

In this issue's Data Line column, the National Center for Health Statistics (NCHS) describes several

of its surveys that provide data on the use of alcohol, the health consequences of alcohol use, and related data.

Although published reports represent the primary vehicle for disseminating NCHS data, these data are also available in public use data tapes. The data tapes permit researchers to crossclassify variables in different or greater detail than that generally presented in the NCHS publications.

A previously published report, "An Inventory of Alcohol, Drug, and Mental Health Data Available From the National Center for Health Statistics," describes the NCHS data on alcohol use in more detail than can be presented in this Data Line. For interested persons, current catalogs of NCHS publications and data tapes are available free of charge. Contact the Scientific and Technical Information Branch, 3700 East-West Highway, Rm. 1–57, Hyattsville, MD 20782, (301) 436–8500 for catalog copies or for further information on alcohol-related data.

The Surveys

The National Health Interview Survey (NHIS) is conducted annually and collects data through household interviews among a sample of the U.S. civilian population. The NHIS questionnaire contains two major parts. The first consists of topics that remain relatively the same from year to year. Information collected in this part of the survey provides data on the incidence of illness and injuries, prevalence of chronic diseases and impairments, disability, physician and dental visits, hospitalizations, and other health topics, as well as data on the demographic and socioeconomic characteristics of the population. The second part of the NHIS questionnaire contains special health topics added each year.

In 1977, the NHIS included a special health topic designed to obtain data on the prevalence of seven health practices, including the frequency and quantity of alcohol consumption. The questions on alcohol (as well as those on the other health practices) replicated, with some modification, those of the Alameda County study (1).

In 1983, the NHIS included a more extensive battery of questions on the use of alcohol. The 1983 NHIS contained questions on drinking practices, health practices, health conditions, self-classifications of drinking level, problems associated with drinking, and detailed items on the quantity and frequency of beer, wine, and liquor consumption.

In 1985, the NHIS added questions on health promotion and disease prevention devoted primarily to the collection of baseline data for monitoring progress toward specific 1990 objectives delineated in the 1980 Public Health Service report, "Promoting Health/Preventing Disease: Objectives for the Nation" (2). In addition to guestions on the amount and frequency of alcohol use, the 1985 NHIS addressed the person's knowledge about the health effects of heavy alcohol drinking, for example, throat cancer, cirrhosis of the liver, and health problems of the newborn.

The 1988 NHIS gathered information on frequency and amount of alcohol consumption, reasons for quitting or abstaining, and alcohol use by the spouse and other relatives. Detailed information on alcohol behavior and associated problems were gathered separately for persons classified as lifetime infrequent drinkers, former drinkers, and current drinkers. The information collected in the 1988 NHIS battery of alcohol questions can be linked to the survey's data on child health, thereby greatly expanding the potential of research on the healthrelated repercussions of alcohol use.

The National Health and Nutrition Examination Survey (NHANES) collects data on the prevalence of specific conditions or chronic diseases, dental health, physiological and body measurements, and nutritional status and deficiencies. The data are collected by means of physician examinations, laboratory procedures, medical history, and standardized tests administered in mobile examination centers, as well as through interviews in the home.

In NHANES I (1971-75), questions on alcohol in the medical history questionnaire were asked directly of respondents ages 12 through 74. Information on the consumption of alcohol was obtained for the 24-hour period prior to the examination for all examinees ages 1 through 74 (either directly or through proxy response) in the dietary component of the survey.

In the dietary-frequency component of NHANES II (1976–80), data on alcohol use was gathered from all examinees ages 6 months through 74 years (either directly or by proxy response). Also in NHANES II, information on the consumption of alcohol was obtained for all examinees in the 24-hour dietary recall component of the survey.

The Hispanic HANES (HHANES) was a one-time survey conducted in 1982–84 of approximately 16,000 persons of Mexican American, Cuban American, and Puerto Rican descent. The HHANES contained a detailed battery of 73 questions relating to alcohol consumption. These questions were asked directly of all sample respondents aged 12–74 years old. Additionally, the HHANES contained a dietary-frequency component and a 24-hour recall component that followed the methodology of NHANES I and II.

NHANES I Epidemiologic Followup Study (NHEFS) is a collaborative project involving the NCHS, the National Institute on Aging, other components of the National Institutes of Health, and the Alcohol, Drug Abuse and Mental Health Administration. The study is a nationwide followup of 14,407 persons who were 25–74 years old when first examined in NHANES I (1971–75). The NHEFS investigates the relationships between clinical, nutritional, and behavioral factors assessed at baseline (NHANES I) and subsequent morbidity and mortality.

The NHEFS is being conducted in several waves. The initial followup phase of the study (1982–84) obtained data from personal interviews; measurements of pulse rate, weight, and blood pressure; data from hospital and nursing home records; and data from death certificates for decedents. Data on alcohol obtained in the first wave related to the reasons for abstaining, frequency of alcohol consumption, selfperception of quantity consumed, and adult history of drinking pattern.

A computer assisted telephone interview (CATI) followup of persons ages 55 years and older at baseline (3,980 subjects) was conducted in 1986 and a CATI followup of the entire cohort (11,750 subjects) was conducted in 1987. In 1986, the elderly were asked questions on the frequency of drinking during the previous year and the number of drinks of liquor, beer, and wine consumed during that period. This battery of questions was repeated for the full cohort in 1987.

