Vital and Health Statistics

Inventory of Pain Data From the National Center for Health Statistics

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In this report, National Center for Health Statistics data sets that contain information on pain and pain-related conditions are identified and a detailed summary of these data elements is provided.

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National Center for Health Statistics

Manning Feinleib, M.D., Dr.P.H., *Director*

Jacob J. Feldman, Ph.D., *Associate Director for Analysis and Epidemiology*

Gail F. Fisher, Ph.D., *Associate Director for Planning and Extramural Programs*

Peter L. Hurley, *Associate Director for Vital and Health Statistics Systems*

Robert A. Israel, *Associate Director for International Statistics*

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Monroe G. Sirken, Ph.D., *Associate Director for Research and Methodology*

David L. Larson, *Assistant Director, Atlanta*

Division of Epidemiology and Health Promotion

Ronald W. Wilson, *Director*

Patricia M. Golden, *Special Assistant*

Diane K. Wagener, Ph.D., *Chief, Environmental Studies Branch*

Ronald W. Wilson, *Acting Chief, Health Status Measurement Branch*

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Contents

Text figure

Symbols

- - -	Data not available
. . .	Category not applicable
–	Quantity zero
0.0	Quantity more than zero but less than 0.05
*	Figure does not meet standard of reliability or precision

Inventory of Pain Data From National Center for Health Statistics

by Kathleen M. Turczyn, M.P.H., and
Thomas F. Drury, Ph.D.

Introduction

In the past 15 years, the Public Health Service and the Department of Health and Human Services have increasingly recognized chronic pain as a major public health problem with enormous impact on the health care system (1–7). The pain literature has continuously cited the need for more complete and comprehensive epidemiologic data on pain (8–9), has explored the feasibility of pooling and sharing data from pain clinics and other treatment facilities for this purpose (10–11), and has called repeatedly for more adequate measurement attention to pain phenomena in general population surveys (1,2,4,6). Although many information gaps will be filled only by the collection and analysis of new data, a number of questions are potentially, and at least partially, answerable through secondary analysis of available data. A major barrier, however, to such secondary analysis has been a basic lack of knowledge about the kinds of pain-related data that exist nationally. In response to this need, this inventory provides an exhaustive listing of information obtained through National Center for Health Statistics (NCHS) data systems related to population-based studies of pain problems and identifies the sources for gaining access to this information.

This introduction serves the following purposes:

- To position this inventory within the context of a comprehensive evaluation of NCHS pain data.
- To acquaint the user of this inventory with the broad spectrum of NCHS data systems that include pertinent information about pain.
- To outline the substantive perspectives used as sifting criteria in the review of NCHS data systems.
- To identify the major sources of information used in identifying relevant content.
- To describe key characteristics of the types of information included in the inventory and provide a description of the analytical summary of its major content areas.
- To explain how the inventory is organized.
- To exemplify how the inventory might be used to identify multiple avenues of analysis in the comprehensive study of selected pain problems.
- To clarify selected features of the problems and prospects of secondary analysis for population-based studies of pain.
- To sketch the relationship of this report to others that will appear in the near future either as NCHS reports or as contributions to the journal literature on pain.

In accordance with these objectives, the remainder of this introduction is organized into nine main sections.

Evaluating NCHS pain data

In response to the need for more and better information on pain, several years ago the staff of the NCHS Health Status Measurement Branch of the Division of Epidemiology and Health Promotion, Office of Analysis and Epidemiology, began to evaluate the efforts that had been made in NCHS data systems to measure pain and pain-related phenomena. As initially conceived, the evaluation would deal with five basic aspects of the NCHS statistical programs (12):

- An evaluation of the efforts made to measure pain phenomena in the form of an inventory of pain data available from NCHS.
- An evaluation of the effectiveness of these efforts in terms of the reliability and validity of the resulting measures (13–16) and in terms of the epidemiologic usefulness of the information obtained (17).
- An evaluation of the efficiency of the pain measurement process in terms of total survey design considerations (18).
- An evaluation of the adequacy of NCHS pain data in terms of the information actually needed at the national level for societal enlightenment, program intelligence, and operational feedback (19).
- An evaluation of the process and procedural aspects of the survey measurement process—from identification and conceptualization of pain phenomena, through the political-economic aspects of obtaining funding and organizational support for pain components on

surveys, to the development and implementation of sampling, data collection, data analysis, and data dissemination procedures (20).

The initial idea was to perform the entire evaluation plan under one or more contracts. Because of funding constraints, however, the overall plan had to be divided into priority projects that might be pursued by in-house staff and into projects that would be more appropriately performed by contractors with national and international expertise in pain. According to this revised plan, in-house staff would evaluate the effort. Priority would also be given to having outside experts evaluate the adequacy of existing information for meeting national data needs in the pain area. Funds permitting, evaluation of adequacy would be followed by a series of analytical projects carried out by outside experts, possibly in collaboration with in-house staff, under a series of professional services contracts. Major aspects of this more limited plan were actually implemented.

This report is the first publication in the NCHS *Vital and Health Statistics* series from this evaluation project, and it represents the efforts by in-house staff to evaluate the efforts made so far in NCHS data systems to measure and assess pain phenomena. The relationships of this report to others that are in press or in preparation at the time of this writing are highlighted in the concluding remarks to this introductory overview.

NCHS data systems with pain data

Although the mission of NCHS includes collection, analysis, and dissemination of data on the Nation's health, it does not currently have any explicit charge to collect data on any specific pain syndrome or even on pain problems more generally. The enabling legislation for NCHS activities specifically states that it shall collect data on the following:

- The extent and nature of illness and disability of the population of the United States and its subgroups.
- The impact of illness and disability of the population on the economy and on the well-being of the population.
- Environmental, social, and other health hazards.
- Determinants of health.
- Health resources, including health professionals by specialty and types of practice, the supply of services by hospitals, extended care facilities, home health agencies, and other institutions.
- Utilization of health care, including ambulatory health services, hospitals, extended care facilities, home health agencies, and other institutions.
- Health care costs and financing.
- Family formation, growth, and dissolution.
- National vital statistics—births, deaths, marriages, and divorces.

Nonetheless, the data collection mechanisms of NCHS that implement this broad mandate—general population surveys, health care surveys, special purpose surveys, and vital statistics—have obtained extensive, and in some instances intensive, information that may be used to clarify important aspects of the magnitude, scope, and impact of selected pain problems in the United States.

The organizational chart shown in the figure identifies particular data systems relevant to pain and pain-related factors, and locates these data systems within NCHS programs primarily responsible for them. As is evident from the chart, primary data collection and analysis responsibilities for current NCHS data systems are located in the Office of Vital and Health Statistics Systems and the Office of Analysis and Epidemiology. Detailed descriptions of these data systems have been published (21).

Other NCHS programs, however, play major roles in the development, operation, and analysis of these data collection systems. The Office of Research and Methodology provides statistical consultation and technical assistance to all NCHS data systems, and formulates statistical standards regarding survey design, data collection, coding, data analysis, data presentation, and statistical computing.

The Office of Planning and Extramural Programs serves as the focal point for coordination of health statistical activities within NCHS and for developing and coordinating the collaborative statistical activities of NCHS with other organizations and agencies, both national and international. The Office of Planning and Extramural Programs also collects, assesses, maintains, and disseminates current information on State and national health statistics systems, both public and private.

The Office of Data Processing and Services (ODPS) is the statistical operations component of NCHS. ODPS is responsible for the collection of data for the National Health and Nutrition Examination Survey and NCHS surveys conducted by mail; data preparation, data entry, and automated data processing for all NCHS surveys; the editing, composition, and printing of NCHS publications; and the marketing, dissemination, and information services for NCHS statistical products. ODPS also provides training and technical assistance to NCHS staff.

Substantive perspectives underlying the inventory

A major purpose of the inventory is to provide a comprehensive listing of available data that might be useful in comprehensive, population-based studies of a broad variety of pain problems. To achieve this overall objective, it was necessary to develop a set of criteria that could be utilized in sifting through the various information sources for each of the NCHS data systems. Given the range of phenomena dealt with, as well as the complexity of the data systems being reviewed, a precise set of sifting

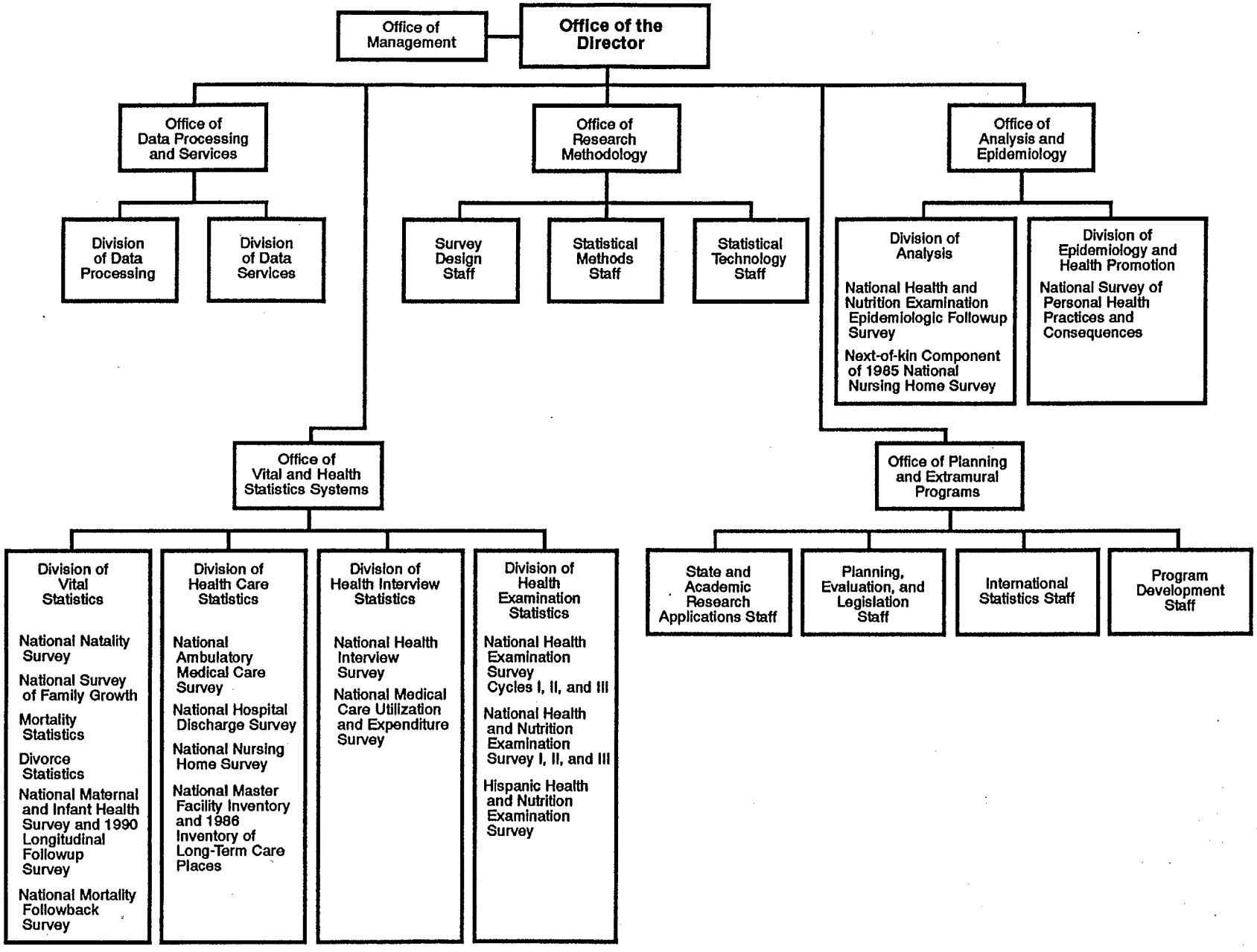

Figure. Data systems with pain and pain-related data components within the organizational structure of the National Center for Health Statistics

criteria were never developed. However, two broad sets of criteria were developed and applied to each data system to determine, first, whether it should be included at all, and, second, the measurement content for inclusion. The first set of criteria took the form of a paradigm or a systematic set of questions for population-based studies of pain. The second set of criteria took the form of a set of guiding images about pain.

Paradigm for population-based studies of pain

Data systems were considered pertinent to population-based studies of pain (as identified below) if they had a bearing on any of the following:

- The identification and classification of various pain syndromes and pain states, including issues surrounding the development and validation of diagnostic criteria.
- The magnitude of various pain problems in the United States, including estimates of the size of the population at risk for various pain problems, treated and untreated prevalence of the problem, magnitude among noninstitutionalized and institutionalized populations, incidence of the problem, and severity of the problem.
- The scope of the problem—that is, its relative frequency across sociodemographic groups.
- The structure of the problem in terms of types of pain patients and interrelationships with various conditions and other pain problems, including the identification of new pain syndromes.
- The natural history and clinical course of the problem
- The determinants of the problem, including the etiological processes and risk factors associated with various pain problems.
- The consequences of various pain problems for individuals, families, employers, and society at large in terms of morbidity, disability, use of health services, health care expenditures, psychological well-being, social and economic impact, and premature mortality.
- Treatments, medical and medicolegal processes, and the operation of the health care system with respect to specific pain problems, provider-patient relationships, quality of care, effectiveness, and costs of health care services.
- Availability of health care resources for dealing with various pain problems.
- Historical trends and projections related to any of the above aspects of various pain problems.
- Conceptual, research design, measurement, data analytic, statistical, computational, and interpretive issues related to any of the above types of substantive issues.

The preceding topics focus on issues addressed by community-based epidemiology with respect to the frequency, distribution, and determinants of pain problems in well-defined populations (22), as well as on issues addressed within the field of clinical epidemiology with respect to diagnosis, treatment, and treatment outcomes (23). Some of the preceding topics go well beyond the fields of community and clinical epidemiology and address a range of issues considered central to the field of health services research (24).

Guiding images of pain

The second set of criteria used in sifting NCHS data systems for the measurement content of this inventory derive from recent efforts to define pain and classify pain syndromes, as well as from the lively discussions that have accompanied such efforts (9). The International Association for the Study of Pain (IASP) has defined pain as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage" and has developed a taxonomy of pain syndromes (25). As has been discussed elsewhere (20), central to the IASP definition is an image of pain as a unitary subjective experience, which leads to an emphasis on self-reports as a source of information (26). Because much of the pain data available from NCHS come from surveys utilizing interviews with respondents or household informants, the IASP framework has been very useful in crafting this inventory. At the same time, however, pain experts with a behavioral focus prefer to image pain as a set of events, which leads to an emphasis upon pain behaviors as an information source (27–29). Within this behavioral framework, a self-report about pain or talking about pain is one of a range of pain behaviors. Loeser's distinctions among nociception, pain, pain behavior, and suffering (30) have also been influential in clarifying and providing a conceptual foundation for partial integration of current definitional controversies.

These images of pain have very different implications for survey case definitions and provide different rationales for obtaining, summarizing, and interpreting self-report and observational data (20). The question of what to include in this report was also influenced by general, even if somewhat more specific, discussions of acute pain, recurrent or episodic pain, chronic pain, and cancer pain.

Acute pain has traditionally been defined as pain of relatively short duration that is usually evoked by a well-defined noxious stimulus. It often has a rapid onset and diminishes progressively as healing occurs. Acute pain produced by tissue damage is the most common type of pain. It has an adaptive biological significance, as it often provides a warning signal to enable an organism to avoid harm and prolong survival. It is usually not associated with prolonged emotional distress, because the pain is explicable and may be controlled effectively (31). Recurrent pain can be thought of as a subset of chronic pain (see below) or as a pain state in its own right. Sternbach (32) has argued that pain can be thought of as a series of states that vary along a temporal dimension and represent a continuous interaction of biological, psychological, and social components. He defines recurrent pain as a current pain problem in which the episode has persisted for less than a month but which has occurred in three episodes or more over the patient's lifetime.

Chronic pain is defined by Bonica (9) as pain that "persists a month beyond the usual course of an acute disease or reasonable time for an injury to heal, or pain that recurs at intervals for months or years." This definition is similar to that adopted by the IASP Subcommittee on Taxonomy, which has stated that chronic pain is "that pain which persists past the normal time of healing" (25). Although the length of time that elapses after which acute pain is regarded as chronic pain is variable, depending on the nature of the original injury, chronic pain is often defined as pain that persists for 3–6 months (31). The IASP Subcommittee (25) adopted "three months as the most convenient point of division between acute and chronic pain." In this context it is interesting to note that, except for conditions that are always considered chronic regardless of the time of onset, a 3-month time period has also conventionally been used by NCHS (particularly in the National Health Interview Survey (NHIS)) for distinguishing chronic from acute conditions.

Chronic pain may be distinguished from acute pain on the basis of several features in addition to temporal duration (31). In the case of chronic pain, the source of noxious stimulation is usually poorly defined. The pain generally has no biological significance as a warning signal. There is usually prolonged physical and psychological distress, as evidenced by fatigue, sleeplessness, loss of motion, restricted physical abilities, additional somatic complaints, irritability, fear, anger, anxiety, depression, and a preoccupation with somatic concerns. Situational factors often include a lack of control over the pain, an increasing reliance on medication as the only possible source of relief, inaccurate expectations about the diagnosis and prognosis, and concerns about the life-threatening potential of the source of the pain. The pain may also be refractory to treatment.

A broad spectrum of pain problems—acute and chronic—come together in cancer pain. Some acute and chronic cancer pains are related to tumors and tumor progression; others, to cancer treatments; and still others (what some would prefer to label as "suffering"), to the psychological stress of living with a potentially fatal disease. Because of the unique constellation of emotional, physiological, and behavioral consequences of the diagnosis and treatment of cancer (31, 33, 34), cancer pain is generally regarded as a special category of pain.

Although it has recently been suggested that viewing cancer pain as a special case may have the unintended consequence of narrowing the range of treatment options considered in the management of cancer pain (35), from the standpoint of population-based studies of cancer pain, it is perhaps crucial to recognize its special nature. Cancer is not one disease but many, and persons with specific types of cancer are not identified in most national surveys of the general population. (The sample sizes are too small to develop reliable estimates for specific cancer sites, and for years asking about cancer was considered too sensitive a topic to include in a survey.) Thus, it is important to think about cancer pain epidemiologically as a special case in need of special study.

Despite the dearth of national information about cancer pain, Bonica (36) has shown how the limited information on mortality from cancers can be used to develop estimates of the magnitude of the problem of cancer pain by integrating estimates of severe pain in different stages of cancer for various types of cancer obtained from clinical studies and clinical series with estimates of the size of the population at risk for such pain obtained from mortality data. Bonica's pioneering work in this area needs to be continued, possibly by extending existing data collection systems based on cancer registries.

Sources of information on NCHS data systems

In constructing the inventory, four principal sources were used: Questionnaires, data tape formats, methodological reports, and consultations with NCHS staff responsible for the collection and analysis of data. First, questionnaires were systematically reviewed for pain data content. The data tape formats were then examined for specific coding and editing algorithms. Methodological reports were reviewed for background information about the surveys and vital statistics systems. Program staff were consulted to clarify questions related to content, methods, coverage, and data availability.

Summary of the inventory's content

The inventory covers the approximately 20-year period for which NCHS public use data tapes are generally available (37,38). Because a major purpose of the inventory is to stimulate the use of NCHS pain data for secondary analysis, it focuses on data available through the public use data tape distribution program. Pain data elements are identified only for data years in which public use tapes are or will be available. Surveys with pain or pain-related elements that were in the planning or early design stages at the time this manuscript went to press are listed in appendix I. NCHS data systems that do not address pain at some level have not been described here. Most data systems within NCHS, however, contain at least some pain components. In the case of the 1989 NHIS, all of the orofacial and abdominal pain components of the Current Health Topics Supplement are included in their original form in appendixes II and III. In other cases, such as the arthritis components of the first and second National Health and Nutrition Examination Surveys (NHANES I and II) and the NHANES I Epidemiologic Followup Study, extensive detailed questions are documented. In yet other cases, only a few relevant items in the survey or data system can be documented.

Pain data elements have been broadly delimited for this inventory. However, whenever possible, attention is focused on specific pain syndromes. Specific acute pain problems covered in this inventory include (but are not restricted to) acute headache, toothache, pain of acute myocardial infarction, labor pain, postoperative pain, severe posttraumatic pain, and burn pain. Specific chronic pain problems covered include headache, orofacial pain, chest or heart pain, abdominal pain, back pain, and arthritic (joint) pain. Items related to conditions or circumstances that may have an impact upon, or be a consequence of, a person's painful condition, such as drug use, life event stress, and sleep disturbance, have also been included.

An effort was also made to identify sociodemographic and other classification variables available in each of the surveys (appendix IV). An attempt was made to place the pain data components in context by providing general descriptions of the types of nonpain data available in each of the surveys and vital statistics systems. The brief descriptions of data elements contained in this inventory are primarily designed, however, to sketch possibilities for data analysis.

Appendix V provides an overall summary of available pain measures in NCHS data systems. The summary includes only major categories of variables and is neither definitive nor comprehensive. In some surveys, questions about a specific pain syndrome were asked differently in different years, covering a varying amount of epidemiologic information. A detailed cross-classification of individual questions is beyond the scope of this document because of the extent of variation in question wording and intent among the surveys. Such a classification is available, however, for NHANES and the National Health Examination Survey (NHES) (39).

Organization of the inventory

The inventory is arranged according to survey or vital statistics system. General population surveys are described first, followed by data systems dedicated to the production of health care statistics. Vital statistics surveys are inventoried next, with the description of pertinent vital statistics data systems rounding out the review.

With the exception of the health examination surveys, each survey or system is described once, regardless of the number of years for which data are available. NHES Cycles I, II and III; NHANES I, II and III; NHANES I Epidemiologic Followup Study; and the Hispanic Health and Nutrition Examination Survey are described separately because of the extensive pain data contained in each.

Descriptions of the surveys or data systems have six components, designed to provide a brief overview of the data system and detailed information concerning pain data. The format is as follows:

- *Name of program or data system*—The name of the survey or vital statistics system is provided, along with its acronym.
- *Survey design*—The target population and geographic boundaries of the survey or vital statistics system are identified and the sampling procedures are briefly described. The data collection method and the time period during which the data were collected are specified.
- *Basic data elements*—A brief overview is given of the types of nonpain data available from the data system. More complete summaries are available elsewhere.
- *Pain data elements*—Pain and pain-related data elements are identified and listed in detail. For the most part, they are sequenced in the order in which they appear in the questionnaires. Although they are summarized whenever possible, questionnaire items are documented in their entirety when summarization would make interpretation difficult. In two cases, the magnitude and complexity of the pain elements are such that appropriate sections of the questionnaires themselves are provided as appendixes. The data frequencies for pain variables have not been examined, and in some instances the number of cases may be quite small.
- *Data tape availability*—A listing of available public use data tapes is provided. For persons with university affiliation, many NCHS tapes are available through the schools of public health of major universities. Schools of public health at the following universities participate in the NCHS data tape acquisition program at this time: Boston University; University of California, Berkeley; University of California, Los Angeles; Columbia University; Harvard University; University of Hawaii; University of Illinois; Johns Hopkins University; Loma Linda University; University of Massachusetts; University of Michigan; University of Minnesota; University of North Carolina, Chapel Hill; University of Pittsburgh; San Diego State University; University of South Carolina; University of South Florida; University of Texas; University of Washington, Seattle; and Yale University. Names of appropriate contact persons at these schools can be obtained by contacting the Scientific and Technical Information Branch, NCHS, 6525 Belcrest Road, Hyattsville, Maryland 20782. The telephone number is (301) 436–8500.
- *Questionnaire source items*—This component identifies references that contain the questionnaire items listed in the inventory. Most of these references are available from the U.S. Government Printing Office, Washington, D.C. 20402. If the questionnaire has not been published, a copy can usually be obtained from the technical contact person.

After each pertinent data system has been described according to the above outline, there are six appendixes. Appendix I lists future NCHS surveys in the planning and

design stages that have projected the inclusion of pain and pain-related data.

The orofacial pain and abdominal pain questions for the 1989 NHIS were particularly detailed and not easily summarized; thus, they are included in their entirety as appendixes II and III.

Appendix IV provides an overview of the classification variables available for each of the data systems that may be appropriate to the study of acute, recurrent, chronic, and cancer pain. Appendix V is a summary of pain measures included in the various surveys.

Appendix VI discusses the use of the International Classification of Diseases (ICD) for coding of NCHS morbidity and mortality data. The discussion is limited to those data systems that are included in the inventory. In some instances the purpose of the question is not to elicit pain information specifically, but rather to gather general health information, such as days lost from work or days spent in bed because of ill health. In reporting such events, respondents provide information about conditions that caused them to restrict their activity. These conditions are then coded into ICD categories that include relevant painful condition codes. Although the IASP Classification of Chronic Pain, developed by the IASP Subcommittee on Taxonomy and published as a supplement to the journal *Pain*, has not been used in the coding of NCHS pain data, a crosswalk has been developed that allows translation of codes to the eighth and ninth revisions of the International Classification of Diseases (40).

Using the inventory to identify multiple avenues of analysis: the case of back pain and related back disorders

The usefulness of the inventory for identifying areas in which secondary analysis of existing data may be a productive research strategy is perhaps best illustrated for the case of back pain and related back disorders. Although far from being exhaustive of the analytic possibilities, the following examples show the extent to which the data systems of NCHS provide a rich national resource and an important set of scientific opportunities for population-based studies of pain. To provide some structure to this case study of the usefulness of the inventory in identifying analytic possibilities, seven issue areas in the comprehensive study of back pain and related back disorders are identified and the relevance of existing NCHS data to these issue areas is discussed.

Alternative definitions of the magnitude of the problem

Data are available from NHIS and the National Medical Care Utilization and Expenditure Survey (NMCUES) on the incidence of acute backaches and associated disability days, as well as back injuries and associated disability days. Information is available from NHIS on whether a back injury occurred at work. Information is also available from NHIS on chronic back pain, including the prevalence and characteristics of impairments of the back or spine. NHIS is also a major source of information on various types of disability caused by back problems.

