

Background for the 2019 NHIS Questionnaire Redesign Alcohol Questions

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Note: The following report was prepared as an internal analysis, intended to contribute to staff discussions about the redesign.

BACKGROUND

As input for decisions for the 2019 redesign of the NHIS questionnaire, we examined the alcohol use questions that have been on the Sample Adult core questionnaire since 1997 (with a past year reference period) and selected questions from the 1988 NHIS Alcohol supplement (with 2-week and past year reference periods and additional details about alcohol use). Our goal was to assess the possible implications of changing from a past year reference period to the 30-day reference period.

The proposed 30-day questions are:

1. [PAST 30 DAYS] Had one or more drinks of any alcoholic beverage?
 - a. *If no:* Had 12 or more drinks in lifetime?
2. [PAST 30 DAYS] *If yes:* Number of days alcohol was consumed?
3. [PAST 30 DAYS] Average number of drinks on days consumed any alcohol?
4. [PAST 30 DAYS] Number of times had 5 (if male) / 4 (if female) or more drinks on any one occasion?
5. *If one or more times:* [PAST 30 DAYS] Largest number of drinks on any one occasion?
6. [PAST 30 DAYS] Number of days had 5 (if male) / 4 (if female) or more drinks?

The alcohol questions that have been on the NHIS Sample Adult core health behaviors section (AHB) since 1997 were developed in close collaboration with the National Institute on Alcohol Abuse and Alcoholism (NIAAA). They use a 12-month reference period and provide an indicator of lifetime alcohol use status and average drinking levels over the course of the past year. All questions except the last one (binge drinking) have been on the survey since 1997. A question on binge drinking was added in 2014. For 2014 quarters 1-3, the wording referred to “a 2-hour period.” In quarter 4, the wording was changed to “on an occasion” to be consistent with the BRFSS question wording. Preliminary examination of the 2014 data suggested that respondents were taking the “in about 2-hours” too literally and the concept of “occasion” was easier to respond to. The first public use release of the binge drinking question will be the 2015 data, released in June of 2016.

The current NHIS Sample Adult core questions (1997-2018) are:

1. In ANY ONE YEAR, have you had at least 12 drinks of any type of alcoholic beverage?
2. *If no:* In your ENTIRE LIFE, have you had at least 12 drinks of any type of alcoholic beverage?
3. In the PAST YEAR, how often did you drink any type of alcoholic beverage?
4. In the PAST YEAR, on those day that you drank alcoholic beverages, on the average, how many drinks did you have?
5. In the PAST YEAR, on how many DAYS did you have {5 or more, if male; 4 or more, if female} drinks of any alcoholic beverage? [threshold for women changed from 5 drinks to 4 in 2014] *{If 1-365 days, then ask:}*

6. Considering all types of alcoholic beverages, DURING THE PAST 30 DAYS, how many times did you have {5 or more, if male; 4 or more, if female} drinks on an occasion? [new in Q4, 2014]

This background investigation to inform the 2019 questionnaire redesign involved two phases.

In phase 1, we examined 2014 NHIS alcohol questions and their correlation with each other and with selected health conditions. For analysis of conditions, we used a combined 2011-2014 data file in order to improve stability of estimates for low prevalence liver conditions. We sought to determine: (1) if the number of days with 5+ drinks based on usual intake and the number of days with 5+ drinks based on asking the respondent directly added unique and important information for classifying alcohol drinking status and, (2) if failure to classify lifetime abstainers, lifetime infrequent (also called “former infrequent”) and former regular drinkers would hinder the analytic utility of NHIS alcohol variables.

In phase 2, we looked at results from the 1988 NIAAA-sponsored NHIS alcohol use supplement. This supplement used a 2-week reference period but included questions about past year alcohol use for adults who had not had a drink in the previous two weeks. Data from the 1988 Alcohol supplement was examined in order to assess whether recent drinking practices (past 2 weeks) are likely to accurately reflect usual alcohol use and provide sufficient information for using alcohol use as a covariate for health-related research.

The 1988 NHIS Alcohol supplement contained an extensive array of alcohol questions. See: https://www.cdc.gov/nchs/data/series/sr_10/sr10_173.pdf. The key questions used to inform 2019 redesign decisions are:

1. In YOUR ENTIRE LIFE, have you had at least 12 drinks of any kind of alcoholic beverage?
2. In the PAST 12 MONTHS, did you have at least 12 drinks of any kind of alcoholic beverage?
3. In ANY ONE YEAR of your entire life did you have at least 12 drinks of ANY kind of alcoholic beverage?
4. [If Q 2 = “yes”] On the average, how often do you drink any alcoholic beverages?
5. [If Q 2 = “yes”] On the average, on the days that you drink alcohol, how many drinks do you have a day?
6. Did you have a drink during the 2-week period beginning Monday {date} and ending Sunday {date}? [Quantity and frequency were then asked for beer, wine and liquor separately. Not analyzed.]

METHODS

2011-2014 NHIS Sample Adult

The Adult Health Behaviors (AHB) section of the sample adult component includes all alcohol-related measures in the NHIS since 1997. Using the NHIS Sample adult for 2014, we first examined prevalence of lifetime alcohol use, average heavy drinking days, episodic heavy drinking days, and binge drinking for adults aged 18 and over and for three age groups (18-44, 45-64, and 65+) [Table 1]. The main goal of the analyses in phrase 1 was to show how different alcohol measures relate to one another and to present current estimates. Thus demographic variability in drinking behavior, other than age, was not examined. Data from the 2014 NHIS were also used to calculate the percentage of adults 18 and over

who had at least one episodic heavy drinking day and at least one binge drinking experience in the past 30 days, by current drinking status (Table 3). Estimates corresponding to ‘average heavy drinking days’ (Table 1), ‘episodic heavy drinking days’ and binge drinking (Tables 1 and 3) are based on 4 or more drinks for females and 5 or more drinks for males, and estimates for both genders are combined in the overall estimate presented.

To compare the agreement between ‘average heavy drinking days’ and ‘episodic heavy drinking days’ (Table 2), data from the 2011-2013 NHIS were utilized. The analysis was restricted to the 2011-2013 NHIS to correspond to the latest survey years when both males and females were asked about the same quantity of drinks (5 or more drinks in a day).

