

National Center for Health Statistics

...monitoring the Nation's Health

Programs and Activities







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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Centers for Disease Control and Prevention National Center for Health Statistics

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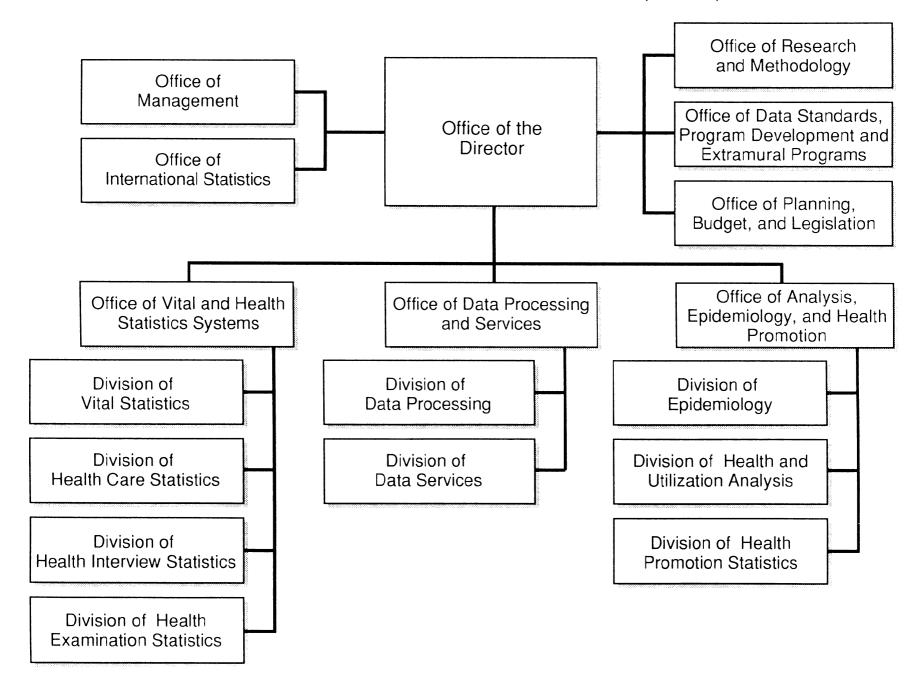
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DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS)



Overview and Background

The National Center for Health Statistics (NCHS) is a unique public resource for health information. As the Nation's principal health statistics agency, NCHS provides statistical information to guide actions and policies to improve the health of the American people. NCHS's mission is to monitor America's health, and our activities mirror the multi-faceted aspects of health care.

NCHS surveys and data systems provide fundamental public health and health policy statistics that meet the needs of a wide range of users. NCHS data are used to track changes in health and health care, particularly as major changes are occurring in private markets and in Federal and State policy. NCHS provides mechanisms for obtaining consistent, uniform statistics that allow for comparison across population groups, types of health care providers, and States; for planning, targeting, and assessing the effectiveness of public health programs, and for identifying health problems, risk factors, and disease patterns. This type of information is important to understanding trends that allow NCHS to anticipate the future directions in the health care system and in health behaviors.

In 1960 the National Office of Vital Statistics and the National Health Survey merged to form NCHS. Since 1987 NCHS has been a part of the Centers for Disease Control and Prevention. Under Sections 304, 306, and 308 of the Public Health Service Act, NCHS has legislative authority for its programs. The Act authorizes data collection, analysis, and dissemination of a broad range of health and health-related areas and provides specific legislative authority to enable the Center to protect the confidentiality of information received in its surveys. In addition the Act provides for NCHS to undertake and support research, demonstrations, and evaluations regarding survey methods and to provide technical assistance to State and local jurisdictions.

Surveys and Data Systems

Information plays a critical role in public health and health policy. NCHS obtains statistics through a broad-based program of ongoing and special studies, including household interview surveys, examination surveys, surveys of health care providers, and collection of statistics on birth and death in partnership with State government. For additional information on NCHS data systems and programs, refer to the appendix in the back of this publication.

National Vital Statistics System

The National Vital Statistics System is responsible for the Nation's official vital statistics. These vital statistics are provided through State-operated registration systems and are based on vital records filed in State vital statistics offices. The registration of vital events—births, deaths, marriages, divorces, fetal deaths, and induced terminations of pregnancy—is a State function. NCHS cooperates with the States to develop and recommend standard forms for data collection and model procedures to ensure uniform registration of the events. The Center shares the costs incurred by the States in providing vital statistics data for national use.

Detailed annual data on births, deaths (including infant deaths), fetal deaths, and terminations of pregnancy are available for the United States and for States, counties, and other local areas. Monthly provisional data are available for the United States and each State. For marriage and divorce, monthly totals are available.

National Maternal and Infant Health Survey—The objective of the survey is to collect data needed by Federal, State, and private researchers to study factors related to poor pregnancy outcomes, including low birthweight, stillbirth, infant illness, and infant death. It provides data on socioeconomic and demographic characteristics of mothers, prenatal care, pregnancy history, occupational background, health status of mother and infant, and types and sources of medical care received. Information is based on data collected from questionnaires administered to mothers, physicians, hospitals, and other medical providers associated with outcomes.

The 1988 survey expanded on information available for birth, fetal death, and infant death vital records, and was the first national survey that included data on those three pregnancy outcomes simulta-

neously. A 1991 longitudinal followup of respondents in the NMIHS was conducted to obtain national estimates and health status information on a nationally representative sample of 3-year old children.

Earlier studies included National Natality Surveys in 1963, 1964–66, 1968–69, 1972, and 1980. A National Fetal Mortality Survey was conducted in 1980, and a National Infant Mortality Survey was conducted in 1964–66.