NHANES I and II are a source of self-report data on back pain, physician examination findings of back problems, and medical history information on diagnosed back problems. NHANES II also has data on x-ray examination findings for the lower back, which could be made available to the public on a case-by-case basis. The 1982–84 NHANES I Epidemiologic Followup Study (NHEFS) also measures the magnitude of back pain.

Data are available from NHIS and NMCUES on physician visits involving diagnosis or treatment for acute and chronic back problems, and extensive data are available from the National Ambulatory Medical Care Survey (NAMCS) for visits to office-based physicians in the United States for back pain symptoms and back problems.

Although NAMCS and the National Hospital Discharge Survey (NHDS) are provider-based surveys, back pain data from these surveys measure the magnitude of the back pain problem among visits to office-based physicians or to short-stay hospitals for treatment.

NHDS is a source of information on short-stay hospital discharges and hospital days for back problems, including important data on laminectomies and spinal fusions. NHIS also has selected information on short-stay hospital experiences for back problems.

The National Nursing Home Survey (NNHS) is a source of information on the prevalence of back problems among nursing home residents. Mortality data are also important in certain limited cases.

From these data, it should be possible to extract a comprehensive statement of alternative definitions of the magnitude of the problem of back pain in the United States. This comprehensive statement could be compared with and contrasted to other definitions and estimates in the literature (41–47).

Socioeconomic differentials

A major task in the epidemiology of back pain is to clarify the extent to which the problem of back pain varies among sociodemographic categories of the population. Many studies have found that back pain is proportionately more common among people in the lower socioeconomic strata. However, several aspects of this empirical generalization need to be clarified. Socioeconomic status can be indexed in a variety of ways (including education, family income, occupation, and household social standing). How consistent is the generalization of socioeconomic status and the relative frequency of back pain across these different indicators? To what extent is the association of socioeconomic status and back pain independent of the effects of other factors associated with both socioeconomic status and back pain? How does the independent effect of socioeconomic status on back pain vary among categories of the

population defined in terms of factors associated either with socioeconomic status or with back pain, but not with both? How important is socioeconomic status as a predictor of back pain, compared with other sociodemographic factors that are associated with back pain? Which components of socioeconomic status have the greatest effects on back pain?

What are the major alternative interpretations that can be advanced to explain the patterns of association between socioeconomic status and back pain? To what extent can these alternative interpretations be evaluated directly or indirectly with available NCHS data? When the empirical implications of these alternative interpretations can be evaluated with the data at hand, what do the results show?

Based on all these analyses, what can be concluded about the relationship between socioeconomic status and back pain? How do these generalizations based on an analysis of available NCHS data compare with existing generalizations in the literature? What are the major implications of the results of these analyses and comparisons with the literature?

These questions and others related to socioeconomic differentials can be answered using NCHS data documented in the inventory. Data on the scope of the problem of back pain and related back disorders are available from the same data systems identified as dealing with the magnitude of the problem, for comprehensive data on the sociodemographic characteristics of respondents are routinely collected in NCHS surveys. In addition to these data systems, sociodemographic differentials can be studied using data from the 1988 National Maternal and Infant Health Survey and the 1990 Longitudinal Followup.

Health characteristics

In addressing the structure of the problem of back pain and related back disorders, a major strength of the population-based health surveys of NCHS is that persons with a certain health problem can be compared with persons without that particular problem in terms of a wide variety of other health characteristics. The analyst could capitalize on these national data resources to compare the health characteristics of persons with and without back pain and related back disorders.

The inventory identifies NHIS, NHANES I and II, and NMCUES as data systems from which a comprehensive description of persons with back pain could be prepared in terms of acute illnesses and injuries, disability days, selected chronic conditions (including conditions in which pain predominates), limitation of activity from a chronic condition or impairment, limitation of mobility, need for long-term care, self-assessed health status, psychological well-being, depressive symptoms, use of physicians, use of dentists, use of short-stay hospitals, usual sources of medical care, health insurance, out-of-pocket health expenses, health practices, and knowledge and attitudes related to various aspects of health promotion and disease prevention.

To the extent feasible, the description of these health characteristics could take into account differences in the sociodemographic characteristics of persons with and without back pain that are also associated with the health characteristic being described. These analyses could serve to clarify important aspects of the structure of the problem of back pain and could have important implications for the development of typologies of persons with back pain.

Risk factors for back pain and related back disorders

A variety of workplace (48) and individual (49) characteristics have been identified in the literature as factors that increase the risk of having an episode of low back pain or that influence the seriousness or disabling consequences of such an episode.

Workplace characteristics asssociated with the risk of an episode of low back pain include the following:

- Physical work characteristics, such as the extent to which a job requires heavy lifting, pushing, pulling, cyclic loading, exposure to vibrations, prolonged sitting, and certain other postures a worker assumes in carrying out job duties.
- Psychological characteristics, such as monotony, boredom, and job dissatisfaction.

Individual characteristics associated with the occurrence, seriousness, and disabling consequences of an episode of low back pain include the following:

- Constitutional factors, such as age, physical fitness, abdominal muscle strength, flexor or extensor balance, and muscular insufficiency.
- Postural and structural factors, such as severe scoliosis, certain congenital abnormalities, and a narrowed spinal canal.
- Radiographic findings of specific structural abnormalities, namely, spondylolysis, fractures, multilevel degenerative disc disease, and spondyloarthropathies.
- Personal health care factors, such as smoking, alcohol use, and diet.
- Participation in certain kinds of recreational activities, such as golfing, tennis, football, gymnastics, jogging, and cross-country skiing.
- Psychosocial factors, such as anxiety, depression, hypochondriasis, and somatization.
- Other factors, such as familial clustering of back problems and multiple births in females.

Several NCHS data sets, including NHIS, NHANES I and II, and the Hispanic Health and Nutrition Examination Survey, provide a basis for retrospective comparisons of individuals with and without back pain in terms of many of these known risk factors. Information from the

NHEFS and NMCUES also provide a basis for several prospective analyses of the effects of some of these risk factors on back pain. Available NCHS data could be examined for their bearing upon the nature and relative importance of these known risk factors and could be explored for the relevance of additional risk factors that have been suggested in the literature but never empirically tested.

Economic impact

One consequence of back pain problems is the economic costs for the individual, his or her family and employer, and society at large. Estimates of the economic impact of illnesses in the United States are most commonly developed using a "human capital" approach (50–53) that differentiates two broad categories of costs: Direct medical care costs and indirect costs resulting from disability and premature mortality.

Direct medical care costs include public and private expenditures for prevention, detection, treatment, rehabilitation, research, training, and capital investments in medical facilities. Under direct medical care costs are the more familiar specific categories of personal services and supplies and nonpersonal services. The former of these specific categories, personal services and supplies, includes hospital care, nursing home care, physicians' services, dentists' services, other medical professional services, drugs and drug sundries, eyeglasses and appliances, school health services, industrial health services, and medical activities in Federal units other than hospitals. The latter specific category, nonpersonal services, includes medical agencies and health insurance costs. Because of the ambiguities that confound the allocation of these nonpersonal service costs to specific diseases, they are generally not estimated for specific diseases.

Indirect costs—a measure of potential productivity lost to society—include loss of output to the economy (as a result of illness, disability, and premature death) in terms of wages lost because of days lost from work. One component of these indirect costs is morbidity loss because of decreased productivity on the job, absenteeism, and unemployment. A second component is the value of productivity not realized in a year due to disease-related deaths as well as the present value of future productivity lost as a result of deaths in that year.

In early efforts to document the economic impact of back pain problems in the United States (54), an attempt was made to estimate selected components of these costs using published data. More recently, efforts have been made to develop a more comprehensive statement of the economic impact of back pain by estimating a broader range of cost components using public use data tapes (43). Specialized studies codifying what is currently known about compensation costs for back pain have also been published (55).

A great majority of the data for these studies of economic impact are obtained from NCHS data systems that provide base estimates of the magnitude and scope of the problem. Data are available from NHIS, NHANES I and II, NAMCS, NHES, and NMCUES.

A critical review of previous efforts to estimate the direct and indirect costs associated with back pain and related back disorders could be undertaken, and the development of more up-to-date estimates of the economic impact of back pain and related back disorders, going beyond the limitations of previous estimates to the extent feasible, could be attempted using available NCHS data.

Back pain management

The management of back pain and related back disorders includes a variety of options for doctors and individuals (56). Physicians can diagnose the back problem, which usually involves the use of clinical tests and laboratory measurements, and treat the problem, which may include prescribed bed rest; use of medications, braces, corsets, collars, traction, physical therapy, transcutaneous electrical nerve stimulation, injections, or surgery; or referral to a back school or pain clinic. The services of chiropractors and other health care professionals are also sometimes used. In addition to their compliance with medical interventions, individuals can do many things to manage their own back problems.

Data bearing on the management of back pain and related back disorders are available from NHIS, NHANES I and II, NHEFS, NMCUES, NAMCS, NHDS, and NNHS. Most of these data are concentrated on the services of the medical care system; however, the information from these various data sets could be integrated to provide a fairly comprehensive description of the management of back pain and related back disorders in the United States.

Temporal variations

A major task of an epidemiology of back pain is to clarify the extent to which problems of back pain and related back disorders are changing over time with respect to magnitude, scope, structure, etiology, consequences, and treatments. Data systems of NCHS provide a basis for describing selected aspects of such changes in the United States.

Trend data are available from the NHIS on incidence of acute backaches, disability days associated with acute backaches, the prevalence and impact of chronic back and spine impairments, the prevalence and impact of slipped disc problems, physician visits involving diagnosis or treatment for acute and chronic back problems, and short-stay hospital discharges for back problems, including surgical treatment for back problems. NHANES I and II data provide replicate information on the prevalence and characteristics of adults with back pain. NAMCS provides trend information on the characteristics of visits to office-based physicians for back pain and related back disorders. NHDS provides trend information for short-stay hospital

discharges, hospital days, and surgery associated with back problems. NNHS has limited information on the prevalence of problems of the back or spine among nursing home residents.

The analyst could use this information to describe selected trends in the problem of back pain in the United States. To the extent that the data permit, an effort could also be made to evaluate the observed trends (57) in relationship to changes in survey procedure, changes in the soc' ' composition of the population, changes in the organization and operation of the health care system, and changes in values related to the definition, diagnosis, and report of back pain. Moreover, because increasing attention is being given in public health discussions to the magnitude, scope, and impact of various health problems projected over the next several decades, an effort could also be made to develop preliminary projections (58) of the magnitude and severity of the problem of back pain in the United States in the future.

Secondary analysis for population-based studies of pain

As the preceding case study amply demonstrates, the NCHS has collected a variety of data appropriate to the study of pain and pain-related issues. A basic assumption of this inventory is that NCHS surveys are a good source of data for secondary (and in some cases for primary) analysis of pain issues. Some of the data presented in this inventory have already been analyzed by NCHS staff or others. NCHS statistical compendums such as *Health, United States* (59) have included selected information on pain syndromes, most notably on back pain, as have selected reports in the *Vital and Health Statistics* series (such as (60–73)) and in *Advance Data From Vital and Health Statistics* (such as (74–96)). However, much of the pain data collected by NCHS have not been analyzed. Even those data that have received attention offer potential for further analysis. This inventory is a first attempt to systematically identify these data and make their existence known to interested researchers and policy analysts.

The benefits of secondary analysis are many (97). On the practical side, the approach requires fewer resources, in terms of both money and time, than a full-scale survey effort. Secondary analysis also has several substantive advantages. It provides historical perspective on important issues. It permits trend studies and comparative analyses that a single research endeavor cannot achieve. It also promotes the expansion of existing theory by forcing the researcher to think broadly and abstractly to find overarching concepts or categories within which available indicators can be contained.

Secondary analysis, particularly analysis of large-scale, complex surveys, requires careful consideration of the intricacies and limitations of the data (18,98–101). Methods, target populations, units of analysis, and response rates vary among data systems. Although items may appear similar in a questionnaire, their possible uses can vary substantially. Trend studies in particular warrant critical examination of methodological and measurement variation (57,102,103). Detailed discussion of these issues is beyond the scope of this report. The user is urged to consult other publications for a more complete description of the data systems and for references to detailed methodological reports (21,37,104). Excellent overviews of the current state of the art of pain measurement are also available in the literature (14,16) and constitute fundamental resources for evaluating the sources and quality of pain data.

Current and future efforts

During the past 15 years, there have been numerous efforts to document the problem of pain in the United States. Each of these efforts has called attention to the need for more complete and comprehensive information on pain with respect to the magnitude of pain problems and their scope, structure, sources, impact, treatments, and trends. Because NCHS is the only Government agency mandated by law to collect general-purpose, descriptive statistics on the Nation's health, NCHS staff began several years ago to evaluate existing NCHS data on pain. The first step in this evaluation was an examination of the efforts already made in NCHS data systems to measure pain and pain-related phenomena. The results of this initial evaluation of NCHS efforts in the study of pain are presented in the main body of this report, which follows this section.

A second report, "Pain Data Available From the National Center for Health Statistics: An Evaluation of Adequacy, Epidemiologic Uses, and National Data Needs" (105), which focuses on the methodological quality, substantive adequacy, and epidemiologic uses of currently available NCHS pain data, is in the final stages of preparation at the time of this writing and will appear in the near future in Series 4 of *Vital and Health Statistics*.

Because of funding and staffing constraints, only a limited number of analytical projects were funded, including analyses of NHANES, NHDS, and NAMCS data on back pain. The results of these analyses are making their way into the pain literature through presentations and poster sessions at professional meetings, as well as through publication in appropriate journals (106–111).

General population surveys

National Health Examination Survey (NHES), Cycle I

Survey design

Survey of U.S. civilian noninstitutionalized adults ages 18–79 years, using a multistage, clustered probability sample stratified by geographic region and population size. Interviews and examinations with about 6,700 persons conducted from October 1959 through December 1962.

Basic data elements

Data include a household interview, medical history, medical examination, dental examination, x ray, electrocardiogram readings, laboratory blood tests, vision and hearing tests, and anthropometric measurements. Also included are a personal medical history and results of a physician examination related to the cardiovascular system, arthritis, and diabetes. Data are located on multiple tapes.

Pain data elements

Cardiovascular data:
Frequency of headaches in past few years
- Do they bother you?

Chest pain in past few years? Heart pain in past few years?
- Location
- Does it move around?
- Duration
- When does it usually come? When exercising, when quiet, makes no difference, other? When upset, makes no difference, other?
- Take medication for chest pain? Take medication for heart pain?

Leg cramps?
Angina pectoris (examining physician's impression)?

Osteoarthritis and rheumatoid arthritis:
Osteoarthritis x-ray readings on hands and feet: None, doubtful, minimal, moderate, severe
Rheumatoid x-ray readings on hands and feet: None, doubtful, minimal, moderate, severe
Osteoarthritis diagnosis
Limitation of activity
Presence of iritis in one or both eyes?
Tenderness?
Pain on motion except distal-interphalangeal and spine?
Benonite flocculation (dilution range from negative to more than 1:16)
Rheumatoid arthritis diagnosis: Classical, definite, probable, possible
Frequency of joint pain
Think you have arthritis or rheumatism? Confirmed by a doctor?
- Duration
- Had in the past year?
- Take medicine for it?
- Have gout?

Data tape availability

NHES I Cardiovascular Data (tape no 1004), NTIS accession no PB 293138
NHES I Osteoarthritis and Rheumatoid Arthritis (tape no 1005), NTIS accession no PB 293130

Technical contact:
Patricia Vaive
Division of Health Examination Statistics
6525 Belcrest Road, Room 900
Hyattsville, MD 20782
(301) 436–7081

Questionnaire source items

National Center for Health Statistics. Plan and initial program of the Health Examination Survey. National Center for Health Statistics. Vital Health Stat 1(4). 1965.

National Health Examination Survey (NHES), Cycle II

Survey design

Survey of U.S. civilian noninstitutionalized children ages 6 months–11 years, using a multistage, clustered probability sample stratified by geographic region and population size. Interviews and examinations with approximately 7,100 children conducted from 1963 through 1965.

Basic data elements

Data include detailed medical and developmental histories from a household adult, usually the mother; information from the school; medical, dental, and psychological examinations; vision and hearing tests; and anthropometric measurements. Major data elements are on one tape. Approximately one-third of the children examined in Cycle II were reexamined in Cycle III. These children are identified on both the Cycle II and Cycle III tapes, making longitudinal analyses possible.

Pain data elements

Sore throats?
Earaches?
- Injury to ears?
- Eardrums opened or lanced?
  - Number of times

Data tape availability

NHES II Integrated Data Tape (tape no 2IDT), NTIS accession no PB 293124

Technical contact:
Patricia Vaive
Division of Health Examination Statistics
6525 Belcrest Road, Room 900
Hyattsville, MD 20782
(301) 436–7081

Questionnaire source items

National Center for Health Statistics: Plan, operation, and response results of a program of children's examinations. National Center for Health Statistics. Vital Health Stat 1(5). 1967. (Selected questionnaire items only.)

Questionnaires available upon request from technical contact person.

National Health Examination Survey (NHES), Cycle III

Survey design

Survey of the U.S. civilian noninstitutionalized population ages 12–17 years, using a multistage, clustered probability sample stratified by geographic region and population size. Interviews and examinations with approximately 6,800 youths conducted from 1966 through 1970.

Basic data elements

Data include a household interview; detailed medical and developmental histories; information from the school; medical, dental, and psychological examinations; vision and hearing tests; anthropometric measurements; x rays; and laboratory tests. Major data elements are on one tape. Approximately one-third of the youths examined in Cycle III were examined earlier in Cycle II. These youths are identified on both the Cycle II and Cycle III tapes, making longitudinal analyses possible.

Pain data elements

Medical History of Youth From Parent Questionnaire
- Any bones ever broken?
- Ever had any serious accidents or injuries?
  - Number
  - Hospitalized for accident or injury
- International Classification of Diseases (8th revision) code for most serious illness or disease (using International Classification of Diseases, Adapted for Use in the United States)
  - Age when illness started
  - Seriousness of illness or disease
- Any injury to ears?
- Earache in past year?
- Inclination to consult physician if youth: Had a stomach ache, sore throat, headache; hurt all over; had pain in chest
- Pain or discomfort from periods?
  - How often painful: Very often, occasionally
  - Severity of pain or discomfort when present: Mild, moderate, severe
  - Remedy used to ease pain: Takes medicine, goes to sickroom or nurse, stays in bed, stays home from school
  - Talked to a doctor about the pain?

Health Habits and History—Youth Questionnaire
- Ever broken any bones?
  - Number of times
- Ever had any other injuries or accidents?
- Ears ever damaged or injured?
- Any earaches in past year?
- Anything that prevents complete use of legs or arms?
- Any backaches in past year or two?
- Inclination to consult physician if: Had a stomach ache, sore throat; hurt all over; had a headache; had pain in chest, sore gums, a toothache, sores in mouth

Nurse's Questionnaire—Females
- Pain or discomfort from periods?
  - Frequency: Most periods, occasionally
  - Severity: Mild, moderate, severe
  - Medicine for discomfort?
  - Use sickroom or nurse?
  - Miss school or work?
  - Talked to doctor about pain or discomfort?

Data tape availability

NHES III Extended Data Tape (tape no 3EDT), NTIS accession no PB 296025

Technical contact:
Patricia Vaive
Division of Health Examination Statistics
6525 Belcrest Road, Room 900
Hyattsville, MD 20782
(301) 436–7081

Questionnaire source items

Questionnaires available upon request from technical contact person.

First National Health and Nutrition Examination Survey (NHANES I)

Survey design

Survey of the U.S. civilian noninstitutionalized population ages 1–74 years, using a multistage, clustered probability sample stratified by geographic region and population size. Interviews and examinations with about 21,000 persons were conducted from 1971 through 1974. This sample was augmented with approximately 3,000 persons ages 25–74 in 1974 and 1975.

Basic data elements

Data on all examined persons include household and demographic information; nutrition information; medical, dental, dermatological, and ophthalmological examinations; anthropometric measurements; hand-wrist x rays (ages 1–17 only); and a variety of laboratory tests. Information on a subsample of adults includes a supplementary medical history; tobacco and alcohol use; mental health and depression measures; supplementary information concerning arthritis, respiratory, and cardiovascular conditions; health care needs; an extended medical examination; x rays of the chest and hip and knee joints; and a variety of additional clinical procedures and laboratory tests. Data are located on multiple tapes.

Pain data elements

Medical History Questionnaire (ages 1–11 years)

Ever had a bad accident?
Still have the effects of it?
Ages 6–11 years:
Ever been treated for a stomach or intestinal disorder? Kidney disease or infection? Cancer or tumors?
Unable to do some things because of a condition that has bothered for a long time?

Medical History Questionnaire (ages 12–74 years)

Episodes of pain or discomfort in abdomen or stomach at least 3 days a month?
Has a doctor ever told you that you have any of the following conditions, and if so, do you still have it? How many years ago did you first have it?
Arthritis? Gout? Heart attack? Peptic, stomach, or duodenal ulcer? Recurrent or chronic enteritis? Colitis? Gallstones? Hiatus hernia of the diaphragm? Kidney disease or kidney stones? Malignant tumor or growth? Fracture of hip, wrist, spine, any other bone?
During the past 6 months have you used any medicine, drugs, or pills for any of the following: Headache? Other pains?

Detailed Medical History Supplement (ages 25–74 years)

Health problems now that you would like to talk to a doctor about:
Headaches? Trouble with joints, pain, aching, swelling, stiffness? Possible heart or circulatory trouble including trouble with veins, leg pains, and chest pains? Gastrointestinal troubles including heartburn, abdominal pain? Kidney or bladder trouble, pain when passing urine?
In past 5 years, injury resulting in a broken hip, wrist, spine, other bone?
In past 5 years, a back injury?
Ever had pain present for at least 1 month on most days:
In any of your joints either at rest or when moving them?
In neck or back?
In or around either hip joint?
In or around the knee?
In a swollen joint?
Ever had: Trouble with any pain or discomfort in your chest?
Severe pain across the front of your chest lasting for half an hour or more?
Pains in either leg while walking?
Pain or burning sensation when passing urine?

Health Care Needs Questionnaire (ages 25–74 years)

Toothache was the main reason for last visit or talk with a dentist at either his office or clinic.

General Well-Being Schedule (ages 25–74 years)

In past month, bothered by any illness, bodily disorder, pains, or fears about health?

Supplement A—Arthritis (ages 25–74 years)

Pain in either the back or neck on most days for at least 1 month?
Has pain been present on any one occasion for at least 6 weeks?
Is pain usually located in neck? Upper back? Mid-back? Lower back?
Is pain most intense in neck? Upper back? Mid-back? Lower back?
Is pain present when resting at night?
Does pain awaken you from sleep at night?
Does pain in back ever seem to spread?
Does pain spread to the back of the right leg? Left leg? Both legs? Top of the head? The sides of the body?
Has pain in neck ever seemed to spread?

If so, does pain spread to top and back of head? Either shoulder area? The arms or hands? Other locations?

Is back or neck pain made worse:

By coughing, sneezing, or deep breathing?

With bending or twisting motion?

After prolonged activity?

After prolonged sitting?

After prolonged standing?

Age when first experienced recurring back or neck pain

When last had this pain

The longest episode of back or neck pain ever had

Does back or neck pain occur more frequently now than before?

Ever had a sprained back because of some type of physical activity?

Ever had a "whiplash" injury of the neck?

Ever had a ruptured disc in either your back or neck?

If so, at what age?

Were you in traction?

Was surgery necessary?

Ever stayed overnight in a hospital for back or neck pain?

Had pain in or around either hip joint on most days for at least 1 month?

Has pain in the hip area been present on any one occasion for at least 6 weeks?

Where did you first notice it? Left hip? Right hip? Both hips?

In hip area, is the pain usually most intense in the right buttock? Left buttock? Both buttocks? Right groin? Left groin? Both groins? Side of right thigh? Side of left thigh? Sides of both upper thighs? Other areas?

From the hip, has the pain tended to spread to:

The inside of your leg?

The front of your leg?

The outside of your leg?

The back of your leg?

Had pain in or around the hip when either coughing or sneezing?

When hip pain present, does it hurt at rest as well as when moving?

Age when first experienced recurring pain in the hip

Last time had pain

Longest episode of hip pain you have ever had

Ever had a fractured hip?

If yes, which hip was broken?

Age when it happened

Was hip in traction?

Was there surgery?

Ever had a dislocated hip?

If yes, which hip was dislocated?

Age when it happened

Was hip in traction?

Was there surgery?

Had pain in or around knee on most days for at least 1 month?

Has pain in the knee area been present on any one occasion for at least 6 weeks?

In which knee did you first have it?

Age when first experienced recurring pain in the knee

When knee pain present, is it most intense in right knee, left knee, both knees, behind the right knee, behind the left knee or behind both knees?

Does it hurt at rest as well as when moving?

Is there also swelling of the knee joint?

Ever had "locking" of the knee?

Has either knee ever "given way" under you?

If yes, which knee gave way?

Last time had this knee pain

Longest episode of knee pain ever had

Ever had a fractured knee?

Which knee fractured?

Ever had a severe twisting of either knee with resultant sprain or swelling lasting more than 2 weeks? Which knee?

Ever had any other knee injury? Which knee?

Ever had hip, knee, or back disease treated by an operation?

Which joint?

If hip, which hip?

If knee, which knee?

Had pain or aching in any joint other than the hip, back, or knee on most days for at least 6 weeks?

Were fingers painful? Which fingers?

Was wrist painful? Which wrist?

Was elbow painful? Which elbow?

Was shoulder painful? Which shoulder?

Was ankle painful? Which ankle?

Was foot painful? Which foot?

Any swelling of joints with pain present when the joint was touched on most days for at least 1 month?

