
Vital and Health Statistics

Health Characteristics of Large Metropolitan Statistical Areas: United States, 1988–89

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Annual average estimates of rates or percents of limitation of activity, respondent-assessed health status, restricted-activity days, bed-disability days, work-loss days, school-loss days, physician utilization, hospital utilization, incidence of selected acute conditions, and prevalence of selected chronic conditions are shown by geographic region for all large U.S. metropolitan statistical areas combined and for individual metropolitan statistical areas with populations of at least 1.1 million persons.

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Cooperation of the U.S. Bureau of the Census

Under the legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies.

In accordance with specifications established by the National Center for Health Statistics, the U.S. Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

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Symbols

- Data not available
 - . . . Category not applicable
 - Quantity zero
 - 0.0 Quantity more than zero but less than 0.05
 - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
 - * Figure does not meet standard of reliability or precision
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Health Characteristics of Large Metropolitan Statistical Areas

by John Gary Collins, M.B.A., and Gerry E. Hendershot, Ph.D., Division of Health Interview Statistics

Introduction

Estimates from the National Health Interview Survey (NHIS) are usually provided for the civilian noninstitutionalized population of the United States by demographic characteristics and two geographical distributions—geographic region and place of residence. States are grouped into four geographic regions—Northeast Region, Midwest Region, South Region, and West Region—and place of residence is classified as inside or outside a metropolitan statistical area (MSA)—MSA—central city, MSA—not central city, non-MSA—nonfarm, and non-MSA—farm. In recent years, there has been a demand for data on smaller geographic areas, such as States and cities, to provide them with planning data and to establish milestones for reaching the health status objectives of their populations.

This report addresses the demand for data on the health of persons living in metropolitan areas by providing health characteristics of 33 large city areas, 18 of which are consolidated metropolitan statistical areas (CMSA's). Also included are health characteristics data for 23 primary metropolitan statistical areas (PMSA's), which are component areas of the 18 CMSA's included in this report, and data for the large metropolitan areas by

geographic region. All areas included in this report have populations exceeding 1.1 million persons.

NHIS data on large MSA's have been presented four times previously for the time periods July 1963–June 1965 (1), 1969–70 (2), 1973–74 (3), and 1980–81 (4). However, only the last report provided data for a substantial number of large MSA's—31. Furthermore, because the NHIS questionnaire was changed in 1982 and the sample frame was changed in 1985, many of the estimates for health characteristics in this report are not directly comparable with those for 1980–81. In addition, this report provides individual health characteristic profiles for each of the areas, as opposed to area comparisons.

This report is based on NHIS survey years 1988 and 1989 and includes data on the age distribution of the populations, restricted activity, bed disability, work loss and school loss, limitation of activity, respondent-assessed health status, physician utilization, hospital utilization, acute conditions, and selected chronic conditions for large CMSA's, PMSA's, and MSA's. Morbidity ratios that reflect indirect age adjustment are shown for variables that have substantially higher rates among older persons.

Sources and limitations of data

The information from the National Health Interview Survey (NHIS) presented in this report is based on data collected in a continuing nationwide survey by household interview. Each week a probability sample of the civilian noninstitutionalized population of the United States is interviewed by personnel of the U.S. Bureau of the Census. Information is obtained about the health and other characteristics of each member of the household.

One of the strengths of the NHIS is the ability to combine data over multiple years. This is possible because of its sampling design and its use of standard questions over several years. This is particularly desirable when making estimates for variables with relatively small sample sizes. The stability of the estimates is increased because increasing the sample size leads to smaller sampling errors. Therefore, for this report, data are based on information obtained by the National Center for Health Statistics (NCHS) in the 1988 and 1989 NHIS's, and annual averages for these two years are presented.

The NHIS sample for the two years 1988 and 1989 was composed of about 93,196 eligible households, containing approximately 239,239 persons living at the time of interview. The total noninterview rate for the NHIS was about 5.1 percent; 3.0 percent was due to respondent refusal, and the remainder was primarily the result of failure to locate an eligible respondent at home after repeated calls.

In 1985, the NHIS adopted several new sample design features although, conceptually, the sampling plan remained the same as the previous design. The major changes included:

- Reducing the number of primary sampling locations from 376 to 198 for sampling efficiency
- Oversampling the black population to improve the precision of the statistics
- Subdividing the NHIS sample into four separate representative panels to facilitate linkage to other NCHS surveys
- Using an all-area frame not based on the decennial census to facilitate NCHS survey linkage and to conduct NHIS followback surveys

Descriptions of the survey design, the methods used in estimation, and general qualifications of the data obtained from the survey are presented in appendix I.

Because the estimates presented in this report are based on a sample of the population, they are subject to sampling errors. Therefore, readers should pay particular attention to the section of appendix I entitled "Reliability of the estimates," which presents formulas for calculating standard errors and instructions for their use. Sampling errors for most of the estimates are relatively low. However, when an estimated number or the numerator or denominator of a rate or percent is small, the sampling error may be large.

All information collected in the survey results from reports by responsible family members residing in the household. When possible, all adult family members participate in the interview. However, proxy responses are accepted for family members who are not at home and are required for all children and for family members who are physically or mentally incapable of responding for themselves. Although a considerable effort is made to ensure accurate reporting, the information from both proxy and self-respondents may be inaccurate because the respondent is unaware of relevant information, has forgotten it, does not wish to reveal it to an interviewer, or does not understand the intended meaning of a question. Errors may also be introduced by interviewers, coders, and others during the processing and analysis of the data.

Certain terms used in this report are defined in appendix II and have specialized meanings for the purpose of the survey. It is suggested that the reader become familiar with these definitions.

Appendix III contains the probe questions and the recording forms used to obtain health characteristic data for large MSA's. The questions for 1988 and 1989 are presented in their entirety in the *Current Estimates* reports for these years (5,6). The portion of the questionnaire shown in appendix III for 1989 is the same as that for 1988.