The 2011-2014 NHIS were combined to compare alcohol use practices in terms of prevalence of selected health conditions (fair or poor health status, ever having been diagnosed with liver disease, having two or more chronic health conditions, and being a current cigarette smoker) (Table 4). Chronic health conditions were based on a positive response to ever having been told by a doctor or health care provider that they have/had cancer (excluding non-melanoma); hypertension; coronary heart disease; stroke; currently have asthma; diabetes; hepatitis; weak or failing kidneys, any of the following three respiratory conditions: chronic obstructive pulmonary disease, emphysema, or chronic bronchitis in the past 12 months; or any of the following five conditions: arthritis, gout, lupus, rheumatoid arthritis or fibromyalgia.

All estimates presented in tables 1-4 were weighted using the sample adult weight (WTFA_SA). Statistical analysis to test for reliability between average and episodic drinking were conducted in SUDAAN version 10.0 using crosstab agree statement for categorical comparison (Kappa statistic) and vargen for continuous comparison (Pearson correlation). Point estimates and 95% confidence intervals of selected health measures by alcohol behavior were also calculated using SUDAAN.

1988 NHIS Alcohol Supplement

The 1988 NHIS Alcohol supplement collected detailed information of current and past alcohol use and allowed assessment of the extent to which the previous 2-week drinking reflected usual alcohol use. This is the closest approximation we have to the proposed 30-day recall period. The questions about current drinking were asked only of adults who had had at least 12 drinks in the past year which differs from the current NHIS but is consistent with the classification of “current regular drinkers” that has been used in the NHIS since 1997. In fact, the current threshold was decided upon based on lessons learned from the 1988 supplement (https://www.cdc.gov/nchs/data/series/sr_10/sr10_173.pdf). The dataset includes a drinking status recode that classifies lifetime status although it does not have a recode comparable to “alcstat” to assign levels of current drinking. All estimates were weighted using the supplement weight (wtfa). Analyses of the 1988 data file were done in SAS 9.4 and standard errors of the estimates were not calculated.

RESULTS

2011-2014 NHIS Adult Health Behavior Questions (Tables 1-4)

At least 1 in 3 (34.3%) adults aged 18 and over did not consume alcohol in the past year, including 20.9% who were lifetime alcohol abstainers (Table 1). A higher percentage of alcohol abstinence in the

past year occurred among those aged 65 and older (48.7%), compared with those aged 18-44 (29.9%) and those aged 45-64 (32.4%). Former drinkers accounted for almost half of the total percentage who did not consumed alcohol in the past year among those 45-64 (15.9%) and those 65 and over (23.9%).

The second most common lifetime drinking status among adults aged 18 and over was ‘light drinker’ (30.6%), followed by ‘moderate drinkers’ (15.2%), ‘infrequent drinkers’ (12.9%) and ‘heavy drinkers’ (5.2%) – see¹ for definitions. This distribution pattern in lifetime drinking status was similar within age groups 18-44, 45-64 and 65 and over.

The measure of current heavy drinker intends to capture an average consumption component of “at-risk drinking” for alcohol abuse and other health problems. The NHIS measure of average current heavy drinking is consistent with the 2015 Dietary Guidelines for Americans. Estimates for average heavy drinking have remained stable since first measured in the NHIS in 1997², and as observed in the lifetime drinking status distribution, it is a rare behavior among adults of all ages³.

Current heavy drinking is derived from questions that asks about average quantity-frequency consumption of alcohol in the past year, thus this set of questions may not encompass those occasions when heavy drinking occurs irregularly. A separate question in the NHIS attempts to capture directly episodic heavy drinking, operationalized in NHIS as 5 or more drinks for men and 4 or more drinks for women on the same day during the past year. Episodic heavy drinking is henceforth called ‘an episodic heavy drinking day.’ An ‘episodic heavy drinking day’ is another component of ‘at-risk’ for alcohol-related harm. Its purpose is to capture those who have, at times, engaged in high risk drinking behavior without it being a regular behavior. The objective of also measuring episodic drinking days stems from an observed ‘preventive paradox’ where the majority of alcohol-related harm occurs among low risk drinkers.⁴ The confounding of increased harm among low quantity-frequency drinkers is largely explained by occasions of high risk drinking.

To illustrate the difference in measurements between episodic heavy drinking days and ‘typical’ or average heavy consumption, we calculated the number of days during the year that a person had 5 or more drinks, using the questions that ask for the number of drinks consumed on days the respondent drank and the total number of days drank during the year, and compared this with the responses to the episodic drinking (5+/4+ in a day) question (Table 1). On average 9 out of 10 current drinkers (88.3%) drank 1 to 4 drinks on the days that they drank. Most of those who, on average, consumed 5 or more drinks when they drank did so on 12 or more days in the past year (9.9%); only 1.9% drank this much on 1-11 days during the year. The percentage who usually had 5 or more drinks and drank at least 12 days

¹ Drinking status are based on questions ALC1YR, ALCLIFE, ALC12MYR, ALCAMT and SEX.

Lifetime abstainer: consumed 0-11 drinks in lifetime;

Former infrequent: consumed at least 12 drinks in entire lifetime, but not in any one year and had 0 drinks in the past year;

Former regular: consumed at least 12 drinks in any one year but had 0 drinks in the past year;

Current infrequent: consumed at least one but fewer than 11 drinks in the past year;

Current light: consumed 3 or fewer drink on average per week in the past year;

Current moderate: consumed 4-14 drinks (male) or 4-7 drinks (female), on average per week in the past year;

Current heavy: consumed 15 or more drinks (male) or 8 or more drinks (female) on average per week in the past year.

² See Health Behaviors of Adults: United States, 2011-2014, <https://www.cdc.gov/nchs/nhis/SHS/tables.htm>, and Vital and Health Statistics Reports, Series 10, Numbers 257, 245, 230, and 219 for earlier survey years.

³ In 2014, the sample size for average current heavy drinker was 1,922 for all sample adults. Note that monitoring and reporting of demographic and socioeconomic disparities in current heavy drinking, and its relation to other health conditions has commonly required analysts to combine least two survey years of data in order to produce more reliable estimates.

⁴ Personal communication from NIAAA to NCHS, January 19, 2000.

in the past year was higher among those 18-44 (14.3%), compared with 45-64 (6.6%) and 65 and over (2.6%).

The distribution of episodic heavy drinking illustrates the underestimate in heavy drinking that occurs when using questions that ask about average drinking (Table 1). With the question that asks respondents directly about days with 5+/4+ drinks, 61.0% of current drinkers had zero heavy drinking days in the past year, compared with 88.3% based on usual (average) drinking-- an absolute difference of 27.3% percentage points. Based on the direct episodic heavy drinking day question, 23.5% of current drinkers had 5+/4+ drinks in one day on 1-11 days and 15.4% had 5/4 or more drinks on 12 or more days in the past year. Among younger drinkers (aged 18-44) more than half had at least one episodic heavy drinking day in the past year (51.3%), with 30.8% drinking this much on 1-11 days and 20.5% on 12+ days. Prevalence of this behavior was lower among those 45-64 (31.8%) for both 1-11 days (19.6%) and 12+ days (12.2%) and lowest among those aged 65 and over (14.2%) for both 1-11 days (8.2%) and 12+ days (6.0%).