National Mortality Followback Survey—Information from this survey expands information on the death certificate to help researchers identify how lifestyles affect health and the extent of the burden of illness in the last year of life. The data provide information on socioeconomic characteristics of deceased persons, use of and payment for hospitals and institutional care during the last year of life, and factors related to health status, such as smoking habits.

The survey was conducted annually from 1961 to 1968 and then in 1986. The 1986 survey sample was approximately 1 percent of U.S. resident deaths of persons 25 years of age and over. If death occurred in a hospital or institution, a questionnaire was also sent to the facility.

The most recent survey was initiated in 1993 and it is the first survey to collect information from medical examiners and coroners for external causes of death.

Linked Files of Live Birth and Infant Death Records—The purpose of this data set is to provide information needed for detailed analyses of infant mortality trends and differentials in the United States. In the linked birth/infant death data set the death certificate is linked to the corresponding birth certificate for each infant under 1 year of age who dies in the United States. The purpose of the linkage is to use the many additional variables available from the birth certificate in infant mortality analyses. The linked birth/infant death data set is the only source of national record-based data on infant mortality by birthweight, gestational age, prenatal care utilization, cause of death, and on maternal characteristics such as age, education, marital status, and smoking and alcohol use during pregnancy. Infant mortality rates for detailed race and Hispanic-origin subgroups are available from this data set, which permits use of the more accurate race and Hispanic origin data from the birth certificate. Unit record linked file data are available on public-use data tapes for 1983-91 birth cohorts and on CD-ROM for the 1985–91 birth cohorts.

National Death Index—Working with State offices, NCHS established the National Death Index (NDI) as a resource to aid epidemiologists and other health and medical investigators with their mortality ascertainment activities. The NDI is a central computerized index of death record information compiled from magnetic tapes submitted by State vital statistics offices.

Beginning with 1979 deaths, death records are added to the NDI file annually, approximately 10 months after the end of a particular calendar year.

The index assists investigators in determining whether persons in their studies have died and, if so, provides the names of the States in which those deaths occurred, the dates of death, and the corresponding death certificate numbers. Investigators also will soon be able to receive the coded causes of death or (as in the past) can arrange with the appropriate State offices to obtain copies of death certificates.

The index is available to investigators solely for statistical purposes in medical and health research. It is not accessible to organizations or the general public for legal, administrative, or genealogy purposes. To use the system, investigators must first submit an NDI application form to NCHS. Applicants should allow about 2 months for their applications to be reviewed and approved. Once approved for NDI file searches, users may submit records of their study subjects to NCHS on magnetic tape or floppy disk. Users should submit as many of the following data items as possible for each study subject first and last name, middle initial, father's surname, social security number, date of birth, sex, race, marital status, State of last known residence, State of birth, and age at death (if known).

National Survey of Family Growth

The National Survey of Family Growth (NSFG) is a multipurpose survey based on personal interviews with a national sample of women 15–44 years of age in the civilian noninstitutionalized population of the United States. Its main function is to collect data on factors affecting pregnancy and women's health in the United States. Previous NSFG surveys were conducted in 1973, 1976, 1982, 1988, and 1990. The latest survey was conducted in 1995.

National Health Interview Survey

The National Health Interview Survey (NHIS) is a principal source of information on the health of the civilian noninstitutionalized population. The survey, conducted annually since 1957, collects information from approximately 40,000 households and 100,000 people on health status, access to care and insurance, health services utilization, health behaviors, and other topics. The survey consists of a set of basic data items that are repeated each year and additional questions that can change each year to address current health topics.

Basic annual data are collected on the incidence of acute conditions, episodes of persons injured, prevalence of chronic conditions and impairments, restriction in activity due to impairment or health problems, respondent-assessed health status, utilization of health care services involving physician care, health insurance, and demographic and socioeconomic characteristics.

Supplemental questions addressing major health issues have included a variety of topics. Questions on AIDS knowledge and attitudes have been included annually as a special health topic since 1987. Other special topics have included immunization, family resources and health insurance, cancer control, cancer epidemiology, disability, youth risk behaviors, and data items to measure national progress toward achieving the objectives set in *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*.

NHIS is a major part of the Department of Health and Human Services' (DHHS) integration plan, an effort to improve the quality, efficiency, and timeliness of data by integrating surveys. The NHIS national sample is used as the sampling frame for other DHHS surveys including the National Medical Expenditures Panel Survey, and is linked to the sample of the National Health and Nutrition Examination Survey and the National Survey of Family Growth.

As part of the integration plan, NHIS has been redesigned to give more emphasis to personal health characteristics such as disability and less emphasis to medical events such as hospitalization. It will obtain information on fewer types of chronic conditions than in the past, but will produce more reliable estimates for the conditions it does cover. More complete information on injuries and on children will also be available. The data collected will be more useful for disease and risk factor surveillance and will be better able to address emerging health issues.

Concurrent with the survey redesign, NHIS has changed from traditional paper and pencil for data collection to computer-assisted personal interviewing. This will significantly reduce the time between collecting and disseminating the data.

Targeted population studies—In targeted population studies, persons or families are selected from NHIS participants, and additional health-related information is obtained by reinterviewing them or by obtaining information from linking NHIS data files with other health data files. This approach facilitates the collection of detailed information from the target population over time and may be used for studies requiring more detail about prevalence of selected conditions or diseases.

Targeted population studies undertaken by NCHS and collaborating agencies have included the following:

 The Longitudinal Study of Aging (LSOA)-1, based on the 1984 NHIS Supplement on Aging, and the LSOA-2, based on the 1994 NHIS, both conducted jointly with the National Institute on Aging.

