



An important resource for epidemiologic research, the National Death Index, (NDI), enters its eighth

year of operation in November. New NCHS reports chronicle the downward trend in marriages in 1985 and for the same year document the second highest annual number of divorces in the nation. NCHS releases new data to analyze national patterns in health practices and unhealthy habits.

The National Death Index

Health investigators often follow cohorts of persons over time to obtain current information on aspects of their health status or to determine whether any of them have died (and the cause of death). Determining the vital status of persons is often no easy task, depending on the following factors:

- size of cohort
- geographic distribution of cohort
- mobility of study group
- elapsed time from last contact
- accuracy and completeness of contact information, including addresses and telephone numbers
- whether the persons are still alive.

Aware of the problems related to tracing cohorts, the National Center for Health Statistics worked closely with State vital statistics offices to implement a centralized system in

1981 that helped health investigators identify study group members who might have died.

Structure of the NDI. The NDI is a computerized national index to death records filed in the State vital statistics offices. It is compiled from magnetic tapes submitted to NCHS by State vital statistics offices. These tapes contain a standard set of identifying information for each decedent.

The NDI begins with deaths occurring in 1979. Currently, the NDI file contains 16.8 million death records for the period 1979 through 1986; deaths for 1987 will be added to the file around December 1988.

Investigators conducting prospective studies can use the NDI to determine whether persons in their studies have died. The investigators are provided with the names of the States in which those deaths occurred, the dates of death, and the corresponding death certificate numbers. The NDI user can then arrange with State offices to obtain copies of death certificates or specific statistical information, such as cause of death.

Uses of the NDI. The NDI may be used only for statistical purposes in medical and health research. It has served investigators involved with a variety of studies, including occupational and environmental health, cancer and other disease registries,

clinical trials, health effects of life style or other specific risk factors, and studies that have followed cohorts of the general population.

Since November 1981, the NDI program has performed 373 file searches for 196 different studies. Many investigators submit records for repeat searches every 1 or 2 years. By the end of 1987, investigators had submitted 6.8 million records for searches against the NDI file.

Instructions to Users. The 12 matching criteria used in searching the NDI file consist of combinations of the name and either social security number or date of birth (see box). The matching effectiveness of each NDI file search depends partly on the completeness and accuracy of the data that the NDI user submits. The data items needed for effective matching are

- first and last name, middle initial
- father's surname
- social security number
- date of birth
- sex
- state of birth
- state of residence
- marital status
- race
- age at death (if known).

Investigators planning to use the NDI are encouraged to collect as many of the NDI data items as possible. This collection will optimize the matching process and assist the investigators in assessing the quality of the matches.

To make use of the NDI, the investigator must first submit an NDI application form for review by NDI staff and a group of advisors representing the health research community. Applications are reviewed in about 3 months.

Upon notification of approval, the investigator submits the names of study subjects and related information on magnetic tape, floppy disk, or NDI coding sheets. Payment for NDI services is also made at this time. Then, the NDI file search is performed; the results are mailed to the investigators within 3 weeks. Finally, the investigator assesses the quality of the resulting NDI matches and purchases copies of relevant death certificates from State vital statistics offices.

National Death Index (NDI) Matching Criteria

1. Social Security number, first name.
2. Social Security number, last name.
3. Social Security number, father's surname.
4. If the subject is female: Social Security number, last name (user's record) and father's surname (NDI record).
5. Month and exact year of birth, first and last names.
6. Month and exact year of birth, first name, father's surname.
7. If the subject is female: month and exact year of birth, first name, last name (user's record) and father's surname (NDI record).
8. Month and exact year of birth, first and middle initials, last name.
9. Month and ± 1 year of birth, first and middle initials, last name.
10. Month and ± 1 year of birth, first and last name.
11. Month and day of birth, first and last name.
12. Month and day of birth, first and middle initials, last name.

NOTE: The NDI Retrieval Program is used to search the NDI file to determine whether a particular NDI death record qualifies as a possible record match with a particular user record. To qualify as a possible match, both records must satisfy at least one of the 12 conditions or matching criteria listed. The specified data items must agree on both records. (Criteria numbers 8-12 were implemented in August 1986 to enhance the matching effectiveness of the Retrieval Program.)

For further information on the NDI, please contact Mr. Robert Bilgrad, Special Assistant to the Director, Division of Vital Statistics, National Center for Health Statistics, (301) 436-8951.

1985 Marriage and Divorce Statistics

The number of marriages in the United States dropped substantially in 1985 from a record high in 1984, according to a new report from NCHS. Marriages were down in every region of the country, in most States, and for almost every month in the year. Marriage rates declined in 1985 for single, widowed, and divorced men and women, continuing a trend which has been observed since the early 1970s.