An asterisk is placed beside certain figures in the tables to indicate a relative standard error of 30 percent or more. Figures marked with an asterisk are given primarily to allow the reader to combine them with related estimates and thereby possibly to produce a more reliable overall estimate for a broader category.

The Division of Health Interview Statistics of NCHS should be contacted for information about coding and editing procedures used to produce the final data file from which the estimates shown in this report are derived.

Metropolitan area concepts and components

Statistics for metropolitan areas, as shown annually in the *Statistical Abstract* (7), are for those areas designated by the U.S. Office of Management and Budget (OMB) as standard metropolitan statistical areas (SMSA's) or metropolitan statistical areas (MSA's). Effective June 30, 1983, OMB changed the basic term from SMSA to MSA and revised the geographic definitions of many individual metropolitan areas; some new areas were defined, and some areas were redesignated as PMSA's or CMSA's.

The general concept of a metropolitan area is one of a large population nucleus together with adjacent communities that have a high degree of economic and social integration with that nucleus. Standard definitions of MSA's were first issued in 1949 by the then U.S. Bureau of the Budget (predecessor of OMB) under the designation "standard metropolitan areas"; the term was changed to SMSA in 1959. From 1977 to 1981, SMSA's were the responsibility of the Office of Federal Statistical Policy and Standards, U.S. Department of Commerce.

The criteria for the establishment and definition of SMSA's were modified in 1958, 1971, and 1975. The current standards were adopted in January 1980; they provide that each MSA must include at least one of the following:

- One city with 50,000 or more inhabitants
- An area (defined by the U.S. Bureau of the Census as urbanized) of at least 50,000 inhabitants and a total MSA population of at least 100,000 (75,000 in New England)

The standards provide that an MSA include as "central county(ies)" the county in which the central city is located and adjacent counties, if any, with at least 50 percent of their population in the urbanized area. Additional "outlying counties" are included if they meet specified requirements of commuting to the central counties and of metropolitan character (such as population density and percent urban). In New England, the MSA's are defined in terms of cities and towns rather than of counties.

The 1980 standards provide that, within metropolitan complexes of 1 million or more population, separate

component areas are defined if specified criteria are met. Such areas are designated primary metropolitan statistical areas (PMSA's), and any area containing PMSA's is designated a consolidated metropolitan statistical area (CMSA).

The standards adopted in 1980 were implemented in two stages. First, they were used to define a group of 36 new areas in June 1981. The 323 SMSA's as of June 30, 1981, were reported in the 1980 census tabulations and publications. Next, the boundaries of all SMSA's were reviewed in 1982-83 under the new standards for determining central cities, and titles were implemented as part of that review. The largest city in each MSA is designated a "central city"; also, there may be additional central cities if specified requirements are met. The title of each MSA consists of the name(s) of up to three of its central cities and the name of each State into which the MSA extends. However, a central city generally is not included in an MSA title unless it has at least one-third the population of the area's largest city (prior to 1983, virtually all central cities appeared in area titles). An MSA may include other cities with populations of 50,000 or more besides its central or title cities. As mentioned earlier, this report includes data on 18 CMSA's, 23 of their component PMSA's, and 15 MSA's within which no component PMSA's are established.

The NHIS population estimates are based on civilian noninstitutionalized persons and hence are not identical within the ones shown in the *Statistical Abstract*. However, the estimates for all areas included in the report, with the exception of those for the Boston-Lawrence-Salem CMSA and the Boston PMSA, are reasonably close. The Boston area populations shown in this publication are inflated by approximately 1 million persons. This occurred because some PMSA's included in the CMSA have overlapping primary sampling units (PSU's), and, consequently, some of the PSU's are counted twice in the tabulation. However, the health characteristics are also counted in this manner; therefore, the rates shown in the tables should not be affected to any great extent.

Age and health characteristics

The age and health characteristics that comprise the profiles of the large MSA's are briefly defined in this section.

Age distribution

The number and percent distribution of populations for the 56 large CMSA's, PMSA's, and MSA's are shown in table 1 by age, according to geographic region. The specific age groups shown are: under 18 years, 18-44 years, 45-64 years, 65-74 years, and 75 years of age and over. Hence, the age distribution of a specific metropolitan area can be compared with the age distribution for all large MSA's or the age distribution for specific regions or other large MSA's shown in this report. The age distributions are also valuable for providing a basis for an indirect age adjustment of health characteristics that have substantially higher rates among older populations.

Limitation of activity due to chronic conditions

The concept of limitation of activity used in this report refers to long-term reduction in activity resulting from chronic disease or impairment. The percent limited in activity as shown in this report includes persons unable to carry on their usual activity, persons limited in the amount and kind of their usual activity, and persons limited but not in their usual activity, which would include such things as civic, church, or recreational activities. Limitation of activity is explained in further detail in appendix II. Because percents of limitation of activity are much higher among older persons, morbidity ratios that allow for age adjustment are provided for each of the areas.

The procedure for calculating morbidity ratios is detailed in this report (see "Morbidity ratios").

Respondent-assessed health status

Data on assessed health status results from simply asking respondents to assess their own health or that of family members living in the same household as "excellent," "very good," "good," "fair," or "poor." This report shows the percents of persons reporting fair or poor

health. These percents are higher among older populations; therefore, morbidity ratios that reflect indirect age adjustment are shown.

Disability days

Four types of restricted activity resulting from illness, injury, or impairment are measured in the NHIS: days lost from work for currently employed persons 18 years of age and over, school days missed by youths 5-17 years of age, days spent in bed (which may overlap either of the preceding types), and other days on which a person cut down on the things that he or she usually does. Estimates of "cut-down" days are not presented separately but are included in the generic concept of "restricted-activity days." The other three types of restricted activity also included in the generic concept "restricted activity" are shown separately in this report. The four categories are restricted-activity days, bed-disability days, work-loss days, and school-loss days. Disability days are higher among younger populations for acute conditions and higher among older populations for chronic conditions. Only the category "restricted-activity days," which is primarily made up of cut-down days, has markedly higher rates among older populations. Hence, morbidity ratios are not shown.