Has this swelling been present on any one occasion for at least 6 weeks?

Is swelling and tenderness on touching:

In fingers? Which fingers?

In wrists? Which wrist?

In elbows? Which elbow?

In shoulders? Which shoulder?

In hips? Which hip?

In knees? Which knee?

In ankles? Which ankle?

In feet? Which foot?

Age when first experienced this swelling of the joints

Last time you had this swelling

Ever had pain, swelling, or stiffness in a joint as result of an accident or injury?

Was this the cause of the pain, swelling, or stiffness mentioned previously?

Is this the cause of any pain, swelling, or stiffness

which might still be present?

Ever been treated by any of the following for your joint troubles?

General practitioner, internist, rheumatologist, orthopedist, chiropractor, osteopath, foot doctor, physical therapist, occupational therapist, other, never been treated

Are you currently being treated by a doctor for the troubles you have just described?

Type of doctor specified

Doctor's diagnosis: Acute arthritis; arthritis of spine, hip, upper and lower extremities; arthritis because of an infection; rheumatoid arthritis; osteoarthritis and allied conditions; other specified forms of arthritis; arthritis, unspecified; rheumatism, polymyositis, and dermatomyositis; rheumatism, specified; osteocyelitis and periostitis; other diseases of the musculoskeletal system; other

Last time saw doctor

Who originally referred you to this doctor?

Where usually see doctor?

How long will it be until next visit to doctor?

Have you ever used any of the following kinds of treatment for your joint troubles? Do they do you any good? Do you use them regularly?

Splints or casts? Braces? Diathermy or paraffin? Hot packs or heating pads? Cold packs or ice? Rest? Traction? Exercises or physical therapy? Aspirin? Cane? Crutch? Stiff mattress? Bed board?

Ever had injections into joints? Did they do you any good?

Ever taken any of the following medications for your joints? Did it do any good?

Any cortisone-like medicine by mouth? Butazolidin? Darvon or Tylenol? Indocin?

Can you do the following things without the help of someone else or the help of some special device:

Go up or down stairs? Get into or out of a car? Use washing facilities? Dress yourself? Feed yourself? Get into or out of bed?

At present time, does joint condition restrict your physical activity very little, quite a bit, or a whole lot?

Ever had to stay in bed for long periods of time because of joints?

Ever stayed overnight in a hospital because of joint problems?

With respect to your joint trouble, would you say your condition is mild, moderate, or severe?

Job status 1 month before first developing joint condition

Change in job status as a result of joint condition?

Current job status

Number of workdays lost during past 12 months as result of joint condition

X-ray readings

Supplement B—Respiratory (ages 25–74 years)

Chest pains: With persistent coughing? With morning coughing spells? Along with shortness of breath?

Where? Upper back, lower back, upper chest, along the rib edge, on the sides?

Supplement C—Cardiovascular (ages 25–74 years)

Have chest pains, chest discomfort, pressure, or heaviness?

Description of pain: Heaviness? Burning sensation? Tightness? Stabbing pain? Pressure? Sharp pain? Shooting pains?

Had it more than three times?

Been bothered by this within the past 12 months?

Age when first had it

Get it if you walk at an ordinary pace on level ground?

Get it if you walk uphill or hurry?

What do you do if you get it while walking: Stop, slow down, continue at same pace, take medicine?

If you do stop or slow down, is it relieved?

How soon?

When you get pain or discomfort, where is it located: Upper middle chest? Lower middle chest? Left side of chest? Left arm? Right side of chest? Other?

Do any of these things tend to bring it on? Excitement or emotion, stooping over, eating a heavy meal, coughing spells, cold wind, exertion?

Ever had severe pain across the front part of chest lasting half an hour or more?

How many of these attacks have you had?

Date of last attack (month, year)

Duration of pain during last attack

See a doctor about last attack?

What did doctor say it was? Rheumatic fever, chronic rheumatic heart disease, hypertension, ischemic heart disease, other forms of heart disease, cerebrovascular disease, arteriosclerosis, other diseases of the circulatory system

Get pain or discomfort in either leg while walking?

Also get this pain in your legs while standing still?

Parts of leg in which pain is felt: Lower (calf), upper (thigh); both

Have the leg pain while quiet or while sitting?

Get it when you walk up a hill in a hurry?

Get it when you walk at an ordinary pace on level ground?

Does the pain in your legs come on after you have taken a few steps?

Does the pain disappear while you are still walking?

What do you do when you get it while you are walking: Stop, slow down, continue at same pace, take medicine?

If you stop, is it relieved? How soon after stopping?

Is the pain more likely to occur when you are hurrying than when you are walking at a slower, more even pace?

Seen a doctor about chest pains, chest discomfort, pains in the legs while walking, or heart failure?

Type of doctor: General practitioner, osteopath, heart specialist, other specialist, other

Types of diagnostic procedures

Types of treatments

Ever been disabled because of chest pain, leg pain, or heart failure?

Ever stayed overnight in a hospital because of chest pain, leg pain, or heart failure?

Job status 1 month before developing chest pain, leg pain, or heart failure

As a result of your condition, has there been a change in your job status?

Current job status

Medical Examination (ages 1–74 years)

Pain on motion of knees:

Active, passive, both; tenderness

Right and/or left medial

Right and/or left lateral

Right and/or left diffuse

Pain on motion of hips:

Active, passive

Extension

Flexion

Abduction

Adduction

External rotation

Internal rotation

Pain on motion of (right and/or left) shoulder, elbow, wrist, (number of) metacarpophalangeal, (number of) proximalinterphalangeal, (number of) distalinterphalangeal, ankle, foot

Pain on flexion, extension, right and/or left lateral bending, right and/or left rotation of back (location):

Cervical

Thoracic

Low back

Diffuse

Uncertain

Data tape availability

NHANES I Medical History Questionnaire, Ages 1–11 (tape no 4067), NTIS accession no PB 296031

NHANES I Medical History Questionnaire, Ages 12–74 (tape no. 4081), NTIS accession no PB 296073

NHANES I Detailed Medical History, Health Care Needs, Respiratory, and Cardiovascular Supplements, Ages 25–74 (tape no 4091), NTIS accession no PB 296029

NHANES I General Well-Being and the Center for Epidemiologic Studies Depression Scale Developed by the National Institute of Mental Health, Ages 25–74 (tape no 4171), NTIS accession no PB 296020

NHANES I Medical Examination, Ages 1–74 (tape no 4233), NTIS accession no PB 296035

Technical contact:

Patricia Vaive
Division of Health Examination Statistics
6525 Belcrest Road, Room 900
Hyattsville, MD 20782
(301) 436–7081

Questionnaire source items

National Center for Health Statistics. Plan and operation of the Health and Nutrition Examination Survey: United States, 1971–1973. National Center for Health Statistics. Vital Health Stat 1(10b). 1977.

Engel A, Murphy RS, Maurer K, Collins E. Plan and operation of the HANES I Augmentation Survey of Adults 25–74 years: United States, 1974–1975. National Center for Health Statistics. Vital Health Stat 1(14). 1978.

Second National Health and Nutrition Examination Survey (NHANES II)

Survey design

Survey of the U.S. civilian noninstitutionalized population ages 6 months–74 years, using a multistage, clustered probability sample stratified by geographic region and population size. Interviews were conducted with approximately 25,000 persons. Of these respondents, approximately 21,000 persons were examined from 1976 through 1980.

Basic data elements

Data include household and demographic information, a medical history, nutrition information, medication and vitamin usage, tobacco use, behavioral characteristics, exercise frequency, a medical examination, anthropometric measurements, and a variety of clinical procedures and laboratory tests. Information for all interviewed persons (not just examined persons) is located on multiple tapes.

Pain data elements

Child's Medical History Questionnaire (ages 6 months–11 years)

Ever had any bad accidents?

Burned?

Break a bone?

Still have effects of accident?

Unable to do some things because of a condition that has bothered for a long time?

Ever been treated for cancer or tumors?

Ever had any infections of the kidney, bladder, or urinary tract?

Number of times

Ever seen a doctor for any kidney, bladder, or other urinary problem?

Type of doctor

Ever been told by a doctor that you had the following?

Still have it? When first had it?
Nephritis?
Kidney stones or stones in the ureter?
Nephrosis?
Kidney infection?
Kidney abscess?
Bladder infection?
Bladder stones?
Urinary tract infection?
Ear infection?

Health History Supplement (ages 12–74 years)

Ever had any trouble with pain, discomfort, or pressure in your chest when you walk fast or uphill?
Description of pain: Heaviness? Burning sensation? Tightness? Stabbing pain? Pressure? Sharp pain? Shooting pains?
Had the pain or discomfort more than three times?
Been bothered by the pain or discomfort within the past 12 months?
Age when first had the pain or discomfort
Get the pain or discomfort if walk at an ordinary pace on level ground?
If so, do you: Stop? Slow down? Continue at the same pace? Take medicine?
If stop or slow down, is the pain or discomfort relieved?
How soon is the pain relieved?
Where is the pain or discomfort located: Upper middle chest? Lower middle chest? Left side of chest? Left arm? Right side of chest? Some other place?
Do any of the following things tend to bring the pain or discomfort on?
Excitement or emotion?
Stooping over?
Eating a heavy meal?
Coughing spells?
Cold wind?
Exertion?
Ever had severe pain across front of chest lasting one-half hour or more?
Number of these pain attacks
Date of last attack
Duration of pain during last attack
Doctor seen about last attack
Doctor's diagnosis: Rheumatic fever, chronic rheumatic heart disease, hypertension, ischemic heart disease, other forms of heart disease, cerebrovascular disease, arteriosclerosis, other diseases of the circulatory system, or other chest pain—not cardiovascular
Ever seen a doctor about chest pains, chest discomfort, or heart failure?
Type of doctor: General practitioner? Internist? Osteopath? Heart specialist? Some other medical person?
Ever stayed in a hospital overnight or longer because of chest pains or a heart condition?
Estimated workdays lost because of a heart condition
Chest pains along with shortness of breath?
Location of chest pains: Upper chest? Upper back? Lower back? Along the lower ribs? On the sides?
Ever had pain in your back on most days for at least 2 weeks?
Longest episode of back pain ever had
Usual location of back pain: Upper back? Mid-back? Lower back?
Where is it most intense: Upper back? Mid-back? Lower back?
Is back pain usually present when resting at night?
Does the back pain awaken you from sleeping at night?
Does the back pain ever seem to spread?
Does it spread to the: Back of the right leg? Back of the left leg? Back of both legs? Top of the head? Sides of the body?
Is your back pain made worse: By coughing, sneezing, or deep breathing? With bending or twisting motion? After prolonged sitting? After prolonged standing? After prolonged activity?
Age when first experienced recurring back pain
Last time had this back pain
Does this back pain occur more frequently now than it used to occur?
Has this back pain usually been mild, moderate, or severe?
Ever had a sprained back because of some type of physical activity?
Ever had a disc problem in either your back or neck?
A ruptured disc?
Was the disc problem in your back or neck?
Age when first had the disc problem
Were you in traction?
Was surgery necessary?
Ever stayed in a hospital overnight or longer for back pain?
Ever had pain in your neck on most days for at least 2 weeks?
Longest episode of neck pain
Neck pain present when resting at night?
Does the neck pain ever seem to spread?
Does it spread to: The top and back of the head? Either shoulder area? The arms or hands? Other?
Is neck pain made worse: By coughing, sneezing, or deep breathing? With bending or twisting motion? After prolonged activity? After prolonged sitting? After prolonged standing?
Age when first experienced this recurring neck pain
Last time had this pain
Does this neck pain occur more frequently now than it used to occur?
Neck pain usually mild, moderate, or severe?
Ever had a "whiplash" injury of the neck?

Ever used any of the following kinds of treatment for your back or neck trouble? Did it do you any good? Are you using it regularly?

Splints or casts? Braces? Diathermy or paraffin? Hot packs or heating pads? Cold packs or ice? Rest? Traction? Exercises or physical therapy? Aspirin? Cane? Crutch? Stiff mattress? Bed board?

Back or neck condition restricts physical activity very little, quite a bit, a whole lot?

Ever had to stay in bed at home for long periods of time because of back or neck trouble?

Ever stayed overnight in a hospital because of back or neck problems?

Would you say your back or neck condition is mild, moderate, or severe?

At any time during the past year did your back or neck trouble cause you to cut down on the things you usually do?

Number of activity cut-down days

Number of days lost from work or school, not counting work around the house

Number of days condition limited the kind or amount of work around the house

Number of bed days

Ever had pain, swelling, or stiffness in your back or neck as the result of an accident or injury?

Think the accident or injury is the cause of any pain, swelling, or stiffness that might still be present?

Ever been treated by a medical person for back or neck trouble?

Type of medical person: General practitioner? Internist? Rheumatologist? Orthopedist? Chiropractor? Osteopath? Physical therapist? Occupational therapist? Other?

Diagnosis: Arthritis; rheumatoid arthritis; osteoarthritis and allied conditions; rheumatism, polymyositis, dermatomyositis; osteomyelitis and periostitis; other diseases of the musculoskeletal system

Now being treated by a medical person for back or neck trouble?

Type of medical person: General practitioner? Internist? Rheumatologist? Orthopedist? Chiropractor? Osteopath? Physical therapist? Occupational therapist? Other?

Current diagnosis: Arthritis; rheumatoid arthritis; osteoarthritis and allied conditions; rheumatism, polymyositis, dermatomyositis; osteomyelitis and periostitis; other diseases of the musculoskeletal system

Ever had an operation for a back or neck disease or injury?

Was it your back or neck?

Had pain or aching in any joint other than the back or neck on most days for at least 6 weeks?

Which joints were painful?

Fingers? Which fingers?

Wrist? Which wrist?

Elbow? Which elbow?

Shoulder? Which shoulder?

Hip? Which hip?

Knee? Which knee?

Ankle? Which ankle?

Foot? Which foot?

Had any swelling of joints with pain present when the joint was touched on most days for at least 1 month?

Has this swelling been present on any 1 occasion for at least 6 weeks?

Joints usually involved whenever you have this swelling and tenderness on touching:

Fingers? Which fingers?

Wrist? Which wrist?

Elbow? Which elbow?

Shoulder? Which shoulder?

Hip? Which hip?

Knee? Which knee?

Ankle? Which ankle?

Foot? Which foot?

Age when first experienced this swelling of the joints

Last time had this

Ever had a job which placed frequent stress or strain on your back?

Length of time worked at that kind of job

Ever had pain or burning sensation on urination accompanied by more frequent urination than usual?

Number of separate times this has happened

Have a physical disability or handicap that prevents or limits normal daily activities, such as the kind or amount of work that you can do, housework, schoolwork, using public transportation, and so on?

Adult Medical History Questionnaire (ages 12–74 years)

During the past 12 months, stayed in hospital overnight or longer for (painful) condition? Eighth Revision International Classification of Diseases, Adapted for Use in the United States (ICDA) code

(Painful) illness or condition that interferes with your eating, digestion, or appetite? ICDA code

Has a doctor ever told you that you had any of the following conditions, and if so, do you still have it? How many years ago did you first have it?

Arthritis?

Back injury?

Bladder infection?

Bladder stones?

Cancer?

Gallstones?

Gout?

Heart attack?

Kidney infection?

Kidney stones or stones in the ureter?

Neck injury?

Nephritis?

A peptic, stomach, or duodenal ulcer?

Recurrent or chronic enteritis?
Spastic colon or mucose colitis?
Ulcerative colitis?
Urinary tract infection?
During the past 6 months, use of aspirin or aspirin-type pills
On the average, use these pills one or more times per week?
Ever had kidney stones?
Ever passed a stone?
Kind of treatment for stones: Medicines? Surgery? Special diet? Any other treatment?
Have you ever had any infections of the kidney, bladder, or urinary tract?
Number of times
Number of times doctor seen
Type of practitioner: General practitioner? Internist? Urologist? Nephrologist? Other?
Number of schooldays or workdays lost because of kidney, bladder, or urinary condition
Special x rays?
Hospitalizations?
Last time saw doctor
Specific treatments
Had any trouble with pain from kidney, bladder, or urinary problems?
Location of pain: Right, left, or both sides and back? Area over the bladder? Lower abdomen?
Number of times had this pain
Ever had any trouble with pain, discomfort, or pressure in your chest when you walk fast or uphill?
Ever had severe pain across the front of chest lasting for half an hour or more?
Number of these attacks
Ever had pain in back on most days for at least 2 weeks?
Ever had pain in neck on most days for at least 2 weeks?
Ever had pain or aching in any joint, other than the back or neck, on most days for at least 6 weeks?
Ever had any swelling of joints with pain present when the joint was touched on most days for at least 1 month?
Ever changed job or stopped working because of a health problem?

Physician's Examination (ages 6 months–74 years)
Costovertebral tenderness
Pain on motion of (right, left, both) shoulder, elbow, wrist, (number of) metacarpophalangeal, (number of) proximal interphalangeal, (number of) distal interphalangeal, ankle, foot, knee, hip
Pain on flexion, extension, right and/or left lateral bending, right and/or left rotation of back (location):
Cervical: Severity of pain (none, doubtful, minimal, moderate, maximal)
Thoracic
Low back
Diffuse
Uncertain

Data tape availability

NHANES II Medical History Questionnaire, Ages 6 Months–11 Years (tape no 5010),
NTIS accession no PB 83-215616
NHANES II Health History Supplement, Ages 12–74 Years (tape no 5305),
NTIS accession no PB 83-256537
NHANES II Medical History Questionnaire, Ages 12–74 Years (tape no. 5020),
NTIS accession no PB 83-154815
NHANES II Physician's Examination, Ages 6 Months–74 Years (tape no 5302), NTIS accession no PB-242930

Technical contact:
Patricia Vaive
Division of Health Examination Statistics
6525 Belcrest Road, Room 900
Hyattsville, MD 20782
(301) 436–7081

Questionnaire source items

McDowell A, Engel A, Massey JT, Maurer K. Plan and operation of the second National Health and Nutrition Examination Survey, 1976–80. National Center for Health Statistics. Vital Health Stat 1(15). 1981.

Hispanic Health and Nutrition Examination Survey (HHANES)

Survey design

Survey of civilian noninstitutionalized persons of Hispanic origin ages 6 months–74 years, using a multistage, clustered probability sample drawn from a universe comprised of 229 counties in Texas, Arizona, Colorado, New Mexico, and California (the Mexican-American sample); New York City (the Puerto Rican sample); and Miami (the Cuban-American sample) areas. An estimated 76 percent of the Hispanic-origin population of the United States resides in these counties. Interviews and examinations with about 12,000 persons were conducted from 1982 through 1984.

Basic data elements

Data include household and demographic information, a medical history, medication and vitamin use, tobacco and alcohol use, drug abuse, health care needs, utilization of health services, a medical examination, a dental examination, anthropometric measurements, nutrition, and a variety of clinical procedures and laboratory tests.

Pain data elements

Child History Questionnaire (ages 6 months–11 years)
Ever had an ear infection or an earache?

Number of times
Ever treated by a doctor for it?
Ever had tubes placed in ear(s) by a doctor?
Ever had a ruptured eardrum?
Cause of functional limitation:
Acute (onset within past 3 months)
Chronic (onset more than 3 months ago)

The following information is not yet available on the current Child Sample Person public use data tape:
Use of nonprescription medicines in past 2 weeks:
Pain relievers such as aspirin or Tylenol?
Sleeping tablets, sedatives, or tranquilizers?
Use of prescription medicines in past 2 weeks:
Name
Strength
Prescribed dosage
Prescribed frequency
Problem for which prescribed
Frequency taken
Side effects—specified

Adolescent and Adult Medical History Questionnaire (ages 12–74 years)
Average number of hours of sleep each day
Main reason for last visit for dental care was toothache

Digestive disease (ages 20 years and over)
Has a doctor ever told you that you had gallstones?
Have you ever had surgery or an operation for gallstones or gallbladder disease?
During the past 5 years, have you had pain in your abdomen or lower chest which lasted a half hour or more?
Location of pain
Last time had pain
Usual duration
Pain steady or come in waves?
When have the pain, do you move around or lie still?
Time pain usually starts
Ever been awakened from sleep by this pain?
Get this pain while eating, after eating, or is it not related to eating?
How long after eating do you get this pain?
Usually feel sick to stomach either before or after get this pain?
Within a day or two of having the pain, had any of the following:
Fever or chills?
Itching?
Yellow jaundice?
Unusually dark colored urine?
Unusually light colored bowel movements?
Number of days in past year had this pain in the abdomen or lower chest
In the past year, what was the longest period of days, weeks, or months in which you did not have this pain?
Age at first attack of this pain
Ever seen a doctor about this pain?
Doctor's diagnosis
Cause of this pain
Ever received an injection of medication to relieve this pain?
Ever hospitalized for this pain?
During the past year, had heartburn or burning pain after eating?
Frequency
Distress caused by any of the following foods:
Milk?
Fatty foods?
Green vegetables?
Seafood?
Any other food?

Cardiovascular conditions (ages 20 years and over):
Ever had any pain or discomfort in your chest?
Do you get it when you walk uphill or hurry?
Do you get it when you walk at an ordinary pace on the level?
What do you do if you get the pain or discomfort while you are walking?
Stop or slow down?
Continue at the same pace?
Take medicine?
If you stand still, what happens to the pain or discomfort? Is it relieved?
How soon is it relieved?
Location of pain or discomfort
Doctor seen?
Doctor's diagnosis: Coronary heart disease; other cardiovascular disease; respiratory conditions; chest pain, noncardiovascular; stress, tension, or nervous conditions
Ever had severe pain across the front of your chest lasting for half an hour or more?
Number of these attacks
Date of first attack; duration of pain
Date of last attack; duration of pain
See a doctor because of this pain?
Doctor's diagnosis

Functional impairment (ages 18–70 years):
Cause of functional limitation is:
Acute (onset within the past 3 months)
Chronic (onset more than 3 months ago)
Ever changed job, stopped working, or made any changes in housework because of a disability or health problem? (ages 18 years and over)

Condition list:
Doctor ever told you that you had a heart attack?
Time since had first attack
Doctor ever told you that you had kidney problems?
Still have problems?
Time since first had problems

The following information is not yet available on the current Adolescent and Adult Medical History public use data tape:

Use of nonprescription medicines in past 2 weeks:
- Pain relievers such as aspirin or Tylenol?
- Sleeping tablets, sedatives, or tranquilizers?

Use of prescription medicines in past 2 weeks:
- Name
- Strength
- Prescribed dosage
- Prescribed frequency
- Problem for which prescribed
- Frequency taken
- Side effects—specify

Physician's Examination (ages 6 months–74 years)

Tender lymph nodes?

Thyroid tenderness?

Costovertebral angle tenderness?

Tenderness on palpation of the abdomen (nine specified areas)?

During the past 5 years has examinee had pain in the gallbladder area that lasted a half hour or more?
- Does examinee usually feel sick to his or her stomach either before or after getting this pain?
- Likelihood examinee has gallstones

Leg ulceration: Which leg?

Edema in legs: Which leg? Severity?

Pain with ankle dorsiflexion: Which leg?

Tenderness in the following joints (ages 10 and over):
- Hips? Which hip?
- Knees? Which knee?
- Ankles? Which ankle?
- Feet? Which foot?
- Shoulders? Which shoulder?
- Elbows? Which elbow?
- Wrists? Which wrist?
- Hands? Which hand?

Tenderness in the back (ages 5 and over):
- Sciatic notch? Which side?
- Sacroiliac? Which side?

Varicose veins: Which leg? Severe, moderate, or mild?

Measures of Depression (ages 20–74 years)

National Institute of Mental Health Diagnostic Interview Schedule Depression Section

Center for Epidemiologic Studies Depression Scale

Gallbladder Ultrasound Data (ages 20–74 years)

Data tape availability

HHANES Child History Questionnaire, Ages 6 Months–11 Years, Version 2 (tape no 6522), NTIS accession no PB 87–182424

HHANES Adolescent and Adult History Questionnaire, Ages 12–74 Years, Version 2 (tape no 6521), NTIS accession no PB 87–182440

HHANES Physician's Examination, All Ages (tape no 6509), NTIS accession no PB 87–158416

HHANES Gallbladder Ultrasound Data, Ages 20–74 Years, Version 1 (tape no 6504), NTIS accession no PB 89–164511

HHANES Measures of Depression, Ages 20–74 Years (tape no 6523), NTIS accession no PB 87–100391

Technical contact:

Patricia Vaive
Division of Health Examination Statistics
6525 Belcrest Road, Room 900
Hyattsville, MD 20782
(301) 436–7081

Questionnaire source items

Maurer KR. Plan and operation of the Hispanic Health and Nutrition Examination Survey, 1982–84. National Center for Health Statistics. Vital Health Stat 1 (19). 1985.

Third National Health and Nutrition Examination Survey (NHANES III)

Survey design

Survey of the U.S. civilian noninstitutionalized population ages 2 months and over, using a multistage, clustered probability sample stratified by geographic region and population size. Interviews and examinations will be conducted from 1988 through 1994, with both the first and second 3 years of data collection constituting national samples. The total sample size of 40,000 is expected to yield about 30,000 examined persons.

Basic data elements

Data on all examined persons include household and demographic information, nutrition information, medical and dental examinations, anthropometric measurements, and a variety of laboratory tests. Examination data on subsamples, determined mainly by age of examinee, include electrocardiograms, eye fundus photographs, radiographs of hand-wrist and knee, ultrasounds of the gallbladder, spirometry, bone densitometry, and tests for hearing, allergies, and physical and cognitive functions. Target diseases and conditions include cardiovascular disease, chronic obstructive pulmonary disease, diabetes, kidney disease, gallbladder disease, osteoporosis, arthritis, infectious diseases, dental health, allergy, cancer, mental health, and hearing. Data will probably be located on multiple tapes.

Pain data elements

Household Youth Questionnaire (ages 2 months–16 years)

Selected conditions:
- Complaints of headaches during the past 12 months
- Complaints of stomach aches

Dental care and status (ages 2–16 years)
- Type of dental care needed now: Relief of pain?

