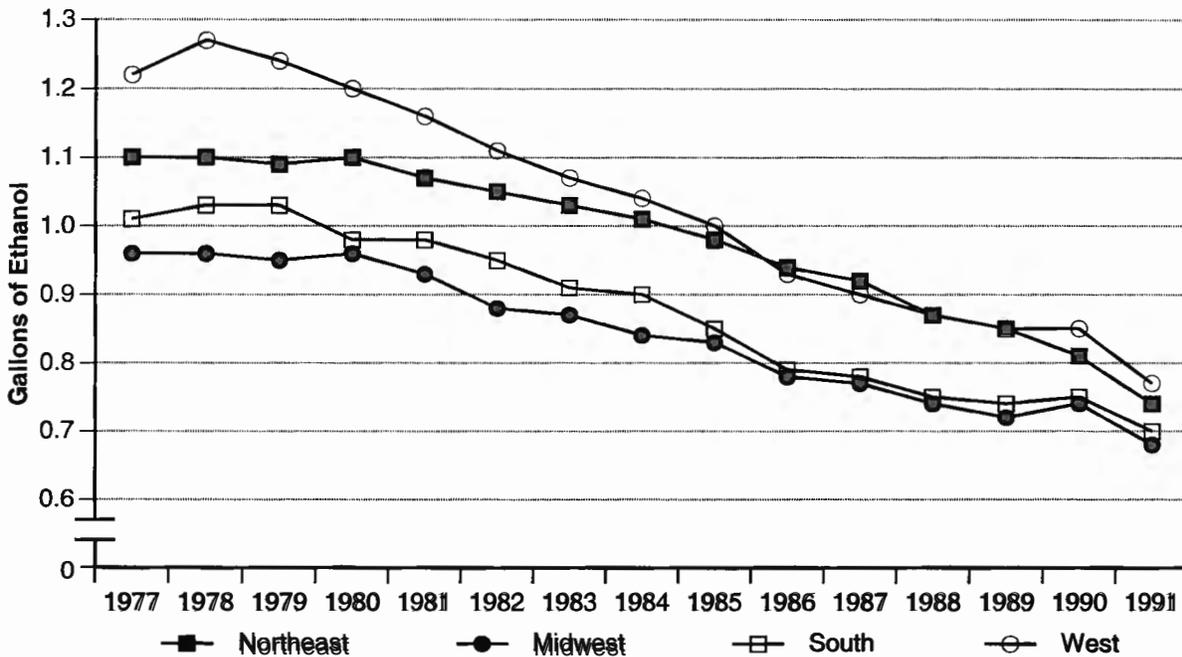


Figure 9. Per Capita Ethanol Consumption from Spirits by Region, 1977-91



showed the largest decrease in per capita beer consumption (from 1.38 gallons ethanol to 1.30 gallons ethanol); the Northeast had the second largest decrease (from 1.25 to 1.19 gallons). The Midwest showed a slight increase in per capita beer consumption (from 1.32 to 1.35 gallons), as did the South (from 1.25 to 1.31 gallons). Year-to-year variations in per capita beer consumption are notable in all regions, but especially in the West, where beer consumption dropped dramatically from 1981 to 1985, increased again in 1986, decreased from 1987 to 1989, increased in 1990, and decreased again in 1991.

As shown in figure 8, patterns of wine consumption also differ among the regions. The West again showed the largest levels of per capita wine consumption, and the Northeast was next highest. Both areas, of course, are large producers of wine, notably wine production in California and New York. The Midwest and South had the lowest levels of per capita wine consumption, with little difference between the two. All regions but the West showed 1977–91 per capita wine consumption increases over the 14-year study period: Northeast (0.34 to 0.35 gallons ethanol), Midwest (0.21 to 0.23 gallons), and South (0.19 to 0.23 gallons). However, wine consumption in the West dropped from 0.54 gallons ethanol in 1977 to 0.44 gallons in 1991, a drop of 18.5 percent.

The largest regional changes in per capita consumption have occurred in the per capita consumption of spirits (figure 9). From 1977 to 1991, the West showed the largest per capita decrease in spirits ethanol consumption (1.22 vs. 0.77 gallons), followed by the Northeast (1.10 vs. 0.74 gallons), the South (1.01 vs. 0.70 gallons), and the Midwest (0.96 vs. 0.68 gallons). Spirits consumption for each region since 1977 has decreased as follows: West (36.9%), Northeast (32.7%), South (30.7%), and Midwest (29.2%).

PER DRINKER CONSUMPTION IN SELECTED STATES

Per capita alcohol consumption data from tables 1, 2, and 3 in this report are based on the total population of persons aged 14 years and older. Such data underestimate average consumption when the focus is only on those individuals who actually drink alcoholic beverages. This is because both nondrinkers and drinkers aged 14 years and older are included in the denominator that is used to calculate the per capita data. It is well known that the percentage of abstainers varies considerably from state to state. Therefore, when reasonable estimates are available for abstainers, they can be subtracted from the denominator, thereby providing an estimate of average consumption among the drinking population.

The BRFS, conducted by individual states and coordinated with CDC, provides annual percentage estimates of the abstainers in those states that participate in the BRFS (Centers for Disease Control 1986, 1987, 1988, 1989, 1990, 1991). Forty-seven states and the District of Columbia participated in the BRFS in 1991. It is expected that BRFS participation will extend to all the states in the near future. The BRFS is a telephone survey of persons aged 18 years and older; BRFS questions related to alcohol consumption are reported for the month prior to the BRFS interview. From answers to specific drinking questions in the BRFS, population estimates are made of each participating state's abstention rate (i.e., the percentage of persons in the state's population aged 18 years and older who consumed no alcoholic beverages in the month prior to the telephone interview).

Table 4 presents the percentage of abstainers from 1986 to 1991, as appropriate, for each of the states participating in the BRFS. Per capita alcohol consumption estimates are provided, as are the data on per drinker average consumption estimates. The estimates of average consumption for drinkers are only crude approximations, because the respondents may have consumed alcohol

during the year of the interview, but not during the month prior to the interview. Thus, BRFs "abstainers" may include people who are infrequent drinkers, or even "heavier" drinkers who have not had a drink in the past 30 days because of illness, alcoholism treatment, or other circumstances.

Given the relatively small size of the state BRFs samples, often there are large confidence intervals involved in the estimates of the percentage of abstainers for 1986 through 1991. Nonetheless, the estimates should represent a close approximation of the per drinker average consumption in each state. Also, the abstainers identified in the BRFs are from populations aged 18 years and older; thus, detailed comparisons with the other per capita estimates are inappropriate.

In 1991, the percentage of abstainers in the BRFs ranged from a low of 31.7 percent in Wisconsin to a high of 74.5 percent in Tennessee. In the subset of states for which BRFs data are available, adjusting for abstention rates makes a dramatic difference in the ranking of the states on alcohol consumption. One striking effect can be seen among several states in the South, whose historically low levels of per capita consumption are due, in large part, to a higher percentage of abstainers in their populations. Hence, the per drinker consumption estimates in these states are more in line with the estimates of the other states. States with high rates of abstention generally show substantial increases in the average per drinker consumption estimates. States with relatively low abstention show average per drinker consumption estimates more in line with the per capita rates.

Between 1990 and 1991, the percentage of abstainers increased in 30 of the 45 states that participated in both the 1990 and the 1991 BRFs; the percentage of abstainers decreased in 15 states. In most cases, the increases or decreases in abstention were rather slight, and probably were not statistically significant. Until a better method is found, future NIAAA surveillance reports will continue to use the

per drinker average consumption estimates available from the BRFs data.

DISCUSSION

Per capita consumption of all alcoholic beverages combined in 1991 was 2.31 gallons of ethanol, down 6.1 percent from the estimate of 2.46 in 1990. This level of overall per capita consumption in the United States in 1991 is the lowest since 1965, when it was 2.27 gallons of ethanol. The drop in overall per capita consumption in 1991 reverses the slight increase of 1990 and offsets the increase caused by the late 1990 surge in sales to avoid increases in the 1991 FET taxes. As expected therefore, the 1990 increase was not the beginning of a rise in total per capita consumption, but rather an anomaly in an otherwise declining trend line. Market analysts predict that per capita consumption decreases in each individual beverage type and all beverages combined should continue through the 1990s (Jobson 1992a, b; M. Shanken Communications, Inc. 1992a, b, c).

Changes in per capita consumption of beer, wine, spirits, and all beverages combined were variable among the states between 1990 and 1991, but nearly all states experienced a 1990-91 decline in the per capita consumption of beer, wine, or spirits. Individual state decile rankings on total per capita consumption changed relatively slightly in 1991, with only 15 of the 50 states experiencing any change in their rank in overall per capita consumption. However, as noted previously, changes in decile ranks need to be examined in conjunction with the actual changes in per capita consumption.

Regional changes in the 1990-91 per capita consumption estimates for individual beverage types and all beverages combined were consistent with the national trends. All regions experienced decreases in the per capita consumption of beer, wine, and spirits, along with per capita consumption of all alcoholic beverages combined. Changes, however, were more pronounced in some regions than in others. As in most recent years, the West experienced the largest declines in both total

per capita consumption and per capita consumption of each of the beverage types. For the 1977–91 period, per capita consumption of beer declined in the West and Northeast but increased in the Midwest and South. Per capita consumption of wine decreased in the West but increased in each other region. Finally, per capita consumption of spirits declined in every region, with 1977 to 1991 declines of 36.9 percent in the West, 32.7 percent in the Northeast, 30.7 percent in the South, and 29.2 percent in the Midwest.

Data from the BRFS indicated that 30 of the 45 states that participated in both the 1990 and 1991 BRFS showed an increase in their 30-day abstention rates. Also, comparisons using the 1983 and 1988 NHIS (Williams and DeBakey 1992) and the 1985 and 1990 NHIS (U.S. Department of Health and Human Services 1993) show increases in the proportion of abstainers in the U.S. population and decreases in heavier drinking among those who drink. These survey findings support the general trend of declining per capita consumption of alcoholic beverages (the year 1990 being an exception). Also, those demographic factors that tend to influence alcohol consumption (Williams et al. 1991a) have changed, suggesting further declines in alcohol consumption. A working paper prepared by AEDS (Fairchild et al. 1992) suggests that decreasing overall per capita consumption trends closely parallel the decreasing proportion of the population that is 15 to 34 years of age. Other demographic factors, e.g., ethnic and racial distributions of the population (Caetano 1989; Westerman 1989), are likely to influence future trends in consumption, as are intervention and prevention efforts designed to reduce alcohol abuse.