Table 2 illustrates the reliability in responses between having, on average, 5 or more drinks and having episodic heavy drinking days in the past year among current drinkers, using data from the 2011-2013 NHIS. (Note: this was prior to the 2014 change to the threshold for episodic heavy drinking for women). The largest observed agreement occurred among those with zero days of 5 or more drinks on average and zero episodic heavy drinking days (64.4%). Conversely, about 8% of current drinkers agreed on having had at least 12 days where on average they had 5 or more drinks and at least 12 days of heavy drinking days, while 1.4% agreed on the 1-11 day categories. The 26.5% of current drinkers who disagreed on average versus the episodic measure were almost exclusively found among those who on average drank 4 or fewer drinks. About 18% of current drinkers who on average had 0 days with 5 or more drinks in the past year also had 1 to 11 episodic heavy drinking days in the past year. About 7.1% of current drinkers who did not, on average, have 5 or more drinks had at least 12 heavy drinking days in the past year. While it is possible that some disagreement may exist due to respondent error or interviewer error, the error is uncommon in the other direction, suggesting that at least most of the disagreement is genuine. Only 1.4% of current drinkers reported more days where on average they had 5 or more drinks than heavy drinking days. Statistical tests of reliability suggest a moderate to high agreement between average and episodic drinking among current drinkers (Kappa Statistic of 0.34 for categorical comparison, and Pearson correlation of 0.82 for continuous number of days). However, there is a qualitative significance in average low-risk drinkers engaging in occasional high-risk drinking that should not be ignored, as this segment of current drinkers are also at increased risk of alcohol-related harm.

In 2014, NHIS included an additional question with past 30-day reference period that asked about having 5+/4+ drinks in a period of time that would be expected to lead to intoxication, henceforth referred to as binge drinking. In quarters 1-3, the binge drinking question asked about drinking 5+/4+ drinks 'in about two hours'; in Quarter 4 the wording was revised to "on an occasion" based on preliminary analyses that suggested respondents were interpreting the 2-hours too literally and not reporting binge drinking episodes. One in ten (10.3%) current drinkers had 5+/4+ drinks in a two-hour period, while 21.2% of current drinkers had 5+/4+ drinks on an occasion, in the last 30 days (Table 1). The percentage of current drinkers (and among all adults) who had at least one binge drinking experience in the past 30 days was two to three times higher when the question used the less fixed reference period 'on an occasion.'

Overall, there is consistency in the pattern of drinking behavior derived from different alcohol questions (Table 1). The percentage of current drinkers who engaged in binge drinking in the past 30 days, using

either reference period, was lower than the percentage of current drinkers who had at least one episodic heavy drinking day in the past year. Moreover, the high percentage of current drinkers engaging in a heavy drinking day in the past year or binge drinking in a 30-day period support that adults who on average consume low quantity-frequency of alcohol (such as current infrequent and current light) are also engaging in episodic high-risk drinking behavior.

Table 3 shows the percentage of current drinkers who had at least one episodic heavy drinking day in the past year and those who engaged in binge drinking in the past 30 days, by average current drinking status in the past year (average quantity-frequency consumption). Estimates in the first three columns of table 3 are based among all current drinkers in the past year while estimates in the last two columns are nested among those who reported having 5+/4+ or more drinks in the past year, which is the subpopulation that was asked the question about binge drinking.

About 7.3% of current infrequent drinkers had at least one episodic heavy drinking day in the past year; less than 2% of current infrequent drinkers had a binge drinking experience in the past 30 days (using either the 2-hour or on an occasion reference periods). Among those infrequent drinkers who had an episodic heavy drinking day in the past year, 15.2% to 22.1% also had a binge drinking experience in the past 30 days.

Among current light drinkers, a third (33.9%) had at least one episodic heavy drinking day in the past year, 7.2% had a binge drinking experience in a 2-hour period and 13.7% had a binge drinking experience on an occasion in the past 30 days. About 4 in 10 (40.3%) current light drinkers who had an episodic heavy drinking day in the past year also had a binge drinking occasion in the past 30 days.

The majority of current heavier drinkers (84.8%) and current moderate drinkers (61.2%) also had at least one episodic heavy drinking day in the past year. Almost twice as many current heavy drinkers (63.1%) as current moderate drinkers (38.9%) had a binge drinking occasion in the last 30 days. Among those current moderate and current heavy drinkers who had an episodic heavy drinking day in the past year, more than two-thirds of them also had a binge drinking occasion in the past 30 days (66.4% of current moderate and 75.7% of current heavy).

In general, the percentage of current drinkers who had at least one episodic heavy drinking day in the past year and the percentage who had a binge drinking occasion in the past 30 days increased with the average quantity-frequency of alcohol consumed in the past year (i.e. current drinking status). However, current moderate drinkers and current heavy drinkers who had an episodic heavy drinking day in the past year were more consistently likely to also have had a binge occasion in the past 30 days than those who were infrequent and light current drinkers. Less than half of current infrequent (22.1%) and current light drinkers (40.3%) who had at least one episodic heavy drinking day in the past year had also engaged in binge drinking on an occasion in the past 30 days.

In summary, the findings of tables 1 and 3 support that:

- A non-trivial percentage of adults did not drink alcohol in the past year which includes both lifetime abstainers and former drinkers.
- Current drinking status (based on average quantity-frequency consumption) and episodic heavy drinking days (5+/4+ in a day) deliver complementary components of 'at-risk drinking' and are not duplicate measures of alcohol behavior.
- Having had an episodic heavy drinking day in the past year may be less predictive of binge drinking in the last 30 days among those who, on average, have a low alcohol quantity-

frequency consumption than in those who have a higher alcohol quantity-frequency consumption.

Table 4 shows the association between NHIS alcohol measures and selected health conditions by age group. These results illustrate the relevance of the more complete picture of current and lifetime alcohol consumption for understanding the health of US adults.

Lifetime drinking status: Among adults aged 18 and over, former drinkers were the least healthy relative to those with other drinking statuses, but no more likely to be current smokers than those who were light to moderate drinkers.