Physician contacts

A contact is defined as a consultation with a physician, in person or by telephone, for examination, diagnosis, treatment, or advice. The visit is considered a physician contact if the service is provided by the physician or by another person working under the physician's supervision.

Interval since last contact

The interval since the last physician contact is the length of time prior to the week of interview that a physician was last consulted in person or by telephone for treatment or advice of any type whatever. This variable includes persons who had contacted a doctor in the year prior to the interview week.

Contacts per person

This variable is the number of physician contacts per person per year based on the reported number of doctor

visits and the population of a specified area. Physician contacts are high among the youngest population (those under 5 years) and the oldest population (those 65 years of age and over). They are also high among women of childbearing age. Because these data represent a mixed utilization pattern, morbidity ratios are not calculated for these two physician-utilization variables.

Hospitalization

Percent with episode

The percent of persons with a hospital episode in the past year represents those who had had a hospitalization that involved at least a 1-night stay in the year preceding the interview. Because hospitalizations are much more common among older populations, morbidity ratios that reflect indirect age adjustment are shown.

Hospital days per person with an episode

This variable represents the average number of days of hospitalization per person hospitalized in each of the metropolitan areas. The number of days per person with a hospitalization is higher for the younger and older populations; therefore, the value of morbidity ratios is limited for this variable.

Incidence of acute conditions

A condition is considered acute if it was first noticed no more than 3 months before the reference date of the interview and it is not one of the conditions considered chronic, regardless of the time of onset. However, any acute condition not associated with either at least one doctor visit or at least one day of restricted activity during the reference period is considered to be of minor consequence and is excluded from the final data produced by the survey.

The incidence shown in this report includes all acute conditions, that is, infective and parasitic diseases, respiratory conditions, digestive-system conditions, injuries, and other miscellaneous conditions. Acute conditions are lower among older persons who are more prone to

developing chronic problems; therefore, morbidity ratios are not calculated for this variable.

Prevalence of selected chronic conditions

A condition is considered chronic if the respondent indicates that it was first noticed more than 3 months before the reference date of the interview or it is a type of condition that ordinarily has a duration of more than 3 months. Examples of conditions that are considered chronic, regardless of their time of onset, are diabetes, heart conditions, emphysema, and arthritis.

An impairment is a chronic or permanent defect, usually static in nature, that results from disease, injury, or congenital malformation. It represents a decrease in or loss of ability to perform various functions, particularly those of the musculoskeletal system and the sense organs. Impairments are grouped according to type of functional impairment and etiology in the special NHIS impairment codes.

In the NHIS, impairments are included as part of selected chronic conditions.

Rates by area are given for 10 high-prevalence selected chronic conditions in this report. They are arthritis, deafness and other hearing impairments, deformities or orthopedic impairments, heart disease, high blood pressure, hemorrhoids, chronic bronchitis, asthma, hay fever, and chronic sinusitis. It should be noted that the rates shown are based on condition prevalence and not on person prevalence, because, for some of the categories, an individual can have more than one condition. However, of the above conditions, only deformities or orthopedic impairments and heart disease vary to any degree in person prevalence and condition prevalence.

Five of the above conditions—arthritis, deafness and other hearing impairments, deformities or orthopedic impairments, heart disease, and high blood pressure—have higher prevalence rates among older populations, and morbidity ratios that reflect indirect age adjustment are computed for them for each of the areas.

All of the above health characteristics are described in more detail in appendix II of this report.

Morbidity ratios

Indirect age adjustments for morbidity ratios were calculated using the age-specific rates of the total civilian noninstitutionalized population of the United States. The percent of the population in the five age groups shown for each area was multiplied by the age-specific rates of the total population and summed to provide expected rates or percents. The observed rates or percents shown were then divided by the expected rates or percents to provide the morbidity ratios. The ratio of the individual area can then be compared with that for all large metropolitan areas, which is shown in each table, or compared with the total civilian noninstitutionalized population, which would be 1.00. A ratio greater than that for all large areas or for the total population would indicate an age-adjusted rate for the specific area that is higher than that of the population with which it is being compared, and a lower ratio would

correspondingly indicate an age-adjusted rate for the specific area that is lower than that of the population being compared.

The age-specific rates for the civilian noninstitutionalized population that were used to calculate the morbidity ratios are shown in table A. Some of the rates can be obtained from the *Current Estimates* report for 1988 (5); others are based on NHIS unpublished data. Tables 2–13 provide data for the Northeast Region and the large CMSA's, PMSA's, and MSA's within that region. Tables 14–29 provide data for the Midwest Region and the large CMSA's, PMSA's, and MSA's included in it. Tables 30–45 show data for the South Region and the large CMSA's, PMSA's, and MSA's in it; and tables 46–61 provide data for the West Region and its large CMSA's, PMSA's, and MSA's.

Table A. Percent and rate of population by selected health characteristics or chronic conditions and age: United States, 1988

<i>Selected health characteristic or chronic condition</i>	<i>Under 18 years</i>	<i>18–44 years</i>	<i>45–64 years</i>	<i>65–74 years</i>	<i>75 years and over</i>
Health characteristics			Percent		
Limitation of activity	5.3	8.6	22.4	33.9	41.8
Respondent-assessed health status of fair or poor	2.9	5.8	17.0	26.5	33.6
Hospital episode in past year	3.5	8.2	8.9	15.3	19.7
Chronic conditions			Prevalence rate per 1,000 population		
Arthritis	2.4	51.4	271.7	450.8	534.6
Deafness and other hearing impairments	17.7	51.6	139.9	261.2	369.2
Deformities or orthopedic impairments	35.3	153.5	183.2	184.5	223.9
Heart disease	22.4	39.9	128.5	269.1	325.4
High blood pressure	2.5	64.6	253.6	383.6	373.2

NOTE: Data based on *Current Estimates from the National Health Interview Survey, 1989* (5), and unpublished National Health Interview Survey data.