The national health promotion and disease prevention objectives outlined in *Healthy People 2000* (U.S. Department of Health and Human Services 1991) state the national strategy to reduce alcohol consumption by people aged 14 and older to an annual average of no more than 2 gallons of ethanol per person by the year 2000. The 1991 per capita

consumption estimates in this annual report suggest that overall consumption declines are again moving toward the Year 2000 objective. Since 1980 and 1981, when overall per capita consumption reached an all-time high of 2.76 gallons of ethanol, per capita consumption decreased to 2.31 gallons by 1991. This represents an 11-year decrease of 16.3 percent, or an average decrease of about 1.5 percent per year. To meet the Year 2000 objective, overall per capita consumption would have to decrease from the 2.31 gallons of ethanol in 1991 to 2.00 gallons, or by 13.4 percent.

In conclusion, the decreasing trend in overall per capita alcohol consumption since 1981 was interrupted by a sudden “blip,” or per capita increase, in the trend line in 1990. However, a decrease in overall per capita alcohol consumption returned in 1991, more than offsetting the anomalous increase of 1990. While the 1990 results ultimately did not forecast a new increase for 1991 in per capita alcohol consumption in the United States, it clearly demonstrated the vulnerability of per capita estimates to changes in consumer buying practices. Thus, the predicted declines in per capita consumption through the 1990s are simply projections that are possibly subject to change by those events that modify the buying practices of the consumer. Future surveillance reports on the national, state, and regional trends in apparent per capita consumption will monitor both these changes and the important factors and events that influence such trends.

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Table 1
Apparent Per Capita Ethanol Consumption for the United States, 1850-91
 [Gallons of ethanol, based on population age 15 and older prior to 1970 and on population age 14 and older thereafter.]

Year	Beer	Wine	Spirits	All Beverages
1991	1.29	0.30	0.72	2.31
1990	1.34	0.33	0.78	2.46
1989	1.31	0.34	0.78	2.43
1988	1.33	0.36	0.80	2.49
1987	1.34	0.38	0.83	2.54
1986	1.34	0.39	0.85	2.58
1985	1.33	0.38	0.90	2.62
1984	1.35	0.37	0.94	2.65
1983	1.37	0.36	0.96	2.69
1982	1.38	0.36	0.98	2.72
1981	1.39	0.35	1.02	2.76
1980	1.38	0.34	1.04	2.76
1979	1.37	0.32	1.06	2.75
1978	1.32	0.31	1.07	2.71
1977	1.29	0.29	1.06	2.64
1976	1.27	0.32	1.10	2.69
1975	1.26	0.32	1.11	2.70
1974	1.25	0.31	1.11	2.67
1973	1.20	0.31	1.10	2.62
1972	1.17	0.30	1.09	2.56
1971	1.15	0.31	1.12	2.59
1970	1.14	0.27	1.11	2.52
1969	1.12	0.26	1.13	2.51
1968	1.09	0.26	1.10	2.45
1967	1.07	0.25	1.05	2.37
1966	1.06	0.24	1.02	2.32
1965	1.04	0.24	0.99	2.27
1964	1.04	0.24	0.95	2.23
1963	1.01	0.23	0.91	2.15
1962	0.99	0.22	0.90	2.11
1961	0.97	0.23	0.86	2.06
1960	0.99	0.22	0.86	2.07
1959	1.00	0.22	0.84	2.06
1958	0.96	0.22	0.80	1.98
1957	0.97	0.22	0.80	1.99
1956	1.00	0.22	0.81	2.03
1955	1.01	0.22	0.77	2.00
1954	1.01	0.21	0.74	1.96
1953	1.04	0.20	0.77	2.01
1952	1.04	0.21	0.73	1.98
1951	1.03	0.20	0.78	2.01
1950	1.04	0.23	0.77	2.04
1949	1.06	0.22	0.70	1.98
1948	1.07	0.20	0.70	1.97
1947	1.11	0.16	0.76	2.03
1946	1.07	0.24	0.99	2.30
1945	1.17	0.20	0.88	2.25
1944	1.13	0.18	0.76	2.07
1943	1.00	0.17	0.66	1.83
1942	0.90	0.22	0.85	1.97
1941	0.81	0.18	0.71	1.70
1940	0.73	0.16	0.67	1.56

Table 1 (continued)

Apparent Per Capita Ethanol Consumption for the United States, 1850-91
 [Gallons of ethanol, based on population age 15 and older prior to 1970 and on population age 14 and older thereafter.]

Year	Beer	Wine	Spirits	All Beverages
1939	0.75	0.14	0.62	1.51
1938	0.75	0.13	0.59	1.47
1937	0.82	0.13	0.64	1.59
1936	0.79	0.12	0.59	1.50
1935	0.68	0.09	0.43	1.20
1934	0.61	0.07	0.29	0.97
(PROHIBITION)				
1916-19.....	1.08	0.12	0.76	1.96
1911-15.....	1.48	0.14	0.94	2.56
1906-10.....	1.47	0.17	0.96	2.60
1901-05.....	1.31	0.13	0.95	2.39
1896-1900.....	1.19	0.10	0.77	2.06
1891-95.....	1.17	0.11	0.95	2.23
1881-90.....	0.90	0.14	0.95	1.99
1871-80.....	0.56	0.14	1.02	1.72
1870	0.44	0.10	1.53	2.07
1860	0.27	0.10	2.16	2.53
1850	0.14	0.08	1.88	2.10

SOURCES: Williams, G.D.; Stinson, F.S.; Clem, D.; and Noble, J. *Surveillance Report # 23: Apparent Per Capita Consumption: National, State, and Regional Trends, 1977-1990*. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism, Division of Biometry and Epidemiology, Alcohol Epidemiologic Data System, December 1992.

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Table 2

Apparent Alcohol Consumption for States, Census Regions, and the United States, 1991
 [Volume and ethanol in thousands of gallons, per capita consumption in gallons, based on population age 14 and older.]

State or Other Geographic Area	Beer			Wine			Spirits			All Beverages		
	Volume	Ethanol	Per Capita	Volume	Ethanol	Per Capita	Volume	Ethanol	Per Capita	Ethanol	Per Capita	U.S. Decile
AL	72,921	3,281	1.01	4,380	565	0.17	4,685	1,939	0.60	5,786	1.78	10
AK	14,408	648	1.54	1,405	181	0.43	1,166	483	1.14	1,312	3.11	1
AZ	104,212	4,690	1.60	7,961	1,027	0.35	5,654	2,341	0.80	8,057	2.74	2
AR	47,189	2,123	1.13	1,676	216	0.11	2,664	1,103	0.58	3,443	1.83	9
CA	643,785	28,970	1.22	90,278	11,646	0.49	43,371	17,955	0.76	58,572	2.46	4
CO	82,471	3,711	1.39	7,292	941	0.35	5,641	2,335	0.88	6,987	2.62	3
CT	61,628	2,773	1.04	8,870	1,144	0.43	5,489	2,272	0.85	6,190	2.31	6
DE	16,962	763	1.40	1,482	191	0.35	1,266	524	0.96	1,479	2.71	2
DC	16,005	720	1.44	2,410	311	0.62	2,279	943	1.89	1,974	3.96	1
FL	347,338	15,630	1.44	29,153	3,761	0.35	24,375	10,091	0.93	29,482	2.71	2
GA	135,287	6,088	1.17	9,066	1,170	0.22	10,014	4,146	0.79	11,403	2.18	7
HI	31,563	1,420	1.57	2,797	361	0.40	1,550	642	0.71	2,423	2.68	2
ID	23,112	1,040	1.32	1,942	251	0.32	1,090	451	0.57	1,742	2.21	7
IL	282,757	12,724	1.39	24,380	3,145	0.34	16,921	7,005	0.76	22,874	2.50	3
IN	121,058	5,448	1.22	6,634	856	0.19	6,491	2,687	0.60	8,991	2.01	9
IA	65,549	2,950	1.33	2,791	360	0.16	2,842	1,176	0.53	4,486	2.02	8
KS	49,972	2,249	1.15	2,063	266	0.14	2,734	1,132	0.58	3,647	1.86	9
KY	73,511	3,308	1.11	2,508	324	0.11	4,105	1,699	0.57	5,331	1.79	10
LA	110,777	4,985	1.52	5,415	698	0.21	5,864	2,428	0.74	8,111	2.48	4
ME	26,149	1,177	1.19	2,339	302	0.30	1,850	766	0.77	2,244	2.27	6
MD	99,280	4,468	1.15	9,055	1,168	0.30	8,387	3,472	0.89	9,108	2.34	6
MA	129,794	5,841	1.19	16,338	2,108	0.43	10,427	4,317	0.88	12,265	2.51	3
MI	214,854	9,668	1.31	12,673	1,635	0.22	13,435	5,562	0.75	16,865	2.28	6
MN	100,396	4,518	1.30	6,374	822	0.24	6,903	2,858	0.82	8,198	2.36	5
MS	59,364	2,671	1.33	1,456	188	0.09	3,147	1,303	0.65	4,162	2.07	8
MO	123,144	5,541	1.35	6,863	885	0.22	6,408	2,653	0.65	9,080	2.22	7
MT	22,660	1,020	1.61	1,352	174	0.28	1,163	482	0.76	1,676	2.65	3
NE	38,936	1,752	1.40	1,725	223	0.18	1,860	770	0.62	2,745	2.20	7
NV	46,997	2,115	2.07	5,014	647	0.63	4,107	1,700	1.66	4,462	4.36	1
NH	36,403	1,638	1.86	3,326	429	0.49	4,221	1,748	1.99	3,815	4.34	1

Table 2 (continued)

Apparent Alcohol Consumption for States, Census Regions, and the United States, 1991

[Volume and ethanol in thousands of gallons, per capita consumption in gallons, based on population age 14 and older.]