- Lifetime infrequent (25.0%) and former regular drinkers (27.8%) were more likely to have fair or poor health than lifetime abstainers (16.1%) and all current drinkers (7.2% to 14.3%).
- Former drinkers were more likely to have liver disease (2.1% to 3.0%), compared to lifetime abstainers (0.9%) and all current drinkers (0.8% to 1.4%).
- About 4 in 10 lifetime infrequent (42.1%) and former regular drinkers (45.4%) had at least 2 chronic conditions, compared with 1 in 4 of lifetime abstainers (25.0%) and less than 1 in 3 of all current drinkers (range 18.7% - 29.7%).
- Current heavy drinkers were the most likely to be current smokers (37.9%) followed by current moderate drinkers (22.6%); lifetime abstainers were the least likely (7.9%) to smoke. About 1 in 5 lifetime infrequent (19.5%), former regular (20.2%) and current infrequent (19.3%) and current light drinkers (17.5%) were current smokers.

Average heavy drinking versus episodic heavy drinking days in the past year: Among adults aged 18 and over, the pattern of current health status, diagnosed chronic conditions, and current smoking behavior were not consistent between the measures of average heavy drinking and episodic heavy drinking days.

- Those who, on average, had 5 or more drinks on 1-11 days in the past year (14.7%) were more likely than those with 0 days (8.9%) and those with 12 or more days (10.3%) to have fair or poor health. However, when examining episodic heavy drinking days, those who had 0 episodic heavy drinking days (10.0%) were more likely to have fair or poor health than those who had at least one heavy drinking day (6.5% for 1-11 days and 9.1% for 12 or more days).
- The percentage who ever had liver disease was slightly higher among those who, on average, had 1-11 heavy drinking days (1.8%) than in those with 0 days (0.9%) or 12 or more (1.1%) average heavy drinking days. In contrast, the percentages with liver disease were about the same for three groupings of episodic heavy drinking days (1.0 for 0 days, 0.9% for 1-11 days and 1.1% for 12 or more days). Note that liver disease is rare.
- Drinkers who averaged 5 or more drinks on at least 12 days had a lower percentage of having 2+ chronic conditions (14.9%), compared with those who drank this amount for 1-11 days (20.4%) or never (22.1%) in the past year. In contrast, drinkers who had either 1-11 or 12+ episodic heavy drinking days (14.3% and 15.8%, respectively) were less likely to have 2+ chronic conditions than those with 0 episodic heavy drinking days (25.1%).
- The percentage of current drinkers who were current smokers was higher among those with more average and episodic heavy drinking days. The smoking rate among drinkers who averaged 5 or more (male)/ 4 or more (female) drinks on 1-11 drinking days (37.3%) was notably higher than among drinkers who reported 1-11 episodic heavy drinking days (23.2%).

Binge drinking occasion: Although estimates are based on 2014 -quarter 4 data only (and based on a smaller sample size which may impact precision), current drinkers aged 18 and over who had a binge occasion in the past 30 days were healthier than those without a binge occasion.

- A lower percentage of current drinkers with a binge occasion in the past 30 days had poor or fair health (6.5%), compared with current drinkers without a binge occasion (9.5%).
- About 17% of binge drinkers had at least two chronic conditions, compared with 25.2% of current drinkers without a binge occasion.
- Consistent with other measures of at-risk drinking, however, current smoking was higher among those who had a binge drinking occasion (28.6%) than those without a binge drinking occasion (14.5%).
- There were no marked differences in liver disease among current drinkers by binge drinking occasion.

Table 4 shows the prevalence of selected health measures by alcohol behavior, stratified by ages 18-44, 45-64 and 65 and over. These tables also support that the relationship between health conditions differs by various measures of alcohol risk, independent of age.

In summary, the findings from Table 4 support that:

- The relationship between health status, health conditions and smoking varies by lifetime drinking status and measures of current drinking based on a past year and 30-day reference periods.
- A healthy drinking paradox was found when examining measures of more recent at-risk drinking with selected health measures. That is, more recent experiences of at-risk drinking were associated with good health (as defined by health status, liver disease and number of chronic conditions). In contrast, those who were no longer drinking or those who engaged in at-risk drinking sporadically had worse health outcomes.
- The relationship between binge drinking in the past 30-days and health outcomes supports that binge drinking may be occurring among those who are in better health, however estimates are imprecise due to small sample size.

1988 NHIS Alcohol Supplement (Tables 5-7)

The proposal to move from a 12-month recall to a 30-day recall period for alcohol use raises at least two questions. First, does a 30-day recall period adequately represent usual drinking behavior for US adults? Who are we missing by not asking about a longer reference period? Second, and probably more important for a health survey, who do we miss by not being able to determine a lifetime context of alcohol use—that is, lifetime abstainer, lifetime infrequent and former drinkers? Does it matter for understanding health whether or not people used to drink or not? By moving to a 30-day recall without additional questions about past year alcohol use, the NHIS would be losing the ability to identify former drinkers (defined as having had at least 12 drinks in their lifetime but none in the past year). The proposed item for ever had 12 drinks in lifetime does not provide anything more than a lifetime abstainer category.

We have no way of assessing directly the impact of a 30-day recall on estimates of alcohol use. However, data from the 1988 alcohol use supplement provides context for understanding the relationship between a very recent (2-week) recall period and a 12-month recall period (that has been

used on the NHIS since 1997.) This is the closest approximation we have to the 30-day recall that has been suggested for the annual core.

Table 5 shows that over half (51.6%) of adults were classified as current drinkers in 1988 (having had at least 12 drinks of alcohol in the past year) which nearly identical to the estimate of current regular drinkers in the 2014 NHIS (52.2%). Substantial age variations in lifetime drinking status were observed with the oldest group (65+) twice as likely as the youngest (18-44) to be lifetime abstainers and the youngest twice as likely as the oldest to be current drinkers.

Among past 12-month drinkers, about 80% had had a drink in the past two weeks. Although past 2-week drinking status among drinkers did not vary substantially by age, the percentage of current drinkers who reported that their 2-week drinking was *typical* of their usual drinking did vary by age. Adults aged 18-44 were more likely to say that the past 2-weeks was *not typical* of their usual drinking (28.6%) compared with adults 45-64 (20.4%) and adults 65 and over (14.2%).

Among drinkers whose past 2-weeks were not typical of their usual drinking levels, almost 8 in 10 of younger drinkers aged 18-44 (77.4%) and 45-64 (78.1%) said their drinking in the past 2 weeks was *more* than their typical drinking. Drinkers aged 65 and over were less likely to say they drank more and, in fact, about 1 in 3 (31.3%) said their most recent drinking was *less* than typical.