Vision and hearing:
- Ever have an ear infection or an earache?
  - Number of times

Age at first infection or earache
Treated by a doctor?
Tubes in ears?

Household Adult Questionnaire (ages 17 years and over)
Selected conditions:
Has a doctor ever told you that you had:
Arthritis?
Type
Lupus?
Gout?
Cardiovascular disease:
Ever had any pain or discomfort in your chest?
Get it when you walk uphill or hurry?
Get it when you walk at an ordinary pace on level ground?
What do you do when you get it while walking: Stop, slow down, continue at same pace?
Pain or discomfort relieved if you stand still?
How soon?
Location of pain or discomfort
Ever had a severe pain across the front of your chest lasting half an hour or more?
Has a doctor ever told you that you had a heart attack?
Number
Age at (first) attack
Age at last attack
Get pain in either leg while walking?
Does pain ever begin while standing still or sitting?
Pain in calves?
Get it when you walk uphill or hurry?
Get it when you walk at an ordinary pace on level ground?
Pain ever disappear while walking?
What do you do if you get it while walking: Stop, slow down, continue at same pace?
Pain relieved if you stand still?
How soon?

Musculoskeletal conditions (ages 20 years and over):
Ever had pain in back on most days for at least 1 month?
Had this pain within the past 12 months?
Location of back pain
Ever had pain in hands on most days for at least 6 weeks?
Which joints?
Ever had pain in knees on most days for at least 6 weeks?
Right, left, both?
Hurt at rest as well as when moving?
Ever had pain in hips on most days for at least 6 weeks?
Right, left, both?

Gallbladder disease:
During the past 12 months, have you had pain in (the area shaded on a diagram shown the respondent)?
Location of most uncomfortable pain
Duration of longest episode of pain
Number of days in past 12 months with this pain
Was pain continuous, or did it tend to come and go?
Hurt more, less, or no difference if moved around?
Ever seen a doctor about this pain?
What doctor said caused the pain
Has a doctor ever told you that you had gallstones?
Was pain the reason for visiting doctor the time you were told that you had gallstones?
Ever had gallbladder surgery?
Age when surgery performed
Did the pain that caused your doctor visit continue after gallbladder surgery?

Dental care and status:
Type of dental care needed now: Relief of pain?
Vitamin, mineral, and medicine usage:
Use of prescription medicines in past month
Name
Problem for which prescribed
Length of time taken
Use of antacids in past month
Name
Frequency taken
Magnitude of dosage
Length of time taken
Use of nonprescription pain relief medicines
In the past month, taken any
Aspirin, Anacin, Bufferin, Ecotrin, Ascriptin, or Midol?
Tylenol, Anacin-3, or acetaminophen?
Advil, Nuprin, Medipren, or ibuprofen?
Other (specified)?
Frequency taken

Physician's Examination
Pain on passive motion of wrist, finger joints (specified), great toe, knee: right, left, or both (ages 60 years and over)

Home Examination (ages 2–11 months and 20 years and over)
Pain reported on walking?

Family Questionnaire
Health insurance coverage
Medicare coverage
Medicaid coverage during past 12 months
Was father or mother ever told by a doctor that he or she had a heart attack or angina before the age of 50?

Data tape availability

The survey reaches its midpoint in 1991 with a 3-year national probability sample. Public use data tapes from this sample are projected to be available in 1994. The public use data tapes from the full survey are expected to be available in 1997.

Technical contact:
Patricia Vaive
Division of Health Examination Statistics
6525 Belcrest Road, Room 900
Hyattsville, MD 20782
(301) 436–7081

Questionnaire source items

Copies of the questionnaires can be obtained by writing to the following address:

National Center for Health Statistics
Division of Health Examination Statistics
Survey Operations Branch
6525 Belcrest Road, Room 900
Hyattsville, MD 20782

NHANES I Epidemiologic Followup Study (NHEFS)

Survey design

Conducted in three waves with respondents or their proxies (for deceased or incapacitated respondents) initially interviewed and examined during 1971–75 in the first National Health and Nutrition Examination Survey (NHANES I). The 1982–84 first wave of NHEFS data collection included all persons who were 25–74 years of age at their NHANES I examination (n = 14,407). Personal interviews were conducted in respondents' residences, including institutions. The second wave, the 1986 NHEFS, was conducted for members of the NHEFS cohort who were 55–74 years of age at their baseline examination and not known to be deceased at the 1982–84 NHEFS (n = 3,980). Computer-assisted telephone interviews were conducted with survey subjects or their proxies. In the 1987 NHEFS, the third wave of the NHEFS, information was collected from 11,750 subjects who were 25–74 years of age at baseline and not known to be deceased in the previous NHEFS surveys.

Basic data elements

Data include demographic information; a family history; a female medical history; a health condition checklist; sections on nutrition, arthritis, functional limitation (activities of daily living), tobacco and alcohol use, mental status measures, medication use, physical activity, sleep habits and problems, vision and hearing impairments, and dental problems. Blood pressure, pulse rate, and weight were measured in the initial followup. Admission and discharge diagnoses coded according to the 9th Revision, International Classification of Diseases were obtained for each health care facility stay. Death certificates were obtained for NHANES I participants who had died, and proxies provided information on the decedents' last days.

Pain data elements

Subject Questionnaire [a]

Ever had pain or discomfort in chest? (1982–84)
- When do you get it?
  - When you walk uphill or hurry?
  - When you walk at an ordinary pace on level ground?
- What do you do if you get this pain or discomfort while you are walking?
  - Stop or slow down?
  - Take nitroglycerin?
  - Continue at the same pace?
- If you do stop or slow down, is pain relieved?
  - How soon?
- Ever had this pain or discomfort more than three times?
- Age when first had it
- Been bothered by this pain or discomfort in the past 12 months?
- Year when last experienced the pain or discomfort
- Region of pain indicated on a diagram shown the respondent
- Ever had a severe pain across the front of your chest lasting half an hour or more?
  - See a doctor because of this pain?
  - What did the doctor say it was? Angina; coronary; other heart disease; intestinal or intraabdominal problems; lungs, pleura, trachea; chest wall; other
  - Number of these attacks
  - Year of (first) attack
  - Length of episode of pain
  - Year of last attack
  - Length of episode of pain
  - Since 1970, been hospitalized overnight for this/these attacks?

Get pain in either leg when walking? (1982–84)
- Pain ever begin when standing still or sitting?
- Part of leg affected
- Get this pain when walking uphill or hurrying?
- Get this pain when walking at an ordinary pace on level ground?
- Does this pain ever disappear while still walking?
- What do you do if get this pain while walking: Stop or slacken your pace or continue at the same pace?
  - If you do stop, is the pain relieved?
  - How soon after stopping is the pain relieved?
- Age when first had it
- Been bothered by this condition in the past 12 months?
- In what year did you last experience this problem?

Did a doctor ever tell you that a cyst or lump in your breast was cancerous or malignant? (1982–84)

Ever had one or both of your breasts removed? (1982–84)

Year told had breast cancer (1987)

Ever had a skin tumor, growth on your skin, skin ulcer, or other skin lesions for which you received medical treatment by a doctor? Which? (1982–84)
- Listed skin conditions include shingles and lupus erythematosus

[a] Pain data were collected in all years of survey unless indicated by dates in parentheses.

Number of times this condition recurred that required treatment by a doctor, including surgical removal
Parts of the body on which this condition located: Head or face, arms, hands, legs, feet, other (specified)
Since 1970, ever stayed in a hospital overnight for treatment of this condition?

Did a doctor ever tell you that you had any cancer? (1982–84)
Since (month and year) had any type of cancer diagnosed? (1986, 1987)
Location
Type
When first told
Since 1970, been hospitalized overnight for this condition?

When a child or teenager, were you ever sunburned so badly that your skin blistered? (1982–84)
In the past 10 years, ever been confined to bed for most of the day for at least a 2-week period? (1982–84)
Ever had a bedsore, an open sore caused by being confined to bed for a long time or unable to move about as usual? (1982–84)
Had pain on most days for at least 1 month: In neck; in back; in or around either hip joint, including the buttock, groin, and side of upper thigh; in or around the knee, including back of knee? Which knee?
Had pain or aching in any joint other than the hip, back, or knee on most days for at least 6 weeks? (1982–84)
Had any swollen joints that were painful when touched on most days for at least 1 month? (1982–84)
The longest episode of neck pain ever had: 1 month, 2–5 months, 6–12 months, more than 1 year (1982–84)
Age when first experienced this recurring neck pain
Still having this neck pain?
When was the last time you had this pain?
Does this neck pain occur more frequently than it used to?
Pain present when you are/were resting at night?
Pain awaken(s) you from sleep at night?
Pain seem(s) to spread?
Pain spread(s) to:
The top and back of the head?
Either shoulder?
The arms or hands?
Is/was your neck pain made worse:
By coughing, sneezing, or deep breathing?
With bending or twisting motion?
After prolonged sitting?
After prolonged standing?
With other motion?

Ever had neck pain caused by an injury? (1982–84)
Was the neck pain caused by playing a sport, doing your job at work, or some other activity?

Ever been told by a doctor that you had a "whiplash" injury of the neck? (1982–84)
Ever been told by a doctor that you had a slipped or ruptured disc in your neck? (1982–84)
Were you in traction to treat this slipped or ruptured disc?

Ever stayed in a hospital overnight for neck pain? (1982–84)
Have any surgery for neck pain? (1982–84)
Number of times

Had pain in back on most days for at least 1 month? (1982–84)
The longest episode of back pain ever had
Age when first experienced this recurring back pain
Still having this pain?
The last time you had this pain
Does this pain occur more frequently than it used to?
Where is/was the pain located: Upper back, mid-back, lower back?
When have/had this pain, where is/was it most intense: Upper back, mid-back, lower back?
Was/is the pain present when resting at night?
Does/did it awaken you from sleep at night?
Does/did the pain seem to spread?
Does/did the pain spread to: Back of right leg? Back of left leg? Top of the head? Sides of body?
Is/was your back pain made worse:
By coughing, sneezing, or deep breathing?
With bending or twisting motion?
After prolonged sitting?
After prolonged standing?
With other motion?

Ever had back pain caused by an injury? (1982–84)
Was the back pain caused by playing a sport, doing your job at work, or some other activity?

Ever been told by a doctor that you had a slipped or ruptured disc in your back? (1982–84)
Were you in traction to treat this slipped or ruptured disc?

Ever stayed in a hospital overnight for back pain? (1982–84)
Was this hospitalization since 1970?
Have any surgery?
How many times?

Had pain in or around either hip joint, including the buttock, groin, and side of the upper thigh, on most days for at least 1 month?
Longest episode of hip pain ever had
Age when first experienced this recurring pain in the hip
Still having this hip pain?
When was the last time had the hip pain?
Areas of the body the hip pain is/was usually most intense: Right buttock, left buttock, right groin, left groin, side of right upper thigh, side of left upper thigh, somewhere else?
From the hip does/did the pain tend to spread?

Does/did the pain tend to spread to: Inside of leg, front of leg, outside of leg, back of leg, somewhere else?
Do/did you have pain in or around the hip when either coughing or sneezing?
When this pain is/was present, does/did it hurt when resting as well as when moving?
Since 1970, stayed overnight in a hospital for problems related to your hip pain?

Had pain in or around the knee, including the back of the knee, on most days for at least 1 month?
Which knee?
Longest episode of knee pain ever had
Age when first experienced recurring pain in the knee
Still having this knee pain?
Last time had this knee pain
When this pain is/was present, does/did it hurt when resting as well as when moving?
When this knee pain is/was present, is/was there also swelling of the knee joint?
Is/was the joint warm to the touch?
Does/did the joint appear red?

Ever had "locking" of the knee? (1982–84)
Which knee?

Has either knee ever "given way" under you? (1982–84)
Which knee?

Ever had a severe twisting of either knee resulting in a sprain or swelling lasting more than 2 weeks? (1982–84)
Which knee?

Had pain or aching in any joint other than the hip, back, neck, or knee on most days for at least 6 weeks? (1982–84)
Which joints were painful?
Finger(s)? Right or left hand?
Wrists? Right or left?
Elbows? Right or left?
Shoulders? Right or left?
Ankles? Right or left?
Toes? Right or left foot?

Ever had any swollen joints that were painful when touched on most days for at least 1 month? (1982–84)
Age when first experienced swelling of your joints
Still having this swelling of your joints?
The last time you had this swelling
Which joints are/were usually involved whenever you have/had this swelling with tenderness on touching?
Finger(s)? Right or left hand?
Wrists? Right or left?
Elbows? Right or left?
Shoulders? Right or left?
Hips? Right or left?
Knees? Right or left?
Ankles? Right or left?
Toes? Right or left foot?

Did you ever have a surgical procedure on any of your joints? (1982–84)
Which joints were operated on?
Finger(s)? Right or left hand?
Wrist? Right or left?
Elbow? Right or left?
Shoulder? Right or left?
Hip? Right or left?
Knee? Right or left?
Ankle? Right or left?
Toes? Right or left foot?
Did you have any joints replaced? Which joints?
How many replacements?
If finger(s), on right or left hand?
If hip, on right or left side?
If knee, right or left?
Any other joints?

Ever stayed overnight in a hospital because of joint problems? (1982–84)

Arthritis ever diagnosed by a doctor? (1986, 1987)
Type
Ever had an x-ray for arthritis?
Time since first x-ray
Time since last x-ray

Gout ever diagnosed by a doctor? (1986, 1987)
Year first told
Year had last episode of gout

Ever had an attack of arthritis that the doctor said was caused by gout? (1986, 1987)

Since (1980 or 1970), hospitalized for arthritis/gout? (1986, 1987)

Since 1970, stayed overnight in a hospital because of joint problems? (1982–84)

Pain visual analog scale measure for joint condition pain in the past week (1982–84)

Ever been told by a doctor you had a fractured hip?
A dislocated hip? (1982–84)
Which hip?
Age when it happened
What year? (1986, 1987)
Another fractured hip since then? (1986, 1987)
Have surgery?
Since 1970, hospitalized for this problem?

Had any broken or fractured bones (other than hip) since 1970? (1986)
Which bone?
What year?
Hospitalized?

Since (month and year) had a broken or fractured wrist? (1987)
What year?

Use of antacids, aspirin, tranquilizers, antidepressants, vitamins, nutritional supplements (1982–84)

Have any problems that prevent the use of one or more arms or legs? (1986, 1987)
Because of severe arthritis?
Which limbs are involved?

Use of special equipment (1986, 1987)

For the following conditions,
Ever diagnosed by a physician?
Year first diagnosed
Hospitalized since 1970 for this condition?

Migraines (1982–84)
Ulcers: Peptic, stomach, or duodenal (1982–84)
Kidney disorder or kidney stones
Urinary tract or kidney infection more than three times
Colitis, enteritis (1982–84)
Angina (1982–84):

Frequency of (1982–84):
Trouble falling asleep
Trouble with waking up during the night
Trouble with waking up too early and not being able to fall asleep again
Getting so sleepy during the day or evening that you have to take a nap
Taking a sedative or sleeping pill prescribed by a doctor for sleep

Compared with 1 year ago, have sleep problems much more now, somewhat more now, somewhat less now, much less now, or is sleeping pattern about the same? (1982–84)
Usual number of hours of sleep (1982–84)
Medicare coverage (1987)

If subject dead (1982–84):
Was pain medication received during the 24 hours preceding death?
Whether medication was received or not, were there complaints of pain or evidence of pain during the 24 hours preceding death?
Was the pain mild, moderate, or severe?
Any chest pain within 72 hours preceding death?
Duration of pain
Any medication to ease chest pain?

Abbreviated General Well-Being Schedule (1982–84)
During past month, bothered by any illness, bodily disorder, pains, or fears about your health?

Center for Epidemiologic Studies Depression Scale (1982–84)
Feelings during the past week

Data tape availability

1982–84 NHEFS Mortality, NTIS accession no PB 88–102306
1982–84 NHEFS Health Care Facilities, NTIS accession no PB 88–102280
1982–84 NHEFS Interview, NTIS accession no PB 88–121298
1982–84 NHEFS Vital and Tracing Status, NTIS accession no PB 88–102264

Technical contact:
Christine S. Cox
Division of Analysis
6525 Belcrest Road, Room 1080
Hyattsville, MD 20782
(301) 436–5978

1986 NHEFS Mortality, NTIS accession no PB 90–501651
1986 NHEFS Health Care Facilities, NTIS accession no PB 90–501669
1986 NHEFS Interview, NTIS accession no PB 90–501667
1986 NHEFS Vital and Tracing Status, NTIS accession no PB 90–501664

Technical contact:
Fanchon F. Finucane
Division of Analysis
6525 Belcrest Road, Room 1080
Hyattsville, MD 20782
(301) 436–5975

Questionnaire source items

Cohen BB, Barbano HE, Cox CS, et al. Plan and operation of the NHANES I Epidemiologic Followup Study, 1982–84. National Center for Health Statistics. Vital Health Stat 1(22). 1987.
Fried VM, Finucane FF, Madans JH, et al. Plan and operation of the NHANES I Epidemiologic Followup Study, 1986. National Center for Health Statistics. Vital Health Stat 1(25). 1990.

Continued followup questionnaires can be obtained by writing to technical contact person.

National Health Interview Survey (NHIS)

Survey design

General household health survey of the U.S. civilian noninstitutionalized population using a multistage probability design that permits continuous sampling throughout the year. The sample is designed in such a way that the sample of households interviewed each week is representative of the target population and that weekly samples are additive over time. Independent samples are selected each year. Interviews have been conducted annually since 1957 with approximately 111,000 persons living in about 42,000 households. The sample has ranged in magnitude from a high of about 134,000 persons in some 44,000 households in 1972 to a low of about 62,000 people in approximately 35,000 households in 1986. The 1986 sample represented only one-half of the new sample, which was redesigned in 1985. About 123,000 persons in 1987 and about 122,000 persons in 1988 and 1989 were interviewed in approximately 47,000 households each year.

Basic data elements

Data include information on household and sociodemographic characteristics; acute illnesses and injuries; disability days (for example, bed days, work-loss days, and school-loss days) associated with acute and chronic conditions; prevalence of selected chronic conditions and impairments; limitation of activity because of one or more

chronic conditions or impairments; and use of physicians, dentists, and short-stay hospitals. Supplements to the core questionnaire change from year to year in response to current interest in special health topics. Health insurance information is collected periodically. Data are located on multiple tapes.

Pain data elements

Core questionnaire items

- Restricted activity in past 2 weeks because of (painful) condition? Coded according to the International Classification of Diseases (ICD)
  - Number of bed days
  - Number of work-loss days
  - Number of school-loss days
  - Number of reduced-activity days
- Limitation of activity because of ICD-coded (painful) condition:
  - Unable to perform usual activity for one's age and sex group?
  - Limited in kind or amount of usual activity?
  - Limited, but not in usual activity?
- Physician visit(s) in past 2 weeks because of ICD-coded (painful) condition?
  - Type of doctor seen (most years)
- Short-stay hospitalizations because of ICD-coded (painful) condition (condition data available for 1969–81):
  - Number of discharges or episodes
  - Number of days
  - Average length of stay
  - Operations performed
- When and how bothered by condition (Most years 1969–81)
- Surgery for condition? (Most years 1969–81)
- Hospitalization for condition? (Most years 1969–81)
- Injuries: Class of accident

Pain-related items

Various pain-related items have been placed among core questionnaire items in different years. Some are listed as follows:

- Limitation of mobility caused by (painful) chronic condition coded according to *Eighth Revision International Classification of Diseases, Adapted for Use in the United States (ICDA)* (1969, 1971, 1972)
  - Duration
- Cause of pain on movement or joint tenderness (1969):
  - Any accident or injury
  - Exertion from sports and so forth
  - Bursitis and/or tendinitis
  - Heart condition, hypertension, and so forth
  - Back, neck, or spine trouble
  - Arthritis, rheumatism, and so forth
  - Old age
- Received disability payments or benefits from (1977):
  - Social Security Administration?
  - Veterans Administration?
  - Public assistance?
- Chronic condition checklists:
  - Musculoskeletal system and skin condition list (1969, 1976, 1978–90), which includes:
    - Arthritis or rheumatism
    - Gout
    - Lumbago
    - Sciatica (1984–90)
    - Bone cyst or bone spur (1989–90)
    - Osteomyelitis (through 1988)
    - Slipped or ruptured disc
    - Repeated trouble with neck, back, or spine
    - Bursitis or synovitis
    - Trouble with fallen arches, flatfeet, or clubfoot (through 1988)
    - Trouble with ingrown toenails or fingernails
    - Trouble with bunions, corns, or calluses
  - Impairment condition list (1971, 1977–90), which includes:
    - Repeated trouble with back or spine
    - Any trouble with fallen arches or flatfeet
    - Any condition caused by an old accident or injury—specified
  - Digestive condition list (1975, 1978–90), which includes:
    - Gallstones
    - Gallbladder trouble
    - Ulcer
    - Hernia or rupture
    - Gastritis
    - Enteritis
    - Diverticulitis
    - Colitis
    - Cancer of the stomach, colon, or rectum
  - Glandular, blood, nervous, and genitourinary condition list (1973, 1978–90), which includes:
    - Migraine
    - Neuralgia or neuritis
    - Sciatica (1973, 1978–83)
    - Nephritis
    - Kidney stones
  - Cardiovascular condition list (1972, 1978–90), which includes:
    - Angina pectoris
    - Myocardial infarction
    - Hemorrhoids
    - Phlebitis or thrombophlebitis
  - Miscellaneous condition list (1973), which includes:
    - Migraine
    - Neuralgia or neuritis
    - Sciatica
    - Nephritis
    - Kidney stones

All conditions and impairments are ICD-coded and can be identified by individual code. Listings that group, or recode, common conditions and diseases have also been developed. Prior to 1982, there were five condition recodes. Recode 1 lists 278 categories of diseases, injuries, and impairments; recode 2 lists 33 of the most common acute conditions from recode 1; recode 3 lists 53 chronic conditions and impairments from recode 1; recode 4 is a 38-code condition list used in tabulating the diagnosis reported for each hospitalization; and recode 5 is a 58-code listing of diseases, injuries, and impairments.

Since 1982, conditions and impairments have been recoded into three diagnostic recodes. Recode A consists of 32 four-digit categories of frequently reported acute conditions, including fractures; sprains and strains; acute back, spine, and neck pain; and headache, excluding migraine. Recode B is a modified listing of diseases and injuries developed by the World Health Assembly and is primarily used in NHIS to classify conditions reported as causing activity limitation. Recode C consists of 134 three-digit categories of chronic conditions and impairments. The categories correspond to the conditions that appear on the checklists of selected chronic conditions. These categories are used in NHIS to produce prevalence estimates of selected chronic conditons.

Supplements to the core questionnaire are presented here by type of data collected and are listed below according to the major epidemiologic uses, as outlined in appendix V.

Type of data	*Major uses*
Morbidity—acute and chronic	Magnitude, scope, and structure
Disability	Magnitude, scope, and structure
General health status and psychological well-being	Magnitude, scope, structure, risk factors, and impact
Health practices	Risk factors
Use of health services and availability of resources	Impact and management
Social and economic	Impact and management

Morbidity (acute and chronic)

Accident Supplement (all ages) (1975)
- ICDA-coded condition resulting from an accident
- When accident happened: Past week, week before that, 2 weeks–1 month, 1–2 months, 2–3 months, 3–4 months, 4–6 months, 6 or more months
- Number of times saw doctor
- Restricted-activity days
- Bed-disability days
- Work- or school-loss days
- Where accident happened
- How accident happened

Cancer Control Supplement (ages 18 years and over) (1987)
- Was last Pap smear, breast physical examination, mammogram, digital rectal examination, blood stool test, proctoscopic example because of a health problem?
  - What was the problem? Pain?

Supplement Booklet Section N2: Back Pain (ages 18 years and over) (1988)
- Back pain other than menstrual pain every day for a week during the past 12 months?
- Number of days of back pain
- Number of full days missed from work because of back pain
- Part of back bothered the most: Upper, middle, lower
- Back pain ever spread to: Buttocks? Thighs? Lower leg or foot?
- Is the back pain the result of:
  - A single accident or injury, such as slipping, falling, twisting, lifting something, or being in a car accident?
  - Repeated activities, such as lifting, pushing, pulling, bending, twisting, or reaching?
- Where back pain started: At work, at home, recreational site, other
- Occupation, industry, and type of work done
- Cause of back pain
- Has your back bothered you today?
- When last had back pain
- Number of consecutive days of back pain
- Year first had an episode of back pain that lasted for a week or more
- Number of years have had episodes of back pain lasting for a week or more
- Longest period of time had back pain every day
- Ever stopped working at a job or changed jobs because of back pain?
- Ever made a major change in work activities because of back pain?

Supplement Booklet Section N3: Hand Discomfort (ages 18 years and over) (1988)
- During the past 12 months, had discomfort in hands, wrists, or fingers? (Discomfort can mean pain, burning, stiffness, numbness, or tingling.)
  - Number of days in past 12 months with discomfort in hands, wrists, or fingers
  - Have discomfort every day for a week or more during past 12 months?
- Which hand had discomfort: Right, left, or both?
- Discomfort worse when trying to sleep or did it awaken you from sleep?
- Hand(s) bothered you today?
- Time since last had discomfort
- Number of consecutive days, weeks, or months of discomfort
- Year first noticed this hand discomfort
  - Total number of different years of hand discomfort
- During past 12 months, were you away from work for more than 1 week for any reason?

When away from work for more than 1 week, did hand discomfort increase, decrease, or stay the same?

During past 12 months, miss at least a full day from work because of hand discomfort?

Ever stopped working at a job or changed jobs because of hand discomfort?

Ever made a major change in your work activities because of hand discomfort?

Time since last saw or talked to a medical doctor, chiropractor, physical therapist, or other medical person about your hand discomfort

Diagnosis

Ever had any of the following conditions?