- The Teenage Attitudes and Practices Survey, conducted jointly with the Office on Smoking and Health with data collected during the 1989–90 school year.
- The Access to Care Followup study, a 1994 telephone survey including segments of the general population and those persons with asthma or ischemic heart disease. This study was conducted jointly with the Robert Wood Johnson Foundation.
- The Disability Followup Survey, a 1994–95 survey including adults, children, and polio survivors, conducted jointly with a number of other organizations including the DHHS Office of the Assistant Secretary for Planning and Evaluation, the Social Security Administration, the Institute for Disability and Rehabilitation Services, and the Robert Wood Johnson Foundation.

National Health and Nutrition Examination Survey

Since 1960 NCHS has collected information on the health of Americans through a combination of interviews and direct physical examinations. For the National Health and Nutrition Examination Survey (NHANES), standardized medical examinations are conducted and physical measurements are taken on a nationally representative population.

The goals of the survey are as follows:

- To estimate the number and percent of persons in the U.S. population and designated subgroups with selected diseases and risk factors
- To monitor trends in the prevalence, treatment, and control of selected diseases
- To investigate risk factors for selected diseases
- To monitor trends in risk behaviors and environmental exposures
- To study the relationship between diet, nutrition, and health
- To explore emerging public health issues

NHANES III is the most recent of seven health examination surveys and was completed in 1994. It provides information on 30 topics including blood pressure, blood cholesterol, obesity, passive smoking, lung disease, osteoporosis, HIV, hepatitis, immunization status, diabetes, allergies, growth and development, blood lead, anemia as well as information on nutritional status, dietary intake and nutritional blood measures.

The eligible population for this survey was the U.S. civilian noninstitutionalized population aged 2 months and over. Forty-thousand persons of all races were selected from 81 counties, which were selected from 26 States. About 30,000 people agreed to participate in the medical examination. Children, older persons, African Americans, and Mexican Americans were

oversampled to provide precise estimates for these relatively small subsets of the populations.

Planning is currently underway for NHANES IV to be conducted beginning in 1998 and continuing through 2004. Numerous organizations are participating in the planning including virtually all Federal health agencies, the academic community, and the private sector.

National Hispanic Health and Nutrition Examination Survey—This one-time health examination survey focused on three major subgroups of the Hispanic population—Mexican Americans in the Southwest, Cubans in Miami (Dade County), Florida, and Puerto Ricans in the New York City area. This survey was conducted from 1982 to 1984 and provides health and nutrition data on a 12,000-person sample.

NHANES I Epidemiologic Follow-Up Study—Using information gathered in NHANES I, conducted 1971–75, researchers are investigating the relationship between selected clinical, nutritional and behavioral factors and subsequent morbidity, mortality, and institutionalization. The NHANES I Epidemiologic Follow-Up Study is a collaborative project involving NCHS and other organizations in the Centers for Disease Control and Prevention, the National Institute on Aging and other components of the National Institutes of Health, and the Substance Abuse and Mental Health Administration.

The NHANES I Epidemiologic Follow-Up Study includes the 14,407 participants who were 25–74 years of age when first examined. The first wave of data collection was conducted in 1982–84. It included tracing all participants and conducting face-to-face interviews with found participants or their proxies. For all participants, hospital and nursing home records of overnight stays were collected. For those who were alive, pulse rate, weight, and blood pressure were taken. For those participants who were deceased, death certificates were obtained.

Subsequent followups used similar design and data collection procedures, with the following exceptions: A 30-minute computer-assisted telephone interview was used instead of face-to-face interview; no physical measurements were taken; in 1986 the study included those who were aged 55–74 years during the NHANES I and who were not known to be deceased; and in 1987 and 1992, the study was conducted on all living participants.

National Health Care Survey

To meet the health statistics needs of the future, a number of the Center's record-based surveys were merged and expanded into one survey of health care providers called the National Health Care Survey (NHCS). The NHCS provides data on health care settings such as hospitals, ambulatory surgical centers, hospital outpatient departments, emergency departments, nursing homes, hospices, and home health agencies. Thus the survey is a source of a wide range of data on the health care field and a significant resource for monitoring health care use, the impact of medical technology, and the quality of care provided to a changing American population.

NHCS was built upon three NCHS surveys: the National Hospital Discharge Survey, the National Ambulatory Medical Care Survey, and the National Nursing Home Survey. These were complemented by three new surveys; the National Survey of Ambulatory Surgery, the National Hospital Ambulatory Medical Care Survey, and the National Home and Hospice Care Survey.

National Hospital Discharge Survey—The National Hospital Discharge Survey is the principal source of information on inpatient utilization of hospitals. Conducted annually since 1965, the survey provides data on the use of non-Federal short-stay hospitals, on their size, location and ownership as well as data on diagnoses, surgical procedures, length of stay, expected source of payment and patient characteristics. Data from the NHDS are useful for tracking specific diseases, the introduction of new technologies, and the impact of changes in the financing systems. The survey is based on data abstracted from 274,000 records from 500 hospitals.

National Ambulatory Medical Care Survey—The National Ambulatory Medical Care Survey provides data on visits to physicians, including information on patient characteristics, diagnostic procedures, patient management, and planned future treatment. The survey was conducted annually from 1974–81, in 1985, and annually since 1989.

Data are collected using encounter forms from approximately 3,000 physicians from a sample of 40,000 visits. Data collection from the physician, rather than from the patient, provides an analytic base that expands information on ambulatory care collected through other NCHS surveys.

National Survey of Ambulatory Surgery—Although data have been available for three decades for surgery on inpatients, advances in medical technology permit a wide variety of surgical and diagnostic treatments outside the inpatient setting. The National Survey of Ambulatory Surgery provides detailed data on the use of free-standing and hospital-based ambulatory surgery in the United States.

Data collection began in 1994 and data are available on patient characteristics including age and sex; administrative information including patient disposition, expected sources of payment, and region of the country where surgery was performed; and medical information including diagnoses, surgical operations, and diagnostic procedures performed.