Finally, table 5 reveals something about age differences in types of alcohol consumed. Although alcohol preferences varied substantially by age--- with “beer only” being the beverage of choice for the youngest drinkers and “liquor only” being the beverage of choice for those 65 and over, the beverage choices did not differ substantially between those whose past 2-week drinking was typical versus those for whom it was atypical.

Table 6 shows reasons for adults not drinking by lifetime drinking status. For the current drinker category, this applies to adults who drank in the past year but not in the past 2 weeks. As would be expected, reasons for not drinking vary substantially by drinking status. Over 80% of lifetime abstainers said they either didn’t like alcohol or it was against their religious or moral principles. The most relevant finding here, however is that over 34% of former drinkers and over 20% of current drinkers said they had not had a drink because of either an alcohol or other health problem.

Table 7 provides additional information on the association between lifetime drinking status and health conditions. Although prevalence of some of these conditions is small, the data clearly suggest a “healthy drinker” effect. Overall, 12% of adults were in fair or poor health in 1988, with estimates for current drinkers (7.0%) substantially lower than for former (17.7%), lifetime infrequent (16.2%) and lifetime abstainers (17.7%). For most conditions studied, former drinkers were more likely to report the condition than current drinkers. Particularly noteworthy was the estimate of alcoholism among former drinkers (6.4% compared with current drinkers (1.8%). Prevalence of conditions among those who drank in the past 2 weeks compared with those who did not, showed only modest differences. The most noteworthy differences were the higher percentage in fair or poor health, and with ulcers and alcoholism among those who drank in the past year but *not* in the past 2 weeks. The differences are small and have not been tested for statistical significance, but they are suggestive that drinkers with problems may not have had a drink during the recent reporting period.

Conclusions from the 1988 alcohol supplement

Although there is no way to know how 2-week and 30-day recall periods compare, data from the 1988 alcohol supplement suggest that moving to solely a 30-day recall may cause us to lose important information about links between alcohol and health. In 20% of cases, recent drinking does not reflect typical drinking and many adults who have not had a drink, either recently (more than 2 weeks ago) or more long term (former drinkers), have abstained for health reasons.

CONCLUSIONS

Alcohol use behavior is an important measure linked to various health outcomes. Findings from this report support that a 12-month reference period is informative and can provide additional information that may be missed from a 30-day reference period alone for assessing typical drinking behavior. In addition, studies indicate that both episodic heavy drinking and usual drinking behavior are important behavioral health measures to characterize in the population. Episodic heavy drinking (5+/4+ drinks in a day) and binge drinking behavior (5+/4+ drinks on an occasion) have been shown in other studies to be important indicators of excessive alcohol use. Analysis of mortality associated with episodic heavy drinking, controlling for usual drinking level, revealed that episodic heavy drinking increased risk of liver-related death over an 8-year period.⁵ Analysis of alcohol-attributable deaths revealed significant mortality risk associated with excessive drinking including binge drinking.⁶ This information, combined with input from data users and alcohol experts, should be used to determine the alcohol content in the NHIS going forward.

⁵ Schoenborn CA, Stommel M, Ward BW. Mortality risks associated with average drinking level and episodic heavy drinking. *Substance Use & Misuse* 2014;49:1250–1258.

⁶ Stahre M, Roeber J, Kanny D, Brewer RD, Zhang X. Contribution of Excessive Alcohol Consumption to Deaths and Years of Potential Life Lost in the United States. *Prev Chronic Dis* 2014;11:130293.

Table 1. Percent distributions of selected alcohol use indicators among U.S. adults by age group (WEIGHTED): NHIS, 2014

Alcohol use	Adults 18+	18–44 years	45–64 years	65+ years
Lifetime Drinking Status (denominator: all adults)				
Lifetime abstainer	20.9	22.6	16.5	24.8
Lifetime Infrequent ¹	7.9	4.4	9.6	13.7
Former regular	5.5	2.9	6.3	10.2
Current infrequent	12.9	11.8	14.8	12.1
Current light	30.6	35.4	29.3	21.1
Current moderate	15.2	15.8	16.0	12.4
Current heavier	5.2	5.3	5.6	4.0
Number of average heavy drinking days (based on usual daily amount (5+/4+) and number of days drank in past year) ^{2,3}				
No days	88.3	82.9	92.3	96.9
1–11 days	1.9	2.8	1.1	0.4
12+ days	9.9	14.3	6.6	2.6
Number of episodic heavy drinking days (5+/4+ drinks in a day), asked directly ^{2,3}				
No days	61.0	48.7	68.1	85.9
1–11 days	23.5	30.8	19.6	8.2
12+ days	15.4	20.5	12.2	6.0
1+ binge drinking 2-hour EPISODES in past 30 days ^{3,4} (current drinkers)	10.3	15.7	6.0	2.1
1 + binge drinking OCCASIONS in past 30 days ^{3,5} (current drinkers)	21.2	28.4	17.0	6.9
1+ binge drinking 2-hour EPISODES in past 30 days ⁴ (among all adults)	6.6	10.8	4.0	1.1
1 + binge drinking OCCASIONS in past 30 days ⁵ (among all adults)	15.6	23.3	12.7	3.6

¹Also termed "former infrequent" and is defined as < 12 drinks in any one year on one's lifetime.

²Based on men who had who 5 or more drinks and women who had 4 or more drinks.

³Denominator is adults who drank in past year.

⁴Quarters 1–3. Question asked only of adults who had had 5+/4+ drinks in one day. Percentages reflect percent of all adults.

⁵Quarter 4. Question asked only of adults who had had 5+/4+ drinks in one day. Percentages reflect percent of all adults.

SOURCE: NCHS, National Health Interview Survey, 2014.

Table 2. Comparison of directly asked¹ and calculated² number of days that current drinkers had 5 or more drinks in one day in the past year: NHIS, 2011–2013

5+ drinks in one day (asked directly) ²	Days had 5+ drinks, on average, on days drank (calculated) ¹			
	Total	12+ Days	1–11 Days	0 Day
Sample Size				
Total	84,497	7,598	1,303	75,596
12+ Days	12,491	6,527	0	5,964
1–11 Days	17,363	898	1,225	15,240
0 Day	54,643	173	78	54,392
Percentage				
Total	100.0%	9.0%	1.5%	89.5%
12+ Days	14.8%	7.7%	0.0%	7.1%
1–11 Days	20.5%	1.1%	1.4%	18.0%
0 Day	64.7%	0.2%	0.1%	64.4%

¹Based on questions: "In the past year, how often did you drink any type of alcoholic beverage?" and "In the PAST YEAR, on those days that you drank alcoholic beverages, on the average, how many drinks did you have?" Drinkers who reported usually having 5 or more (alcamt) were classified into three categories based on the number of days they drank (alc12myr). Zero day category includes those who on average drink 4 or fewer drinks.