Arthritis of the hand, wrist, or fingers?

A broken bone in your hand, wrist, or fingers?

A condition affecting the wrist and hand called carpal tunnel syndrome?

Supplement Booklet Section N7: Conditions (ages 18 years and over) (1988)

During past 12 months, had:

Repeated trouble with neck, back, or spine?

A condition affecting the wrist and hand called carpal tunnel syndrome?

A condition affecting the fingers and/or toes called Raynaud's phenomenon?

A condition affecting the tendons called tendonitis?

Ever told by a doctor or other medical person that [above condition] was related to any job you ever had?

A worker's compensation claim ever filed for your [above condition]?

During past 12 months, told by your doctor or employer to stay home from work temporarily because of your [condition]?

During past 12 months, did your employer transfer you to another job, either temporarily or permanently, because of your [condition]?

During past 12 months, did your employer give you lighter work or excuse you from certain duties at work because of your [condition]?

Ever stop working at a job or change jobs because of your [condition]?

Occupation and industry related to your [condition]?

Supplement Booklet Section P5: Childhood Conditions (ages 17 years and under) (1988)

Ever have:

Repeated tonsillitis or enlargement of the tonsils or adenoids?

Frequent or repeated ear infections?

Frequent or severe headaches, including migraines?

Arthritis or any other joint disease or joint problem?

Have [condition] in the past 12 months?

Have had [condition] for at least 3 months in lifetime?

Current Health Topics Section Q2: Diabetes Followup Questions (ages 18 years and over) (1989)

Has a doctor ever told you that you had angina?

Ever had symptoms of a bladder infection that lasted more than 3 months, such as frequent urination and pain in your bladder?

Were you told that you had painful bladder syndrome or interstitial cystitis?

Age when told

Current Health Topics Section R: Orofacial Pain (ages 18 years and over) (1989)

See appendix II for a facsimile of the questionnaire.

Current Health Topics Section S1: Specific Digestive Conditions (ages 18 years and over) (1989)

During the past 12 months, have gallstones? Any other gallbladder trouble?

Ever have gallstones? Any other gallbladder trouble?

When first diagnosed

During the past 12 months, have an ulcer?

Ever had an ulcer?

When first diagnosed

Type: Gastric, duodenal, peptic, or other

During the past 12 months, have spastic colon, functional bowel, irritable colon, or irritable bowel syndrome?

Ever had spastic colon, functional bowel, irritable colon, or irritable bowel syndrome?

Have hemorrhoids in the past 12 months?

Ever diagnosed by a doctor?

When last talked to a doctor about hemorrhoids

Ever had surgery for hemorrhoids?

Current Health Topics Section S2: Abdominal Pain (ages 18 years and over) (1989)

See appendix III for a facsimile of the questionnaire.

Current Health Topics Section S3: Normative Bowel Functions (ages 18 years and over) (1989)

Frequency during past 12 months of bowel movements accompanied by pain:

Always; most of the time; some of the time; rarely; never

Have had a lot of trouble in the past year with:

Abdominal pain

Chest or heart pain

Pain in the joints

Pain in arms and legs, other than in the joints

Backaches

Headaches

Pain when urinating

Current Health Topics Section T: Diabetes Risk Factors (ages 18 years and over) (1989)

Number of times in past 12 months had a bladder or urinary tract infection

Ever had symptoms of a bladder infection that lasted more than 3 months, such as frequent urination and pain in your bladder?

Told that you had painful bladder syndrome or interstitial cystitis?
Age when told

1990 Supplement Booklet Section O: Podiatry
During the past 12 months, anyone in the family have trouble with:
Deformities of the toe or joint, including hammer toe, claw toe, and missing toes?
Bunions?
An injury, such as a sprain, strain, fracture, or dislocation of the foot?
Arthritis of the toes?
Still have [problem] or has it gone away or been cured?
Duration of [problem]
[Problem] serious enough to consider getting professional care?
During the past 12 months, get medical care for the foot problem(s)?
If not, why not?
Covered by health insurance that would pay for treatment for the foot problem(s)?
If not, if insurance paid for the medical care, think you would have gone for the foot problem(s)?
Types of health professionals seen in the past 12 months about the foot problem(s): Podiatrist, orthopedic specialist or surgeon, osteopath, physical therapist, any other medical doctor, any other health professional
Number of times seen each type
Where seen
Has or will health insurance pay for any part of the care for the foot problem(s)?
If not, would you still have gone for medical care for the foot problem(s)?

Disability

Disability Person Supplement (ages 3 years and over) (1977)
ICDA-coded conditions
Chronic or acute
Onset of (painful) condition
Because of (painful) condition, needs help with:
Getting around (or stays in bed)
Bathing
Dressing
Eating
Using toilet
How long help needed
How often needs help
How often receives help
Person providing help: Relative, friend, nurse, other, unknown
Number of bed days in past 12 months
Because of (painful) condition, needs help with using public transportation
Does (painful) disability or health problem prevent driving a car?
Is car specially equipped for you?
Hospital insurance coverage
Use of physical therapy, psychological counseling, job counseling or guidance, job or vocational training in past 12 months:
Received service?
Helped by service?
Now needs service?
Tried to get service?
Received services during past 12 months; if government agency involved, type
Tried to get information in past year about health problem or disability?
Source of information
Specific source other than doctor
Changes made to place of residence
Specific changes

Special Aids (all ages) (1977)
ICDA-coded condition(s) causing need
Chronic or acute
Onset of painful condition
Type of aid: Artificial arm; artificial leg; brace, foot or leg; brace, other part of body; brace, not otherwise specified; crutches; cane or walking stick; special shoes; wheelchair; walker; guide dog
Frequency of use
Length of time used

H1 Supplement (ages 20 years and over) (1977)
Disability or health problem prevents driving car
Service-connected disability?
Work-loss days in past 12 months

Home Care Supplement (all ages) (1979–80)
Conditions are ICD-coded, as well as recoded to a two-digit code reflecting acute or chronic status.
Because of (painful) condition, needs help with:
Walking
Going outside
Using toilet
Bathing
Dressing
Eating
Getting in and out of bed

Supplement Booklet Section M: Medical Devices (all ages) (1988)
Artificial joints:
Have you had increased pain over time with the [type of artificial joint] you have now?
Time had the [type of artificial joint] when the increased pain was first noticed: Less than 30 days, 30–90 days, more than 90 days
Why needed a [type of artificial joint]: Osteoarthritis; rheumatoid arthritis; arthritis, unspecified; injury; pain; some other reason

Fixation devices, intraocular lenses, pacemakers, other devices:
Ever had surgery to replace or repair [the device]?
Reason for the surgery: Pain or irritation
Time had device before reason for surgery was first noticed:
Less than 30 days, 30–90 days, more than 90 days
Other than discomfort generally associated with surgery and healing, have you had any other pain with [the device] you have now?
Time had [the device] when pain was first noticed: Less than 30 days, 30–90 days, more than 90 days

General health status and psychological well-being

Child Health Supplement (ages 17 years and under) (1981)
Medications for mother during labor for sample child under 6 years
Number of overnight hospitalizations for sample child
Operation(s) as inpatient and/or outpatient
Number
Type of operation
Child ever had chronic conditions:
Onset of condition
Age at onset
Condition present during past 12 months
Status of condition
Length of time with condition
Chronic or nonchronic?
Repeated ear infections?
Nephritis?
Urinary tract infection?
Ulcer?
Migraines?
Frequent or severe headaches?
Colitis?
Hernia or rupture?
Arthritis?
Rheumatism?
Trouble with flatfeet?
Tendon, muscle, or cartilage disease?
Sickle cell anemia?
Cancer of any kind?
Use of medications during 2-week reference period:
Pain relievers such as aspirin or Tylenol?
Main health problem for which child took the medication
Prescribed by physician?
Recommended by physician?
Frequency taken in past 3 months
Tranquilizers or sedatives?
Main health problem for which child took the medication
Prescribed by physician?
Recommended by physician?
Frequency taken in past 3 months
School limitation of activity for children ages 5–17 years because of chronic condition?
Special classes or special help because of disability or health problem?
Behavioral problems?
Impact of illness or disability of child on family member(s)
Usual number of hours of sleep each night
Usually takes naps?

Aging Supplement (ages 55 years and over) (1984)
Chronic conditions coded according to 9th Revision of ICD
Still have condition? Cured? Under control?
Length of time had condition before cured
Condition present in past 12 months?
Condition cause activity limitation?
Social support
Retired because of health?
Retired because work caused health problem?
Now receiving disability from any source?
Time received disability
Ever received disability payments from Social Security?
By yourself and not using aids, have any difficulty with the following? Degree of difficulty: Some, a lot, or unable to do it? Number of years with specified difficulty:
Walking for a quarter of a mile
Walking up 10 steps without resting
Standing or being on feet for about 2 hours
Sitting for about 2 hours
Stooping, crouching, or kneeling
Reaching up over head
Reaching out (as if to shake someone's hand)
Using fingers to grasp or handle
Lifting or carrying 25 pounds
Lifting or carrying 10 pounds
Think there are some kinds of work could do now if jobs were available?
Want to work at a job or business?
Ever had:
Osteoporosis?
A broken hip?
Angina pectoris?
A myocardial infarction?
Any other heart attack?
Cancer of any kind?
During the past 12 months, arthritis of any kind or rheumatism?
ICD-coded (painful) conditions causing difficulty with activities of daily living
Onset of condition
Degree of difficulty (some, a lot, unable to do it) in:
Bathing or showering?
Use of special equipment: Shower or bathtub seats, handrails

Dressing?
Use of special equipment: Special clothes, fasteners, zipper pulls
Eating?
Use of special equipment: Special utensils, trays
Getting in and out of bed or chairs?
Use of special equipment: Cane, walker, special lifts
Walking?
Use of special equipment: Cane, walker, crutch(es), wheelchair, artificial leg, brace(s)
Getting outside?
Use of special equipment: Cane, walker, crutch(es), wheelchair, artificial leg, brace(s)
Using the toilet, including getting to the toilet?
Use of special equipment: Cane, walker, crutch(es), wheelchair, artificial leg, brace(s), bedpan, raised toilet seat, special toilet, handrails near toilet
Receive help from another person? Who? Is this help paid for?
ICD-coded (painful) conditions causing difficulty with activities of daily living
Onset of condition
Degree of difficulty (some, a lot, unable to do it) in:
Preparing your own meals
Shopping for personal items
Managing your money
Using the telephone
Doing heavy housework
Doing light housework
Receive help from another person? Who? Is this help paid for?
Use of special equipment or aids in activities of daily living?
What type?
ICD-coded (painful) condition causing confinement to bed or chair all or most of the time
Onset of condition
Ever been a resident or patient in a nursing home?
Number of times
Date admitted the first time
Date discharged the last time
Number of months in nursing home the last time
Number of weeks in past 12 months spent in nursing home
Worry over health: A great deal, some, hardly any, none
Physical activity level
Amount of control think have over future health: A great deal, some, very little, none at all

Health practices

Physical Fitness (all ages) (1975)
Types of regular exercise
Sports participant, team member, or tournament player by type of sport in past 12 months
Think you are more, less, or about as active as other persons same age?

Health Habits Supplement (ages 20 years and over) (1976)
Used medicines, drugs, or pills for insomnia during the past 6 months?
Used one or more times per week?
Advised by doctor to take this medication?
Used aspirin or aspirin-type pills in past 6 months?
Used one or more times per week?
Use of coffee, tea, tobacco
Health status

H1 Supplement (ages 20 years and over) (1977)
Number of hours usually slept
Alcohol and tobacco use
Physical activity relative to others same age
Problems getting medical care
Height and weight (also body mass index)

Alcohol and Health Practices Supplement (ages 18 years and over) (1983)
Ever had any of the following conditions:
Arthritis or rheumatism?
Insomnia or sleeplessness?
An ulcer, other than a skin ulcer?
Heart attack or heart failure?
Angina pectoris?
Cancer?

Health Promotion and Disease Prevention (all ages) (1985)
General health habits
Number of hours of sleep
Have a usual place of care?
Kind of place
One particular doctor at usual place?
Main reason no particular place
Injury control awareness
Stress in past 2 weeks
Effect of stress on health in past year
Any physical exercise in past 2 weeks?
Type: Walking; jogging or running; hiking; gardening or yardwork; aerobics or aerobic dancing; other dancing; calisthenics or general exercise; golf; tennis; bowling; biking; swimming or water exercises; yoga; weight lifting or training; basketball; baseball or softball; football; soccer; volleyball; handball, racquetball, or squash; skating; skiing; other
Number of times in past 2 weeks
Minutes spent each time
Increase in heart rate or breathing

Degree of physical activity
Amount of physical work required on job
Hours per day physical work done on job
Amount of physical work required in main daily activity
Hours per day physical work on daily activity
On present job exposed to: Dangerous substances?
Dangerous work conditions? Risk of accident?
Type
Health effect: Cancer, headache, frostbite, burns

Use of health services and availability of resources

Prescribed Medicines Supplement (all ages) (1973)
Use of prescription medication in 2-week reference period
Name of medication
Condition for which medication was taken (painful conditions or general pain symptom)
How obtained:
Written prescription
Refill
Call to pharmacist
Given by physician
Source of payment
Total cost

Medical Care (all ages) (1974)
Usually go to one particular doctor
Place of usual care: Private doctor's office, home, doctors' clinic, group practice, hospital outpatient clinic, hospital emergency room, company or industry clinic, other
Number of visits in past 12 months
Kind of doctor usually seen
Places doctor seen in past 12 months
Reason for no particular doctor
Sources of payment of doctor's bills: Self or family; social security; Medicare; health insurance; worker's compensation; accident insurance; Civilian Health and Medical Program of the Uniformed Services (CHAMPUS); veterans benefits; Medicaid; welfare; professional courtesy; employer, company doctor, or union; other insurance; no charge; other
Problems getting care in past 12 months?
Received as much care as needed? If not, why?
In past 12 months, received services from:
Chiropractor
Podiatrist or chiropodist
Physical therapist

Currently Employed Person (ages 17 and over) (1974)
Number of days lost time from work during past 2 weeks because of own illness or injury, medical care visit, someone else's health problem or medical care visit
Number of hours lost from work paid for:
By employer: Full, part, none
By loss-of-pay insurance, worker's compensation, State disability insurance, other
Earnings per hour
Income per hour lost
Number of days of wage-loss coverage (sick leave)

Health Maintenance Organization (HMO) (all ages) (1975)
Belong to HMO, covered by Blue Cross or Blue Shield, prepaid group, other health insurance?
See other doctors?
Reason
Have one doctor or place of medical care?
Type of place: Private doctor's office, home, doctors' clinic, group practice, hospital outpatient clinic, hospital emergency room, company or industry clinic, other

Health Insurance (all ages) (1976)
Medicare coverage?
Medicaid used in past 12 months?
Private health insurance coverage?
Hospital
Surgical
Type of private health insurance plan
How obtained: Through employer or union, through other group
Hospital coverage?
Surgical coverage?
Use in past 12 months
Reason for no Medicare and/or private health insurance coverage

H1 Supplement (ages 20 years and over) (1977)
Problems getting medical care?
Reasons: Not available when needed, cost of care, didn't know where to go, no transportation, inconvenient hours
In past 12 months, received:
Veterans Administration medical care
Medicare
Worker's compensation
Disability benefits or payments from:
Social Security Administration
Veterans Administration
Public assistance

Health Insurance (all ages) (1978)
Medicare coverage?
Hospital?
Doctor?
Private health insurance coverage?
Hospital?
Surgical?
Reason for no Medicare and/or private health insurance coverage
Type of private health insurance plan
How obtained: Through employer or union, through other group?
Hospital coverage?
Surgical coverage?
Use in past 12 months
Aid to Families with Dependent Children and/or Supplemental Security Income coverage?

Military pensioner or dependent?
Coverage by Veterans Administration health benefits?
Coverage by military benefits?

Supplemental Person (all ages) (1978)
One source of care?
Type
Location (State, county)
Travel time
One particular doctor?
Place doctor last seen
Reason for no one source of care

Health Insurance (all ages) (1980)
Medicare coverage?
Hospital?
Doctor?
Private health insurance coverage?
Hospital?
Surgical?
Reason for no Medicare and/or private health insurance coverage
Type of private health insurance plan
How obtained: Through employer or union, through other group?
Hospital coverage?
Surgical coverage?
Use in past 12 months

Doctor Service Supplement (all ages) (1983)
Doctor visit in past 2 weeks for ICD-coded (painful) condition?
Place of visit
Medical doctor actually talked to?
Kind of medical doctor
Type of medical assistant seen or talked to
Condition acute or chronic?
Operations performed during this visit?
Type of operation
Travel time
Reason for visit to this specific place

Health Insurance (all ages) (1982–84 and 1989)
Medicare coverage?
Hospital?
Doctor or surgeon?
Current coverage if under 65 years
Type of health insurance plan(s)
Is plan an HMO? (1989)
Obtained through employer or union?
Now carried through employer or union?
Plan pays for some or all: Hospital bills; doctor or surgeon bills for operations?
Plan pays for some or all: Dental services; prescription drugs; mental health, alcoholism, or drug abuse services? (1989)
Covered under private health insurance?
Type
Hospital coverage?
Doctor or surgeon coverage?
Covered by a plan that pays for a specific type of service?
Type
Reason for no Medicare and/or private health insurance coverage
Aid to Families With Dependent Children or Aid to Dependent Children?
Supplemental Security Income?
Received Medicaid in past 12 months?
Other public assistance health insurance coverage?
Military health insurance coverage?
Type
Have an Armed Forces service-related disability?
Veterans Administration compensation?
Job layoff or loss in past 12 months? (1983, 1984, and 1989)
Number of times
Month laid off
Lost health insurance coverage?
No health insurance because of job layoff or loss?
Length of time without health insurance
Covered by other health care program?
Length of time covered
Months with no insurance and no health care program
Receipt of unemployment insurance benefits? (1984, 1989)

Social and economic impact

Family Medical Expenses (all ages) (1975–76)
Family type (by size, composition, and age of head)
Personal and family expenses for: Dental bills, doctor bills, hospital bills, prescription medicine, other bills, health insurance premium
Other expenses: Chiropractor, podiatrist, hearing aid, special braces, physical or speech therapy, special nursing care, nursing home or convalescent home care, multiple, and other

Data tape availability

National Health Interview Survey, Core Data

Data year	*NTIS accession no*
1969	PB 235543
1970	PB 237322
1971	PB 238524
1972	PB 285460
1973	PB 285511
1974	PB 285517
1975	PB 281126
1976	PB 300423
1977	PB 80–203953
1978	PB 81–179285
1979	PB 82–157173
1980	PB 83–248922
1981	PB 84–111657
1982	PB 85–236172/HA1
1983	PB 86–138856

1984	PB 87–121547
1985	PB 87–148144
1986	PB 88–146139
1987	PB 89–140651
1988	PB 90–501180

National Health Interview Survey Supplements

Data year	*Supplement*
1973	Prescribed Medicines
1974	Currently Employed
	Medical Care
1975	Accident Supplement
	HMO—All Persons
	Physical Fitness
	Family Medical Expenses
1976	Health Habits
	Health Insurance
	Family Medical Expenses
1977	Disability
	Special Aids
	H1 Supplement
1978	Insurance
	Supplemental Person
1979	Home Care—Person
	Supplement
1980	Home Care—Person
	Supplement
1981	Child Health
1982	Health Insurance
1983	Doctor Service
	Alcohol and Health
	Practices
	Health Insurance
1984	Aging
	Health Insurance
1985	Health Promotion and Disease Prevention
1987	Cancer Control
1988	Supplement Booklet
1989	Current Health Topics
1990	Supplement Booklet

Supplement tapes are available from the Division of Health Interview Statistics.

Technical contact:
Nelma Keen
Division of Health Interview Statistics
6525 Belcrest Road, Room 850
Hyattsville, MD 20782
(301) 436–7087

Questionnaire source items

Gleeson GA. Interviewing methods in the Health Interview Survey. National Center for Health Statistics. Vital Health Stat 2(48). 1972.

National Center for Health Statistics. Health Interview Survey procedure, 1957–1974. National Center for Health Statistics. Vital Health Stat 1(11). 1975.

National Center for Health Statistics. The National Health Interview Survey design, 1973–1984, and procedures, 1975–1983. National Center for Health Statistics. Vital Health Stat 1(18). 1985.

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Givens JD.: Current estimates from the Health Interview Survey, United States, 1978. National Center for Health Statistics. Vital Health Stat 10(130). 1979.

Jack SS, Ries PW. Current estimates from the National Health Interview Survey, United States, 1979. National Center for Health Statistics. Vital Health Stat 10(136). 1981.

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Bloom B. Current estimates from the Health Interview Survey, United States, 1981. National Center for Health Statistics. Vital Health Stat 10(141). 1982.

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Ries PW. Current estimates from the National Health Interview Survey, United States, 1984. National Center for Health Statistics. Vital Health Stat 10(156). 1986.

Moss AJ, Parsons VL. Current estimates from the National Health Interview Survey, United States, 1985. National Center for Health Statistics. Vital Health Stat 10(160). 1986.

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Schoenborn CA, Marano M. Current estimates from the National Health Interview Survey, United States, 1987. National Center for Health Statistics. Vital Health Stat 10 (166). 1988.

Adams PF, Hardy AM. Current estimates from the National Health Interview Survey, 1988. National Center for Health Statistics. Vital Health Stat 10(173). 1989.

Adams PF, Benson V. Current estimates from the National Health Interview Survey, 1989. National Center for Health Statistics. Vital Health Stat 10(176). 1990.

National Medical Care Utilization and Expenditure Survey (NMCUES)

Survey design

Health care expenditures and utilization survey of a panel of 17,500 civilian noninstitutionalized individuals throughout the United States and 13,400 individuals from Medicaid enrollment lists in California, Michigan, New York, and Texas. A multistage area probability sampling procedure was used, and five mutually exclusive samples were obtained. Data were collected in five rounds of household interviews, conducted at 3-month intervals in 1980 and 1981.

Basic data elements

Data include access to medical care; episodes of illness and injury; number of bed days, restricted-activity days, hospital admissions, physician and dental visits, other medical care encounters, and purchases of prescribed medicine. Detailed data, including cost data, were obtained for each contact with the medical care system.

Pain data elements

Conditions coded according to the 9th revision, International Classification of Diseases

Restricted activity since (reference date)[b] because of (painful) condition:
- Number of bed days
- Number of work-loss days
- Number of days cut down on activities

Limitation of activity because of (painful) condition:
- Unable to perform usual activity for one's age and sex group?
- Limited in kind or amount of usual activity?
- Limited, but not in usual activity?

Functional limitations?

Visit to a medical person since (reference date)[b]?
- Type of provider seen
- Number of times seen (since reference date)[b]

Visit to emergency room because of (painful) condition?

Visit to a hospital clinic or outpatient department since (reference date)?[b]
- Type of provider seen

Hospitalized because of (painful) condition?
- Number of nights
- Operations performed?

Medicines prescribed for relief of pain?
- Date last obtained
- Number of times obtained since (reference date)[b]
- Total cost

Data tape availability

National Medical Care Utilization and Expenditure Survey, 1980, NTIS accession no PB 83-229542

Technical contact:
Robert Wright
Division of Health Interview Statistics
6525 Belcrest Road, Room 850
Hyattsville, MD 20782
(301) 436-7100

Questionnaire source items

Bonham GS. Procedures and questionnaires of the National Medical Care Utilization and Expenditure Survey. National Medical Care Utilization and Expenditure Survey A(1). National Center for Health Statistics. Washington: Public Health Service. 1983.

National Survey of Personal Health Practices and Consequences (NSPHPC)

Survey design

Telephone-administered two-wave panel survey of 3,025 adults ages 20–64 years living in households with

[b]The reference date for the first round of interviews was January 1, 1980. The reference date for rounds 2–4 was 3 months prior to the interview. The date for the last round was December 31, 1980.

telephones in the 48 contiguous United States. The multistage probability sample was selected using a random-digit-dialing technique. The first wave of the survey was conducted in 1979. In 1980, 2,436 of the Wave I respondents were successfully contacted and reinterviewed with virtually the same questionnaire.

Basic data elements

Data include information on personal health practices (such as smoking, drinking, sleeping, eating, physical activity, brushing, flossing teeth, and use of seatbelts), health status, functional limitations, use of health services, and history of family longevity.

Pain data elements[c]

Frequency of taking medicines in past month (1980):
- Aspirin
- Medicine for indigestion
- Sleeping pills
- Tranquilizers

Taken Valium in past year? (1980)
- Last time taken Valium

Worry over health in past year?
Perceived control over health
Frequency of headaches
Social support:
- Social group participation—
  - Labor or professional organizations
  - Church
  - Scouts and so forth
  - Community service
- Frequency of visits with any close friends and relatives
- Number of friends and relatives seen at least monthly
- Enough close friends and relatives?
- Marital happiness

Data tape availability

National Survey of Personal Health Practices and Consequences, Waves I and II, NTIS accession no PB 83-104323

Technical contact:
Patricia M. Golden
Division of Epidemiology and Health Promotion
6525 Belcrest Road, Room 1070
Hyattsville, MD 20782
(301) 436-7032

Questionnaire source items

Danchik KM, Schoenborn CA, Elinson J. Highlights from Wave I of the National Survey of Personal Health Practices and Consequences, United States, 1979. National Center for Health Statistics. Vital Health Stat 15(1). 1981.

[c]Items appear in both Waves I and II unless otherwise indicated.

Eisenstadt RK, Schoenborn CA. Basic data from Wave II of the National Survey of Personal Health Practices and Consequences: United States, 1980. Working Paper Series; no 13. Hyattsville, MD: National Center for Health Statistics. 1982.