State or Other Geographic Area	Beer			Wine			Spirits			All Beverages		
	Volume	Ethanol	Per Capita	Volume	Ethanol	Per Capita	Volume	Ethanol	Per Capita	Ethanol	Per Capita	U.S. Decile
NJ	154,525	6,954	1.10	20,999	2,709	0.43	12,643	5,234	0.83	14,897	2.36	5
NM	43,237	1,946	1.64	2,406	310	0.26	1,861	771	0.65	3,027	2.56	3
NY	354,515	15,953	1.09	41,759	5,387	0.37	24,453	10,124	0.69	31,464	2.16	7
NC	136,059	6,123	1.12	10,145	1,309	0.24	8,083	3,346	0.61	10,778	1.98	9
ND	15,864	714	1.43	604	78	0.16	1,046	433	0.87	1,225	2.46	4
OH	258,087	11,614	1.33	12,527	1,616	0.19	10,859	4,495	0.52	17,725	2.03	8
OK	60,888	2,740	1.09	2,462	318	0.13	3,314	1,372	0.55	4,429	1.76	10
OR	66,336	2,985	1.28	7,882	1,017	0.44	3,805	1,575	0.68	5,577	2.39	5
PA	294,477	13,251	1.36	12,934	1,668	0.17	12,314	5,098	0.52	20,018	2.06	8
RI	24,365	1,096	1.33	2,400	310	0.38	1,439	596	0.72	2,002	2.44	4
SC	84,669	3,810	1.35	4,931	636	0.23	5,802	2,402	0.85	6,848	2.43	4
SD	16,512	743	1.36	637	82	0.15	1,000	414	0.76	1,239	2.27	6
TN	105,856	4,764	1.19	4,168	538	0.13	5,294	2,192	0.55	7,493	1.88	9
TX	476,166	21,427	1.60	25,517	3,292	0.25	18,092	7,490	0.56	32,209	2.40	5
UT	22,692	1,021	0.81	1,143	147	0.12	1,332	552	0.44	1,720	1.36	10
VT	14,189	639	1.42	1,627	210	0.47	905	375	0.83	1,223	2.72	2
VA	135,339	6,090	1.20	10,948	1,412	0.28	7,199	2,980	0.59	10,483	2.07	8
WA	108,347	4,876	1.23	13,294	1,715	0.43	7,052	2,920	0.74	9,510	2.40	5
WV	38,533	1,734	1.18	1,019	131	0.09	1,553	643	0.44	2,508	1.70	10
WI	143,893	6,475	1.65	8,254	1,065	0.27	7,975	3,302	0.84	10,842	2.77	1
WY	11,363	511	1.44	558	72	0.20	770	319	0.90	902	2.55	3
Regions												
Northeast	1,096,045	49,322	1.19	110,592	14,266	0.35	73,741	30,529	0.74	94,117	2.28	•
Midwest	1,431,023	64,396	1.35	85,526	11,033	0.23	78,473	32,488	0.68	107,917	2.26	•
South	2,016,144	90,726	1.31	125,790	16,227	0.23	116,123	48,075	0.70	155,028	2.24	••
West	1,221,183	54,953	1.30	143,323	18,489	0.44	78,562	32,525	0.77	105,967	2.51	•
U.S. Total	5,764,396	259,398	1.29	465,230	60,015	0.30	346,900	143,616	0.72	463,029	2.31	•

• Decile values apply only to state-level data. Numbers may not add due to rounding.

Table 3

Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
<u>Alabama</u>					
1991	1.01	0.17	0.60	1.78	10
1990	1.13	0.18	0.62	1.94	9
1989	1.10	0.18	0.60	1.87	9
1988	1.10	0.18	0.61	1.90	9
1987	1.10	0.18	0.61	1.89	9
1986	1.09	0.18	0.64	1.91	9
1985	1.06	0.17	0.67	1.90	9
1984	1.02	0.19	0.69	1.90	10
1983	1.01	0.17	0.71	1.89	10
1982	1.00	0.18	0.72	1.89	10
1981	1.00	0.19	0.73	1.92	10
1980	0.96	0.16	0.74	1.86	10
1979	0.98	0.12	0.84	1.94	10
1978	0.98	0.12	0.88	1.97	9
1977	0.99	0.13	0.84	1.96	9
<u>Alaska</u>					
1991	1.54	0.43	1.14	3.11	1
1990	1.62	0.46	1.26	3.33	1
1989	1.57	0.46	1.24	3.28	1
1988	1.60	0.49	1.24	3.33	1
1987	1.64	0.54	1.30	3.48	1
1986	1.68	0.56	1.28	3.52	1
1985	1.68	0.58	1.53	3.78	1
1984	1.73	0.58	1.56	3.86	1
1983	1.76	0.61	1.70	4.06	1
1982	1.75	0.56	1.74	4.05	1
1981	1.71	0.57	1.82	4.10	1
1980	1.55	0.50	1.70	3.76	1
1979	1.50	0.47	1.65	3.62	1
1978	1.39	0.45	1.68	3.52	2
1977	1.19	0.42	1.70	3.31	2
<u>Arizona</u>					
1991	1.60	0.35	0.80	2.74	2
1990	1.59	0.37	0.81	2.77	2
1989	1.68	0.36	0.86	2.89	2
1988	1.64	0.42	0.89	2.95	2
1987	1.67	0.46	0.86	2.99	2
1986	1.77	0.46	0.92	3.15	2
1985	1.67	0.46	1.00	3.12	2
1984	1.57	0.45	1.06	3.08	3
1983	1.62	0.44	1.00	3.06	3
1982	1.74	0.40	0.99	3.13	3
1981	1.78	0.42	1.01	3.22	3
1980	1.69	0.36	0.98	3.03	4
1979	1.86	0.39	1.17	3.42	2
1978	1.77	0.37	1.10	3.25	2
1977	1.70	0.34	1.05	3.10	3
<u>Arkansas</u>					
1991	1.13	0.11	0.58	1.83	9
1990	1.13	0.13	0.62	1.87	9
1989	1.08	0.13	0.58	1.78	9
1988	1.07	0.14	0.54	1.75	10
1987	1.08	0.11	0.53	1.72	10
1986	1.06	0.09	0.48	1.64	10
1985	1.03	0.13	0.58	1.75	10
1984	1.02	0.12	0.64	1.78	10
1983	1.03	0.13	0.63	1.78	10
1982	1.03	0.12	0.63	1.78	10
1981	1.06	0.12	0.68	1.87	10
1980	1.00	0.12	0.69	1.81	10
1979	0.93	0.10	0.57	1.60	10
1978	0.97	0.11	0.73	1.82	10
1977	0.92	0.10	0.63	1.65	10

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3
Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
Alabama					
1991	1.01	0.17	0.60	1.78	10
1990	1.13	0.18	0.62	1.94	9
1989	1.10	0.18	0.60	1.87	9
1988	1.10	0.18	0.61	1.90	9
1987	1.10	0.18	0.61	1.89	9
1986	1.09	0.18	0.64	1.91	9
1985	1.06	0.17	0.67	1.90	9
1984	1.02	0.19	0.69	1.90	10
1983	1.01	0.17	0.71	1.89	10
1982	1.00	0.18	0.72	1.89	10
1981	1.00	0.19	0.73	1.92	10
1980	0.96	0.16	0.74	1.86	10
1979	0.98	0.12	0.84	1.94	10
1978	0.98	0.12	0.88	1.97	9
1977	0.99	0.13	0.84	1.96	9
Alaska					
1991	1.54	0.43	1.14	3.11	1
1990	1.62	0.46	1.26	3.33	1
1989	1.57	0.46	1.24	3.28	1
1988	1.60	0.49	1.24	3.33	1
1987	1.64	0.54	1.30	3.48	1
1986	1.68	0.56	1.28	3.52	1
1985	1.68	0.58	1.53	3.78	1
1984	1.73	0.58	1.56	3.86	1
1983	1.76	0.61	1.70	4.06	1
1982	1.75	0.56	1.74	4.05	1
1981	1.71	0.57	1.82	4.10	1
1980	1.55	0.50	1.70	3.76	1
1979	1.50	0.47	1.65	3.62	1
1978	1.39	0.45	1.68	3.52	2
1977	1.19	0.42	1.70	3.31	2
Arizona					
1991	1.60	0.35	0.80	2.74	2
1990	1.59	0.37	0.81	2.77	2
1989	1.68	0.36	0.86	2.89	2
1988	1.64	0.42	0.89	2.95	2
1987	1.67	0.46	0.86	2.99	2
1986	1.77	0.46	0.92	3.15	2
1985	1.67	0.46	1.00	3.12	2
1984	1.57	0.45	1.06	3.08	3
1983	1.62	0.44	1.00	3.06	3
1982	1.74	0.40	0.99	3.13	3
1981	1.78	0.42	1.01	3.22	3
1980	1.69	0.36	0.98	3.03	4
1979	1.86	0.39	1.17	3.42	2
1978	1.77	0.37	1.10	3.25	2
1977	1.70	0.34	1.05	3.10	3
Arkansas					
1991	1.13	0.11	0.58	1.83	9
1990	1.13	0.13	0.62	1.87	9
1989	1.08	0.13	0.58	1.78	9
1988	1.07	0.14	0.54	1.75	10
1987	1.08	0.11	0.53	1.72	10
1986	1.06	0.09	0.48	1.64	10
1985	1.03	0.13	0.58	1.75	10
1984	1.02	0.12	0.64	1.78	10
1983	1.03	0.13	0.63	1.78	10
1982	1.03	0.12	0.63	1.78	10
1981	1.06	0.12	0.68	1.87	10
1980	1.00	0.12	0.69	1.81	10
1979	0.93	0.10	0.57	1.60	10
1978	0.97	0.11	0.73	1.82	10
1977	0.92	0.10	0.63	1.65	10

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3 (continued)

Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
<u>District of Columbia</u>					
1991	1.44	0.62	1.89	3.96	1
1990	1.42	0.77	1.98	4.17	1
1989	1.49	0.88	1.86	4.23	1
1988	1.47	0.99	2.04	4.50	1
1987	1.48	1.00	2.39	4.87	1
1986	1.52	1.04	2.21	4.77	1
1985	1.49	1.03	2.42	4.94	1
1984	1.56	1.11	2.68	5.34	1
1983	1.55	1.08	2.79	5.41	1
1982	1.48	1.00	2.91	5.39	1
1981	1.50	1.06	2.92	5.49	1
1980	1.49	0.99	2.94	5.42	1
1979	1.48	0.99	3.03	5.49	1
1978	1.43	0.94	3.14	5.51	1
1977	1.39	0.89	3.26	5.53	1
<u>Florida</u>					
1991	1.44	0.35	0.93	2.71	2
1990	1.54	0.39	1.04	2.97	2
1989	1.51	0.39	1.01	2.91	2
1988	1.51	0.41	1.01	2.92	2
1987	1.51	0.42	1.04	2.96	2
1986	1.50	0.41	1.06	2.97	2
1985	1.47	0.41	1.16	3.04	3
1984	1.48	0.40	1.24	3.12	2
1983	1.56	0.40	1.23	3.19	2
1982	1.56	0.40	1.33	3.29	2
1981	1.55	0.39	1.38	3.31	3
1980	1.42	0.37	1.43	3.22	3
1979	1.47	0.37	1.51	3.34	2
1978	1.41	0.34	1.48	3.23	3
1977	1.33	0.33	1.47	3.13	2
<u>Georgia</u>					
1991	1.17	0.22	0.79	2.18	7
1990	1.22	0.23	0.87	2.33	6
1989	1.18	0.24	0.95	2.38	6
1988	1.22	0.26	0.93	2.41	6
1987	1.22	0.27	1.01	2.50	6
1986	1.22	0.27	0.96	2.44	6
1985	1.17	0.25	1.01	2.43	7
1984	1.18	0.23	1.06	2.48	7
1983	1.14	0.22	1.05	2.42	7
1982	1.12	0.21	1.04	2.37	7
1981	1.10	0.18	1.09	2.38	8
1980	1.07	0.19	1.09	2.35	8
1979	1.17	0.19	1.22	2.58	7
1978	1.14	0.19	1.26	2.59	7
1977	1.08	0.16	1.23	2.47	7
<u>Hawaii</u>					
1991	1.57	0.40	0.71	2.68	2
1990	1.65	0.40	0.80	2.86	2
1989	1.54	0.43	0.79	2.76	3
1988	1.62	0.45	0.80	2.87	3
1987	1.57	0.40	0.77	2.74	3
1986	1.60	0.44	0.86	2.89	3
1985	1.59	0.41	0.88	2.88	3
1984	1.65	0.41	0.91	2.97	3
1983	1.57	0.44	1.12	3.13	3
1982	1.80	0.48	1.14	3.42	1
1981	1.74	0.44	1.16	3.34	2
1980	1.65	0.46	1.21	3.31	2
1979	1.60	0.44	1.28	3.32	3
1978	1.38	0.46	1.30	3.15	3
1977	1.61	0.36	1.26	3.23	2

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3 (continued)

Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
<u>Idaho</u>					
1991	1.32	0.32	0.57	2.21	7
1990	1.36	0.33	0.59	2.28	7
1989	1.23	0.30	0.56	2.10	8
1988	1.25	0.36	0.58	2.19	7
1987	1.31	0.38	0.58	2.27	7
1986	1.34	0.38	0.61	2.33	7
1985	1.35	0.36	0.71	2.42	7
1984	1.40	0.31	0.72	2.43	7
1983	1.44	0.30	0.76	2.51	7
1982	1.47	0.31	0.81	2.58	7
1981	1.54	0.33	0.83	2.70	6
1980	1.53	0.30	0.77	2.60	7
1979	1.55	0.27	0.84	2.65	6
1978	1.50	0.26	0.80	2.56	7
1977	1.50	0.22	0.79	2.52	7
<u>Illinois</u>					
1991	1.39	0.34	0.76	2.50	3
1990	1.44	0.37	0.83	2.64	3
1989	1.38	0.35	0.83	2.57	4
1988	1.42	0.37	0.85	2.65	4
1987	1.41	0.39	0.87	2.67	4
1986	1.40	0.39	0.90	2.68	4
1985	1.38	0.37	0.98	2.72	5
1984	1.40	0.37	1.01	2.77	5
1983	1.42	0.35	1.03	2.80	5
1982	1.41	0.35	1.06	2.83	5
1981	1.43	0.35	1.12	2.91	5
1980	1.43	0.33	1.24	3.00	4
1979	1.45	0.33	1.17	2.94	4
1978	1.38	0.31	1.19	2.88	4
1977	1.35	0.30	1.22	2.87	4
<u>Indiana</u>					
1991	1.22	0.19	0.60	2.01	9
1990	1.27	0.20	0.64	2.11	8
1989	1.21	0.19	0.64	2.04	8
1988	1.23	0.21	0.67	2.11	8
1987	1.24	0.22	0.67	2.13	8
1986	1.25	0.23	0.67	2.15	8
1985	1.25	0.22	0.72	2.19	8
1984	1.26	0.21	0.72	2.19	8
1983	1.27	0.19	0.73	2.19	8
1982	1.29	0.18	0.76	2.23	8
1981	1.29	0.18	0.78	2.25	8
1980	1.26	0.17	0.77	2.21	8
1979	1.23	0.15	0.79	2.18	8
1978	1.19	0.16	0.79	2.14	8
1977	1.14	0.14	0.77	2.05	8
<u>Iowa</u>					
1991	1.33	0.16	0.53	2.02	8
1990	1.35	0.18	0.54	2.07	9
1989	1.26	0.18	0.50	1.94	9
1988	1.28	0.20	0.52	2.00	9
1987	1.30	0.21	0.58	2.09	9
1986	1.32	0.19	0.53	2.05	9
1985	1.31	0.14	0.57	2.02	9
1984	1.36	0.12	0.61	2.09	9
1983	1.38	0.13	0.64	2.15	8
1982	1.39	0.13	0.65	2.17	8
1981	1.44	0.13	0.69	2.27	8
1980	1.41	0.13	0.71	2.25	8
1979	1.40	0.11	0.71	2.22	8
1978	1.38	0.11	0.74	2.22	8
1977	1.33	0.10	0.74	2.17	8

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3 (continued)

Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
Kansas					
1991	1.15	0.14	0.58	1.86	9
1990	1.13	0.13	0.53	1.80	10
1989	1.10	0.13	0.54	1.78	10
1988	1.11	0.21	0.56	1.89	9
1987	1.12	0.16	0.56	1.84	9
1986	1.12	0.17	0.60	1.89	9
1985	1.17	0.15	0.64	1.96	9
1984	1.18	0.14	0.63	1.95	9
1983	1.20	0.13	0.64	1.96	9
1982	1.22	0.13	0.67	2.02	9
1981	1.23	0.12	0.70	2.05	9
1980	1.23	0.11	0.62	1.96	9
1979	1.17	0.11	0.73	2.01	9
1978	1.14	0.12	0.64	1.89	10
1977	1.13	0.10	0.65	1.88	10
Kentucky					
1991	1.11	0.11	0.57	1.79	10
1990	1.13	0.11	0.61	1.85	9
1989	1.08	0.12	0.57	1.76	10
1988	1.08	0.12	0.59	1.80	10
1987	1.03	0.14	0.60	1.77	10
1986	1.09	0.13	0.62	1.85	10
1985	1.07	0.13	0.66	1.86	10
1984	1.05	0.12	0.68	1.85	10
1983	1.13	0.12	0.69	1.94	9
1982	1.14	0.12	0.73	1.99	9
1981	1.13	0.10	0.75	1.99	9
1980	1.08	0.10	0.73	1.91	10
1979	1.10	0.09	0.77	1.97	10
1978	1.07	0.09	0.77	1.93	10
1977	1.19	0.09	0.75	2.03	9
Louisiana					
1991	1.52	0.21	0.74	2.48	4
1990	1.55	0.23	0.79	2.57	4
1989	1.43	0.23	0.72	2.38	6
1988	1.44	0.24	0.70	2.38	7
1987	1.36	0.24	0.75	2.35	7
1986	1.39	0.26	0.78	2.43	7
1985	1.35	0.27	0.86	2.49	6
1984	1.40	0.29	0.94	2.63	5
1983	1.43	0.30	1.02	2.75	5
1982	1.49	0.30	1.00	2.78	5
1981	1.48	0.27	1.02	2.77	6
1980	1.41	0.27	1.04	2.71	6
1979	1.36	0.26	1.08	2.70	6
1978	1.35	0.25	1.07	2.67	6
1977	1.30	0.25	1.03	2.57	6
Maine					
1991	1.19	0.30	0.77	2.27	6
1990	1.22	0.31	0.83	2.36	6
1989	1.25	0.34	0.86	2.45	5
1988	1.28	0.36	0.91	2.55	4
1987	1.26	0.38	0.91	2.55	5
1986	1.28	0.36	0.92	2.56	5
1985	1.29	0.33	0.94	2.56	6
1984	1.25	0.31	1.01	2.57	6
1983	1.32	0.29	1.03	2.63	6
1982	1.30	0.30	1.02	2.63	6
1981	1.24	0.28	1.05	2.57	7
1980	1.32	0.29	1.06	2.67	6
1979	1.30	0.27	1.08	2.65	6
1978	1.31	0.27	1.05	2.62	6
1977	1.37	0.23	1.04	2.64	5

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3 (continued)

Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
Maryland					
1991	1.15	0.30	0.89	2.34	6
1990	1.22	0.33	0.97	2.52	5
1989	1.22	0.34	0.99	2.55	4
1988	1.26	0.36	1.01	2.63	4
1987	1.29	0.38	1.07	2.74	3
1986	1.29	0.39	1.09	2.76	4
1985	1.31	0.36	1.14	2.81	4
1984	1.31	0.36	1.17	2.84	4
1983	1.34	0.35	1.20	2.89	4
1982	1.27	0.32	1.17	2.77	5
1981	1.39	0.34	1.33	3.06	4
1980	1.42	0.33	1.35	3.09	4
1979	1.43	0.31	1.39	3.14	3
1978	1.41	0.31	1.38	3.09	3
1977	1.37	0.30	1.39	3.05	3
Massachusetts					
1991	1.19	0.43	0.88	2.51	3
1990	1.22	0.45	0.97	2.64	3
1989	1.26	0.47	1.02	2.76	3
1988	1.29	0.50	1.08	2.87	2
1987	1.29	0.51	1.13	2.93	2
1986	1.31	0.53	1.13	2.97	2
1985	1.30	0.51	1.21	3.01	3
1984	1.30	0.51	1.24	3.04	3
1983	1.36	0.50	1.21	3.07	3
1982	1.35	0.49	1.22	3.07	3
1981	1.44	0.49	1.24	3.17	3
1980	1.47	0.45	1.27	3.19	3
1979	1.39	0.42	1.23	3.04	4
1978	1.37	0.40	1.25	3.02	4
1977	1.34	0.37	1.24	2.95	3
Michigan					
1991	1.31	0.22	0.75	2.28	6
1990	1.34	0.28	0.81	2.43	6
1989	1.29	0.30	0.81	2.39	6
1988	1.31	0.32	0.84	2.47	5
1987	1.32	0.33	0.86	2.51	6
1986	1.33	0.33	0.91	2.57	5
1985	1.30	0.32	0.95	2.58	5
1984	1.32	0.31	0.97	2.60	6
1983	1.35	0.28	0.97	2.60	6
1982	1.35	0.39	0.98	2.72	6
1981	1.34	0.29	1.00	2.63	6
1980	1.34	0.28	1.03	2.65	6
1979	1.37	0.25	1.03	2.65	6
1978	1.43	0.25	1.05	2.74	5
1977	1.45	0.24	1.02	2.71	5
Minnesota					
1991	1.30	0.24	0.82	2.36	5
1990	1.33	0.27	0.97	2.57	4
1989	1.28	0.27	0.89	2.44	5
1988	1.30	0.30	0.90	2.50	5
1987	1.31	0.32	0.94	2.57	5
1986	1.30	0.33	0.93	2.56	5
1985	1.31	0.31	1.06	2.68	5
1984	1.34	0.28	1.07	2.68	5
1983	1.37	0.27	1.10	2.74	5
1982	1.36	0.27	1.11	2.75	5
1981	1.39	0.27	1.18	2.83	5
1980	1.40	0.26	1.20	2.85	5
1979	1.35	0.24	1.16	2.75	5
1978	1.31	0.23	1.15	2.69	5
1977	1.30	0.20	1.15	2.65	5

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3 (continued)

Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
Mississippi					
1991	1.33	0.09	0.65	2.07	8
1990	1.35	0.09	0.66	2.11	8
1989	1.26	0.09	0.65	2.01	9
1988	1.28	0.09	0.66	2.03	9
1987	1.26	0.09	0.66	2.01	9
1986	1.26	0.10	0.69	2.05	9
1985	1.21	0.10	0.73	2.04	9
1984	1.19	0.11	0.77	2.06	9
1983	1.19	0.11	0.79	2.09	9
1982	1.19	0.11	0.82	2.11	9
1981	1.19	0.11	0.84	2.14	9
1980	1.13	0.10	0.86	2.09	9
1979	1.15	0.10	0.84	2.09	9
1978	1.16	0.10	0.91	2.18	8
1977	1.08	0.11	0.86	2.05	9
Missouri					
1991	1.35	0.22	0.65	2.22	7
1990	1.38	0.22	0.71	2.31	7
1989	1.33	0.22	0.69	2.25	7
1988	1.33	0.25	0.70	2.28	7
1987	1.36	0.27	0.72	2.35	7
1986	1.36	0.28	0.73	2.37	7
1985	1.33	0.26	0.76	2.36	7
1984	1.34	0.25	0.68	2.27	8
1983	1.37	0.22	0.78	2.37	8
1982	1.38	0.21	0.79	2.38	7
1981	1.40	0.21	0.83	2.45	7
1980	1.39	0.20	0.84	2.44	7
1979	1.37	0.20	0.86	2.43	7
1978	1.31	0.20	0.89	2.40	7
1977	1.23	0.19	0.83	2.25	8
Montana					
1991	1.61	0.28	0.76	2.65	3
1990	1.61	0.29	0.78	2.68	3
1989	1.56	0.29	0.73	2.57	4
1988	1.59	0.32	0.76	2.66	3
1987	1.57	0.33	0.77	2.67	4
1986	1.58	0.34	0.82	2.74	4
1985	1.60	0.33	0.88	2.81	4
1984	1.70	0.32	0.93	2.95	3
1983	1.79	0.32	0.99	3.09	3
1982	1.82	0.32	1.02	3.17	3
1981	1.90	0.33	1.05	3.28	3
1980	1.82	0.35	1.04	3.21	3
1979	1.83	0.41	1.05	3.29	3
1978	1.82	0.20	1.07	3.10	3
1977	1.83	0.20	1.10	3.12	3
Nebraska					
1991	1.40	0.18	0.62	2.20	7
1990	1.42	0.20	0.65	2.26	7
1989	1.37	0.19	0.63	2.19	7
1988	1.37	0.22	0.65	2.24	7
1987	1.40	0.22	0.66	2.28	7
1986	1.38	0.23	0.68	2.28	7
1985	1.40	0.22	0.75	2.37	7
1984	1.44	0.20	0.76	2.41	7
1983	1.49	0.21	0.79	2.49	7
1982	1.50	0.28	0.58	2.37	8
1981	1.57	0.20	0.88	2.66	6
1980	1.56	0.19	0.89	2.64	6
1979	1.50	0.18	0.88	2.57	7
1978	1.47	0.18	0.89	2.54	7
1977	1.45	0.17	0.91	2.53	6

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3 (continued)

Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
Nevada					
1991	2.07	0.63	1.66	4.36	1
1990	2.18	0.70	1.94	4.82	1
1989	2.18	0.73	1.93	4.85	1
1988	2.13	0.78	2.01	4.93	1
1987	2.05	0.84	2.11	5.00	1
1986	2.07	0.88	2.12	5.07	1
1985	1.96	0.84	2.18	4.99	1
1984	2.01	0.82	2.36	5.19	1
1983	1.98	0.79	2.45	5.22	1
1982	1.99	0.77	2.50	5.25	1
1981	2.08	0.80	2.71	5.59	1
1980	2.09	0.79	2.94	5.82	1
1979	2.28	0.88	3.28	6.44	1
1978	2.20	0.85	3.65	6.69	1
1977	2.15	0.83	3.85	6.84	1
New Hampshire					
1991	1.86	0.49	1.99	4.34	1
1990	1.85	0.49	1.99	4.33	1
1989	1.87	0.50	2.01	4.38	1
1988	1.91	0.49	1.95	4.35	1
1987	1.93	0.50	1.99	4.42	1
1986	1.93	0.52	2.07	4.52	1
1985	1.99	0.53	2.21	4.73	1
1984	1.99	0.59	2.33	4.91	1
1983	2.17	0.56	2.35	5.08	1
1982	1.89	0.58	2.34	4.81	1
1981	1.89	0.59	2.44	4.92	1
1980	2.21	0.69	2.86	5.76	1
1979	1.98	0.62	2.61	5.20	1
1978	1.99	0.54	2.94	5.46	1
1977	1.89	0.50	2.93	5.32	1
New Jersey					
1991	1.10	0.43	0.83	2.36	5
1990	1.16	0.49	0.96	2.60	4
1989	1.13	0.50	0.96	2.60	3
1988	1.15	0.51	0.93	2.59	4
1987	1.18	0.54	1.01	2.73	4
1986	1.18	0.56	1.04	2.78	3
1985	1.18	0.55	1.08	2.81	4
1984	1.19	0.55	1.10	2.83	4
1983	1.21	0.52	1.13	2.86	4
1982	1.22	0.52	1.13	2.87	4
1981	1.22	0.51	1.15	2.87	5
1980	1.23	0.47	1.13	2.83	5
1979	1.18	0.43	1.10	2.71	5
1978	1.17	0.42	1.10	2.69	5
1977	1.16	0.40	1.13	2.69	5
New Mexico					
1991	1.64	0.26	0.65	2.56	3
1990	1.69	0.28	0.69	2.65	3
1989	1.64	0.29	0.65	2.58	4
1988	1.63	0.33	0.68	2.64	4
1987	1.63	0.35	0.67	2.64	4
1986	1.64	0.35	0.71	2.70	4
1985	1.70	0.36	0.77	2.83	4
1984	1.71	0.28	0.76	2.75	5
1983	1.72	0.31	0.98	3.00	4
1982	1.72	0.34	0.94	3.00	4
1981	1.74	0.32	0.95	3.01	4
1980	1.66	0.32	1.00	2.99	4
1979	1.71	0.30	1.01	3.02	4
1978	1.68	0.32	0.98	2.99	4
1977	1.65	0.32	0.96	2.93	4

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3 (continued)

Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
New York					
1991	1.09	0.37	0.69	2.16	7
1990	1.13	0.41	0.77	2.31	7
1989	1.12	0.42	0.83	2.36	7
1988	1.15	0.45	0.87	2.47	6
1987	1.15	0.48	0.91	2.54	5
1986	1.13	0.50	0.93	2.55	6
1985	1.14	0.49	0.98	2.62	5
1984	1.15	0.49	1.03	2.67	5
1983	1.23	0.49	1.05	2.77	5
1982	1.26	0.48	1.10	2.84	5
1981	1.25	0.46	1.12	2.83	5
1980	1.28	0.46	1.18	2.91	5
1979	1.21	0.44	1.17	2.82	5
1978	1.18	0.42	1.17	2.77	5
1977	1.18	0.38	1.17	2.74	5
North Carolina					
1991	1.12	0.24	0.61	1.98	9
1990	1.16	0.27	0.66	2.09	8
1989	1.13	0.27	0.66	2.07	8
1988	1.12	0.28	0.69	2.09	8
1987	1.11	0.28	0.72	2.11	8
1986	1.12	0.30	0.74	2.16	8
1985	1.09	0.27	0.76	2.13	8
1984	1.11	0.24	0.78	2.13	8
1983	1.10	0.22	0.80	2.12	9
1982	1.07	0.21	0.85	2.13	9
1981	1.10	0.21	0.86	2.17	9
1980	1.11	0.20	0.86	2.17	9
1979	1.08	0.22	0.88	2.18	9
1978	1.06	0.20	0.86	2.12	9
1977	1.01	0.20	0.84	2.05	8
North Dakota					
1991	1.43	0.16	0.87	2.46	4
1990	1.47	0.17	0.94	2.59	4
1989	1.38	0.17	0.84	2.39	6
1988	1.38	0.19	0.87	2.44	6
1987	1.34	0.20	0.88	2.42	6
1986	1.32	0.22	0.86	2.40	7
1985	1.33	0.19	0.96	2.48	7
1984	1.40	0.17	0.98	2.55	6
1983	1.48	0.17	1.05	2.71	6
1982	1.52	0.18	1.09	2.79	5
1981	1.53	0.18	1.14	2.85	5
1980	1.53	0.17	1.14	2.83	5
1979	1.45	0.16	1.10	2.71	6
1978	1.45	0.16	1.15	2.76	5
1977	1.35	0.15	1.12	2.62	6
Ohio					
1991	1.33	0.19	0.52	2.03	8
1990	1.35	0.22	0.53	2.10	8
1989	1.35	0.22	0.51	2.08	8
1988	1.34	0.24	0.55	2.12	8
1987	1.35	0.24	0.59	2.18	8
1986	1.32	0.25	0.61	2.18	8
1985	1.37	0.25	0.59	2.20	8
1984	1.41	0.25	0.61	2.26	8
1983	1.36	0.22	0.65	2.22	8
1982	1.40	0.22	0.66	2.28	8
1981	1.35	0.22	0.68	2.25	8
1980	1.39	0.22	0.72	2.33	8
1979	1.36	0.20	0.71	2.26	8
1978	1.19	0.20	0.70	2.09	9
1977	1.17	0.18	0.70	2.04	9