²Based on the question: "In the past year, on how many DAYS did you have 5 or more drinks of any alcoholic beverage?" (alc5upyr)

SOURCE: NCHS, National Health Interview Survey, 2011–2014.

Table 3. Percentage of adults who had at least one heavy drinking day (5+/4+ drinks in one day) and percentage who had at least one binge drinking episode or binge occasion, by current average drinking level: NHIS, 2014

Average drinking level - all current drinkers	Any 5+/ 4+ drinking days in past year ¹	Quarters 1–3 Any binge episode (2 hour) ¹ [PAST 30 DAYS]	Quarter 4 Any binge occasion ¹ [PAST 30 DAYS]	Quarters 1–3 Any binge episode (2 hour) among drinkers WHO WERE ASKED THE QUESTION ²	Quarter 4 Any binge occasion among drinkers WHO WERE ASKED THE QUESTION ²
Total	39.0	10.3	21.2	26.5	55.2
Current infrequent (< 12 in past year)	7.3	1.1	1.6	15.2	22.1
Current light (< 3 drinks per week)	33.9	7.2	13.7	21.4	40.3
Current moderate (3–7 drinks females or 14 drinks males, per week)	61.2	17.7	38.9	28.6	66.4
Current heavier (> 7 drinks females or >14 drinks males, per week)	84.8	31.1	63.1	36.5	75.7

¹Among adults who had at least one drink in the past year.

²Question was asked only of current drinkers said they had had 5+ drinks (if male) or 4+ drinks (if female) in one day in the past year. Reference period is PAST 30 DAYS.

NOTE: Estimates are weighted.

SOURCE: NCHS, National Health Interview Survey, 2014.

Table 4. Percentage (and 95% confidence intervals) of adults aged 18+ years and by age group with selected health conditions, by alcohol use: NHIS, 2011–2014

Alcohol use	Fair/poor health	Liver disease (ever)	2+ Chronic conditions	Current Smoker
Adults aged 18 and over				
Lifetime Drinking Status				
Lifetime abstainer	16.1 [15.5-16.7]	0.9 [0.8-1.1]	25.0 [24.3-25.7]	7.3 [6.8-7.7]
Lifetime Infrequent	25.0 [24.1-26.0]	2.1 [1.9-2.5]	42.1 [41.0-43.3]	19.5 [18.6-20.5]
Former regular	27.8 [26.6-29.0]	3.0 [2.6-3.4]	45.4 [44.0-46.8]	20.2 [19.1-21.4]
Current infrequent	14.3 [13.7-15.0]	1.4 [1.2-1.6]	29.7 [28.9-30.6]	19.3 [18.4-20.3]
Current light	7.6 [7.3-8.0]	0.8 [0.7-0.9]	18.8 [18.3-19.3]	17.5 [17.0-18.1]
Current moderate	7.2 [6.7-7.6]	0.8 [0.7-1.0]	18.7 [18.0-19.5]	22.6 [21.8-23.5]
Current heavier	10.5 [9.6-11.4]	1.3 [1.0-1.7]	24.0 [22.7-25.3]	37.9 [36.3-39.6]
Current Drinkers				
Average heavy drinking (5+/4+ in a day), using alc12myr & alcamt:				
No days	8.9 [8.6-9.2]	0.9 [0.9-1.0]	22.1 [21.7-22.5]	18.2 [17.7-18.6]
1–11 days	14.7 [12.3-17.6]	1.8 [1.2-2.9]	20.4 [17.5-23.8]	37.3 [33.7-41.1]
12+ days	10.3 [9.5-11.2]	1.1 [0.8-1.4]	14.9 [13.8-16]	42.8 [41.2-44.3]
Episodic heavy drinking (5+ in a day)				
No days	10.0 [9.6-10.3]	1.0 [0.9-1.1]	25.1 [24.6-25.6]	15.7 [15.3-16.2]
1–11 days	6.5 [6.0-7.0]	0.9 [0.7-1.00]	14.3 [13.6-15.1]	23.2 [22.3-24.2]
12+ days	9.1 [8.4-9.7]	1.1 [0.9-1.3]	15.8 [14.9-16.7]	38.0 [36.7-39.2]
Binge drinking occasion in past 30 days ¹				
No occasions	9.5 [8.3-10.2]	1.1 [0.9-1.4]	25.2 [24.3-26.2]	14.5 [13.7-15.4]
1+ occasion	6.5 [5.1-8.4]	0.6 [0.3-1.1]	16.9 [14.2-19.9]	28.6 [25.0-32.4]

Table 4. Percentage (and 95% confidence intervals) of adults aged 18+ years and by age group with selected health conditions, by alcohol use: NHIS, 2011–2014

Alcohol use	Fair/poor health	Liver disease (ever)	2+ Chronic conditions	Current Smoker
Adults aged 18-44 years				
Lifetime Drinking Status				
Lifetime abstainer	7.4 [6.8-8.0]	0.5 [0.4-0.7]	5.6 [5.1-6.1]	7.2 [6.5-8.0]
Lifetime Infrequent	14.0 [12.5-15.6]	1.2 [0.8-1.7]	13.8 [12.3-15.5]	23.7 [21.7-25.8]
Former regular	12.0 [10.3-13.9]	1.6 [1.0-2.6]	12.2 [10.4-14.2]	23.4 [21.1-25.8]
Current infrequent	8.9 [8.2-9.7]	0.8 [0.6-1.1]	10.9 [10.0-11.8]	22.2 [20.8-23.7]
Current light	4.9 [4.6-5.3]	0.6 [0.5-0.7]	6.1 [5.7-6.6]	19.8 [19.0-20.6]
Current moderate	4.4 [3.9-4.9]	0.3 [0.2-0.5]	5.0 [4.5-5.6]	27.1 [25.9-28.3]
Current heavier	6.3 [5.4-7.4]	0.7 [0.4-1.1]	8.2 [7.1-9.4]	43.4 [41.0-45.7]
Current Drinkers				
Average heavy drinking (5+/4+ in a day), using alc12myr & alcamt:				
No days	5.3 [5.1-5.7]	0.5 [0.5-0.7]	6.8 [6.4-7.1]	20.6 [19.9-21.2]
1–11 days	11.3 [8.9-14.2]	1.6 [0.9-2.8]	12.9 [10.1-16.3]	37.6 [33.5- 42.0]
12+ days	6.3 [5.6-7.2]	0.5 [0.4-0.8]	6.6 [5.8-7.5]	41.6 [39.6- 43.5]
Episodic heavy drinking (5+/4+ in a day)				
No days	6.2 [5.8- 6.6]	0.6 [0.5- 0.7]	7.5 [7.1 - 8.0]	18.1 [17.4-18.8]
1–11 days	4.6 [4.1-5.0]	0.5 [0.4- 0.7]	6.1 [5.6- 6.7]	23.6 [22.5-24.8]
12+ days	5.6 [5.0- 6.3]	0.5 [0.3- 0.7]	6.3 [5.6 -7.1]	38.6 [37.1- 40.1]
Binge drinking occasion in past 30 days ¹				
No occasions	5.6 [4.9-6.4]	0.6 [0.4-0.9]	7.6 [6.7-8.6]	17.3 [15.9-18.7]
1+ occasion	4.8 [3.2-7.1]	0.4 [0.1-0.9]	6.2 [4.4-8.7]	28.3 [23.9-33.1]