National Hospital Ambulatory Medical Care Survey—The National Hospital Ambulatory Medical Care Survey provides data representing the experience of the U.S. population in hospital emergency departments and outpatient departments. Specifically, the survey provides information on the demographic characteristics of patients, expected source of payment, patients' complaints, physicians' diagnoses, diagnostic and/or screening services, procedures, medication therapy, disposition, types of health care professionals seen, and causes of injury where applicable.

Data collection began in 1992 and has continued annually. Data are abstracted from 70,000 medical records of visits to 440 hospitals.

National Home and Hospice Care Survey—The National Home and Hospice Care Survey provides data on home health agencies and hospices and their current patients and discharges. Conducted annually from 1992–94 and in 1996, the survey was established in response to the rapid growth in the number of home health agencies and hospices throughout the United States and the need to assess the availability and utilization of these services.

Personal interviews with administrators and staff provide information from approximately 1,500 sample agencies. Data are collected on referral and length of service, diagnoses, number of visits, patient charges, health status, reason for discharge, and types of services provided.

National Nursing Home Survey—The National Nursing Home Survey provides information on nursing homes from two perspectives—that of the provider of services and that of the recipient. Data about the facilities include characteristics such as size, ownership, Medicare and/or Medicaid certification, occupancy rate, services provided, and expenses. For recipients, data are obtained on demographic characteristics, health status, and services received.

Conducted periodically since 1963 and most recently in 1995, the survey is based on data collected in interviews with administrators and staff in a sample of about 1,500 facilities.

National Health Provider Inventory—The National Health Provider Inventory provides the sampling frame for the National Nursing Home Survey and the National Home and Hospice Care Survey. This inventory is a comprehensive national listing of nursing homes, residential care facilities, hospices, and home health agencies. It is an important source of national statistics on the number, type, and geographical distribution of health providers in the United States. It has been updated periodically since 1963 under different titles—the National Master Facility Inventory (1967–82) and the Inventory of Long-Term Care Places (1986). Most recently it was updated in 1991.

Based on data collected on self-administered questionnaires sent directly to agencies and facilities, the

inventory provides names and addresses of almost 56,000 facilities, including more than 15,500 nursing homes, over 31,000 board and care homes and more than 7,800 home health agencies and hospices. Information such as type of facility, ownership, size, location, and resident characteristics is available as well as information on number of clients, services, and locations.

National Employer Health Insurance Survey

The National Employer Health Insurance Survey is a national survey of establishments in the private and public sectors conducted to examine characteristics of employer-sponsored health insurance. The data collected provide information on private health insurance coverage. The study was sponsored by the Department of Health and Human Services and managed by the National Center for Health Statistics.

Data were collected from 39,000 businesses and organizations, primarily using computer-assisted interviews, between April and December 1994.

National Immunization Survey

The National Immunization Survey was established in 1994 to provide high quality, timely data on immunization coverage of children 19–35 months of age. The data are used to monitor immunization coverage in the preschool population in 50 States and 28 large urban areas. The survey is a collaborative effort between NCHS and the Centers for Disease Control and Prevention's National Immunization Program.

State and Local Area Integrated Telephone Survey

In response to the need for the development of a national capacity to generate high quality State level data for tracking and monitoring current and emerging health and welfare policy-related issues, the State and Local Area Integrated Telephone Survey (SLAITS) was initiated. SLAITS was designed to provide quick turnaround data on a variety of broad health and welfare related issues and includes questions on health insurance coverage, access to care, health status, utilization of services and basic demographic and socioeconomic information taken from the National Health Interview Survey. It uses the same telephone design approach as used in the National Immunization Survey. The study will provide a mechanism for State and national comparisons of data and also allow for customization for State specific needs. Data collection for a number of pilot States were conducted in 1997.

Research and Methods

NCHS maintains an active program in statistical research and methodology. The major components of that program are briefly described below.

Cognition and Survey Measurement

The National Laboratory for Collaborative Research in Cognition and Survey Measurement applies cognitive methods in questionnaire design research, and was a pioneering effort when established in 1985. In collaboration with other Center programs, the Laboratory develops and tests NCHS data collection instruments. It also supports a questionnaire design research program in collaboration with university scientists by means of research contracts.

Statistical Methods

Research is undertaken at the Center on analytic methods applicable to the NCHS registration systems and sample surveys. Current projects include the development of computer software for the analysis of survey data, methods for model and design-based State estimates, and random effect models for analyzing longitudinal data.

Statistical Technology

The Center conducts a program of contract and intramural research on automated statistical and graphical technology. Current applications include automated mapping, statistical computing methods, geographic information systems, statistical graphics, and statistical atlases.

Survey Design

The Survey Design program involves the design and evaluation of the sample plans for many of NCHS

s surveys to improve their efficiency and analytical capability. Current research focuses on linked survey designs, designs for State telephone surveys, nonresponse adjustments, and estimation of sampling errors for rare events. In addition, the Center maintains an active program in monitoring data quality.

Automation Activities

A continuing initiative of NCHS is automation of data collection, analysis, and dissemination. Computer-assisted personal and telephone interviews are being conducted to improve the quality and timeliness of data collection. Automation of data collection has also been successfully achieved with NCHS s medical examination centers, where data are collected for the National Health and Nutrition Examination Surveys. The development and field testing of automated medical coding systems is another automation effort in data collection. These systems provide the potential for more timely processing of vital statistics at the local, State, and Federal levels and are essential to the goal of automating the collection of vital statistics at the source.

In recent years NCHS has expanded electronic access to information. National public-use data files including all documentation are now available on CD-ROM. These data are presented using the Center's Statistical Export and Tabulation System (SETS). The SETS software is also available as a toolkit for developers to prepare large read-only databases for distribution on CD-ROM. A Windows 95TM version of SETS is now available. The new software, which incorporates all the advantages of multitasking found in Window 95TM, supports all the powerful aspects of the earlier DOS version and adds a unique charting capability to the spreadsheet functions.