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3 (continued)
Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
Oklahoma					
1991	1.09	0.13	0.55	1.76	10
1990	1.12	0.14	0.56	1.81	10
1989	1.05	0.13	0.53	1.71	10
1988	1.05	0.14	0.51	1.69	10
1987	1.04	0.15	0.57	1.76	10
1986	1.04	0.15	0.61	1.81	10
1985	1.04	0.15	0.68	1.87	10
1984	1.01	0.16	0.74	1.91	9
1983	1.05	0.16	0.77	1.98	9
1982	1.17	0.16	0.83	2.17	9
1981	1.14	0.16	0.83	2.13	9
1980	1.08	0.16	0.71	1.95	9
1979	1.05	0.13	0.80	1.98	9
1978	1.08	0.14	0.82	2.04	9
1977	1.07	0.14	0.78	1.98	9
Oregon					
1991	1.28	0.44	0.68	2.39	5
1990	1.32	0.47	0.73	2.52	5
1989	1.26	0.46	0.70	2.42	6
1988	1.27	0.51	0.71	2.49	5
1987	1.26	0.53	0.72	2.51	6
1986	1.26	0.54	0.74	2.54	6
1985	1.25	0.55	0.77	2.57	6
1984	1.28	0.53	0.82	2.63	6
1983	1.31	0.53	0.85	2.69	6
1982	1.33	0.53	0.88	2.74	6
1981	1.38	0.50	0.92	2.80	5
1980	1.37	0.51	0.94	2.82	5
1979	1.39	0.47	0.96	2.82	5
1978	1.34	0.47	0.98	2.79	5
1977	1.33	0.46	0.96	2.74	5
Pennsylvania					
1991	1.36	0.17	0.52	2.06	8
1990	1.42	0.18	0.56	2.16	8
1989	1.36	0.18	0.56	2.10	7
1988	1.39	0.19	0.53	2.11	8
1987	1.38	0.20	0.62	2.20	8
1986	1.38	0.21	0.64	2.23	8
1985	1.37	0.21	0.65	2.22	8
1984	1.37	0.21	0.66	2.25	8
1983	1.41	0.22	0.67	2.29	8
1982	1.44	0.23	0.70	2.36	8
1981	1.42	0.23	0.72	2.37	8
1980	1.45	0.22	0.71	2.39	8
1979	1.42	0.22	0.73	2.37	8
1978	1.36	0.21	0.74	2.32	8
1977	1.35	0.20	0.74	2.29	8
Rhode Island					
1991	1.33	0.38	0.72	2.44	4
1990	1.32	0.44	0.79	2.55	4
1989	1.37	0.46	0.87	2.70	3
1988	1.39	0.49	0.97	2.85	3
1987	1.40	0.51	0.95	2.86	3
1986	1.41	0.53	0.94	2.87	3
1985	1.40	0.51	1.03	2.94	3
1984	1.37	0.52	1.03	2.92	3
1983	1.48	0.50	1.06	3.04	3
1982	1.34	0.55	1.04	2.93	4
1981	1.36	0.52	1.04	2.92	4
1980	1.46	0.53	1.14	3.14	3
1979	1.46	0.50	1.11	3.07	3
1978	1.41	0.50	1.16	3.07	3
1977	1.39	0.43	1.12	2.93	4

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3 (continued)

Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
South Carolina					
1991	1.35	0.23	0.85	2.43	4
1990	1.45	0.26	0.93	2.64	3
1989	1.37	0.24	0.86	2.47	5
1988	1.37	0.26	0.89	2.52	5
1987	1.34	0.27	0.89	2.50	6
1986	1.30	0.27	0.93	2.50	6
1985	1.26	0.25	0.99	2.49	6
1984	1.26	0.24	1.00	2.50	7
1983	1.26	0.20	1.01	2.47	7
1982	1.24	0.20	1.00	2.44	7
1981	1.25	0.19	1.05	2.49	7
1980	1.22	0.18	1.06	2.46	7
1979	1.25	0.17	1.18	2.60	7
1978	1.20	0.17	1.21	2.59	6
1977	1.17	0.17	1.14	2.49	7
South Dakota					
1991	1.36	0.15	0.76	2.27	6
1990	1.37	0.18	0.81	2.35	6
1989	1.25	0.15	0.70	2.10	8
1988	1.21	0.16	0.77	2.14	8
1987	1.24	0.19	0.79	2.22	8
1986	1.22	0.19	0.82	2.24	8
1985	1.22	0.18	0.94	2.34	8
1984	1.27	0.17	0.89	2.33	7
1983	1.30	0.17	0.95	2.43	7
1982	1.29	0.18	0.98	2.45	7
1981	1.32	0.19	1.05	2.56	7
1980	1.30	0.18	1.07	2.56	7
1979	1.23	0.17	1.04	2.44	7
1978	1.19	0.17	1.05	2.42	7
1977	1.15	0.17	1.06	2.38	7
Tennessee					
1991	1.19	0.13	0.55	1.88	9
1990	1.22	0.15	0.61	1.98	9
1989	1.18	0.14	0.59	1.91	9
1988	1.20	0.14	0.61	1.95	9
1987	1.17	0.15	0.62	1.94	9
1986	1.17	0.16	0.63	1.96	9
1985	1.11	0.16	0.67	1.94	9
1984	1.11	0.15	0.70	1.95	9
1983	1.10	0.14	0.69	1.93	10
1982	1.13	0.14	0.70	1.96	10
1981	1.14	0.13	0.72	1.98	10
1980	1.10	0.12	0.69	1.92	9
1979	1.14	0.11	0.73	1.98	9
1978	1.16	0.11	0.72	1.99	9
1977	1.10	0.10	0.71	1.91	10
Texas					
1991	1.60	0.25	0.56	2.40	5
1990	1.64	0.26	0.58	2.48	5
1989	1.62	0.26	0.58	2.46	5
1988	1.61	0.28	0.59	2.47	6
1987	1.61	0.29	0.61	2.52	5
1986	1.67	0.31	0.66	2.63	5
1985	1.68	0.30	0.73	2.70	5
1984	1.74	0.28	0.79	2.82	4
1983	1.73	0.27	0.79	2.79	5
1982	1.83	0.18	0.84	2.85	4
1981	1.84	0.24	0.85	2.93	4
1980	1.77	0.22	0.81	2.80	5
1979	1.76	0.14	0.87	2.77	5
1978	1.70	0.14	0.84	2.68	6
1977	1.63	0.14	0.81	2.58	6

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3 (continued)
Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
<u>Utah</u>					
1991	0.81	0.12	0.44	1.36	10
1990	0.81	0.12	0.47	1.40	10
1989	0.82	0.13	0.47	1.43	10
1988	0.83	0.14	0.49	1.46	10
1987	0.84	0.15	0.50	1.49	10
1986	0.89	0.17	0.53	1.58	10
1985	0.90	0.15	0.53	1.58	10
1984	0.88	0.14	0.52	1.53	10
1983	0.88	0.14	0.50	1.52	10
1982	1.01	0.15	0.55	1.71	10
1981	1.01	0.14	0.58	1.74	10
1980	0.96	0.14	0.60	1.71	10
1979	0.97	0.16	0.62	1.75	10
1978	0.96	0.15	0.61	1.72	10
1977	0.97	0.14	0.59	1.70	10
<u>Vermont</u>					
1991	1.42	0.47	0.83	2.72	2
1990	1.47	0.48	0.86	2.82	2
1989	1.45	0.51	0.88	2.85	2
1988	1.51	0.56	0.94	3.00	2
1987	1.56	0.58	0.99	3.13	1
1986	1.55	0.59	1.05	3.18	1
1985	1.49	0.55	1.09	3.13	2
1984	1.48	0.49	1.15	3.12	2
1983	1.52	0.50	1.19	3.21	2
1982	1.49	0.50	1.25	3.24	2
1981	1.49	0.50	1.33	3.32	2
1980	1.43	0.48	1.39	3.30	2
1979	1.57	0.47	1.50	3.54	1
1978	1.53	0.47	1.59	3.59	1
1977	1.42	0.44	1.58	3.44	1
<u>Virginia</u>					
1991	1.20	0.28	0.59	2.07	8
1990	1.26	0.30	0.63	2.19	7
1989	1.23	0.31	0.65	2.19	7
1988	1.31	0.25	0.68	2.25	7
1987	1.40	0.26	0.71	2.37	7
1986	1.52	0.27	0.74	2.53	6
1985	1.46	0.30	0.79	2.55	6
1984	1.46	0.29	0.80	2.55	6
1983	1.47	0.27	0.82	2.57	6
1982	1.45	0.27	0.86	2.59	6
1981	1.23	0.27	0.89	2.39	7
1980	1.23	0.25	0.90	2.39	7
1979	1.23	0.25	0.92	2.40	8
1978	1.22	0.21	0.90	2.33	8
1977	1.19	0.21	0.90	2.30	7
<u>Washington</u>					
1991	1.23	0.43	0.74	2.40	5
1990	1.28	0.46	0.77	2.50	5
1989	1.24	0.47	0.76	2.46	5
1988	1.22	0.50	0.77	2.50	5
1987	1.23	0.56	0.80	2.59	4
1986	1.23	0.61	0.82	2.66	4
1985	1.22	0.59	0.87	2.68	5
1984	1.24	0.57	0.91	2.71	5
1983	1.29	0.54	0.94	2.76	5
1982	1.33	0.53	0.99	2.85	4
1981	1.38	0.54	1.05	2.97	4
1980	1.52	0.52	1.08	3.12	3
1979	1.41	0.48	1.10	2.99	4
1978	1.39	0.48	1.09	2.96	4
1977	1.36	0.45	1.07	2.89	4