National Survey of Family Growth (NSFG) Cycles III and IV and Followup

Survey design

Survey of U.S. women ages 15–44 years, conducted on a cyclical basis using a multistage area probability sample. Cycle III interviews were conducted in 1982 with approximately 8,000 women. Cycle IV interviews were conducted during January–August 1988 with about 8,500 women. A computer-assisted telephone interview (CATI) followup was conducted during July–November 1990 and Cycle V is scheduled for 1992.

Basic data elements

Data include marital history, a detailed pregnancy history, fecundity, expected or intended future births, pregnancy planning practices, utilization of specific contraceptive methods, source of financing of family planning services, information on sex education and the sexually active population, socioeconomic and demographic information including religion, and, in Cycle IV, child care arrangements.

Pain data elements

This survey provides denominators for women ages 15–44 years at risk of menstrual, pregnancy, and childbirth-related pain.

Ear infections during first year of life of child (Cycle III)
Ever been treated for pelvic inflammatory disease? (Cycles III and IV, CATI followup)
- Number of times (Cycle IV, CATI followup)
- When first received treatment (Cycle IV)
- When last received treatment (Cycle IV)

Number of times hospitalized for a pelvic infection (Cycles III and IV, CATI followup—half sample)
During (last) pregnancy, ever take any of the following drugs or medications (Cycle IV):
- Tranquilizers such as Valium, Librium, Equanil, and so forth?
- Sedatives such as phenobarbital, Seconal, chloral hydrate, and so forth?

Data tape availability

National Survey of Family Growth, Cycle III, 1982 Combined Respondent-Interval File, NTIS accession no: PB 85–100022

Technical Contact:
William Pratt
Division of Vital Statistics
6525 Belcrest Road, Room 840
Hyattsville, MD 20782
(301) 436-8731

Questionnaire source items

Questionnaires available upon request from technical contact person.

Health care surveys

National Ambulatory Medical Care Survey (NAMCS)

Survey design

Survey of approximately 3,000 non-Federal physicians in office-based practices in the 48 contiguous United States who provide information, using medical record encounter forms, on a systematic sample of about 50,000 patient visits annually. The survey is conducted weekly throughout the year using a multistage probability sample. NAMCS was conducted annually from 1973 through 1981, again in 1985, and annually again starting in 1989.

Basic data elements

Reasons for visit and diagnoses coded according to the International Classification of Diseases (ICD), including injuries and poisonings, are listed up to a maximum of three each. Also included are data on whether a patient was ever seen for the particular problem before and on diagnostic and therapeutic services ordered or provided. Sociodemographic information on the patient includes date of birth, sex, race (all years), ethnicity (1979–81, 1985, 1989–90), geographic region, and whether located in standard metropolitan statistical area.

Pain data elements

Patient information
Patient's problem, complaint, or symptom:
- Principal
- Other
- Seriousness (1973–78)
- Acute or chronic (1973–76, 1979–81)
- Time since onset of symptoms (1977–78)

Physician diagnosis (ICD coding):
- Principal
- Other

Treatment or service ordered or provided:
- Prescription
- Physiotherapy
- Psychotherapy or therapeutic listening

Disposition of visit
Duration of visit
Names of medications prescribed (1980–81, 1985, 1989–90)

Physician Information
Specialty
Type of practice (for example, group or private)
Type of doctor (doctor of medicine, doctor of osteopathy)

Data tape availability

National Ambulatory Medical Care Survey

Data year	*NTIS accession no*
1973	PB 293900
1975	PB 290478
1976	PB 291152
1977	PB 80–130230
1978	PB 80–204092
1979	PB 82–122029
1980	PB 82–191941
1981	PB 84–188960
1985	PB 88–103676
1989	PB 91–509745

National Ambulatory Medical Care Survey—Drug Mentions

Data year	*NTIS accession no*
1980	PB 83–154799
1981	PB 83–199570
1985	PB 88–146113
1989	To be assigned

Technical contact:
Ray Gagnon
Division of Health Care Statistics
6525 Belcrest Road, Room 952
Hyattsville, MD 20782
(301) 436–7132

Questionnaire source items

NOTE: Identical questionnaires were used for the years shown in parentheses after the citation.

DeLozier JE, Gagnon RO. The National Ambulatory Medical Care Survey: 1973 summary, United States, May 1973–April 1974. National Center for Health Statistics. Vital Health Stat 13(21). 1975. (1973–74)

Koch H, McLemore T. The National Ambulatory Medical Care Survey: 1975 summary, United States,

January–December 1975. National Center for Health Statistics. Vital Health Stat 13(33). 1978. (1975–76)

Ezzati T, McLemore T. The National Ambulatory Medical Care Survey: 1977 summary, United States, January–December 1977. National Center for Health Statistics. Vital Health Stat 13(44). 1980. (1977–78)

Gagnon RO, DeLozier JE, McLemore T. The National Ambulatory Medical Care Survey, United States: 1979 summary. National Center for Health Statistics. Vital Health Stat 13(66). 1982. (1979)

Cypress BK. Patterns of ambulatory care in general and family practice: The National Ambulatory Medical Care Survey; United States, January 1980–December 1981. National Center for Health Statistics. Vital Health Stat 13 (73). 1983. (1980–81)

Nelson C, McLemore T. The National Ambulatory Medical Care Survey; United States, 1975–81 and 1985 trends. National Center for Health Statistics. Vital Health Stat 13 (93). 1988. (1985)

National Hospital Discharge Survey (NHDS)

Survey design

Survey of patient discharges from about 450 non-Federal, short-stay hospitals throughout the United States using a two-stage probability sample. Hospital selection is stratified by bed size, geographic region, and ownership. Data are abstracted from the face sheets of a systematic sample of discharged patients. The survey has been conducted annually since 1965.

Basic data elements

From 1965, data elements include patient characteristics (age, race, and marital status); hospital characteristics (location, size, and ownership); all-listed diagnoses, including injuries and poisonings (coded according to the International Classification of Diseases (ICD) revision in use at the time of data collection); all-listed procedures; average length of stay; and discharge status. Since 1977, an item on expected source of payment has also been included. See appendix VI for discussion of ICD coding.

Pain data elements

Selected diagnoses involving pain. The following disorders are listed for illustrative purposes only. All disorders listed on the hospital record are available on the tape.

Angina pectoris
Ankylosing spondylitis
Burns, site specified
Degeneration of lumbar or lumbosacral intervertebral disc
Disorders of synovium, tendon, and bursa
Gout
Lumbago
Lumbar intervertebral disc without myelopathy
Migraine
Osteoarthritis
Rheumatoid arthritis
Sciatica
Sprains and strains, site specified
Traumatic amputation, site specified
Trigeminal nerve disorders
Ulcer, site specified

Data tape availability

Data year	*NTIS accession no*
1970	PB 270763
1971	PB 270765
1972	PB 270767
1973	PB 270769
1974	PB 270771
1975	PB 270773
1976	PB 82–179227
1977	PB 82–179326
1978	PB 82–179342
1979	PB 82–179334
1980	PB 83–126318
1981	PB 85–152338
1982	PB 85–153658
1983	PB 85–152304
1984	PB 86–107737
1985	PB 87–125613
1986	PB 88–129440
1987	PB 89–121537

Technical contact:
Robert Pokras
Division of Health Care Statistics
6525 Belcrest Road, Room 952
Hyattsville, MD 20782
(301) 436–7125

Questionnaire source items

NOTE: Identical questionnaires were used for the years shown in parentheses after the citation.

Ranofsky AL. Utilization of short-stay hospitals: Annual summary for the United States, 1974. National Center for Health Statistics. Vital Health Stat 13(26). 1976. (1965–76)

Haupt BJ. Utilization of short-stay hospitals: Annual summary for the United States, 1977. National Center for Health Statistics. Vital Health Stat 13(41). 1979. (1977–78)

McCarthy E. Inpatient utilization of short-stay hospitals by diagnosis, United States, 1979. National Center for Health Statistics. Vital Health Stat 13(69). 1982. (1979–80)

Graves EJ, Haupt BJ. Utilization of short-stay hospitals, United States: 1981 annual summary. National Center for Health Statistics. Vital Health Stat 13(72). 1983. (1981–82)

Graves EJ. Utilization of short-stay hospitals, United States: 1983 annual summary. National Center for Health Statistics. Vital Health Stat 13(83). 1985. (1983–84)

Graves EJ. Utilization of short-stay hospitals, United States, 1985 annual summary. National Center for Health Statistics. Vital Health Stat 13(91). 1987. (1985–86)

Graves EJ. National Hospital Discharge Survey: Annual summary, 1987. National Center for Health Statistics. Vital Health Stat 13(99). 1989. (1987–89)

The 1990 questionnaire can be obtained from the technical contact person.

National Nursing Home Survey (NNHS)

Survey design

Survey of current residents, discharged residents, and employees of U.S. nursing homes, using a two-stage cluster probability sample. Nursing home selection was stratified by bed size and type of service. A systematic sample of current residents, discharged residents (1977 and 1985), and employees was then selected. (Only registered nurses were sampled in 1985.) Three cycles of NNHS have been conducted. The 1973–74 national survey covered approximately 1,900 nursing homes, 19,000 current residents, and 21,000 employees. The 1977 national survey covered approximately 1,500 nursing homes, 7,000 current residents, 5,100 discharged residents, and 13,600 employees. The national sample was augmented in 1977 in California, Illinois, Massachusetts, New York, and Texas to produce State-level estimates. The total sample for these five States included 650 nursing homes, 3,100 current residents, 2,500 discharged residents, and 5,700 employees. The 1985 national survey covered approximately 1,100 nursing homes, 5,200 current residents, 6,000 discharged residents, and 2,800 registered nurses.

Basic data elements

Administrative information for the facility and the staff. Data for current and discharged residents consist of information on diagnoses—limited to a list in 1973–74 and 1977 and full International Classification of Diseases (ICD) coding in 1985—functional status, physician and other services received, visitors, and overnight leave. In 1985, additional information was obtained on diagnosis-related group category for any hospital visit and on sources of payment.

Pain data elements

Facility Questionnaire

Services routinely provided on premises:
- Counseling or therapy by psychiatrist, psychologist, or mental health worker (1977)
- Supervision over medications that may be self-administered (1973–74; 1977)
- Medications and treatments administered in accordance with physician's orders (1973–74, 1977)
- Rub and massage (1973–74, 1977)
- Physical therapy (1973–74, 1977)
- Occupational therapy (1973–74, 1977)
- Other rehabilitation therapies (1973–74, 1977)

Services provided to nonresidents:
- Physical therapy (1977, 1985)

Services offered to residents (1985):
- Medical services
- Nursing services
- Mental health services
- Physical therapy
- Occupational therapy
- Vocational rehabilitation
- Prescribed medicines or nonprescribed medicines

Resident Questionnaire

Primary reason for admission
- Physical (illness or need for treatment) (1973–74, 1977)

Primary diagnosis at time of admission
- Accidents, poisonings, and violence (for example, fracture of hip, other broken bones, burns, concussion) (1973–74)
- Diseases of the musculoskeletal system and connective tissue (for example, arthritis, rheumatism, back pain) (1973–74)
- ICD code (1985)

Primary diagnosis at time of last medical examination
- Accidents, poisonings, and violence (for example, fracture of hip, other broken bones, burns, concussion) (1973–74)
- Diseases of the musculoskeletal system and connective tissue (for example, arthritis, rheumatism, back pain) (1973–74)
- Arthritis or rheumatism (1977)
- Gout (1977)
- Ulcers (1977)

Current conditions or impairments
- Arthritis or rheumatism (1973–74, 1977)
- Any chronic trouble with back or spine (1973–74, 1977)
- ICD-coded (painful) condition (1985)

Therapy services received in past month (1973–74, 1977, 1985):
- Physical therapy
- Occupational therapy

Medications received during past 7 days (1973–74):
- Tranquilizers
- Analgesics
- Antianginal drugs
- Antidepressants

Conditions for which resident received medication in past 7 days (1977):
- Arthritis or rheumatism
- Chronic back or spine problems (excluding stiffness and deformity)

A rub or massage received in the past 7 days? (1977)
Is resident depressed or withdrawn? (1973–74, 1977)
Does resident display depression which restricts functioning nearly every day? (1985)

Discharged Resident Questionnaire (1977, 1985)
Exhibition of any of the following conditions or impairments by former resident? (1977)
Arthritis or rheumatism
Chronic back or spine problems (excluding stiffness and deformity)

Primary diagnosis at time of former resident's admission:
Arthritis or rheumatism (1977)
Gout (1977)
Ulcers (1977)
ICD-coded (painful) condition (1985)

Primary and other diagnoses (ICD-coded) at time of discharge (1985)
A rub or massage received during last 7 days before discharge? (1977)
During month prior to discharge did former resident receive (1977):
Physical therapy?
Occupational therapy?

Staff Questionnaire (1973–74, 1977)
Number of nondegree training courses taken in past year in:
Physical therapy or rehabilitation
Occupational therapy
Pharmacology and care of drugs

Enrollment in past 12 months in nondegree training in mental or social problems of the aged or chronically ill? (1977)
Performs work, counseling services? (1977)

Nursing Questionnaire (1985)
Taken a continuing education workshop during the past year on:
Occupational therapy?
Pharmacology and the aged or chronically ill?
Physical therapy or rehabilitation?

Data tape availability

National Nursing Home Survey, 1973–74, NTIS accession no PB 89–159420

National Nursing Home Survey, 1977, NTIS accession no PB 80–188030

National Nursing Home Survey, 1977, five States (California, Illinois, Massachusetts, New York, Texas), NTIS accession no PB 80–188717

National Nursing Home Survey, 1985, NTIS accession no PB 89–159503

Technical contact:
Esther Hing
Division of Health Care Statistics
6525 Belcrest Road, Room 952
Hyattsville, MD 20782
(301) 436–8830

Questionnaire source items

Sirrocco A, Koch H. Nursing homes in the United States 1973–74, National Nursing Home Survey. National Center for Health Statistics. Vital Health Stat. 14(17). 1977.

Van Nostrand JF, Zappolo A, Hing E, et al. The National Nursing Home Survey, 1977 summary for the United States. National Center for Health Statistics. Vital Health Stat 13 (43). 1979.

Hing E, Sekscenski E, Strahan G. The National Nursing Home Survey: 1985 summary for the United States. National Center for Health Statistics. Vital Health Stat 13 (97). 1989.

Next-of-Kin (NOK) Component of the 1985 National Nursing Home Survey (NNHS)

Survey design

Supplements the 1985 NNHS survey of current residents and discharged residents of U.S. nursing homes using a computer-assisted telephone interview system. Interviewing took place from October 1985 through March 1986. Of the 11,181 people eligible, NOK interviews were completed for 9,084 subjects, using proxy respondents (primarily next of kin) if the subject could not participate. Administrators or other facility personnel were contacted for a few subjects who were in facilities and for whom no next of kin could be located. The NOK component was conducted by NCHS in collaboration with the National Institute on Aging.

Basic data elements

The NOK was used to obtain information that was not readily available from patient records or other sources in the nursing home. Information was obtained on the resident's status prior to the sample admission, past use of nursing homes, hospital admissions and discharges, activities of daily living at admission, reasons for entering the nursing home, method of payment, current vital status, and living arrangements.

Pain data elements

First five (pain-related) medical reasons for admission and main (pain-related) medical reason for admission:
Hip fracture
Other fracture
Arthritis
Central nervous system diseases, injuries
Burns, skin diseases, infections

Data tape availability

Next-of-Kin Component, 1985 National Nursing Home Survey, NTIS accession no: To be assigned

Technical contact:
Mary Ann Bush
Division of Analysis
6525 Belcrest Road, Room 1080
Hyattsville, MD 20782
(301) 436–7037

Questionnaire source items

Questionnaire available upon request from technical contact person.

National Master Facility Inventory (NMFI) and 1986 Inventory of Long-Term Care Places (ILTCP)

Survey design

Surveys of all hospitals in the United States were made annually from 1963 through 1976. (Data for years subsequent to 1976 are available from the American Hospital Association, 840 Lake Shore Drive, Chicago, Illinois 60611.) Surveys of all nursing and related-care homes in the United States were made in 1963, 1967, 1969, 1971, 1973, 1976, 1978, 1980, and 1982. In 1986, the survey was called the Inventory of Long-Term Care Places, and, in addition to nursing and related-care homes, it included facilities for the mentally retarded. The data were gathered using a mail questionnaire.

Basic data elements

Comprehensive list of facilities in the United States that provide medical, nursing, personal, or custodial care to groups of unrelated persons on an inpatient basis. Data for hospitals include name of facility, ownership, type of facility, number of beds, days of care, discharges, admissions, type of service, outpatient visits, employees, and facilities and services offered. Data for nursing homes and other health facilities include name of facility, address, number of beds, ownership, type of facility, ages and sexes served, and number of residents.

Pain data elements[d]

Nursing and related-care homes:
Resident facility for:
- Extended care (1971–73)
- Skilled nursing home (1971–86)
- Skilled nursing facility of a hospital (1976, 1986)
- Nursing home (1971–86)
- Convalescent home (1971–76)
- Rest home (1971–73)
- Home for the aged (1971–73)
- Residential facilities (1986)
- Nursing care unit of a retirement center (1971–76)
  - Average length of stay (1971)

Information collected but not available on data tapes:
- Number of full- and part-time occupational therapists (1973–78)
- Number of full- and part-time occupational therapy assistants and aides (1973–78)
- Number of full- and part-time physical therapists (1973–78)
- Number of full- and part-time physical therapy assistants and aides (1973–78)
- Routinely provided services:
  - Supervision over medications that may be self-administered
  - Medications and treatments administered in accordance with physician's orders
  - Rub and massage

Hospitals:
Type of service hospital provides to majority of patients:
- Rehabilitation
- Orthopedic
- Chronic disease

Facilities and services located within the hospital:
- Burn care unit
- Physical therapy department
- Occupational therapy department
- Rehabilitation inpatient unit
  - Number of beds
- Rehabilitation outpatient unit
- Home care department
  - Annual number of visits
- Clinical psychology services (1973–76)

Data tape availability

National Master Facility Inventory, nursing homes and other health facilities

Data year	*NTIS accession no*
1971	PB 287270
1973	PB 287268
1976	PB 287230
1980	PB 83–178459
1982	PB 86–237872

Inventory of Long-Term Care Places

Data year	*NTIS accession no*
1986	PB 88–110606

National Master Facility Inventory, hospitals

Data year	*NTIS accession no*
1971	PB 284912
1972	PB 284914
1973	PB 284916
1974	PB 284918

[d]Items appear in all years of the survey unless otherwise noted.

1975	PB 284920
1976	PB 284922

Technical contact:
Al Sirrocco
Division of Health Care Statistics
6525 Belcrest Road, Room 952
Hyattsville, MD 20782
(301) 436–8830

Questionnaire source items

Sirrocco A. Inpatient health facilities as reported from the 1971 MFI Survey. National Center for Health Statistics. Vital Health Stat 14(12). 1974.

Sirrocco A. Inpatient health facilities as reported from the 1973 MFI Survey. National Center for Health Statistics. Vital Health Stat 14(16). 1976.

Sutton JF, Sirrocco A. Inpatient health facilities as reported from the 1976 MFI Survey. National Center for Health Statistics. Vital Health Stat 14(23). 1980.

Strahan GW. Inpatient health facilities statistics, United States, 1978. National Center for Health Statistics. Vital Health Stat 14(24). 1981.

Sirrocco A. Nursing and related care homes as reported from the 1980 NMFI Survey. National Center for Health Statistics. Vital Health Stat 14(29). 1983.

Sirrocco A. Nursing home characteristics: 1986 Inventory of Long-Term Care Places. National Center for Health Statistics. Vital Health Stat 14(33). 1989.

Vital statistics surveys

National Natality Survey (NNS) and National Fetal Mortality Survey (NFMS)

Survey design

National Natality Surveys, conducted in 1963–69, 1972, and 1980, were based on probability samples of registered births occurring in a calendar year in each registration area in the United States. Because all pain data elements were collected in the 1980 survey, only information from this survey is addressed here. For the first time in 1980, the natality survey was accompanied by the 1980 National Fetal Mortality Survey, based on a sample of registered late fetal deaths. In NNS and NFMS, questionnaires were mailed to married mothers, hospitals where the deliveries occurred, attendants at delivery, and x-ray technicians and radiologists. The data set contains birth certificate information for all sample births and questionnaire information for survey respondents. The sample contained approximately 9,900 live births and 6,400 late fetal deaths to married and unmarried women in the 1980 survey. Of the 7,825 married women with live births and 4,815 married women with fetal deaths who were sent questionnaires, response rates were 79.5 and 74.5 percent, respectively.

Basic data elements

Survey data include about 300 items, including medical care of the mother, breastfeeding practices, information about previous pregnancies, childbearing expectations, sterilization, smoking and alcohol use, health status of mother and child, marital history, electronic fetal monitoring, and amniocentesis. The vital record contains basic sociodemographic data, State of birth, number of previous children born alive, number of fetal deaths, birth order, birth weight, and completed weeks of pregnancy.

Pain data elements

Total duration of labor (1980)
Number of anesthetics used for delivery (1980)
Type of anesthetic used for delivery (1980)
- Inhalation (general)
- Local (pudendal block)
- Spinal
- Epidural
- Other anesthetic used

Type of delivery (1980)
Number of aspirin tablets taken per month during pregnancy (1980)

Data tape availability

The National Natality Survey and the National Fetal Mortality Survey—1980, NTIS accession no PB 84–177310

Technical contact:
Paul Placek or Kenneth Keppel
Followback Survey Branch
Division of Vital Statistics
6525 Belcrest Road, Room 840
Hyattsville, MD 20782
(301) 436–7464

Questionnaire source items

Keppel KG, Placek PJ, Heuser R, et al. Methods and response characteristics—1980 National Natality and Fetal Mortality Surveys. National Center for Health Statistics. Vital Health Stat 2(100). 1986.

National Mortality Followback Survey (NMFS)

Survey design

Survey based on a systematic random national sample of 1 percent of U.S. resident deaths occurring in 1986 to persons 25 years of age and over. The sample was stratified for race, age, cause of death, month of death, State, and sex. A total sample of about 18,500 decedents was drawn. Questionnaires were mailed to death certificate informants or other knowledgeable relatives and to all health care facilities that were used by decedents in the last year of life. Data collection was completed in 1988.

Basic data elements

Survey data from death certificate informants include hospital, nursing, and other facility care in the last year of life; number of doctor visits in last year of life; Medicare coverage, sources of payment for health care in the last year of life; help for activities of daily living in the last year of life; problems getting care in the last year of life; lifestyle (for

example, tobacco and alcohol use, and diet); selected chronic conditions; occupation and income; family size; history of heart attack in family; and total value of things owned by decedent. Health care facility data for each discharge in the last year of life include length of stay, diagnoses, and medical procedures. Death certificate data include sociodemographic information, place of death, date of death, underlying cause, and relationship of informant to decedent.

Pain data elements

Cause(s) of death coded according to International Classification of Diseases
Ever had a heart attack?
    How long before death was first heart attack?
Ever had angina pectoris?
    How long before death when first noticed?
Within the hour before death, did the person start having a new or sharply increased problem such as chest pain, difficulty breathing, or fainting?

Data tape availability

National Mortality Followback Survey, 1986
NTIS accession no PB 90–501800

Technical contact:
Paul J. Placek
Chief, Followback Survey Branch
Division of Vital Statistics
6525 Belcrest Road, Room 840
Hyattsville, MD 20782
(301) 436–7464

Questionnaire source items

Questionnaires available upon request from technical contact person.

1988 National Maternal and Infant Health Survey (NMIHS) and 1990 Longitudinal Followup (LF)

Survey design

In the 1988 NMIHS, conducted from December 1988 through December 1990, 21,000 vital records of live births, infant deaths, and fetal deaths were sampled and a total of 60,000 mothers, hospitals where the births and infant deaths occurred, and providers of prenatal care were surveyed. Questionnaires were linked with the vital records, which included 11,000 birth certificates, 6,000 death certificates for infants, and 4,000 reports of fetal death of 28 weeks gestation or more. In the 1990 LF, linked to NMIHS, 10,000 respondents who had live births in 1988, their hospitals and pediatric providers, 1,000 women who had experienced infant deaths, and 1,000 women who had experienced stillbirths were reinterviewed.

Basic data elements

For NMIHS, data from mothers include barriers to prenatal care; source of payment; use patterns of those in the Women, Infants, and Children (WIC) program; smoking; alcohol and marijuana use; work patterns before and after delivery; infant feeding practices; infant health and medical care up to 6 months; and sociodemographic characteristics. Data from hospitals include maternal hospitalizations; maternal and infant diagnoses and procedures coded according to the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM); charges for care and diagnosis-related groups; cesarean delivery and trial of labor; fetal monitoring; medical devices and monitors; neonatal intensive care; and infant hospitalizations up to 6 months. Data from prenatal care providers include prenatal visit measures, patient education, acquired immunodeficiency syndrome (AIDS) and sexually transmitted disease testing, sonograms and X rays, prescribed medications and vitamins, amniocentesis and chorionic villus sampling, and charges for care.

For the 1990 LF, data from mothers include child development and behavior up to 3 years of age; child care; child nutrition and WIC food use; child immunizations; barriers and costs of primary pediatric care; parental smoking, drinking, and drug use; stress and social support; subsequent fertility; occupation; and environmental hazards. Data from pediatric care providers include child medical histories, AIDS testing, lead screening, medications, and charges for care. Data from hospitals include diagnoses and procedures (ICD-9-CM coding), child hospitalizations, and charges for care.