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Table 1. Number and percent distribution of population of large metropolitan statistical areas by age, according to region: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Region	Population	Age					
		All ages	Under 18 years	18-44 years	45-64 years	65-74 years	75 years and over
	Number in thousands	Percent distribution					
Total	117,211	100.0	25.6	44.4	18.9	6.9	4.2
Northeast	32,593	100.0	23.3	43.4	20.0	8.2	5.1
Boston-Lawrence-Salem CMSA	5,187	100.0	22.7	45.1	18.8	7.8	5.6
Boston PMSA	4,105	100.0	21.2	44.6	19.2	8.5	6.4
Buffalo-Niagara Falls CMSA	1,237	100.0	24.3	41.7	21.9	6.9	5.2
New York-Northern New Jersey-Long Island CMSA	18,207	100.0	24.1	44.0	19.8	7.6	4.6
Bergen-Passaic PMSA	1,356	100.0	25.0	44.3	19.2	6.9	4.6
Nassau-Suffolk PMSA	2,572	100.0	22.8	44.0	21.2	7.8	4.2
New York PMSA	8,348	100.0	24.5	43.1	20.2	7.5	4.6
Newark PMSA	1,981	100.0	22.4	44.5	20.6	7.6	4.8
Philadelphia-Wilmington-Trenton CMSA	5,756	100.0	22.4	42.4	20.1	9.7	5.4
Philadelphia PMSA	4,789	100.0	23.2	42.4	19.5	9.3	5.5
Pittsburgh-Beaver Valley CMSA	2,205	100.0	20.5	37.6	23.4	11.2	7.3
Midwest	27,745	100.0	27.0	44.0	18.8	6.3	3.9
Chicago-Gary-Lake County CMSA	7,849	100.0	27.2	44.0	18.6	6.4	3.8
Chicago PMSA	7,114	100.0	27.1	44.3	18.5	6.4	3.8
Cincinnati-Hamilton CMSA	1,665	100.0	28.9	43.8	16.6	6.5	4.1
Cincinnati PMSA	1,377	100.0	28.0	44.1	16.1	6.9	4.8
Cleveland-Akron-Lorain CMSA	2,999	100.0	24.2	42.0	21.9	7.4	4.5
Cleveland PMSA	2,003	100.0	24.4	41.6	20.9	8.1	5.1
Columbus MSA	1,270	100.0	24.0	46.1	19.1	6.5	4.3
Detroit-Ann Arbor CMSA	4,372	100.0	26.9	43.7	19.5	5.8	4.0
Detroit PMSA	4,052	100.0	26.6	43.6	19.5	6.1	4.2
Indianapolis MSA	1,222	100.0	28.9	42.1	18.2	6.4	4.4
Kansas City MSA	1,562	100.0	28.9	42.2	17.7	6.9	4.2
Milwaukee-Racine CMSA	1,715	100.0	27.9	43.9	19.1	5.5	3.6
Milwaukee PMSA	1,560	100.0	28.1	44.3	18.8	5.4	3.4
Minneapolis-St. Paul MSA	2,475	100.0	28.6	46.9	17.0	4.4	3.1
St. Louis MSA	2,617	100.0	25.8	45.5	18.7	6.8	3.2
South	26,329	100.0	26.5	45.4	18.1	6.4	3.7
Atlanta MSA	2,835	100.0	25.8	49.3	15.3	6.9	2.7
Baltimore MSA	2,177	100.0	22.1	44.1	20.1	8.8	4.9
Dallas-Fort Worth CMSA	4,534	100.0	29.5	46.6	17.5	4.2	2.2
Dallas PMSA	2,742	100.0	30.7	49.1	15.0	3.2	2.0
Fort Worth-Arlington PMSA	1,792	100.0	27.5	42.8	21.3	5.6	2.7
Houston-Galveston-Brazoria CMSA	3,696	100.0	31.5	47.9	15.7	3.1	1.7
Houston PMSA	3,525	100.0	32.1	48.1	15.3	2.9	1.6
Miami-Fort Lauderdale CMSA	3,079	100.0	23.3	41.3	19.2	8.4	7.8
Fort Lauderdale-Hollywood-Pompano Beach PMSA	1,310	100.0	22.9	42.4	16.8	9.3	8.6
Miami-Hialeah PMSA	1,769	100.0	23.5	40.5	21.0	7.7	7.3
New Orleans MSA	1,282	100.0	26.4	41.3	18.7	9.7	3.8
Norfolk-Virginia Beach-Newport News MSA	1,474	100.0	31.8	46.0	15.3	4.2	2.7
San Antonio MSA	1,142	100.0	27.0	39.9	19.6	9.1	4.5
Tampa-St. Petersburg-Clearwater MSA	2,150	100.0	22.2	43.2	17.6	11.1	5.9
Washington, D.C., MSA	3,960	100.0	24.3	46.6	21.5	4.9	2.8

Table 1. Number and percent distribution of population of large metropolitan statistical areas by age, according to region: United States, 1988–89 – Con.

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Region	Population	Age					
		All ages	Under 18 years	18–44 years	45–64 years	65–74 years	75 years and over
	Number in thousands	Percent distribution					
West	30,544	100.0	26.0	45.0	18.5	6.6	4.0
Denver–Boulder CMSA	1,884	100.0	25.6	47.3	17.4	6.3	3.5
Los Angeles–Anaheim–Riverside CMSA	13,296	100.0	27.7	44.8	17.9	6.0	3.7
Anaheim–Santa Ana PMSA	2,279	100.0	26.8	43.9	20.8	5.5	2.9
Los Angeles–Long Beach PMSA	8,147	100.0	27.2	45.9	17.5	5.8	3.6
Riverside–San Bernardino PMSA	2,203	100.0	29.4	43.3	15.4	7.1	4.7
Phoenix MSA	1,985	100.0	25.8	42.8	19.7	7.7	4.0
Portland–Vancouver CMSA	1,380	100.0	23.3	47.0	18.0	6.7	4.9
Portland PMSA	1,149	100.0	21.8	47.2	18.3	7.0	5.7
Sacramento MSA	1,505	100.0	26.5	46.9	19.0	4.4	3.3
San Diego MSA	2,157	100.0	26.4	41.3	18.3	8.9	5.1
San Francisco–Oakland–San Jose CMSA	5,848	100.0	22.8	45.8	19.9	7.2	4.3
San Francisco–Oakland PMSA	3,398	100.0	21.5	46.9	19.0	7.7	4.9
San Jose PMSA	1,342	100.0	23.7	48.0	20.9	5.5	2.0
Seattle–Tacoma CMSA	2,489	100.0	25.5	45.0	18.7	6.8	4.0
Seattle PMSA	1,865	100.0	24.2	46.0	19.5	6.9	3.4