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3 (continued)

Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
West Virginia					
1991	1.18	0.09	0.44	1.70	10
1990	1.20	0.10	0.42	1.73	10
1989	1.12	0.11	0.38	1.60	10
1988	1.12	0.12	0.41	1.64	10
1987	1.11	0.13	0.41	1.65	10
1986	1.10	0.13	0.42	1.84	10
1985	1.11	0.13	0.42	1.66	10
1984	1.12	0.12	0.44	1.68	10
1983	1.13	0.13	0.48	1.74	10
1982	1.11	0.14	0.55	1.80	10
1981	1.06	0.14	0.66	1.85	10
1980	1.00	0.09	0.72	1.82	10
1979 .....	.97	0.09	0.77	1.83	10
1978 .....	.96	0.09	0.79	1.84	10
1977 .....	.98	0.09	0.78	1.85	10
Wisconsin					
1991	1.65	0.27	0.84	2.77	1
1990	1.74	0.31	1.04	3.08	1
1989	1.71	0.31	0.95	2.97	1
1988	1.75	0.33	0.95	3.03	1
1987	1.78	0.36	0.98	3.12	1
1986	1.87	0.34	0.96	3.16	2
1985	1.82	0.32	1.05	3.19	1
1984	1.86	0.30	1.03	3.19	2
1983	1.93	0.33	1.07	3.33	1
1982	1.93	0.30	1.04	3.27	2
1981	1.95	0.31	1.20	3.47	1
1980	1.96	0.31	1.20	3.46	1
1979	1.88	0.28	1.17	3.33	3
1978	1.80	0.28	1.18	3.25	2
1977	1.78	0.27	1.26	3.31	2
Wyoming					
1991	1.44	0.20	0.90	2.55	3
1990	1.48	0.22	0.93	2.64	3
1989	1.35	0.22	0.82	2.39	6
1988	1.39	0.23	0.84	2.46	6
1987	1.46	0.24	0.87	2.57	5
1986	1.46	0.26	0.93	2.64	5
1985	1.56	0.25	1.03	2.84	3
1984	1.58	0.22	1.05	2.86	4
1983	1.66	0.22	1.09	2.98	4
1982	1.80	0.24	1.21	3.25	2
1981	1.91	0.24	1.27	3.42	2
1980	1.85	0.24	1.32	3.42	2
1979	1.86	0.22	1.30	3.38	2
1978	1.82	0.22	1.36	3.41	2
1977	1.79	0.21	1.32	3.31	1
Northeast Region					
1991	1.19	0.35	0.74	2.28	
1990	1.24	0.38	0.81	2.43	
1989	1.22	0.39	0.85	2.45	
1988	1.25	0.40	0.87	2.52	
1987	1.25	0.43	0.92	2.60	
1986	1.25	0.44	0.94	2.63	
1985	1.25	0.43	0.98	2.66	
1984	1.25	0.43	1.01	2.70	
1983	1.31	0.43	1.03	2.76	
1982	1.31	0.43	1.05	2.79	
1981	1.31	0.41	1.07	2.80	
1980	1.34	0.40	1.10	2.84	
1979	1.30	0.38	1.09	2.77	
1978	1.26	0.36	1.10	2.73	
1977	1.25	0.34	1.10	2.69	

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 3 (continued)

Per Capita Ethanol Consumption for States, Census Regions, and the United States, 1977-91
 [Gallons of ethanol, based on population age 14 and older.]

State or Other Geographic Area	Per Capita Consumption				U.S. Decile for All Beverages
	Beer	Wine	Spirits	All Beverages	
Midwest Region					
1991	1.35	0.23	0.68	2.26	
1990	1.38	0.26	0.74	2.39	
1989	1.34	0.26	0.72	2.32	
1988	1.36	0.28	0.74	2.38	
1987	1.37	0.29	0.77	2.43	
1986	1.37	0.30	0.78	2.44	
1985	1.37	0.28	0.83	2.48	
1984	1.39	0.27	0.84	2.50	
1983	1.41	0.25	0.87	2.53	
1982	1.42	0.27	0.88	2.56	
1981	1.42	0.26	0.93	2.61	
1980	1.42	0.24	0.96	2.63	
1979	1.41	0.23	0.95	2.58	
1978	1.35	0.22	0.96	2.53	
1977	1.32	0.21	0.96	2.49	
South Region					
1991	1.31	0.23	0.70	2.24	
1990	1.37	0.26	0.75	2.37	
1989	1.33	0.26	0.74	2.32	
1988	1.33	0.27	0.75	2.35	
1987	1.33	0.27	0.78	2.38	
1986	1.35	0.28	0.79	2.42	
1985	1.33	0.27	0.85	2.46	
1984	1.34	0.27	0.90	2.51	
1983	1.36	0.25	0.91	2.52	
1982	1.37	0.23	0.95	2.55	
1981	1.36	0.24	0.98	2.58	
1980	1.31	0.23	0.98	2.51	
1979	1.32	0.21	1.03	2.55	
1978	1.29	0.20	1.03	2.52	
1977	1.25	0.19	1.01	2.44	
West Region					
1991	1.30	0.44	0.77	2.51	
1990	1.37	0.50	0.85	2.72	
1989	1.36	0.51	0.85	2.72	
1988	1.37	0.57	0.87	2.81	
1987	1.39	0.62	0.90	2.91	
1986	1.40	0.65	0.93	2.98	
1985	1.37	0.65	1.00	3.02	
1984	1.41	0.61	1.04	3.05	
1983	1.42	0.61	1.07	3.10	
1982	1.45	0.60	1.11	3.15	
1981	1.49	0.60	1.16	3.26	
1980	1.48	0.59	1.20	3.26	
1979	1.49	0.58	1.24	3.31	
1978	1.43	0.56	1.27	3.26	
1977	1.38	0.54	1.22	3.15	
U.S. Total					
1991	1.29	0.30	0.72	2.31	
1990	1.34	0.33	0.78	2.46	
1989	1.31	0.34	0.78	2.43	
1988	1.33	0.36	0.80	2.49	
1987	1.34	0.38	0.83	2.54	
1986	1.34	0.39	0.85	2.58	
1985	1.33	0.38	0.90	2.62	
1984	1.35	0.37	0.94	2.65	
1983	1.37	0.36	0.96	2.69	
1982	1.38	0.36	0.98	2.72	
1981	1.39	0.35	1.02	2.76	
1980	1.38	0.34	1.04	2.76	
1979	1.37	0.32	1.06	2.75	
1978	1.32	0.31	1.07	2.71	
1977	1.29	0.29	1.06	2.64	

Decile values apply only to state-level data. Numbers may not sum due to rounding.

Table 4

Per Drinker Average Ethanol Consumption for Selected States, 1986-91

[Based on estimates of abstinence among population age 18 and older from the Behavioral Risk Factors Survey, Centers for Disease Control.]

State	Per Capita Ethanol Consumption	Percentage of Abstainers for State	Average Consumption Per Drinker
Alabama			
1991	1.78	64.2	4.96
1990	1.94	66.2	5.73
1989	1.87	69.4	6.12
1988	1.90	64.0	5.28
1987	1.89	60.1	4.74
1986	1.91	61.8	5.00
Alaska			
1991	3.11	40.5	5.22
1990 .....	.	.	.
1989 .....	.	.	.
1988 .....	.	.	.
1987 .....	.	.	.
1986 .....	.	.	.
Arizona			
1991	2.74	51.7	5.68
1990	2.77	48.6	5.39
1989	2.89	43.2	5.09
1988	2.95	41.6	5.05
1987	2.99	40.6	5.04
1986	3.15	39.5	5.21
Arkansas			
1991	1.83	61.5	4.74
1990 .....	.	.	.
1989 .....	.	.	.
1988 .....	.	.	.
1987 .....	.	.	.
1986 .....	.	.	.
California			
1991	2.46	42.3	4.27
1990	2.79	39.1	4.58
1989	2.79	42.3	4.84
1988	2.91	37.4	4.65
1987	3.04	34.9	4.67
1986	3.12	34.4	4.75
Colorado			
1991	2.62	38.3	4.24
1990	2.40	37.2	3.81
1989 .....	.	.	.
1988 .....	.	.	.
1987 .....	.	.	.
1986 .....	.	.	.
Connecticut			
1991	2.31	37.8	3.72
1990	2.47	33.5	3.71
1989	2.55	31.5	3.73
1988	2.72	30.8	3.93
1987 .....	.	.	.
1986 .....	.	.	.
Delaware			
1991	2.71	46.0	5.02
1990	2.98	43.5	5.27
1989 .....	.	.	.
1988 .....	.	.	.
1987 .....	.	.	.
1986 .....	.	.	.
District of Columbia			
1991	3.96	56.3	9.05
1990	4.17	62.5	11.14
1989	4.23	61.3	10.93
1988	4.50	60.6	11.43
1987	4.87	53.6	10.49
1986	4.77	44.1	8.53

• State did not participate in the Behavioral Risk Factors Survey that year.

Table 4 (continued)

Per Drinker Average Ethanol Consumption for Selected States, 1986-91

[Based on estimates of abstinence among population age 18 and older from the Behavioral Risk Factors Survey, Centers for Disease Control.]