Similar information on alcohol should become available from another wave of interviewing in 1990.

The National Hospital Discharge Survey (NHDS) is an annual survey of the use of non-Federal short-stay hospitals. Data on diagnoses, surgical procedures, and characteristics of inpatients (age, sex, and race) are collected along with information by size, location, and ownership of hospitals. Survey data are abstracted from a sample of medical records of approximately 500 participating hospitals.

In the NHDS, data on the inpatient treatment of persons involved with alcohol abuse are coded by the ICD-9-CM to show diagnoses such as "alcoholic psychoses," "alcohol dependence syndrome," "acute alcoholic intoxication," and "other and unspecified alcohol dependence" and "alcohol abuse." Beginning in 1980, alcohol data are also available coded under Diagnostic Related Groups (DRGs).

The National Nursing Home Survey (NNHS) has been conducted periodically since 1973–74. This survey is the source of data on the financial and other characteristics of nursing homes and also on their services and staff. Additionally, the NNHS provides data on the personal and health characteristics of nursing home patients.

In the NNHS, diagnostic information is collected from a sample of both current residents and discharged patients. Diagnostic data on "alcoholism" are available only from the 1977 and 1985 surveys.

In 1977, the NNHS collected diagnostic data using precoded check boxes. In this format, "alcoholism" was specifically identified as a primary diagnosis and as a chronic condition or impairment. In addition, "cirrhosis of the liver," a common sequalae of alcoholism, was also identified on the diagnostic checklist.

In the 1985 NNHS, diagnostic data were collected in an open-ended format and then coded to several categories of mental disorders, including alcoholic psychoses, alcohol dependence syndrome, and alcohol abuse. The 1985 NNHS also provided diagnostic data on cirrhosis of the liver.

Additionally, the 1985 NNHS Current Resident Questionnaire contained a checklist of mental disorders that included the category "alcohol abuse or dependence." (A similar checklist was not used for discharged patients.)

The National Natality and Fetal Mortality Survey is based on a sample of live birth and fetal death records. Data are obtained from questionnaires sent to the mothers and physicians, hospitals, and other medical care providers used by the mother.

One major area of investigation includes the effects of maternal drinking on infant health. In the 1980 cvcle of this survey, married mothers were asked four questions related to drinking alcoholic beverages: (a) "Did you drink alcoholic beverages, that is, beer, wine, or liquor, during the 12 months before your 1980 delivery?" (b) "During the time you were pregnant, how often did you drink alcoholic beverages?" (c) "On the days that you drank, how many drinks did you have?" and (d) "On a typical day that you drank, what kinds of alcoholic beverages did you usually drink?"

The National Maternal and Infant Health Survey is being conducted in 1988. This survey has three components: live births, fetal deaths, and infant deaths. The alcohol questions in the 1988 survey have been modified somewhat but will produce data comparable to that obtained from the 1980 survey.

The National Mortality Followback Survey is designed to provide data on socioeconomic characteristics of deceased persons, use and payment for hospitals and institutional care during the patient's last year of life, and factors associated with health status. Questionnaires are sent to the decendents' next of kin and to the institutions that provided health care—hospitals, nursing homes, hospices, and other facilities. The survey was conducted annually from 1961 through 1968 and most recently in 1986.

In the 1986 survey, three alcoholrelated questions were asked: (a) "In the person's entire adult life, did he or she have at least 12 drinks of any kind of alcoholic beverages, such as beer, wine, or liquor?" (b) "On the average, during adult life, how often did he or she drink any alcoholic beverages, such as beer, wine, or liquor?" and (c) "On the days that the person drank, how many drinks did he or she have on the average, per day?"

The National Survey of Family Growth (NSFG) is the source of data on family planning practices and attitudes, factors influencing trends and differences in fertility, and related aspects of maternal and child health.

The 1982–83 NSFG included a probability sample of approximately 3,000 women in their childbearing years (ages 15–44), regardless of their marital status. The survey had one alcoholrelated question: "During your (last) pregnancy, how often (did/do) you usually drink alcoholic beverages, that is, beer, wine, or liquor?" The 1988 NSFG had a similar size and question on alcohol.

The Vital Registration System

Vital statistics. The 1989 revision of the U.S. Standard Certificate of Live Birth has a question on whether the mother used alcohol at any time during pregnancy and one on the average number of drinks she had per week. Since most States will be revising their birth certificates accordingly, these data on the mother's use of alcohol during pregnancy are expected to become available in 1991 for most of the 3.8 million births occurring annually in the United States.

Mortality statistics. Data on deaths related to or due to alcohol use are available for 100 percent of deaths registered in the United States each year. These data are obtained from death certificates and are coded in detail according to the ICD version in use at the time of data collection.

References.....

- Belloc, N. B., and Breslow, L.: Relationship of physical health status and health practices. Prev Med 1: 409-21, 1972.
- Department of Health and Human Services: Promoting health/preventing disease: objectives for the nation. U.S. Government Printing Office, Washington, DC, 1980.

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