A total of 2,412,625 marriages were recorded in 1985, down 3 percent from the historical high level reached in 1984. The rate of marriages, 10.1 per 1,000 population, decreased 4 percent from the previous year. The marriage rate for all unmarried females ages 15 years and older decreased to a record low in 1985.

The 1985 decline in marriages was widespread geographically. The number and the rate of marriages declined for all four regions.

The average age of marriages has been increasing for brides and grooms for both first marriages and remarriages since the mid-1970s. The average age at marriage in 1985 for single brides was 24.0, and for single grooms, 25.9 years. For previously widowed brides, the average age was 53.0, and for grooms, 60.8 years. As in previous years, marriages followed the typical seasonal pattern. The marriage rate was twice as high in June as it was in January or February. These and other marriage statistics are shown in "Advance Report of Final Marriage Statistics, 1985," Monthly Vital Statistics Report, Vol. 37, No. 1 (supplement).

In 1985, 1,190,000 couples divorced in the United States. The 1985 divorce total was the second highest in history, exceeded only by that in 1981. Since the early 1960s, the number of divorces has increased each year, hitting a peak in 1981. Since 1981, the total has fluctuated, dropping in 1982 and 1983 and rising in 1984 and 1985.

Divorce statistics are published in "Advance Report of Final Divorce Statistics, 1985," Monthly Vital Statistics Report, Vol. 36, No. 8 (supplement).

New Reports on Health Promotion and Disease Prevention

In 1985, NCHS fielded a comprehensive study of health promotion and disease prevention as a special supplement to its National Health Interview Survey. The purpose of this study was to provide the data to track the progress in reaching the health promotion goals set for the nation almost a decade ago.

Three new reports from NCHS present data from that 1985 study. "Health Promotion and Disease Prevention, 1985," Vital and Health Statistics Series 10, No. 163, (GPO Stock No. 017-022-01030-5, price \$4.50) is a detailed analysis of the findings. Health measures discussed in the report include body weight, cigarette smoking, alcohol consumption, exercise, breast feeding, breast examinations, nutrition, stress, and use of seatbelts.

In 1985, about one-fourth of U.S. adults were 20 percent or more above their desirable body weight. Marked racial differences in prevalence of overweight were noted for women: 36 percent of black women, compared with 21 percent of white women, were significantly overweight.

About 30 percent of adults smoked cigarettes in 1985. As in the past, among persons over the age of 30, men continued to have higher smoking rates than women. However, among men and women 18-29 years old, no significant difference in smoking prevalence was found.

"Adults Health Practices in the United States and Canada," Vital and Health Statistics Series 5, No. 3, (GPO Stock No. 017-022-01039-9, price \$4), compares the prevalence of several important health practices in the United States and Canada. In 1985, seatbelt use in the United States was less than half that in Canada. In the United States, 40 percent of adults reported that they exercised or played sports regularly, compared with 53 percent in Canada who reported vigorous activity for at least 15 minutes, three or more times a week.

Data from the 1985 survey show the relationship between smoking and other unhealthy habits. All smokers were more likely to be heavy drinkers and less physically active than non-smokers. In addition, heavy smokers were most likely to snack and to be

overweight. Advance Data No. 154, "Relationship Between Smoking and Other Unhealthy Habits: United States, 1985," is available from NCHS.

New Publications from NCHS

Vital and Health Statistics Series 2, No. 107, Use and Interpretation of Diagnostic Statistics from Selected Data Sources: GPO Stock No. 017-022-01029-1; Price \$3

Vital and Health Statistics Series 5, No. 2, Hospital Use in Poland and the United States; GPO Stock No. 017-022-01033-0; Price \$9

Advance Data No. 147—Nursing and Related Care Homes as Reported from the 1986 Inventory of Long-Term Care Places

Advance Data No. 148—AIDS Knowledge and Attitudes for September 1987, Provisional Data from the National Health Interview Survey

Advance Data No. 149—Aging in the Eighties: People Living Alone 2 Years Later

Advance Data No. 150—AIDS Knowledge and Attitudes for October 1987, Provisional Data from the National Health Interview Survey

Advance Data No. 151—AIDS Knowledge and Attitudes for November 1987, Provisional Data from the National Health Interview Survey

Advance Data No. 157—Characteristics of Registered Nurses in Nursing Homes

Sale publications are available from the Superintendent of Documents, Government Printing Office, Washington, D.C., 20402. All other publications are available directly from NCHS. For copies or more information, contact the Scientific and Technical Information Branch, 3700 East-West Highway, Hyattsville, Maryland 20782, or phone (301) 436-8500.

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