Analytical Products and Dissemination

A central component of the mission of NCHS is to disseminate its vital and health statistics and research findings to as wide an audience as possible. NCHS data are presented in a variety of electronic products and publications, including journal articles and chartbooks.

To assist data users, NCHS operates a full-service, centralized information program that provides reference, inquiry, and referral service to help users locate and use NCHS data and to identify other data sources.

Electronic Products

NCHS has an extensive program of data release through electronic media including the World Wide Web, CD-ROMS with statistical software, CD-ROMs with text-retrieval software, and public-use data tapes.

Home Page

The NCHS home page provides instantaneous access to a wide range of statistical information about health status and use of health care in the United States. The NCHS Web site includes links to the latest social statistics from Federal agencies; a link to FED-STATS with over 70 links to other Federal statistical agencies; a data warehouse with detailed statistical tables, links to CDC's WONDER data retrieval system, and other data sites; news releases and fact sheets, frequently asked questions, and sections on what's new, coming events, and NCHS products. Fulltext files of catalogs and publications may be viewed, searched, printed, and downloaded. The Web page also features a query section where users have an opportunity to direct statistical questions to NCHS technical information specialists and to provide comments on the home page and other Center activities.

CD-ROMs

Statistical CD-ROMs containing micro-data are now available from many of the Center's data collection programs. These CD-ROMs contain detailed data files; the associated documentation; and Statistical Export and Tabulation System (SETS) software to retrieve, access, and search data and documentation. Text CD-ROMs containing NCHS publications are also available. These publications can be viewed, searched, printed, and down-

loaded using the Adobe Acrobat software on the CD-ROMs. Refer to the most recent Catalog of Electronic Products for additional information.

Data Tapes

Over 600 public-use data tapes have been produced by the Center. Data tapes available through NCHS parallel the various data systems and represent the full range of data collected by NCHS. The majority of NCHS data tapes are microdata rather than summary analyses; individual identifiers have been removed. NCHS data files are sold through the National Technical Information Service. Purchase price for the file includes complete documentation. Data tapes are described in the Catalog of Electronic Products and in periodic updates.

Major Publications

NCHS publications are indexed in catalogs of publications of the National Center for Health Statistics. Major publications are as follows:

- Health, United States
 - A comprehensive annual report from the Secretary of Health and Human Services to the President and the Congress on the health of the Nation. *Health, United States* presents current and trend data on health status and determinants, utilization of health resources, health care resources, and health care expenditures.
- Vital and Health Statistics Series
 Background, methodology, and analytical studies
 and presentations of findings from NCHS data collection programs.
- Advance Data From Vital and Health Statistics
 Summary reports that provide the first release of data from NCHS health and demographic surveys.
- Vital Statistics of the United States
 Historical marriage and divorce data through 1988
 and on-going annual compilations of mortality and
 natality data, with extensive demographic and geographic detail.
- Monthly Vital Statistics Report
 Monthly and cumulative data on vital events, with brief analyses.

Interaction with Users and Collaborators

A primary mission of NCHS is to meet the health data needs of other agencies of the Department of Health and Human Services and other data users. The Center accomplishes this through several programs that promote interaction with users and collaborators.

National Committee on Vital and Health Statistics

The National Center for Health Statistics provides staff support for the National Committee on Vital and Health Statistics (NCVHS) and its subcommittees. The NCVHS is the official external advisory committee on health statistics to the Secretary of Health and Human Services.

The Committee consists of 16 individuals distinguished in the fields of health statistics, epidemiology, and health care services. The Committee fulfills important review and advisory functions relative to health statistical problems of national or international interest, stimulates or conducts studies of such problems, and makes proposals for improvement of the Nation's health statistics and information systems.

The NCVHS serves as a national forum for the collaboration of interested parties with the long-term goal of improving the comparability of private sector, State, and Federal health information systems while assuring the confidentiality of the information collected. The committee's new charter enables the NCVHS to foster collaboration on a voluntary means to facilitate and accelerate the development of consensus across the public and private sectors around these key data standards.

NCVHS has become increasingly active over the past several years, addressing issues relating to uniform health data sets, medical classification systems, the need for improved mental health statistics, data needs for minority health and the medically indigent, and State and community health data needs.

DHHS Data Council

The Director of NCHS serves as the Senior Advisor on Health Statistics to the Secretary of Health and Human Services (HHS) In this role he serves as a member of the DHHS Data Council. Other members include the HHS Privacy Advocate and Assistant Secretary and Agency Administrator-level HHS officials who have a direct reporting relationship to the Secretary of Health and Human Services.

Established in 1995, the Data Council meets monthly to coordinate all health and nonhealth data collection and analysis activities of the Department of Health and Human Services through an integrated health data collection strategy, coordination of health data standards, and health information and privacy activities.

The majority of the Data Council's work is performed by issue-specific, inter-agency standing and ad hoc staff committees and working groups. Agenda items include: develop a Department-wide data collection strategy, including coordination and integration of surveys and oversight of surveys and general statistical analysis; coordinate HHS and Inter-Department health data standards activities; serve as HHS liaison for the NCVHS; serve as focus for HHS issues relating to privacy of health and social services information; provide a forum for coordination of health and human services issues raised by the expanding National Information Infrastructure activities; and provide a forum for coordination of HHS responses to external requests for HHS action on issues related to health and social services data.

Nutrition Monitoring

NCHS plays a major role in monitoring the nutritional and health status of the American population. Working with members of the Interagency Board for Nutrition Monitoring and Related Research (IBN-MRR), NCHS provides information about dietary and nutritional status, conditions that affect dietary and nutritional status, and the relationship between diet and health.