State	Per Capita Ethanol Consumption	Percentage of Abstainers for State	Average Consumption Per Drinker
<u>Florida</u>			
1991	2.71	46.7	5.08
1990	2.97	50.1	5.96
1989	2.91	45.5	5.33
1988	2.92	42.5	5.08
1987	2.96	41.2	5.03
1986	2.97	39.8	4.93
Georgia			
1991	2.18	65.0	6.24
1990	2.33	63.7	6.41
1989	2.38	61.9	6.24
1988	2.41	43.7	4.28
1987	2.50	57.4	5.87
1986	2.44	56.0	5.54
Hawaii			
1991	2.68	50.0	5.37
1990	2.86	50.8	5.82
1989	2.76	47.1	5.23
1988	2.87	45.8	5.29
1987	2.74	41.0	4.65
1986	2.89	41.6	4.95
<u>Idaho</u>			
1991	2.21	55.9	5.01
1990	2.28	54.1	4.96
1989	2.10	52.6	4.43
1988	2.19	52.1	4.57
1987	2.27	46.8	4.26
1986	2.33	46.4	4.34
Illinois			
1991	2.50	52.6	5.26
1990	2.64	47.7	5.04
1989	2.57	46.3	4.78
1988	2.65	40.5	4.46
1987	2.67	40.1	4.45
1986	2.68	44.5	4.83
Indiana			
1991	2.01	52.8	4.27
1990	2.11	53.5	4.55
1989	2.04	53.5	4.40
1988	2.11	48.3	4.08
1987	2.13	49.2	4.20
1986	2.15	46.9	4.05
<u>Iowa</u>			
1991	2.02	48.4	3.90
1990	2.07	48.1	4.00
1989	1.94	46.0	3.60
1988	2.00	46.1	3.71
1987	•	•	•
1986	•	•	•
Kansas			
1991	•	•	•
1990	•	•	•
1989	•	•	•
1988	•	•	•
1987	•	•	•
1986	•	•	•
<u>Kentucky</u>			
1991	1.79	65.8	5.24
1990	1.85	66.1	5.45
1989	1.76	65.4	5.10
1988	1.80	62.8	4.84
1987	1.77	63.5	4.83
1986	1.85	59.3	4.54

• State did not participate in the Behavioral Risk Factors Survey that year.

Table 4 (continued)

Per Drinker Average Ethanol Consumption for Selected States, 1986-91

[Based on estimates of abstinence among population age 18 and older from the Behavioral Risk Factors Survey, Centers for Disease Control.]

State	Per Capita Ethanol Consumption	Percentage of Abstainers for State	Average Consumption Per Drinker
<u>Louisiana</u>			
1991	2.48	54.4	5.42
1990	2.57	50.5	5.20
1989	•	•	•
1988	•	•	•
1987	•	•	•
1986	•	•	•
<u>Maine</u>			
1991	2.27	48.7	4.41
1990	2.36	48.9	4.61
1989	2.45	50.2	4.92
1988	2.55	45.3	4.66
1987	2.55	44.5	4.60
1986	•	•	•
<u>Maryland</u>			
1991	2.34	47.0	4.41
1990	2.52	46.6	4.71
1989	2.55	46.0	4.72
1988	2.63	44.5	4.74
1987	2.74	39.0	4.50
1986	•	•	•
<u>Massachusetts</u>			
1991	2.51	34.4	3.82
1990	2.64	34.0	4.01
1989	2.76	32.1	4.06
1988	2.87	35.9	4.48
1987	2.93	31.0	4.25
1986	2.97	27.5	4.10
<u>Michigan</u>			
1991	2.28	44.7	4.12
1990	2.43	46.7	4.56
1989	2.39	44.8	4.33
1988	2.47	38.6	4.02
1987	•	•	•
1986	•	•	•
<u>Minnesota</u>			
1991	2.36	36.7	3.72
1990	2.57	36.9	4.07
1989	2.44	38.4	3.95
1988	2.50	34.6	3.82
1987	2.57	32.8	3.82
1986	2.56	31.0	3.71
<u>Mississippi</u>			
1991	2.07	68.9	6.66
1990	2.11	64.0	5.86
1989	•	•	•
1988	•	•	•
1987	•	•	•
1986	•	•	•
Missouri			
1991	2.22	51.4	4.56
1990	2.31	50.0	4.61
1989	2.25	53.2	4.80
1988	2.28	51.1	4.66
1987	2.35	45.6	4.34
1986	2.37	47.0	4.47
<u>Montana</u>			
1991	2.65	45.6	4.87
1990	2.68	45.8	4.94
1989	2.57	41.9	4.43
1988	2.66	39.4	4.39
1987	2.67	38.6	4.35
1986	2.74	34.6	4.19

• State did not participate in the Behavioral Risk Factors Survey that year.

Table 4 (continued)

Per Drinker Average Ethanol Consumption for Selected States, 1986-91

[Based on estimates of abstinence among population age 18 and older from the Behavioral Risk Factors Survey, Centers for Disease Control.]

State	Per Capita Ethanol Consumption	Percentage of Abstainers for State	Average Consumption Per Drinker
Nebraska			
1991	2.20	44.9	3.99
1990	2.26	46.1	4.19
1989	2.19	48.4	4.24
1988	2.24	49.0	4.39
1987	2.28	41.9	3.92
1986	•	•	•
Nevada			
1991	•	•	•
1990	•	•	•
1989	•	•	•
1988	•	•	•
1987	•	•	•
1986	•	•	•
New Hampshire			
1991	4.34	34.7	6.64
1990	4.33	33.8	6.55
1989	4.38	32.1	6.45
1988	4.35	31.9	6.39
1987	4.42	27.8	6.12
1986	•	•	•
New Jersey			
1991	2.36	43.7	4.20
1990	•	•	•
1989	•	•	•
1988	•	•	•
1987	•	•	•
1986	•	•	•
New Mexico			
1991	2.56	57.5	6.02
1990	2.65	51.2	5.43
1989	2.58	47.5	4.91
1988	2.64	48.2	5.09
1987	2.64	61.2	6.82
1986	2.70	49.2	5.31
New York			
1991	2.16	50.0	4.31
1990	2.31	49.9	4.62
1989	2.36	51.5	4.87
1988	2.47	45.8	4.56
1987	2.54	45.3	4.64
1986	2.55	39.2	4.20
North Carolina			
1991	1.98	67.3	6.05
1990	2.09	64.0	5.82
1989	2.07	62.0	5.44
1988	2.09	60.1	5.23
1987	2.11	59.2	5.16
1986	2.16	57.8	5.12
North Dakota			
1991	2.46	43.0	4.32
1990	2.59	43.1	4.54
1989	2.39	41.8	4.11
1988	2.44	38.2	3.95
1987	2.42	38.1	3.90
1986	2.40	38.3	3.89
Ohio			
1991	2.03	64.8	5.78
1990	2.10	60.8	5.35
1989	2.08	49.9	4.15
1988	2.12	48.5	4.12
1987	2.18	44.2	3.90
1986	2.18	41.8	3.75

• State did not participate in the Behavioral Risk Factors Survey that year.

Table 4 (continued)

Per Drinker Average Ethanol Consumption for Selected States, 1986-91

[Based on estimates of abstinence among population age 18 and older from the Behavioral Risk Factors Survey, Centers for Disease Control.]

State	Per Capita Ethanol Consumption	Percentage of Abstainers for State	Average Consumption Per Drinker
Oklahoma			
1991	1.76	64.3	4.94
1990	1.81	63.5	4.97
1989	1.71	63.6	4.69
1988	1.69	58.2	4.04
1987	•	•	•
1986	•	•	•
Oregon			
1991	2.39	43.9	4.26
1990	2.52	48.4	4.89
1989	2.42	44.6	4.37
1988	•	•	•
1987	•	•	•
1986	•	•	•
Pennsylvania			
1991	2.06	42.2	3.56
1990	2.16	45.8	3.99
1989	2.10	44.2	3.76
1988	•	•	•
1987	•	•	•
1986	•	•	•
Rhode Island			
1991	2.44	39.6	4.03
1990	2.55	38.6	4.16
1989	2.70	40.3	4.52
1988	2.85	49.6	5.65
1987	2.86	49.2	5.62
1986	2.87	38.0	4.63
South Carolina			
1991	2.43	65.3	7.00
1990	2.64	59.8	6.56
1989	2.47	61.4	6.40
1988	2.52	64.6	7.12
1987	2.50	57.1	5.82
1986	2.50	57.5	5.88
South Dakota			
1991	2.27	44.6	4.10
1990	2.35	44.3	4.22
1989	2.10	43.6	3.71
1988	2.14	40.5	3.60
1987	2.22	40.9	3.76
1986	•	•	•
Tennessee			
1991	1.88	74.5	7.37
1990	1.98	70.1	6.60
1989	1.91	68.9	6.14
1988	1.95	65.6	5.67
1987	1.94	63.9	5.35
1986	1.96	61.4	5.08
Texas			
1991	2.40	48.7	4.69
1990	2.48	47.8	4.76
1989	2.46	48.1	4.75
1988	2.47	47.5	4.70
1987	2.52	41.6	4.31
1986	•	•	•
Utah			
1991	1.36	72.4	4.95
1990	1.40	69.8	4.65
1989	1.43	68.8	4.58
1988	1.46	70.2	4.91
1987	1.49	66.7	4.49
1986	1.58	62.0	4.16

• State did not participate in the Behavioral Risk Factors Survey that year.

Table 4 (continued)

Per Drinker Average Ethanol Consumption for Selected States, 1986-91

[Based on estimates of abstinence among population age 18 and older from the Behavioral Risk Factors Survey, Centers for Disease Control.]

State	Per Capita Ethanol Consumption	Percentage of Abstainers for State	Average Consumption Per Drinker
Vermont			
1991	2.72	40.1	4.54
1990	2.82	33.4	4.23
1989	•	•	•
1988	•	•	•
1987	•	•	•
1986	•	•	•
Virginia			
1991	2.07	48.7	4.04
1990	2.19	48.8	4.28
1989	2.19	46.4	4.08
1988	•	•	•
1987	•	•	•
1986	•	•	•
Washington			
1991	2.40	43.5	4.24
1990	2.50	42.2	4.33
1989	2.46	41.8	4.23
1988	2.50	36.4	3.93
1987	2.59	36.4	4.07
1986	•	•	•
West Virginia			
1991	1.70	72.7	6.24
1990	1.73	69.5	5.66
1989	1.60	69.7	5.29
1988	1.64	67.6	5.06
1987	1.65	64.6	4.65
1986	1.64	65.1	4.70
Wisconsin			
1991	2.77	31.7	4.05
1990	3.08	30.6	4.44
1989	2.97	30.1	4.24
1988	3.03	29.1	4.27
1987	3.12	29.8	4.44
1986	3.16	25.9	4.26
Wyoming			
1991	•	•	•
1990	•	•	•
1989	•	•	•
1988	•	•	•
1987	•	•	•
1986	•	•	•

- State did not participate in the Behavioral Risk Factors Survey that year.