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 2. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Northeast Region consolidated metropolitan statistical areas and metropolitan statistical areas: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Northeast Region		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	23.3	---	---
18-44 years	44.4	---	---	43.4	---	---
45-64 years	18.9	---	---	20.0	---	---
65-74 years	6.9	---	---	8.2	---	---
75 years and over	4.2	---	---	5.1	---	---
Health characteristics						
	Rate					
Percent limited in activity	12.4	13.5	0.92	12.2	14.4	0.85
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	8.8	10.5	0.84
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,238.4	---	---
Bed-disability days per 100 persons	603.3	---	---	575.6	---	---
Work-loss days per 100 currently employed persons 18-64 years of age	537.1	---	---	502.1	---	---
School-loss days per 100 children 5-17 years of age	530.2	---	---	407.2	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	77.4	---	---
Physician contacts per person	5.5	---	---	5.1	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.4	8.4	0.88
Hospital days per person with a hospital episode	8.0	---	---	9.0	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	131.7	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	113.2	141.4	0.80
Deafness and other hearing impairments	71.0	87.4	0.81	61.4	94.7	0.65
Deformities or orthopedic impairments	121.6	133.9	0.91	105.3	138.0	0.76
Heart disease	71.6	80.0	0.90	69.4	86.9	0.80
High blood pressure	108.2	119.4	0.91	99.2	129.8	0.76
Hemorrhoids	43.6	---	---	37.0	---	---
Chronic bronchitis	46.2	---	---	43.2	---	---
Asthma	44.0	---	---	38.3	---	---
Hay fever	88.6	---	---	73.0	---	---
Chronic sinusitis	114.2	---	---	79.7	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 3. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Boston–Lawrence–Salem consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Boston–Lawrence–Salem CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	22.7	---	---
18–44 years	44.4	---	---	45.1	---	---
45–64 years	18.9	---	---	18.8	---	---
65–74 years	6.9	---	---	7.8	---	---
75 years and over	4.2	---	---	5.6	---	---
Health characteristics						
	Rate					
Percent limited in activity	12.4	13.5	0.92	14.5	14.3	1.01
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	7.7	10.4	0.74
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,329.2	---	---
Bed-disability days per 100 persons	603.3	---	---	541.2	---	---
Work-loss days per 100 currently employed persons 18–64 years of age	537.1	---	---	537.5	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	584.0	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	80.0	---	---
Physician contacts per person	5.5	---	---	5.2	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.5	8.5	0.88
Hospital days per person with a hospital episode	8.0	---	---	8.5	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	143.3	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	118.2	139.9	0.84
Deafness and other hearing impairments	71.0	87.4	0.81	71.9	94.6	0.76
Deformities or orthopedic impairments	121.6	133.9	0.91	106.0	138.6	0.76
Heart disease	71.6	80.0	0.90	80.6	86.4	0.93
High blood pressure	108.2	119.4	0.91	94.3	128.2	0.74
Hemorrhoids	43.6	---	---	27.6	---	---
Chronic bronchitis	46.2	---	---	59.4	---	---
Asthma	44.0	---	---	53.0	---	---
Hay fever	88.6	---	---	82.1	---	---
Chronic sinusitis	114.2	---	---	58.4	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 4. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Boston primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Boston PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	21.2	---	---
18–44 years	44.4	---	---	44.6	---	---
45–64 years	18.9	---	---	19.2	---	---
65–74 years	6.9	---	---	8.5	---	---
75 years and over	4.2	---	---	6.4	---	---
Health characteristics			Rate			
Percent limited in activity	12.4	13.5	0.92	15.2	14.8	1.03
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	7.8	10.9	0.72
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,392.4	---	---
Bed-disability days per 100 persons	603.3	---	---	547.6	---	---
Work-loss days per 100 currently employed persons 18–64 years of age	537.1	---	---	564.8	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	573.0	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	80.8	---	---
Physician contacts per person	5.5	---	---	5.6	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.5	8.7	0.86
Hospital days per person with a hospital episode	8.0	---	---	8.7	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	135.5	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	121.3	148.1	0.82
Deafness and other hearing impairments	71.0	87.4	0.81	66.5	99.5	0.67
Deformities or orthopedic impairments	121.6	133.9	0.91	103.0	141.1	0.73
Heart disease	71.6	80.0	0.90	90.1	90.9	0.99
High blood pressure	108.2	119.4	0.91	106.9	134.5	0.79
Hemorrhoids	43.6	---	---	25.1	---	---
Chronic bronchitis	46.2	---	---	65.5	---	---
Asthma	44.0	---	---	47.0	---	---
Hay fever	88.6	---	---	81.1	---	---
Chronic sinusitis	114.2	---	---	56.3	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 5. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Buffalo–Niagara Falls consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Buffalo–Niagara Falls CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	24.3	---	---
18–44 years	44.4	---	---	41.7	---	---
45–64 years	18.9	---	---	21.9	---	---
65–74 years	6.9	---	---	6.9	---	---
75 years and over	4.2	---	---	5.2	---	---
Health characteristics						
	Rate					
Percent limited in activity	12.4	13.5	0.92	13.0	14.3	0.91
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	7.6	10.4	0.73
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,520.7	---	---
Bed-disability days per 100 persons	603.3	---	---	540.7	---	---
Work-loss days per 100 currently employed persons 18–64 years of age	537.1	---	---	893.3	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	*154.4	---	---
Physicians contacts:						
Percent with a physician contact in the past year	76.7	---	---	77.4	---	---
Physician contacts per person	5.5	---	---	4.5	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	9.0	8.3	1.08
Hospital days per person with a hospital episode	8.0	---	---	8.6	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	106.5	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	128.5	140.4	0.92
Deafness and other hearing impairments	71.0	87.4	0.81	79.2	93.7	0.85
Deformities or orthopedic impairments	121.6	133.9	0.91	194.0	137.1	1.42