The IBNMRR oversees implementation of the 10-Year Comprehensive Plan for the National Nutrition Monitoring and Related Research Program. The Plan was formally sent to Congress in January 1993. The goals of the plan are to:

- collect quality data that are continuous, coordinated, timely, and reliable
- use comparable methods for collecting data and reporting the results
- conduct related research and
- efficiently and effectively disseminate and exchange information with data users

This information is used to set nutrition policy, evaluate programs, and develop and plan nutrition and health education and intervention programs.

The IBNMRR coordinates the preparation of directories and Federal and State nutrition monitoring activities, reports of findings from the National Nutrition Monitoring and Related Research Program, and periodic scientific reports to Congress, Federal and State organizations, researchers, and the media. The most recent report, *Third Report on Nutrition Monitoring in the United States*, was published in 1995.

NCHS Data Users Conference and Public Health Conference on Records and Statistics

NCHS holds a Data Users Conference for current and potential users of NCHS data. The Conference provides an opportunity to meet with and ask questions of NCHS staff and to learn about present and future plans for NCHS data collection, analysis, and dissemination activities. The Conference program consists of plenary sessions featuring key NCHS staff, workshops on all of the NCHS data files, and sessions on cross-cutting topical and analytical issues of public health concern. The Public Health Conference on Records and Statistics (PHCRS) has been sponsored by the National Center for Health Statistics as a periodic meeting since 1958. PHCRS provides a forum for representatives from Federal, State, and local governments, as well as from universities and professional associations, to share their knowledge and experience. This diverse gathering lends the Conference a rich variety of perspectives on current issues concerning health information in the United States. Technical and philosophical issues are brought to light during each Conference session. The proceedings are published and serve as a valuable reference tool in addressing issues raised at the Conference. In 1997, the two meetings were combined into one Conference.

Reimbursable Work Program

Many NCHS data systems are designed to allow flexibility in content in targeting special populations. This flexibility allows NCHS to add questions or examination procedures to existing data collection mechanisms and to target population subgroups (for example, older persons, Hispanics, and blacks) in its surveys.

Agencies with data requirements frequently are able to work with NCHS to meet their needs through modifications or additions to NCHS data systems, eliminating the need to mount new data collection efforts that may be costly or may duplicate existing efforts. NCHS is reimbursed by these agencies for costs incurred in providing such services.

Technical Assistance

NCHS offers technical assistance to interested parties in the areas of health statistics development and in access to or use of existing health-related data. Staff members from the major survey divisions of NCHS are frequently called upon to assist in developing sample survey questionnaires, methods, and procedures. Other research or analytical staff provide assistance in the areas of survey design, estimation, and analytical methods. Where design-based estimates for small areas

are impossible from existing survey vehicles, NCHS provides guidance in the development of and use of model-based estimates.

NCHS uses a variety of opportunities to share plans, developments, and analyses. These include university lectures and seminars; data system seminars; special topic seminars; presentation of research findings at annual association meetings; conferences, workshops, symposiums, and ad hoc site visits for unique problem solutions.

Minority Statistics and Grants

For several decades, NCHS has held a leadership role in highlighting the health of racial and ethnic populations in the United States, and in calling attention to the significant differences that exist between various population groups.

NCHS data programs provide the statistics to profile the health of minority populations in the United States. Vital statistics provide information on life expectancy, infant mortality, and patterns of birth by prenatal care and birthweight. Other data to determine the prevalence of major chronic conditions—such as heart disease, hypertension, and diabetes—and the use of hospital and physician services are provided through health surveys. In general, all NCHS data systems make special efforts to make estimates for the black and Hispanic populations, but are limited in their ability to provide data for Asian or Pacific Islanders, and for American Indians or Alaskan Natives. NCHS is continuing its efforts to improve the availability of data for minority populations. These efforts include oversampling of minority populations in NCHS surveys to improve the precision of the estimates made based on the collected data, modification of coding methodologies to provide data for subpopulations of the broader racial and ethnic groups, and increased publication of data for racial and ethnic minority populations. NCHS has conducted the Hispanic Health and Nutrition Examination Survey that includes a range of data on chronic conditions, disability, growth, and physical development.

As a result of legislation passed in 1990, an extramural grants program to improve minority statistics was established by NCHS. Grants were authorized for the support of studies to fill in gaps where national surveys cannot provide sufficient data; analysis of existing data; and research to improve methods for obtaining information on racial and ethnic subpopulations.

International Collaboration

The National Center for Health Statistics (NCHS) maintains international health statistics programs with developed and developing countries all around the

world. These programs consist of cooperative ventures and collaborative research on analytical and methodological issues, technical assistance and consultation, training and information exchange, and joint activities with multinational agencies. In addition, NCHS sponsors international meetings and symposiums, and contributes to other international forums through scientific articles and presentations. Through these efforts, NCHS seeks to improve the availability and quality of health data in the United States and other countries.

The international research program is carried out in collaboration with other countries and with other agencies of the HHS. An important part of this research is carried out through International Collaborative Efforts (ICE's), which bring together domestic and foreign experts to focus on specific health issues of mutual interest to the participating countries. Research findings from these analytic research projects are used to provide guidance to specific HHS programs and to improve the health statistical activities of NCHS. Current topics included in these collaborative research projects are perinatal and infant mortality, health and health care of the elderly, and injuries. Under development is a new ICE on the automated classification of causes of death.

The Center directly supports the World Health Organization (WHO) in worldwide health statistics activities by promoting domestic and international development and use of the International Classification of Diseases and the International Classification of Impairments, Disabilities, and Handicaps. This is accomplished through the WHO Collaborating Center for Classification of Diseases for North America, housed at NCHS. NCHS also serves as the WHO Collaborating Center for Health and Nutrition Examination Surveys, helping to disseminate its unique capabilities in complex health survey design and health examination data collection and analysis.