Table 4. Percentage (and 95% confidence intervals) of adults aged 18+ years and by age group with selected health conditions, by alcohol use: NHIS, 2011–2014

Alcohol use	Fair/poor health	Liver disease (ever)	2+ Chronic conditions	Current Smoker
Adults aged 45-64 years				
Lifetime Drinking Status				
Lifetime abstainer	21.7 [20.5-22.8]	1.4 [1.2-1.8]	31.3 [29.9-32.6]	9.3 [8.5-10.1]
Lifetime Infrequent	29.5 [27.9-31.2]	3.2 [2.6-3.8]	44.5 [42.7-46.4]	23.5 [21.9-25.1]
Former regular	33.3 [31.2-35.4]	4.3 [3.6-5.2]	47.1 [44.9-49.3]	25.5 [23.6-27.5]
Current infrequent	18.5 [17.3-19.7]	2.1 [1.7-2.6]	36.3 [34.8-37.7]	20.3 [19.0-21.6]
Current light	10.5 [9.8-11.2]	1.2 [1.0-1.4]	26.7 [25.8-27.7]	17.4 [16.5-18.2]
Current moderate	9.4 [8.6-10.3]	1.3 [1.1-1.7]	23.4 [22.2-24.7]	22.2 [20.9-23.5]
Current heavier	15.0 [13.3-16.9]	2.1 [1.5-2.8]	31.5 [29.1-34.1]	38.3 [35.6-41.1]
Current Drinkers				
Average heavy drinking (5+/4+ in a day), using alc12myr & alcamt:				
No days	11.7 [11.2-12.3]	1.4 [1.2- 1.6]	28.1 [27.4-28.8]	18.9 [18.2-19.6]
1–11 days	24.5 [18.6-31.4]	2.7 [1.4- 5.3]	39.5 [32.3-47.3]	38.2 [31.3-45.7]
12+ days	19.9 [17.8-22.3]	2.5 [1.9- 3.5]	32.1 [29.3-35.0]	48.7 [45.7-51.6]
Episodic heavy drinking (5+/4+ in a day)				
No days	12.5 [11.9-13.1]	1.4 [1.2- 1.6]	28.7 [27.9-29.5]	16.9 [16.3-17.7]
1–11 days	10.0 [9.0-11.1]	1.5 [1.1- 2.0]	26.7 [25.2-28.2]	23.7 [22.3-25.3]
12+ days	15.5 [14.0-17.1]	2.1 [1.6- 2.6]	29.3 [27.3-31.5]	39.8 [37.5-42.1]
Binge drinking occasion in past 30 days ¹				
No occasions	12.5 [11.4-13.7]	1.5 [1.1-2.0]	28.5 [27.0-30.1]	14.8 [13.6-16.2]
1+ occasion	9.7 [6.8-13.8]	0.7 [0.3-1.8]	33.7 [27.6 [40.5]	30.5 [24.7-37.0]

Table 4. Percentage (and 95% confidence intervals) of adults aged 18+ years and by age group with selected health conditions, by alcohol use: NHIS, 2011–2014

Alcohol use	Fair/poor health	Liver disease (ever)	2+ Chronic conditions	Current Smoker
Adults aged 65+ years				
Lifetime Drinking Status				
Lifetime abstainer	28.8 [27.5-30.0]	1.2 [0.9-1.7]	61.1 [59.7-62.4]	4.9 [4.3-5.5]
Lifetime Infrequent	29.0 [27.4-30.7]	1.7 [1.3-2.3]	65.0 [63.2-66.8]	10.5 [9.4-11.7]
Former regular	33.2 [31.2-35.2]	2.3 [1.8-3.0]	68.9 [66.7-71.1]	11.2 [9.8-12.7]
Current infrequent	19.1 [17.6-20.8]	1.4 [0.9-2.3]	64.4 [62.4-66.4]	9.7 [8.5-11.0]
Current light	11.9 [10.9-13.0]	0.8 [0.6-1.2]	54.2 [52.6-55.7]	7.5 [6.7-8.5]
Current moderate	11.0 [9.7-12.5]	1.0 [0.7-1.6]	53.9 [51.7-56.1]	8.6 [7.5-9.8]
Current heavier	12.0 [9.8-14.7]	1.4 [0.8-2.4]	57.6 [53.9-61.2]	17.6 [15.1-20.5]
Current Drinkers				
Average heavy drinking (5+/4+ in a day), using alc12myr & alcamt:				
No days	13.2 [12.5-14.0]	1.0 [0.8- 1.3]	56.9 [55.8-57.9]	8.7 [8.1- 9.3]
1–11 days	28.8 [15.6-46.8]	1.1 [0.2- 7.7]	73.2 [58.6-84.0]	20.0 [10.2-35.5]
12+ days	23.8 [19.1-29.2]	1.8 [1.0- 3.5]	60.8 [54.1-67.1]	26.8 [21.9-32.5]
Episodic heavy drinking (5+/4+ in a day)				
No days	13.3 [12.5-14.1]	0.9 [0.7- 1.2]	56.9 [55.7-58.0]	7.9 [7.3- 8.6]
1–11 days	13.1 [10.6-16.1]	1.5 [0.8- 3.0]	55.6 [51.4-59.7]	14.1 [11.5-17.3]
12+ days	16.7 [13.8-20.0]	2.4 [1.3- 4.4]	61.5 [57.0-65.9]	20.5 [17.3-24.1]
Binge drinking occasion in past 30 days ¹				
No occasions	11.9 [10.6-13.3]	1.4 [0.8-2.3]	56.0 [53.7-58.3]	8.0 [6.9-9.3]
1+ occasion	11.3 [5.7-21.3]	2.2 [0.4-10.4]	64.7 [48.5-78.1]	21.0 [11.2-36.0]

¹NHIS 2014, Quarter 4 only. Binge drinking is defined as 5+ drinks on an occasion for men and 4+ drinks on an occasion for women. The question was asked only of drinkers who said they had had 5+/4+ drinks in 1 day. However, drinkers with no 5+/4+ drinking days were classified as "no occasions" for purposed of this table.