Heart disease	71.6	80.0	0.90	59.8	85.7	0.70
High blood pressure	108.2	119.4	0.91	113.2	129.0	0.88
Hemorrhoids	43.6	---	---	*36.4	---	---
Chronic bronchitis	46.2	---	---	61.4	---	---
Asthma	44.0	---	---	*29.9	---	---
Hay fever	88.6	---	---	115.6	---	---
Chronic sinusitis	114.2	---	---	164.1	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 6. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and New York–Northern New Jersey–Long Island consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			New York–Northern New Jersey–Long Island CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	24.1	---	---
18–44 years	44.4	---	---	44.0	---	---
45–64 years	18.9	---	---	19.8	---	---
65–74 years	6.9	---	---	7.6	---	---
75 years and over	4.2	---	---	4.6	---	---
Health characteristics						
	Rate					
Percent limited in activity	12.4	13.5	0.92	10.9	14.0	0.78
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	9.4	10.2	0.92
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,183.1	---	---
Bed-disability days per 100 persons	603.3	---	---	603.5	---	---
Work-loss days per 100 currently employed persons 18–64 years of age	537.1	---	---	476.9	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	370.7	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	75.4	---	---
Physician contacts per person	5.5	---	---	4.9	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.1	8.3	0.86
Hospital days per person with a hospital episode	8.0	---	---	9.3	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	131.6	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	103.3	135.8	0.76
Deafness and other hearing impairments	71.0	87.4	0.81	48.1	91.5	0.53
Deformities of orthopedic impairments	121.6	133.9	0.91	108.9	136.6	0.80
Heart disease	71.6	80.0	0.90	59.4	83.8	0.71
High blood pressure	108.2	119.4	0.91	96.5	125.6	0.77
Hemorrhoids	43.6	---	---	41.5	---	---
Chronic bronchitis	46.2	---	---	36.5	---	---
Asthma	44.0	---	---	38.3	---	---
Hay fever	88.6	---	---	71.9	---	---
Chronic sinusitis	114.2	---	---	75.7	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 7. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Bergen-Passaic primary metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Bergen-Passaic PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
			Percent distribution			
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	25.0	---	---
18-44 years	44.4	---	---	44.3	---	---
45-64 years	18.9	---	---	19.2	---	---
65-74 years	6.9	---	---	6.9	---	---
75 years and over	4.2	---	---	4.6	---	---
Health characteristics			Rate			
Percent limited in activity	12.4	13.5	0.92	10.6	13.7	0.77
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	6.8	9.9	0.69
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,148.2	---	---
Bed-disability days per 100 persons	603.3	---	---	808.6	---	---
Work-loss days per 100 currently employed persons 18-64 years of age	537.1	---	---	395.4	---	---
School-loss days per 100 children 5-17 years of age	530.2	---	---	*323.9	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	78.2	---	---
Physician contacts per person	5.5	---	---	4.8	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.1	8.2	0.87
Hospital days per person with a hospital episode	8.0	---	---	9.0	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	152.7	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	85.5	131.2	0.65
Deafness and other hearing impairments	71.0	87.4	0.81	76.0	89.2	0.85
Deformities of orthopedic impairments	121.6	133.9	0.91	158.6	135.0	1.17
Heart disease	71.6	80.0	0.90	*38.3	81.5	*0.47
High blood pressure	108.2	119.4	0.91	85.5	121.6	0.70
Hemorrhoids	43.6	---	---	*43.5	---	---
Chronic bronchitis	46.2	---	---	42.0	---	---
Asthma	44.0	---	---	*18.4	---	---
Hay fever	88.6	---	---	101.0	---	---
Chronic sinusitis	114.2	---	---	75.2	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 8. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Nassau-Suffolk primary metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Nassau-Suffolk PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	22.8	---	---
18-44 years	44.4	---	---	44.0	---	---
45-64 years	18.9	---	---	21.2	---	---
65-74 years	6.9	---	---	7.8	---	---
75 years and over	4.2	---	---	4.2	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	7.3	14.1	0.52
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	7.0	10.3	0.68
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	964.0	---	---
Bed-disability days per 100 persons	603.3	---	---	329.5	---	---
Work-loss days per 100 currently employed persons 18-64 years of age	537.1	---	---	495.0	---	---
School-loss days per 100 children 5-17 years of age	530.2	---	---	*319.4	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	73.0	---	---
Physician contacts per person	5.5	---	---	4.5	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	6.4	8.3	0.77
Hospital days per person with a hospital episode	8.0	---	---	9.5	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	127.4	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	95.6	138.4	0.69
Deafness and other hearing impairments	71.0	87.4	0.81	54.8	92.3	0.59
Deformities of orthopedic impairments	121.6	133.9	0.91	103.8	138.2	0.75
Heart disease	71.6	80.0	0.90	47.8	84.6	0.57
High blood pressure	108.2	119.4	0.91	86.7	128.4	0.68
Hemorrhoids	43.6	---	---	47.8	---	---
Chronic bronchitis	46.2	---	---	39.3	---	---
Asthma	44.0	---	---	33.0	---	---
Hay fever	88.6	---	---	100.3	---	---
Chronic sinusitis	114.2	---	---	69.2	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 9. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and New York primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			New York PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
			Percent distribution			
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	24.5	---	---
18–44 years	44.4	---	---	43.1	---	---
45–64 years	18.9	---	---	20.2	---	---
65–74 years	6.9	---	---	7.5	---	---
75 years and over	4.2	---	---	4.6	---	---
Health characteristics			Rate			
Percent limited in activity	12.4	13.5	0.92	12.1	14.0	0.86
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	12.1	10.2	1.19
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,285.1	---	---
Bed-disability days per 100 persons	603.3	---	---	738.1	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	502.5	---	---
School-loss days per 100 children 5–17 years of age.	530.2	---	---	373.7	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	75.4	---	---
Physician contacts per person	5.5	---	---	4.8	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.1	8.2	0.87