Pain data elements

1988 National Maternal and Infant Health Survey
Mother's Questionnaire
    Health problems or symptoms during this pregnancy:
        Abdominal cramps
        Severe headaches
        Hemorrhoids
    Illnesses or problems baby had during each of the first 6 months:
        Ear infection
        Eye infection
        Colic
        Injury from bad fall or accident
Prenatal Care Provider Questionnaire
    ICD-9-CM code for any diagnoses and diagnostic or obstetric procedures performed during this pregnancy
    Names, dosage, and duration of therapy of medications or drugs recommended, prescribed, or administered
Hospital Questionnaire
    ICD-9-CM code for any diagnoses and diagnostic or obstetric procedures for the mother:
        During the delivery

During her pregnancy
Up to 6 months after her delivery
Methods of anesthesia during delivery:
Epidural
Spinal
Local or pudendal block
Inhalation
None
Names, dosage, and duration of therapy of medications or drugs recommended, prescribed, or administered
ICD-9-CM code for any diagnoses and procedures used on the infant after delivery and if rehospitalized

1990 Longitudinal Followup
Mother's Questionnaire
Number and circumstances of serious injuries of child that required a doctor's or nurse's care
While riding in a car
Other than from a car accident
Child ever suffered a burn that needed a doctor's or nurse's care?
Number of times
Circumstances
Any injuries as a result of using an apnea monitor?
Type of injury
Conditions of the child in the past 30 days
Stomach ache without vomiting
Stomach "flu" with vomiting and diarrhea
Ear infection or earache (otitis media) with fever
Sore throat with high fever
Urinary tract infection
Tonsillitis
Over-the-counter medicines given the child in the past 30 days
Aspirin
Tylenol
Other pain relievers and fever reducers
Number of medical visits for child for injuries
Pediatric Care Provider Questionnaire
Injuries requiring medical care?
Description
Date
Circumstances
Reported as child abuse?
Poisoning requiring medical care?
Type
Date
Circumstances
Malignant or benign neoplasms?
Type and site
Date of diagnosis
Ever concerned the child has experienced or reported the child for:
Neglect?
Sexual abuse?
Physical abuse?
Hospital Questionnaire
Hospitalization or emergency room episodes for child after the age of 6 months
Admission and discharge dates
ICD-9-CM coded diagnoses and procedures

Data tape availability

National Maternal and Infant Health Survey, 1988
NTIS accession no PB 92–500081

Tapes are not yet available for the 1990 LS.

Technical contact:
Paul J. Placek
Chief, Followback Survey Branch
Division of Vital Statistics
6525 Belcrest Road, Room 840
Hyattsville, MD 20782
(301) 436–7464

Questionnaire source items

Questionnaires available upon request from technical contact person.

Vital statistics registration

Mortality Statistics (MS)

Survey design

One-hundred percent registration of deaths in the United States since 1933. Deaths are registered by the States and reported to NCHS on an ongoing basis.

Basic data elements

Detailed data include characteristics of the location of residence of the deceased, age at death, day of death (1972–77), whether autopsy was performed (1972–77), whether findings were used (1972–77), multiple cause-of-death codes (1968–present), and underlying cause-of-death codes, which include codes for accidents and injuries. Mortality data are coded according to the International Classification of Diseases (ICD) revision in use at the time of data collection. (See appendix VI.) Local area summary and cause-of-death summary tapes contain selected data from the detailed tapes.

Pain data elements

All causes of death are ICD coded. To the extent that ICD rubrics can be used to identify painful conditions, magnitude and scope of mortality associated with pain can be ascertained.

Data tape availability

Vital statistics—mortality, detail

Data year	*NTIS accession no*
1968	PB 300800
1969	PB 299676
1970	PB 299679
1971	PB 300802
1972	PB 200885
1973	PB 300805
1974	PB 300807
1975	PB 300809
1976	PB 300811
1977	PB 300798
1978	PB 81–125106
1979	PB 83–132357
1980	PB 83–261552
1981	PB 84–213016
1982	PB 85–163897
1983	PB 86–120441
1984	PB 87–129706
1985	PB 88–101316
1986	PB 89–121180
1987	PB 90–500133
1988	PB 91–506626

Vital statistics—mortality, local area summary

Data year	NTIS accession no
1968	PB 238827
1969	PB 80–126618
1970	PB 80–108749
1971	PB 80–126642
1972	PB 80–126667
1973	PB 80–133374
1974	PB 80–126683
1975	PB 80–134158
1976	PB 80–134117
1977	PB 80–131675
1978	PB 81–100232
1979	PB 83–143230
1980	PB 83–261636
1981	PB 84–212992
1982	PB 85–163913
1983	PB 86–120482
1984	PB 86–125639
1985	PB 88–101357
1986	PB 89–121586
1987	PB 90–500158
1988	PB 91–506642

Vital statistics—mortality, cause-of-death summary

Data year	NTIS accession no
1968	PB 80–126550
1969	PB 80–133358
1970	PB 80–133333
1971	PB 80–133317
1972	PB 80–133275
1973	PB 80–126576
1974	PB 80–133291
1975	PB 80–134133
1976	PB 80–134091
1977	PB 80–126592
1978	PB 81–100257
1979	PB 83–132373
1980	PB 83–261578
1981	PB 84–213032
1982	PB 85–163764
1983	PB 86–120466

1984	PB 87–129680
1985	PB 88–101332
1986	PB 89–121602
1987	PB 90–500141

Vital statistics mortality—multiple cause of death, detail

Data year	NTIS accession no
1968	PB 82–191800
1969	PB 82–155011
1970	PB 82–121716
1971	PB 82–142654
1972	PB 82–191966
1973	PB 82–191644
1974	PB 82–186164
1975	PB 82–157322
1976	PB 81–186827
1977	PB 81–217382
1978	PB 82–105743
1979	PB 83–153031
1980	PB 84–112200
1981	PB 85–153617
1982	PB 85–224202
1983	PB 86–138831
1984	PB 87–161030
1985	PB 87–235057
1986	PB 89–121461
1987	PB 90–500448
1988	PB 91–507343

Technical contact:
Mabel Smith
Division of Vital Statistics
6525 Belcrest Road, Room 840
Hyattsville, MD 20782
(301) 436–8980

The following vital statistics publications of the National Center for Health Statistics—all published in Washington by the Public Health Service—are now available.

Questionnaire source items

National Center for Health Statistics. Vital statistics of the United States, 1968, vol II, mortality, part A. Washington: Public Health Service. 1971.

National Center for Health Statistics. Vital statistics of the United States, 1968, vol II, mortality, part B. Washington: Public Health Service. 1971.

National Center for Health Statistics. Vital statistics of the United States, 1969, vol II, mortality, part A. Washington: Public Health Service. 1974.

National Center for Health Statistics. Vital statistics of the United States, 1969, vol II, mortality, part B. Washington: Public Health Service. 1973.

National Center for Health Statistics. Vital statistics of the United States, 1970, vol II, mortality, part A. Washington: Public Health Service. 1974.

National Center for Health Statistics. Vital statistics of the United States, 1970, vol II, mortality, part B. Washington: Public Health Service. 1974.

National Center for Health Statistics. Vital statistics of the United States, 1971, vol II, mortality, part A. Washington: Public Health Service. 1975.

National Center for Health Statistics. Vital statistics of the United States, 1971, vol II, mortality, part B. Washington: Public Health Service. 1974.

National Center for Health Statistics. Vital statistics of the United States, 1972, vol II, mortality, part A. Washington: Public Health Service. 1975.

National Center for Health Statistics. Vital statistics of the United States, 1972, vol II, mortality, part B. Washington. Public Health Service. 1975.

National Center for Health Statistics. Vital Statistics of the United States, 1973, vol II, mortality, part A. Washington. Public Health Service. 1977.

National Center for Health Statistics. Vital Statistics of the United States, 1973, vol II, mortality, part B. Washington. Public Health Service. 1975.

National Center for Health Statistics. Vital Statistics of the United States, 1974, vol II, mortality, part A. Washington. Public Health Service. 1978.

National Center for Health Statistics. Vital Statistics of the United States, 1974, vol II, mortality, part B. Washington. Public Health Service. 1976.

National Center for Health Statistics. Vital Statistics of the United States, 1975, vol II, mortality, part A. Washington. Public Health Service. 1979.

National Center for Health Statistics. Vital Statistics of the United States, 1975, vol II, mortality, part B. Washington. Public Health Service. 1977.

National Center for Health Statistics. Vital Statistics of the United States, 1976, vol II, mortality, part A. Washington: Public Health Service. 1980.

National Center for Health Statistics. Vital Statistics of the United States, 1976, vol II, mortality, part B. Washington: Public Health Service. 1980.

National Center for Health Statistics. Vital Statistics of the United States, 1977, vol II, mortality, part A. Washington: Public Health Service. 1981.

National Center for Health Statistics. Vital Statistics of the United States, 1977, vol II, mortality, part B. Washington: Public Health Service. 1980.

National Center for Health Statistics. Vital Statistics of the United States, 1978, vol II, mortality, part A. Washington: Public Health Service. 1982.

National Center for Health Statistics. Vital Statistics of the United States, 1978, vol II, mortality, part B. Washington: Public Health Service. 1982.

National Center for Health Statistics. Vital Statistics of the United States. 1979. vol II, mortality, part A. Washington: Public Health Service. 1984.

National Center for Health Statistics. Vital Statistics of the United States. 1979. vol II, mortality, part B. Washington: Public Health Service. 1984.

National Center for Health Statistics. Vital Statistics of the United States. 1980. vol II, mortality, part A. Washington: Public Health Service. 1985.

National Center for Health Statistics. Vital Statistics of the United States. 1980. vol II, mortality, part B. Washington: Public Health Service. 1985.

National Center for Health Statistics. Vital Statistics of the United States. 1981. vol II, mortality, part A. Washington: Public Health Service. 1986.

National Center for Health Statistics. Vital Statistics of the United States. 1981. vol II, mortality, part B. Washington: Public Health Service. 1986.

National Center for Health Statistics. Vital Statistics of the United States. 1982. vol II, mortality, part A. Washington: Public Health Service. 1986.

National Center for Health Statistics. Vital Statistics of the United States. 1982. vol II, mortality, part B. Washington: Public Health Service. 1986.

National Center for Health Statistics. Vital Statistics of the United States. 1983. vol II, mortality, part A. Washington: Public Health Service. 1987.

National Center for Health Statistics. Vital Statistics of the United States. 1983. vol II, mortality, part B. Washington: Public Health Service. 1987.

National Center for Health Statistics. Vital Statistics of the United States. 1984. vol II, mortality, part A. Washington: Public Health Service. 1987.

National Center for Health Statistics. Vital Statistics of the United States. 1984. vol II, mortality, part B. Washington: Public Health Service. 1987.

National Center for Health Statistics. Vital Statistics of the United States. 1985. vol II, mortality, part A. Washington: Public Health Service. 1988.

National Center for Health Statistics. Vital Statistics of the United States. 1985. vol II, mortality, part B. Washington: Public Health Service. 1988.

National Center for Health Statistics. Vital Statistics of the United States. 1986. vol II, mortality, part A. Washington: Public Health Service. 1988.

National Center for Health Statistics. Vital Statistics of the United States. 1986. vol II, mortality, part B. Washington: Public Health Service. 1988.

National Center for Health Statistics. Vital Statistics of the United States. 1987. vol II, mortality, part A. Washington: Public Health Service. 1990.

National Center for Health Statistics. Vital Statistics of the United States. 1987. vol II, mortality, part B. Washington: Public Health Service. 1989.

National Center for Health Statistics. Vital Statistics of the United States. 1988. vol II, mortality, part A. Washington: Public Health Service. 1991.

National Center for Health Statistics. Vital Statistics of the United States. 1988. vol II, mortality, part B. Washington: Public Health Service. 1990.

Volumes for subsequent data years are not yet published.

Divorce Statistics (DS)

Survey design

Divorce counts are obtained from all States and counties in the United States. In addition, States in the divorce-registration area (DRA) provide either microfilm copies of divorce certificates or machine-readable data tapes. The detailed divorce tapes contain a sample from the microfilm records and all the records from States that supply machine-readable tapes. Detailed data are available for all years since 1958 for States in the DRA. The following areas have participated in the DRA: Alabama, Alaska, California, Connecticut, Delaware, Georgia, Hawaii, Idaho, Illinois, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Missouri, Montana, Nebraska, New Hampshire, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Utah, Vermont, Virginia, Wisconsin, Wyoming, and the Virgin Islands. The number of participating States has expanded from 14 in 1958 to 31 in 1981. The District of Columbia joined in 1986; California dropped out in 1978.

Basic data elements

For 1958–67, data are published showing tabulations of counts of divorces by region, State, and county. For registration States there are also tabulations on plaintiff, duration of the marriage, and number of children. Shown separately for the husband and wife are race, ages at marriage and divorce, and marriage order.

Beginning in 1968, computer tapes are available in addition to the published annual volumes. These tapes contain region, division, and State of divorce and marriage; month and year of marriage, separation, and divorce and durations between these events; plaintiff; and number of children under 18 years of age. They also contain, separately for the husband and wife, age; race; education; and number of times married, widowed, and divorced. Not all items are reported by every registration State in each year.

Pain data elements

Denominators are provided for people at risk of painful conditions that could be related to or exacerbated by stresses that can be associated with divorce.

Total U.S. population
Number of divorces by region, State, and county

Divorce-registration area States
Number of this marriage
Previous marital status
Duration of marriage
Number of children under 18 years of age

Data tape availability

Vital statistics—divorce, detail

Data year	*NTIS accession no*
1968	PB 238824
1969	PB 238825
1970	PB 80–186745
1971	PB 80–187164
1972	PB 80–187180
1973	PB 80–187149
1974	PB 80–187123
1975	PB 80–186786
1976	PB 80–186760
1977	PB 80–186729
1978	PB 81–100216
1979	PB 81–238800
1980	PB 83–242644
1981	PB 84–164185
1982	PB 85–179430
1983	PB 86–165248
1984	PB 87–125506
1985	PB 88–127865
1986	PB 89–209415
1987	PB 90–501891
1988	PB 91–507731

Technical contact:
Barbara Wilson
Division of Vital Statistics
6525 Belcrest Road, Room 840
Hyattsville, MD 20782
(301) 436–8978

Questionnaire source items

National Center for Health Statistics. Vital Statistics of the United States, 1968, vol III, marriage and divorce. Washington: Public Health Service. 1971.

National Center for Health Statistics. Vital Statistics of the United States, 1969, vol III, marriage and divorce. Washington: Public Health Service. 1972.

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National Center for Health Statistics. Vital Statistics of the United States, 1972, vol III, marriage and divorce. Washington: Public Health Service. 1976.

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National Center for Health Statistics. Vital Statistics of the United States, 1985, vol III, marriage and divorce. Washington: Public Health Service. 1989.

National Center for Health Statistics. Vital Statistics of the United States, 1986, vol III, marriage and divorce. Washington: Public Health Service. 1990.

National Center for Health Statistics. Vital Statistics of the United States, 1987, vol III, marriage and divorce. Washington: Public Health Service. 1991.

Volumes for subsequent data years are not yet published.

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1. Ng LKY, Bonica JJ, eds. Pain, discomfort and humanitarian care. New York: Elsevier North Holland, Inc. 1980.
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Appendixes

Contents

List of appendix tables

Appendix I
Projected pain-related items in future NCHS surveys

1991 National Health Interview Survey supplement

Inability to perform activities of daily living because of a physical or mental condition
Need help from another person in performing activities of daily living because of a physical or mental condition
Incidence of head injury where lost consciousness in past 12 months (18 years and over)
- Circumstances
- Cause
- Treatment
- Impact

Incidence of falls in past 12 months
- Break hip as a result of a fall

1992 National Survey of Family Growth Cycle V

Questions on pelvic inflammatory disease

Appendix II
1989 National Health Interview Survey
Current Health Topics
section R: Orofacial pain

RT 73 3–4

Section R — OROFACIAL PAIN

CHECK ITEM 1 — *Status of sample person.* — 6

0 ☐ No person 18 + in family *(Cover page of HIS-1A)*
1 ☐ Available *(Intro)*
2 ☐ Callback required *(Hhld page of HIS-1)*
3 ☐ Noninterview *(Section T)*

INTRO
These next questions concern conditions of the teeth, mouth, or face. Tell me if you experienced any of these conditions MORE THAN ONCE in the past 6 months.

CHECK ITEM 2 — *Refer to 4b and 4f, "Dental" page 26, for sample person.* — 6

1 ☐ Sample person has no teeth *(2)*
8 ☐ Other *(1)*

1a. **During the past 6 months, did you have a toothache more than once, when biting or chewing?** — 7
1 ☐ Yes
2 ☐ No *(2)*

b. **Did you first have this pain more than 6 months ago?** — 8
1 ☐ Yes
2 ☐ No

2a. **(During the past 6 months) Did you have painful sores or irritations around the lips or on the tongue, cheeks, or gums more than once?** — 9
1 ☐ Yes
2 ☐ No *(3)*

b. **Did you first have the sores or irritations more than 6 months ago?** — 10
1 ☐ Yes
2 ☐ No

3a. **(During the past 6 months) Did you have a prolonged, unexplained burning sensation in your tongue or any other part of your mouth more than once?** — 11
1 ☐ Yes
2 ☐ No } *(4)*
9 ☐ DK }

b. **When you have this sensation, does it come and go or is it continuous and uninterrupted?** — 12
1 ☐ Come and go
2 ☐ Continuous/uninterrupted
8 ☐ Other
9 ☐ DK

c. **During how many DIFFERENT MONTHS in the past 6 months did you have this sensation?** — 13
☐☐ Months

d. **How many total days in the past 6 months did you have this sensation?** — 14
1 ☐ 1–3 days
2 ☐ 4–10 days
3 ☐ 11–15 days
4 ☐ 16–30 days
5 ☐ 31–45 days
6 ☐ 46 + days
7 ☐ "Everyday"
9 ☐ DK

e. **Did you first have this sensation more than 6 months ago?** — 15
1 ☐ Yes
2 ☐ No

4a. **(During the past 6 months) Did you have pain in the jaw joint or in front of the ear more than once?** — 16
1 ☐ Yes
2 ☐ No *(5)*

b. **When you have this pain, does it come and go or is it continuous and uninterrupted?** — 17
1 ☐ Come and go
2 ☐ Continuous/uninterrupted
8 ☐ Other
9 ☐ DK

c. **During how many DIFFERENT MONTHS in the past 6 months did you have this pain?** — 18
☐☐ Months

d. **How many total days in the past 6 months did you have this pain?** — 19
1 ☐ 1–3 days
2 ☐ 4–10 days
3 ☐ 11–15 days
4 ☐ 16–30 days
5 ☐ 31–45 days
6 ☐ 46 + days
7 ☐ "Everyday"
9 ☐ DK

e. **Did you first have this pain more than 6 months ago?** — 20
1 ☐ Yes
2 ☐ No

f. **On a scale of 1–10, where 1 is mild and 10 is severe, how would you rate this pain at its worst?** *Circle only one.* — 21–22
1 2 3 4 5 6 7 8 9 10

5a. **(During the past 6 months) Did you have a dull, aching pain across your face or cheek more than once? Do not count sinus pain.** — 23
1 ☐ Yes
2 ☐ No *(Check Item 3)*

b. **When you have this pain, does it come and go or is it continuous and uninterrupted?** — 24
1 ☐ Come and go
2 ☐ Continuous/uninterrupted
8 ☐ Other
9 ☐ DK

c. **During how many DIFFERENT MONTHS in the past 6 months did you have this pain?** — 25
☐☐ Months

d. **How many total days in the past 6 months did you have this pain?** — 26
1 ☐ 1–3 days
2 ☐ 4–10 days
3 ☐ 11–15 days
4 ☐ 16–30 days
5 ☐ 31–45 days
6 ☐ 46 + days
7 ☐ "Everyday"
9 ☐ DK

e. **Did you first have this pain more than 6 months ago?** — 27
1 ☐ Yes
2 ☐ No

f. **On a scale of 1–10, where 1 is mild and 10 is severe, how would you rate this pain at its worst?** *Circle only one.* — 28–29
1 2 3 4 5 6 7 8 9 10

FORM HIS-1A (1989) (3-10-89)

Section R — OROFACIAL PAIN — Continued

CHECK ITEM 3 — *Refer to 3c, 4c, and 5c.*

30
1 ☐ Two or more months in any one of 3c, 4c, or 5c *(6)*
8 ☐ Other *(Section S)*

6a. **In the past 6 months, did you see or talk to a DENTIST for the pain we just discussed?** — 31
1 ☐ Yes
2 ☐ No *(6c)*

b. **How many times during the last 6 months did you see or talk to a dentist about the pain?** — 32–34
_____ Times
999 ☐ DK

c. **(In the past 6 months) Did you see or talk to a MEDICAL DOCTOR about the pain?** — 35
1 ☐ Yes
2 ☐ No *(6e)*

d. **How many times?** — 36–38
_____ Times
999 ☐ DK

e. **(In the past 6 months) Did you see or talk to any other type of health professional about the pain?** — 39
1 ☐ Yes
2 ☐ No *(6h)*

f. **What kind of health professional?** — 40–41
Health professional _____

g. **How many times during the past 6 months did you see or talk to the** *(person in 6f)*? — 42–44
_____ Times
999 ☐ DK

h. **(In the past 6 months) Did you worry about the health of your teeth and gums because of the pain?** — 45
1 ☐ Yes
2 ☐ No

i. **(In the past 6 months) Did you worry about the health of your body because of the pain?** — 46
1 ☐ Yes
2 ☐ No

HAND CARD R1 . Read list if telephone interview.

7. **Here is a list of things people do when they have teeth, mouth, or face pain. Please tell me the things you did for the pain during the past 6 months.**

Circle all that apply.

1 — Use a hot or cold compress	1	1	47
2 — Take a prescription drug	2	2	48
3 — Take an over-the-counter drug	3	3	49
4 — Drink some liquor or wine because of the pain	4	4	50
5 — Take time off work	5	5	51
6 — Stay home more than usual	6	6	52
7 — Avoid family and friends	7	7	53
8 — Anything else? *(Specify)*	8 *(Specify)*_____	8	54
0 — None of the above	0	0	55
9 — Don't know	9	9	56

Notes

Appendix III
1989 National Health Interview Survey
Current Health Topics
section S2: Abdominal pain

RT 75
3-4

Section S2 — ABDOMINAL PAIN

5

Hand Card S1.

The next questions are about pain and discomfort in the abdomen. By abdomen, we mean [the shaded area on this diagram/the area between the lower ribs and the hips]. Do not include pain related to kidneys, bladder, or arthritis (menstruation or pregnancy).

1. **DURING THE PAST 12 MONTHS, have you had any type of pain or severe discomfort in your abdomen three or more times?**

1 ☐ Yes
2 ☐ No } *(Section S3)*
9 ☐ DK }

6

2. **Have you ever made a visit to a doctor for your abdominal pain?**
If asked: **or the condition that caused the pain.**

1 ☐ Yes
2 ☐ No } *(4)*
9 ☐ DK }

3a. **What condition did the doctor say was the cause of the pain?**
Enter first 5 code numbers and the conditions in the order mentioned.
Do not probe.

98 ☐ Doctor didn't say } *(4)*
99 ☐ DK }

Code	Condition	
_____	_____	7–8
_____	_____	9–10
_____	_____	11–12
_____	_____	13–14
_____	_____	15–16

If only one response to 3a, enter in 3b without asking.

b. **Which of these conditions caused the MOST pain during the past 12 months?**
Enter code number and condition.

_____ _____ *(Check item 1)* 17–18

99 ☐ DK *(Check item 1)*

4a. **What condition do you think was the cause of the pain?**
Enter first 5 code numbers and the conditions in the order mentioned.
Do not probe.

99 ☐ DK *(5)*

Code	Condition	
_____	_____	19–20
_____	_____	21–22
_____	_____	23–24
_____	_____	25–26
_____	_____	27–28

If only one response to 4a, enter in 4b without asking.

b. **Which of these conditions caused the MOST pain during the past 12 months?**
Enter code number and condition.

_____ _____ *(Check item 1)* 29–30

99 ☐ DK *(Check item 1)*

01 Spastic colon	22 Gallstones	43 Tension
02 Functional bowel	23 Gastritis	44 Trouble swallowing
03 Irritable colon	24 Gastroenteritis	45 Tumor
04 Irritable bowel syndrome	25 Growth	46 Ulcer
05 Allergies	26 Heartburn	47 Ulcerative colitis
06 Anxiety	27 Hepatitis	48 Virus
07 Appendicitis	28 Hernia, other than hiatal	
08 Cancer	29 Hiatal hernia	* 55 Arthritis
09 Cirrhosis	30 Impacted bowels	* 56 Back problems
10 Colitis	31 Indigestion	* 57 Bladder
11 Constipation	32 Infection	* 58 Kidneys
12 Crohn's disease	33 Influenza	* 59 Menstruation
13 Depression	34 Lactose intolerance	* 60 Other female trouble
14 Diarrhea	35 Medication side effects	* 61 Pregnancy
15 Diverticulitis	36 Nerves	* 62 Prostate
16 Diverticulosis	37 Obstructed bowels	63 Other — *Specify above*
17 Enteritis	38 Other bowel trouble	64 Other — *Specify above*
18 Esophagitis	39 Other liver trouble	65 Other — *Specify above*
19 Flu	40 Other stomach trouble	66 Other — *Specify above*
20 Food poisoning	41 Peritonitis	67 Other — *Specify above*
21 Gallbladder problem	42 Stress	

* Do not ask questions 5—27 about these conditions.

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Section S2 — ABDOMINAL PAIN — Continued

Ask questions 5—27 about the first condition coded 01—04 in 3a or 4a. If none, ask about condition in 3b or 4b. If this is an asterisked condition, ask about next condition mentioned in 3a or 4a. If this is "DK", begin with question 5, but do not read the parentheticals. If no other condition, go to Section S3.