For additional information about the National Center for Health Statistics, contact:

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SUMMARY OF SURVEYS AND DATA SYSTEMS National Center for Health Statistics

August 1997

NAME	DATA SOURCE/ METHODS	SELECTED APPLICATIONS OF DATA PRODUCED	PLANNED SAMPLE	RACE/ETHNICITY AND SESI	PLANNED PERIODICITY	FY 1998-2001 PLANS
Vital Statistics Cooperative Program (VSCP)	* State vital registration	* Life expectancy Causes of death Infant mortality (IM) Prenatal care and birthweight Birth rates Nonmarital births Pregnancy outcomes Occupational mortality Teenage pregnancy	* All births, deaths, and fetal deaths * Counts of marriages and divorces	For births, deaths, and fetal deaths: * White, Black, 5 API groups, American Indian, Other * 5 Hispanic groups * Education * Births & deaths: 10 API groups from 8 States & NYC Deaths only * Occupation in 21 States	Annual	Continue monthly, annual data system Explore new certificate items for analysis Fully automate system to enhance timeliness and reengineer the registration process
Linked Birth/Infant Death Program	* Birth and death certificates	* IM rates by birth and period cohorts * IM rates by birthweight	* All U.S. births and infant deaths	* Same race & ethnic groups as VSCP * Education	Annual	Expand analyses Continue development of State-level linkage with Medicaid files
National Death Index (NDI)	* State registration- death certificates	 Facilitates epidemiological followup studies Verification of death for individuals under study Optional release of coded causes of death available to users upon request Most NCHS surveys are linked to NDI 	* All deaths	Same race groups as VSCP	Annual	* Continue ongoing matching operations
National Maternal and Infant Health Survey (NMIHS)	* Followback - State vital records * Interviews - mothers * Hospital medical records * Prenatal care providers	 Factors associated with low birthweight and infant death Barriers and facilitators to prenatal care Effects of maternal risk factors on pregnancy outcomes Evaluation of prenatal care effectiveness 	 10,000 live births 4,000 fetal deaths 6,000 infant deaths Oversample Blacks 	* Same race & ethnic groups as VSCP * Family income * Education * Occupation	Every 8 years, with longitudinal followup	Most recent NMIHS conducted in 1988 with 1991 longitudinal followup Plans for future surveys not yet determined Considering participation in NCES survey beginning in 2000
National Mortality Followback Survey NMFS)	Followback - State death records Telephone and/or personal interviews with informants Hospital medical records Medical examiner/ coroner records	* Mortality by socioeconomic factors * Premature death * Health care and cost of health care * Evaluation of data on death certificates * Use of health care in last year of life * Disability prior to death * Mortality associated with suspected risk factors	* 23,000 deaths of persons ages 15 years and over	* Same race & ethnic groups as VSCP * Income(wealth * Education * Occupation and employment history	Every 7 years	* Plans for future surveys not yet determined
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lational Survey of amily Growth NSFG)	 Personal interviews 	Contraception & sterilization Teenage sexual activity & pregnancy Family planning & unintended pregnancy Adoption Breastfeeding Infertility Event histories-jobs, marriage, daycare, etc.	 14,000 women 15-44 years of age sampled to complete over 10,000 interviews Oversample blacks and Hispanics 	OMB categories Hispanic groups Family & individual income, & poverty level Sources of income Education & Occupation	3 and 4 years (2001 & 2004)	 Computer-assisted personal interviewing (CAPI) implemented beginning with Cycle V Cycle VI anticipated in 2001
ational Health terview Survey PHIS)	* Personal internews	Annual data on: Health status and disability Utilization of health care AIDS knowledge and attitudes Family resources Health insurance Access to care Immunization Injury Health Behaviors Functioning	 41,000 households Oversample blacks and Hispanics 	OMB categories Hispanic groups API groups Family & individual income, & poverty level Education & Occupation (sample person only) Type of living quarters	Annual	Improve timeliness through automated collection Healthy People 2000 supplement, 1998 Serve as nucleus for household portion of HHS Survey Integration, by providing sampling frame to the Medical Expenditure Panel Survey
ocess to Care rivey (ACS)	Followup - Sample identified in 1993 NHIS Telephone interviews Sample of persons without telephones interviewed in person	Experiences in obtaining medical care Access or barriers to care Reasons for seeking or not seeking care Characteristics of groups experiencing access barriers	 Sample formed from responding NHIS households in the last two quarters of 1993 Composed of: 4,000 general population respondents 3,000 respondents identified as having experienced access problems 1,400 respondents identified as having astuma or ischemic heart disease 	OMB categories Hisparuc groups API groups Family & individual income, & poverty level Education & Occupation Type of living quarters	Targeted population study	• Issue public use tape in 1998
ational Health terview Survey on isability (NHIS-D)	* Personal interviews	Sensory, mobility, and communication impairments Functional limitations Personal assistance Special education Mental health conditions Employment and transportation limitations Therapeutic services Children w/ special health needs Post polio syndrome	 Phase 1 screens 90,000 households Phase 2 is a followup of those persons with moderate to severe disabilities, approximately 20,000 per year 	OMB categories Hispanic groups API groups Family income & poverty level Education & Occupation Type of living quarters	Special 2 -year study	 Public use data tape release: Phase 2 (first year of followup) - Late 1997 Polic survivors - Early 1998 Plans subject to change based on resources
econd Supplement n Aging (SOAII)	 Personal interviews Administrative match data: Medicare, NDI, and cause-of-death files 	 Functional status Living arrangements Use of hospitals and nursing homes Death rates by social, economic, family and health characteristics 	 Approximately 10,000 persons age 70 and over at the time of Phase 2 of NHIS-D (1994-1997) 	OMB categories Hispanic groups Education Type of housing Occupation & retirement Income & income sources	Special cohort study	Wave 1 followup interview conducted in 1997 - 1998 Ongoing record matches with the National Death Index and HCFA Medicare records