Hospital days per person with a hospital episode	8.0	---	---	9.9	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year.	171.7	---	---	112.3	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	119.4	136.0	0.88
Deafness and other hearing impairments	71.0	87.4	0.81	38.6	91.4	0.42
Deformities of orthopedic impairments.	121.6	133.9	0.91	96.0	136.0	0.71
Heart disease	71.6	80.0	0.90	57.9	83.8	0.69
High blood pressure.	108.2	119.4	0.91	98.8	125.6	0.79
Hemorrhoids.	43.6	---	---	32.0	---	---
Chronic bronchitis	46.2	---	---	24.1	---	---
Asthma	44.0	---	---	43.2	---	---
Hay fever.	88.6	---	---	50.6	---	---
Chronic sinusitis	114.2	---	---	60.5	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 10. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Newark primary metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Newark PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	22.4	---	---
18-44 years	44.4	---	---	44.5	---	---
45-64 years	18.9	---	---	20.6	---	---
65-74 years	6.9	---	---	7.6	---	---
75 years and over	4.2	---	---	4.8	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	11.4	14.2	0.80
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	8.8	10.4	0.85
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,151.6	---	---
Bed-disability days per 100 persons	603.3	---	---	494.8	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	533.7	---	---
School-loss days per 100 children 5-17 years of age	530.2	---	---	*508.6	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	73.4	---	---
Physician contacts per person	5.5	---	---	5.3	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.8	8.4	0.93
Hospital days per person with a hospital episode	8.0	---	---	8.7	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	161.7	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	78.2	139.3	0.56
Deafness and other hearing impairments	71.0	87.4	0.81	58.6	93.3	0.63
Deformities of orthopedic impairments	121.6	133.9	0.91	107.5	138.7	0.78
Heart disease	71.6	80.0	0.90	68.1	85.3	0.80
High blood pressure	108.2	119.4	0.91	102.0	128.6	0.79
Hemorrhoids	43.6	---	---	48.5	---	---
Chronic bronchitis	46.2	---	---	*31.8	---	---
Asthma	44.0	---	---	48.0	---	---
Hay fever	88.6	---	---	72.2	---	---
Chronic sinusitis	114.2	---	---	131.2	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 11. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Philadelphia–Wilmington–Trenton consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Philadelphia–Wilmington–Trenton CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	22.4	---	---
18–44 years	44.4	---	---	42.4	---	---
45–64 years	18.9	---	---	20.1	---	---
65–74 years	6.9	---	---	9.7	---	---
75 years and over	4.2	---	---	5.4	---	---
Health characteristics			Rate			
Percent limited in activity	12.4	13.5	0.92	13.9	14.9	0.93
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	7.8	10.9	0.72
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,137.5	---	---
Bed-disability days per 100 persons	603.3	---	---	503.3	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	410.7	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	407.0	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	81.8	---	---
Physician contacts per person	5.5	---	---	5.8	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.5	8.6	0.87
Hospital days per person with a hospital episode	8.0	---	---	8.7	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year . .	171.7	---	---	127.1	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	122.0	149.5	0.82
Deafness and other hearing impairments	71.0	87.4	0.81	78.9	99.2	0.80
Deformities of orthopedic impairments	121.6	133.9	0.91	82.3	139.8	0.59
Heart disease	71.6	80.0	0.90	78.9	91.4	0.86
High blood pressure	108.2	119.4	0.91	102.7	136.3	0.75
Hemorrhoids	43.6	---	---	28.5	---	---
Chronic bronchitis	46.2	---	---	51.1	---	---
Asthma	44.0	---	---	38.2	---	---
Hay fever	88.6	---	---	70.9	---	---
Chronic sinusitis	114.2	---	---	89.6	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 12. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Philadelphia primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Philadelphia PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	23.2	---	---
18–44 years	44.4	---	---	42.4	---	---
45–64 years	18.9	---	---	19.5	---	---
65–74 years	6.9	---	---	9.3	---	---
75 years and over	4.2	---	---	5.5	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	14.0	14.7	0.95
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	8.3	10.8	0.77
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,231.3	---	---
Bed-disability days per 100 persons	603.3	---	---	542.5	---	---
Work-loss days per 100 currently employed persons	---	---	---	---	---	---
18–64 years of age	537.1	---	---	435.5	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	402.2	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	81.4	---	---
Physician contacts per person	5.5	---	---	6.2	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.7	8.5	0.91
Hospital days per person with a hospital episode	8.0	---	---	8.9	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	139.0	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	132.4	146.7	0.90
Deafness and other hearing impairments	71.0	87.4	0.81	85.0	97.9	0.87
Deformities of orthopedic impairments	121.6	133.9	0.91	88.7	138.5	0.64
Heart disease	71.6	80.0	0.90	81.2	90.1	0.90
High blood pressure	108.2	119.4	0.91	100.4	133.6	0.75
Hemorrhoids	43.6	---	---	28.8	---	---
Chronic bronchitis	46.2	---	---	54.9	---	---
Asthma	44.0	---	---	41.8	---	---
Hay fever	88.6	---	---	62.9	---	---
Chronic sinusitis	114.2	---	---	88.3	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 13. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Pittsburgh–Beaver Valley consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Pittsburgh–Beaver Valley CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	20.5	---	---
18–44 years	44.4	---	---	37.6	---	---
45–64 years	18.9	---	---	23.4	---	---
65–74 years	6.9	---	---	11.2	---	---
75 years and over	4.2	---	---	7.3	---	---
Health characteristics			Rate			
Percent limited in activity	12.4	13.5	0.92	12.4	16.4	0.76
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	9.3	12.2	0.76
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,587.3	---	---
Bed-disability days per 100 persons	603.3	---	---	635.0	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	647.3	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	*473.1	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	76.1	---	---
Physician contacts per person	5.5	---	---	4.9	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	9.0	9.0	1.00