NOTE: Except for binge drinking, estimates in this table is based on a combined 2011-2014 dataset prepared for the health behaviors of adults report. The episodic heavy drinking question changed in 2014 for women (reducing the threshold to 4 drinks in a day for women which could lead to an overestimate of 5+ drinks in a day for women).

SOURCE: NCHS, National Health Interview Survey, 2011–2014.

Table 5. Percent distribution of adults by selected alcohol use indicators, by age group: NHIS 1988 Alcohol Supplement

Alcohol use	Ages 18+	18–44	45–64	65+
Lifetime drinking status [DRINKR]				
Abstainer (<12 drinks entire life)	18.6	15.4	18.0	30.8
Lifetime infrequent drinker (<12 drinks in any 1 year)	11.3	9.4	13.0	15.7
Former drinker (12+ drinks in 1 year but not in past year)	18.5	15.7	21.7	23.2
Current drinker (12+ drinks in past year)	51.6	59.5	47.3	30.4
Past 2-week drinking status among past year drinkers [DRNKSTR]				
Drank in past 2 weeks	81.0	80.1	82.3	81.8
No drinks in past 2 weeks	19.0	19.7	17.5	17.5
Unknown when last drink was	0.3	0.3	0.3	0.7
Past 2-week drinking typical of past year [D2WPTP12]				
Yes	73.6	70.5	78.4	83.6
No	25.3	28.6	20.4	14.2
Unknown	1.1	0.9	1.3	2.2
Past 2-week drinking relative to past 12 months [AD2WTP12]				
More	76.9	77.4	78.1	66.8
Less	21.9	21.8	19.8	31.3
Unknown	1.1	0.8	2.1	1.9
Usual type of alcohol for typical past week drinking [DRNK2WK]				
Beer only	27.4	30.0	21.0	11.8
Wine only	9.0	8.2	10.4	16.8
Liquor only	13.5	11.9	17.5	24.4
Wine and beer	9.6	10.4	7.4	4.2
Beer and liquor	18.7	20.1	14.7	13.0
Wine and liquor	10.0	8.2	14.8	19.6
Wine, beer, & Liquor	11.3	10.9	13.3	8.9
Unknown	0.5	0.3	1.0	1.3

Table 5. Percent distribution of adults by selected alcohol use indicators, by age group: NHIS 1988 Alcohol Supplement

Alcohol use	Ages 18+	18–44	45–64	65+
Usual type of alcohol for atypical past week drinking [DRNK2WK]				
Beer only	30.9	33.7	23.7	17.0
Wine only	9.4	8.6	11.1	15.4
Liquor only	13.4	11.7	17.5	24.4
Wine and beer	8.9	9.8	6.6	4.1
Beer and liquor	17.4	18.6	14.3	11.2
Wine and liquor	8.5	6.9	12.7	16.1
Wine, beer, & Liquor	9.6	9.2	11.4	7.8
Unknown	1.9	1.6	2.7	4.1

NOTE: The 1988 supplement asked for frequency and quantity of alcohol use in the past 2 weeks but then probed for alcohol use in the past year. The threshold for past year drinking was "at least 12 drinks," in contrast to the current NHIS where the threshold is 1+ drinks. All estimates are weighted with variable wfa which is the equivalent of the sample adult weight.

SOURCE: NCHS, National Health Interview Survey, 1988.

Table 6. Percent distribution of adults aged 18 and over by reasons for not drinking alcohol: NHIS, 1988

Lifetime drinking status	Total	Reasons for not drinking... Don't socialize	Reasons for not drinking... Don't like	Reasons for not drinking... Alcohol problem	Reasons for not drinking... Health	Reasons for not drinking... Religious or moral	Reasons for not drinking... Diet, cost, other or don't know
Abstainer (<12 drinks entire life)	100.0	1.1	50.5	5.1	4.8	32.4	6.2
Lifetime infrequent drinker (<12 drinks in any 1 year)	100.0	5.0	57.2	7.5	10.2	12.4	7.7
Former drinker (12+ drinks in 1 year but not in past year)	100.0	5.6	35.2	17.1	17.4	12.7	12.1
Current drinker (12+ drinks in past year/none past 2 weeks) ¹	100.0	11.9	24.6	10.7	10.7	3.6	38.4

¹Based on drinkers who had at least 12 drinks in the past year but none in the past 2 weeks.

NOTE: Estimates are weighted using variable wtfa.

SOURCE: NCHS, National Health Interview Survey, 1988.

Table 7. Percent of adults aged 18 and over who reported selected lifetime health conditions, by lifetime and past 2-week drinking status: NHIS, 1988

Alcohol use	Fair or poor health	Hypertension	Hardening of arteries	Heart disease	Arthritis	Ulcer	Diabetes	Liver disease	Cancer	Alcoholism
Total	12.0	21.0	2.5	7.1	21.2	8.5	4.0	2.8	2.8	2.2
Lifetime drinking status [DRNKR]										
Abstainer (<12 drinks entire life)	17.7	23.7	3.3	8.6	26.4	6.9	6.0	1.7	2.8	0.2
Lifetime infrequent drinker (<12 drinks in any 1 year)	16.2	24.4	3.4	9.1	26.8	8.5	5.6	2.5	3.5	0.2
Former drinker (12+ drinks in 1 year but not in past year)	17.7	27.8	4.3	11.0	27.5	12.8	6.7	4.1	3.8	6.4
Current drinker (12+ drinks in past year)	7.0	16.9	1.4	4.7	15.8	7.5	1.9	2.8	2.2	1.8
2-week drinking status (among past 12 month drinkers) [drnkstr]										
Drank in past 2 weeks	6.5	16.9	1.5	4.7	15.8	7.3	1.8	2.8	2.2	1.6
No drinks in past 2-weeks	9.0	16.8	1.2	4.7	15.5	8.3	2.2	3.0	2.4	2.8
Past 2-week drinking typical of usual drinking [D2WPTP12]										
Yes	7.3	17.4	1.6	5.0	16.4	7.1	2.0	2.7	2.3	1.6
No	6.0	15.4	0.9	4.1	13.9	8.3	1.5	3.0	2.0	2.4

NOTE: Estimates are weighted using variable wtfa.