National Health and Nutrition Examination Survey (NHANES)	* Personal interview * Physical examination * Laboratory tests * Nutritional assessment	* Total prevalence of disease or conditions including those unrecognized or undetected * Nutrition monitoring * Heart disease * Diabetes * Osteoporosis * Iron deficiency anemia and other nutritional disorders * Lead exposure * Children's growth & development * Infectious diseases monitoring * Overweight/physical fitness	* 30,000 persons, all ages * Oversample adolescents * Oversample Blacks & Mexican Americans	AND SES1 All Years Income & poverty index Education Occupation Type of living quarters Social services Black, white & Mex. Amer. Prior to 1982 White, Black, Other Birthplace 1988 + OMB categories	PERIODICITY Annual, with longitudinal followup	* Complete NHANES 1998 survey planning, conduct pilot testing in 1998 and begin national survey in Fall 1998
NHANES I Epidemiologic Followup Study (NHEFS)	Longitudinal followup - NHANES I cohort Personal and telephone interviews Medical records - hospitals & nursing homes Death certificates	Epidemiologic studies by PHS agencies Etiology of chronic disease and functional impairment Mortality and morbidity associated with suspected risk factors Hospital and nursing home utilization	 14,407 persons aged 25-74 years, from 1971-75 NHANES I sample Oversample persons in poverty areas, women of childbearing age & elderly 	* White, Black, API, Aleut, & American Indian * Birthplace/ancestory * Income & poverty index * Education * Occupation * Type of living quarters	Special cohort study	Continue analysis and publication Continue mortality follow-up Plans for future surveys are being considered
National Hospital Discharge Survey (NHDS)	 Hospital records Computerized data sources 	 Patient characteristics Length of stay Diagnosis and multiple diagnoses Surgical and diagnostic procedures 	* 542 hospitals * 250,000 discharges	OMB categories	Annual	* Continue annual survey of hospitals
National Survey of Ambulatory Surgery (NSAS)	* Abstract forms completed by facility staff	 Patient Characteristics Diagnosis and multiple diagnoses Surgical and diagnostic procedures 	* 750 facilities * 180,000 patients	* OMB categories	Annual through 1996; periodic thereafter	* Release of data from 1994-96 surveys
National Ambulatory Medical Care Survey (NAMCS)	* Encounter forms completed by physicians practicing in private offices	Characteristics of patients' visits to physicians Diagnoses and treatment	* 3,000 physicians in office-based practices * 45,000 patient visits	* OMB categories	Annual	* Continue annual survey
National Hospital Ambulatory Medical Care Survey (NHAMCS)	 Encounter forms completed by physicians and other hospital staff 	Characteristics of patients' visits to hospital outpatient departments (OPD) and emergency departments (ED) Diagnoses and treatment	600 hospitals90,000 patient visits	* OMB categories	Annual	* Continue annual survey
National Nursing Home Survey (NNHS)	* Long term care providers * Resident next-of-kin interviews	Number & characteristics of residents in nursing homes Functional status of NH residents People discharged from NH Characteristics of NH Expenditures of NH	1,500 nursing homes9,000 NH residents9,000 NH discharges	* OMB categories	Historically every 4-10 years; converting to bi-annual cycle	* Full survey planned in 1999 and 2001 * Small mail survey planned in 1998 and 2000

VAME	METHODS	OF DATA PRODUCED	SAMPLE	AND SESI	PERIODICITY	FY 1998-2001 PLANS
Vational Home and Hospice Care Survey NHHCS)	and hospices	 Number of patients Functional status of patients Number of discharged patients Characteristics of home health agencies and hospices and their patients 	 1,500 home health agencies and hospices 9,000 current patients 9,000 discharged patients 	* OMB categories		* Full survey planned in 1998 and 2000 * Small mail survey planned in 1999 and 2001
rovider Inventory	* State licensing agencies * Professional associations	 Characteristics of hospitals, nursing and related care homes, hospices, and home health agencies Sampling frame for provider surveys 	* All facilities in covered categories	* Percentage of Nursing home, hospice and home health care residents according to OMB categories	Periodic	* Overall plan for measuring supply and capacity being discussed under HHS Survey Integration Plan
National Employer Health Insurance Survey (NEHIS)	telephone interviewing	State level estimates of private health insurance Baseline to monitor changes in health insurance coverage as a result of state and market health care reform Detailed national level analysis of private health insurance Characteristics of employer spending for health care	of establishments to include	* Not applicable	One-time survey	* Release data from 1994 survey * Survey has been integrated with AHCPR/Health Insurance Plan Surveys and is now conducted by AHCPR
	* Data from NHIS personal interviews used to	Evaluation of immunization status of preschool population (NIS) Demographic characteristics Family resources data Health care utilization	. ,	* Income * Education of the mother	Continuous with quarterly 12 month moving averages	* Currently conducting interviews for all areas
State and Local Area Integrated Telephone Surveys (SLAITS)	* Telephone interviews * Data from NHIS personal interviews used to assess bias associated with telephone interviewing and adjust accordingly * Piggyback NIS sample	* State-based estimates for: Health insurance coverage Health care utilization and barriers Performance partnership initiatives Impact of welfare-related reforms	* Up to 14 States in first year	OMB Categories Income and poverty levels Entitlements Cash and non-cash program participation	One time pilot study pending additional funding	* Seek funding to expand into all States * Work collaboratively with States

DEPARTMENT OF HEALTH & HUMAN SERVICES

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