CHECK ITEM 1 — *Enter code and condition.* — 31—32: _____ Code; _____ Condition

5. **(These next questions are about pain related to your *(condition in Check Item 1)*.**
Ask if "Yes" in 2; otherwise go to 8.
How many DIFFERENT doctors have you visited for this pain? — 33: 0 ☐ None *(8)*; 1 ☐ One; 2 ☐ Two; 3 ☐ Three or more

6. **DURING THE PAST 12 MONTHS, how many doctor visits did you have because of this pain?** — 34—36: 000 ☐ None; 001 ☐ One; _____ Number of visits

7. **Were any of the following tests done (to diagnose your *(condition in check item 1)*)?** — 37

a. **Upper GI series?**
Read if necessary: **You drink a chalky white liquid called barium and then X-rays are taken.** — 1 ☐ Yes; 2 ☐ No; 9 ☐ DK

b. **Barium enema?** — 38
Read if necessary: **You are given an enema containing barium and X-rays of your abdomen are taken.** — 1 ☐ Yes; 2 ☐ No; 9 ☐ DK

c. **Upper endoscopy or gastroscopy?** — 39
Read if necessary: **A long flexible tube with a light on the end is inserted down the throat so that the lining of the stomach and the upper intestine can be examined.** — 1 ☐ Yes; 2 ☐ No; 9 ☐ DK

d. **Lower endoscopy or colonoscopy?** — 40
Read if necessary: **A long flexible tube with a light on the end is inserted in the rectum so that the lining of the large intestine can be examined.** — 1 ☐ Yes; 2 ☐ No; 9 ☐ DK

e. **Sonogram or ultrasound?** — 41
Read if necessary: **A gel is rubbed on your upper right side and an instrument is moved around the area while an examiner watches on a television screen.** — 1 ☐ Yes; 2 ☐ No; 9 ☐ DK

Mark box or ask.
Hand Card S1.
8. **Looking at this card, tell me the numbers that show where the pain (from the *(condition in Check Item 1)*) was located?**
Mark all that apply.
Do not probe.
0 ☐ Telephone interview *(9)* — 42
1 ☐ — 43
2 ☐ — 44
3 ☐ — 45
4 ☐ — 46
5 ☐ — 47
6 ☐ — 48
7 ☐ — 49
8 ☐ — 50
9 ☐ — 51
(11)

9. **Was the pain above the waistline, below the waist, or around the waistline?**
Mark all that apply.
1 ☐ Above — 52
2 ☐ Below — 53
3 ☐ Around — 54

10. **Was the pain on the right side, the left side, or down the middle?**
Mark all that apply.
1 ☐ Right — 55
2 ☐ Left — 56
3 ☐ Middle — 57

11. **When you get this pain, how long does it USUALLY last?** — 58—61
_____ 1 ☐ Minutes; 2 ☐ Hours; 3 ☐ Days
7777 ☐ Constant, all the time
8888 ☐ Varies too much for a usual duration

12. **During how many days in the past year did you have this pain?** — 62—64
001 ☐ One *(15)*
_____ Days
365 ☐ Everyday

If more than 14 days in 12, go to 14
13. **Did all of this pain occur during one two week period?** — 65: 1 ☐ Yes *(15)*; 2 ☐ No

14. **During how many DIFFERENT months in the past year did you have this pain?** — 66—67: _____ Months

15. **On a scale from 1 to 10, where 1 is mild and 10 is severe, how would you rate this pain at its worst?** — 68—69
Circle one
01 02 03 04 05
06 07 08 09 10

16. **Have you ever taken any medication for the pain?** — 70: 1 ☐ Yes; 2 ☐ No *(18)*

17. **Was any of the medication you took prescribed for you by a doctor?** — 71: 1 ☐ Yes; 2 ☐ No

18. **When this pain starts, do you have to stop what you are doing because it hurts?** — 72: 1 ☐ Yes; 2 ☐ No

19. **When you have this pain, do you USUALLY have bowel movements?** — 73: 1 ☐ Yes; 2 ☐ No

20. **When you have this pain, are your bowel movements USUALLY looser than normal?** — 74: 1 ☐ Yes; 2 ☐ No

21. **When you have this pain, are your bowel movements USUALLY more frequent than normal?** — 75: 1 ☐ Yes; 2 ☐ No

22. **Is the pain USUALLY relieved or lessened by having a bowel movement?** — 76: 1 ☐ Yes; 2 ☐ No

23. **Is the pain relieved by passing gas?** — 77: 1 ☐ Yes; 2 ☐ No

24. **When you have this pain, is your abdomen usually swollen or bloated?** — 78: 1 ☐ Yes; 2 ☐ No

25. **When you have this pain, are you ever awakened from sleep?** — 79: 1 ☐ Yes; 2 ☐ No

26. **In the past 30 days, has this pain caused you to cut down on the things you usually do?** — 80: 1 ☐ Yes; 2 ☐ No *(Section S3)*

27. **In the past 30 days, how many days did you cut down for more than half the day?** — 81—82: 00 ☐ None; _____ Days

Notes

Appendix IV
Classification variables for analysis of pain data

Table I. Classification variables available for analysis of pain data, by survey or data system

Classification variables	NHES Cycle I	NHES Cycle II	NHES Cycle III	NHANES I	NHANES II	HHANES	NHANES III	NHEFS	NHIS	NMCUES	NSPHPC	NSFG	NAMCS	NHDS	NNHS	NOK	NMFI and ILTCP	NNS and NFMS	NMFS	NMIHS and LF	MS	DS
Sex	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Age	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Race	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	–	X	X	X	X	X
Hispanic origin	–	–	–	–	X	X	X	X	X	X	X	X	X	X	X	–	–	X	X	X	–	–
Ethnic origin	–	–	–	X	X	X	X	X	X	–	–	X	–	–	–	–	–	X	–	–	–	–
Education of individual	X	X	X	X	X	X	X	X	X	X	X	X	–	–	–	–	–	X	–	X	–	X
Education of head of household	X	X	X	X	X	X	X	X	X	X	–	–	–	–	–	–	–	X	–	X	–	–
Personal income	–	–	–	–	–	–	–	X	X	X	–	X	–	–	–	–	–	X	–	X	–	–
Family income	X	X	X	X	X	X	X	X	X	X	X	X	–	–	–	–	–	X	X	X	–	–
Marital status	X	–	–	X	X	X	X	X	X	X	X	X	–	X	X	–	–	X	X	X	X	X
Employment status	X	–	X	X	X	X	X	X	X	X	X	X	–	–	–	–	–	X	X	X	–	–
Labor force status	X	–	X	X	X	X	X	X	X	X	X	X	–	–	–	–	–	–	X	X	–	–
Occupation	X	–	–	X	X	X	X	X	X	–	–	X	–	–	–	–	–	X	X	X	–	–
Industry	X	–	–	X	X	X	X	X	X	X	–	X	–	–	–	–	–	X	X	X	–	–
Class of worker	X	–	–	X	X	X	X	–	X	X	–	–	–	–	–	–	–	X	X	X	–	–
Region	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	–	–	X	–	X	X	–
Location of residence	X	X	X	X	X	X	X	–	X	X	X	X	X	–	X	–	–	X	–	X	X	–
Size of location of residence	X	X	X	X	X	X	X	–	X	–	–	–	–	–	–	–	–	–	–	–	X	–
Place of birth	–	X	X	X	X	X	X	X	–	–	–	–	–	–	–	–	–	–	–	X	X	X
Veteran status	X	–	–	–	X	X	X	–	X	X	–	–	–	–	–	–	–	–	X	X	X	–
Twin status	–	X	X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	X	–	–
Number of persons in household	X	X	X	X	X	X	X	X	X	X	X	X	–	–	–	–	–	X	X	X	–	–
Family relationship	X	–	–	X	X	X	X	X	X	X	–	X	–	–	–	–	–	–	X	X	–	–
Family structure	–	X	X	–	–	X	X	–	X	–	–	–	–	–	–	–	–	–	X	–	–	–
Number of rooms	–	–	–	X	X	X	X	–	X	–	–	–	–	–	–	–	–	–	–	–	–	–
Medical insurance	–	–	–	–	–	X	X	–	X	X	–	X	–	X	–	–	–	–	X	X	–	–
Disability status	–	–	–	–	X	X	X	X	X	X	X	–	–	–	–	–	–	–	–	X	–	–
Height and weight	X	X	X	X	X	X	X	X	X	–	X	–	–	–	–	–	–	–	–	X	–	–
Self-assessed health status	X	X	X	X	X	X	X	X	X	X	X	–	–	–	–	–	–	–	–	X	–	–

Note: X means relevant information available.

NHES National Health Examination Survey.
NHANES National Health and Nutrition Examination Survey.
HHANES Hispanic Health and Nutrition Examination Survey.
NHEFS NHANES I Epidemiologic Followup Study.
NHIS National Health Interview Survey.
NMCUES National Medical Care Utilization and Expenditure Survey.
NSPHPC National Survey of Personal Health Practices and Consequences.
NSFG National Survey of Family Growth.
NAMCS National Ambulatory Medical Care Survey.
NHDS National Hospital Discharge Survey.
NNHS National Nursing Home Survey.
NOK Next-of-Kin Component of the 1985 NNHS.
NMFI National Master Facility Inventory.
ILTCP Inventory of Long-Term Care Places.
NNS National Natality Survey.
NFMS National Fetal Mortality Survey.
NMFS National Mortality Followback Survey.
NMIHS National Maternal and Infant Health Survey.
LF Longitudinal Followup to the NMIHS.
MS Mortality Statistics.
DS Divorce Statistics.

Appendix V
Summary of selected pain measures

Table II. Pain measures, by survey or data system

Classification variables	NHES Cycle I	NHES Cycle II	NHES Cycle III	NHANES I	NHANES II	HHANES	NHANES III	NHEFS	NHIS	NMCUES	NSPHPC	NSFG	NAMCS	NHDS	NNHS	NOK	NMFI and ILTCP	NNS and NFMS	NMFS	NMIHS and LF	MS
Headache	X	–	–	X	–	–	X	–	X[2,3]	[4]	X	–	[5]	[3]	[6]	–	–	–	–	[3,7]	–
Magnitude	X	–	–	X	–	–	X	–	X	X	X	–	–	–	–	–	–	–	–	X	–
Scope	X	–	–	–	–	–	X	–	X	X	X	–	–	–	–	–	–	–	–	X	–
Structure	X	–	–	–	–	–	X	–	X	X	X	–	–	–	X	–	–	–	–	X	–
Risk factors	–	–	–	–	–	–	–	–	X	X	X	–	X	X	–	–	–	–	–	X	–
Impact	–	–	–	–	–	–	–	–	X	X	–	–	X	X	X	–	–	–	–	X	–
Management	–	–	–	X	–	–	–	–	–	X	–	–	X	X	X	–	–	–	–	–	–
Trends	–	–	–	–	–	–	–	–	X	X	–	–	X	X	–	–	–	–	–	–	–
Orofacial pain	–	–	–	–	–	–	–	–	X[3]	[4]	–	–	[5]	[3]	[6]	–	–	–	–	[3]	–
Magnitude	–	–	–	–	–	–	–	–	X	X	–	–	–	–	–	–	–	–	–	–	–
Scope	–	–	–	–	–	–	–	–	X	X	–	–	–	–	–	–	–	–	–	X	–
Structure	–	–	–	–	–	–	–	–	X	X	–	–	–	–	X	–	–	–	–	X	–
Risk factors	–	–	–	–	–	–	–	–	X	X	–	–	X	X	–	–	–	–	–	X	–
Impact	–	–	–	–	–	–	–	–	X	X	–	–	X	X	X	–	–	–	–	X	–
Management	–	–	–	–	–	–	–	–	X	X	–	–	X	X	X	–	–	–	–	–	–
Trends	–	–	–	–	–	–	–	–	–	X	–	–	X	X	–	–	–	–	–	–	–
Earache	–	X	X	–	X	X	X	–	X[2,3]	[4]	–	X	[5]	[3]	[6]	–	–	–	–	X[3]	–
Magnitude	–	X	X	–	X	X	X	–	X	X	–	X	–	–	–	–	–	–	–	X	–
Scope	–	X	X	–	X	X	X	–	X	X	–	X	–	–	–	–	–	–	–	X	–
Structure	–	X	X	–	X	X	X	–	X	X	–	X	–	–	X	–	–	–	–	X	–
Risk factors	–	X	X	–	–	–	–	–	X	X	–	X	X	X	–	–	–	–	–	X	–
Impact	–	–	–	–	–	–	–	–	X	X	–	–	X	X	X	–	–	–	–	–	–
Management	–	X	–	–	–	X	X	–	–	X	–	–	X	X	X	–	–	–	–	–	–
Trends	–	–	–	–	–	–	–	–	X	X	–	–	X	X	–	–	–	–	–	–	–
Toothache	–	–	–	X	–	X	X	–	X[2,3]	[4]	–	–	[5]	[3]	[6]	–	–	–	–	[3]	–
Magnitude	–	–	–	–	–	–	X	–	X	X	–	–	–	–	–	–	–	–	–	–	–
Scope	–	–	–	–	–	–	X	–	X	X	–	–	–	–	–	–	–	–	–	X	–
Structure	–	–	–	–	–	–	X	–	X	X	–	–	–	–	X	–	–	–	–	X	–
Risk factors	–	–	–	–	–	–	–	–	X	X	–	–	X	X	–	–	–	–	–	X	–
Impact	–	–	–	–	–	–	–	–	X	X	–	–	X	X	X	–	–	–	–	X	–
Management	–	–	–	X	–	X	–	–	X	X	–	–	X	X	X	–	–	–	–	–	–
Trends	–	–	–	–	–	–	–	–	X	X	–	–	X	X	–	–	–	–	–	–	–
Chest pain	X	–	–	X	X	X	X	X	X[3]	[4]	–	–	[5]	[3]	[6]	–	–	–	X	[3]	–
Magnitude	X	–	–	X	X	X	X	X	X	X	–	–	–	–	–	–	–	–	X	–	–
Scope	X	–	–	X	X	X	X	X	X	X	–	–	–	–	–	–	–	–	X	X	–
Structure	X	–	–	X	X	X	X	X	X	X	–	–	–	–	X	–	–	–	X	X	–
Risk factors	X	–	–	X	X	X	X	X	X	X	–	–	X	X	–	–	–	–	X	X	–
Impact	–	–	–	X	X	X	X	X	X	X	–	–	X	X	X	–	–	–	X	X	–
Management	X	–	–	X	X	X	X	X	X	X	–	–	X	X	X	–	–	–	X	–	–
Trends	–	–	–	–	–	–	–	X	X	X	–	–	X	X	–	–	–	–	–	–	–

Table II. Pain measures, by survey or data system—Con.

Classification variables	NHES Cycle I	NHES Cycle II	NHES Cycle III	NHANES I	NHANES II	HHANES	NHANES III	NHEFS	NHIS	NMCUES	NSPHPC	NSFG	NAMCS	NHDS	NNHS	NOK	NMFI and ILTCP	NNS and NFMS	NMFS	NMIHS and LF	MS
Abdominal pain	–	–	X[8]	X	–	X	X	–	X[3]	[4]	–	–	[5]	[3]	[6]	–	–	–	–	[3,7]	–
Magnitude	–	–	X	X	–	X	X	–	X	X	–	–	–	–	–	–	–	–	–	X	–
Scope	–	–	X	X	–	X	X	–	X	X	–	–	–	–	–	–	–	–	–	X	–
Structure	–	–	X	X	–	X	X	–	X	X	–	–	–	–	X	–	–	–	–	X	–
Risk factors	–	–	–	–	–	X	–	–	X	X	–	–	X	X	–	–	–	–	–	X	–
Impact	–	–	–	–	–	X	X	–	X	X	–	–	X	X	X	–	–	–	–	–	–
Management	–	–	X	–	–	X	X	–	X	X	–	–	X	X	X	–	–	–	–	–	–
Trends	–	–	–	–	–	–	–	–	X	X	–	–	X	X	–	–	–	–	–	–	–
Back pain	–	–	X	X	X	–	X	X	X[3]	[4]	–	–	[5]	[3]	X[6]	–	[9]	–	–	[3]	–
Magnitude	–	–	X	X	X	–	X	X	X	X	–	–	–	–	–	–	–	–	–	–	–
Scope	–	–	X	X	X	–	X	X	X	X	–	–	–	–	–	–	–	–	–	X	–
Structure	–	–	X	X	X	–	X	X	X	X	–	–	–	–	X	–	–	–	–	X	–
Risk factors	–	–	–	X	X	–	X	X	X	X	–	–	X	X	–	–	–	–	–	X-	
Impact	–	–	–	X	X	–	–	X	X	X	–	–	X	X	X	–	–	–	–	X	–
Management	–	–	–	X	X	–	–	X	X	X	–	–	X	X	X	–	X	–	–	–	–
Trends	–	–	–	–	–	–	–	X	X	X	–	–	X	X	X	–	–	–	–	–	–
Joint or arthritis pain	X	–	–	X	X	X	X	X	X[3]	[4]	–	–	[5]	[3]	X[6]	X	[9]		–	[3]	–
Magnitude	X	–	–	X	X	X	X	X	X	X	–	–	–	–	–	–	–	–	–	–	–
Scope	X	–	–	X	X	X	X	X	X	X	–	–	–	–	–	–	–	–	–	X	–
Structure	X	–	–	X	X	X	X	X	X	X	–	–	–	–	X	X	–	–	–	X	–
Risk factors	–	–	–	X	X	X	X	X	X	X	–	–	X	X	–	X	–	–	–	X	–
Impact	–	–	–	X	X	–	–	X	X	X	–	–	X	X	X	X	–	–	–	X-	
Management	X	–	–	X	X	–	–	X	X	X	–	–	X	X	X	–	X	–	–	–	–
Trends	–	–	–	–	–	–	–	X	X	X	–	–	X	X	X	X	–	–	–	–	–
Burns	–	–	–	–	X	–	–	–	[2,3]	[4]	–	–	[5]	[3]	[6]	[10]	X	–	–	X[3]	[3]
Magnitude	–	–	–	–	X	–	–	–	X	X	–	–	–	–	–	–	–	–	–	X	X
Scope	–	–	–	–	X	–	–	–	X	X	–	–	–	–	–	–	–	–	–	X	X
Structure	–	–	–	–	X	–	–	–	X	X	–	–	–	–	X	X	–	–	–	X	–
Risk factors	–	–	–	–	–	–	–	–	X	X	–	–	X	X	–	X	–	–	–	X	–
Impact	–	–	–	–	–	–	–	–	X	X	–	–	X	X	X	X	–	–	–	X	–
Management	–	–	–	–	–	–	–	–	–	X	–	–	X	X	X	–	X	–	–	–	–
Trends	–	–	–	–	–	–	–	–	X	X	–	–	X	X	–	X	–	–	–	–	–
Injuries	–	–	X	X	X	–	–	X	X[3]	[4]	–	–	[5]	[3]	X[6]	X[11]	[9]	–	–	X[3]	[3]
Magnitude	–	–	X	X	X	–	–	X	X	X	–	–	–	–	–	–	–	–	–	X	X
Scope	–	–	X	X	X	–	–	X	X	X	–	–	–	–	–	–	–	–	–	X	X
Structure	–	–	X	X	X	–	–	X	X	X	–	–	–	–	X	X	–		–	X	–
Risk factors	–	–	–	–	–	–	–	X	X	X	–	–	X	X	–	X	–	–	–	X	–
Impact	–	–	–	X	X	–	–	X	X	X	–	–	X	X	X	X	–	–	–	X	–
Management	–	–	X	X	X	–	–	X	X	X	–	–	X	X	X	–	X	–	–	–	–
Trends	–	–	–	–	–	–	–	X	X	X	–	–	X	X	–	X	–	–	–	–	–

Table II. Pain measures, by survey or data system—Con.

Classification variables	NHES Cycle I	NHES Cycle II	NHES Cycle III	NHANES I	NHANES II	HHANES	NHANES III	NHEFS	NHIS	NMCUES	NSPHPC	NSFG	NAMCS	NHDS	NNHS	NOK	NMFI and ILTCP	NNS and NFMS	NMFS	NMIHS and LF	MS
Extremity pain	–	–	–	X	–	X	X	X	X[3]	[4]	–	–	[5]	[3]	[6]	–	[9]	–	–	[3]	–
Magnitude	–	–	–	X	–	X	X	X	X	X	–	–	–	–	–	–	–	–	–	–	–
Scope	–	–	–	X	–	X	X	X	X	X	–	–	–	–	–	–	–	–	–	X	–
Structure	–	–	–	X	–	X	X	X	X	X	–	–	–	–	X	–	–	–	–	X	–
Risk factors	–	–	–	X	–	X	X	X	X	X	–	–	X	X	–	–	–	–	–	X	–
Impact	–	–	–	X	–	–	X	X	X	X	–	–	X	X	X	–	–	–	–	X	–
Management	–	–	–	X	–	–	X	X	X	X	–	–	X	X	X	–	X	–	–	–	–
Trends	–	–	–	–	–	–	–	X	X	X	–	–	X	X	–	–	–	–	–	–	–
Labor pain	–	–	–	–	–	–	–	–	[2,3]	[4]	–	–	[5]	[3]	–	–	–	X	–	X[3]	–
Magnitude	–	–	–	–	–	–	–	–	–	X	–	–	–	–	–	–	–	–	–	–	–
Scope	–	–	–	–	–	–	–	–	X	X	–	–	–	–	–	–	–	–	–	–	–
Structure	–	–	–	–	–	–	–	–	X	X	–	–	–	–	–	–	–	–	–	–	–
Risk factors	–	–	–	–	–	–	–	–	X	X	–	–	X	X	–	–	–	–	–	–	–
Impact	–	–	–	–	–	–	–	–	X	X	–	–	X	X	–	–	–	–	–	–	–
Management	–	–	–	–	–	–	–	–	–	X	–	–	X	X	–	–	–	X	–	X	–
Trends	–	–	–	–	–	–	–	–	–	X	–	–	X	X	–	–	–	–	–	–	–

[1]Variables are not identical across surveys.
[2]If reported as occurring in past 2 weeks and meets the NHIS specifications.
[3]ICD-coded conditions.
[4]Questions about health or medical consequences lead to ICD-coded conditions that may be identified as painful.
[5]Patients' symptoms and physicians' diagnoses.
[6]ICD-coded conditions since 1985.
[7]During specified pregnancy.
[8]Menstrual pain.
[9]Orthopedic, physical therapy, and rehabilitation services.
[10]Burns are included in a category with skin diseases and infections.
[11]Selected injury data.

NHES National Health Examination Survey.
NHANES National Health and Nutrition Examination Survey.
HHANES Hispanic Health and Nutrition Examination Survey.
NHEFS NHANES I Epidemiologic Followup Study.
NHIS National Health Interview Survey.
NMCUES National Medical Care Utilization and Expenditure Survey.
NSPHPC National Survey of Personal Health Practices and Consequences.
NSFG National Survey of Family Growth.
NAMCS National Ambulatory Medical Care Survey.
NHDS National Hospital Discharge Survey.
NNHS National Nursing Home Survey.
NOK Next-of-Kin Component of the 1985 NNHS.
NMFI National Master Facility Inventory.
ILTCP Inventory of Long-Term Care Places.
NNS National Natality Survey.
NFMS National Fetal Mortality Survey.
NMFS National Mortality Followback Survey.
NMIHS National Maternal and Infant Health Survey.
LF Longitudinal Followup to the NMIHS.
MS Mortality Statistics.
DS Divorce Statistics.

Appendix VI
International Classification of Diseases description

The *International Classification of Diseases* (ICD), used to classify cause of death, is published by the World Health Organization and revised approximately every 10 years. It has been used in most National Center for Health Statistics (NCHS) surveys in which condition data are collected. Most NCHS data systems that employ the ICD coding system began using the ninth revision of the ICD (ICD-9) or the clinical modification of the ICD-9 (ICD-9-CM) in 1979. (In the ICD-9-CM, developed jointly by NCHS, the Health Care Financing Administration, and other U.S. organizations in the health care field, an extra digit is added to many original codes and a number of the original ICD-9 codes are modified as well.)

Prior to the ninth revision, NCHS data systems did not begin using the new revisions in the same data year. The eighth revision (including the ICD–Adapted) was used from approximately 1968 to 1978, and the seventh revision was used from approximately 1958 to 1967. Users who intend to use condition data from these earlier years should consult the data system's technical contact regarding the ICD revision in use at the time and any modifications made to the official ICD codes. Comparability ratios between the eighth and ninth revisions, using data from two NCHS morbidity surveys—the National Ambulatory Medical Care Survey (NAMCS) and the National Hospital Discharge Survey (NHDS)—are available (112). Comparability ratios between the eighth and ninth revisions for selected causes of death, as well as comparability ratios for the seventh and eighth revisions, are also available (113). These ratios assist researchers in interpreting trends in ICD-coded conditions that may be attributable to changes in the classification system.

The ICD is used for classifying cause of death for NCHS mortality statistics, as well as the coding of conditions reported in the Hispanic Health and Nutrition Examination Survey, the National Health Interview Survey, and the National Medical Care Utilization and Expenditure Survey. An extensive coding manual, developed by the Division of Health Interview Statistics, provides detailed guidelines for the coding of selected diagnoses and impairments. (Impairment codes are independent of the ICD.)

The ICD-9-CM has been used in classifying physician diagnoses reported in NAMCS, NHDS, the examination components of the National Health and Nutrition Examination Surveys, and (in 1986) the National Mortality Survey. Before 1979, if a condition was listed with a symptom (such as "pain"), only the condition was coded in NHDS.

Some NCHS data systems do not use the ICD coding system. The National Health Examination Surveys, Cycles I, II, and III, and the National Nursing Home Surveys (until 1985) contain data on clinical conditions, but these data are coded using non-ICD coding schemes. In the case of the National Nursing Home Survey, a precoded list of selected diagnoses, very much like but not identical to ICD-9 categories, was used until 1985; since 1985, conditions have been coded using the ICD. The National Survey of Personal Health Practices and Consequences, the National Master Facility Inventory, the National Survey of Family Growth, and the National Natality Survey contain no condition data that require medical coding.

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Scientific and Technical Information Branch
National Center for Health Statistics
Centers for Disease Control
Public Health Service
6525 Belcrest Road, Room 1064
Hyattsville, Md. 20782

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