Hospital days per person with a hospital episode	8.0	---	---	9.7	---	---
Conditions:						
Incidence of acute conditions year	171.7	---	---	131.0	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	151.0	172.9	0.87
Deafness and other hearing impairments	71.0	87.4	0.81	91.2	112.0	0.81
Deformities of orthopedic impairments	121.6	133.9	0.91	84.4	144.8	0.58
Heart disease	71.6	80.0	0.90	106.6	103.6	1.03
High blood pressure	108.2	119.4	0.91	115.2	154.4	0.75
Hemorrhoids	43.6	---	---	45.4	---	---
Chronic bronchitis	46.2	---	---	*29.5	---	---
Asthma	44.0	---	---	*9.1	---	---
Hay fever	88.6	---	---	42.2	---	---
Chronic sinusitis	114.2	---	---	88.9	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 14. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Midwest Region large consolidated metropolitan statistical areas and large metropolitan statistical areas: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Midwest Region		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	27.0	---	---
18-44 years	44.4	---	---	44.0	---	---
45-64 years	18.9	---	---	18.8	---	---
65-74 years	6.9	---	---	6.3	---	---
75 years and over	4.2	---	---	3.9	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	13.0	13.2	0.98
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	8.9	9.5	0.94
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,309.8	---	---
Bed-disability days per 100 persons	603.3	---	---	550.6	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	510.2	---	---
School-loss days per 100 children 5-17 years of age	530.2	---	---	543.9	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	77.1	---	---
Physician contacts per person	5.5	---	---	5.4	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.0	8.0	1.00
Hospital days per person with a hospital episode	8.0	---	---	8.1	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	181.2	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	122.0	123.6	0.99
Deafness and other hearing impairments	71.0	87.4	0.81	73.9	84.6	0.87
Deformities of orthopedic impairments	121.6	133.9	0.91	131.8	131.9	1.00
Heart disease	71.6	80.0	0.90	75.0	77.4	0.97
High blood pressure	108.2	119.4	0.91	118.8	115.5	1.03
Hemorrhoids	43.6	---	---	41.5	---	---
Chronic bronchitis	46.2	---	---	50.7	---	---
Asthma	44.0	---	---	42.7	---	---
Hay fever	88.6	---	---	84.7	---	---
Chronic sinusitis	114.2	---	---	151.1	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 15. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Chicago-Gary-Lake County consolidated metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Chicago-Gary-Lake County CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	27.2	---	---
18-44 years	44.4	---	---	44.0	---	---
45-64 years	18.9	---	---	18.6	---	---
65-74 years	6.9	---	---	6.4	---	---
75 years and over	4.2	---	---	3.8	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	12.4	13.2	0.94
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	8.7	9.5	0.92
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,389.2	---	---
Bed-disability days per 100 persons	603.3	---	---	518.1	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	596.5	---	---
School-loss days per 100 children 5-17 years of age. .	530.2	---	---	558.9	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	75.5	---	---
Physician contacts per person	5.5	---	---	4.5	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.0	7.9	1.01
Hospital days per person with a hospital episode	8.0	---	---	8.5	---	---
Conditions:						
Incidence of acute conditions per 100 persons per						
year	171.7	---	---	140.9	---	---
Prevalence of selected chronic conditions per						
1,000 persons per year:						
Arthritis	113.1	128.3	0.88	118.6	123.0	0.96
Deafness and other hearing impairments	71.0	87.4	0.81	60.4	84.3	0.72
Deformities of orthopedic impairments.	121.6	133.9	0.91	100.4	131.5	0.76
Heart disease	71.6	80.0	0.90	80.0	77.1	1.04
High blood pressure	108.2	119.4	0.91	116.8	115.0	1.02
Hemorrhoids.	43.6	---	---	48.8	---	---
Chronic bronchitis	46.2	---	---	51.1	---	---
Asthma	44.0	---	---	40.0	---	---
Hay fever	88.6	---	---	84.7	---	---
Chronic sinusitis	114.2	---	---	114.8	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 16. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Chicago primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Chicago PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	27.1	---	---
18–44 years	44.4	---	---	44.3	---	---
45–64 years	18.9	---	---	18.5	---	---
65–74 years	6.9	---	---	6.4	---	---
75 years and over	4.2	---	---	3.8	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	11.9	13.1	0.91
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	8.4	9.5	0.88
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,274.1	---	---
Bed-disability days per 100 persons	603.3	---	---	471.5	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	601.6	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	517.1	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	75.8	---	---
Physician contacts per person	5.5	---	---	4.5	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.8	8.0	0.98
Hospital days per person with a hospital episode	8.0	---	---	8.4	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	140.0	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	118.8	122.9	0.97
Deafness and other hearing impairments	71.0	87.4	0.81	57.9	84.3	0.69
Deformities of orthopedic impairments	121.6	133.9	0.91	92.5	131.8	0.70
Heart disease	71.6	80.0	0.90	81.7	77.1	1.06
High blood pressure	108.2	119.4	0.91	118.2	114.9	1.03
Hemorrhoids	43.6	---	---	51.0	---	---
Chronic bronchitis	46.2	---	---	52.9	---	---
Asthma	44.0	---	---	37.5	---	---
Hay fever	88.6	---	---	83.6	---	---
Chronic sinusitis	114.2	---	---	113.0	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 17. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Cincinnati–Hamilton consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Cincinnati–Hamilton CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	28.9	---	---
18–44 years	44.4	---	---	43.8	---	---
45–64 years	18.9	---	---	16.6	---	---
65–74 years	6.9	---	---	6.5	---	---
75 years and over	4.2	---	---	4.1	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	13.9	12.9	1.08
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	10.9	9.3	1.17
Disability days:						
Restricted-activity days per 100 person	1,389.8	---	---	1,346.4	---	---
Bed-disability days per 100 persons	603.3	---	---	546.3	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	656.0	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	*549.1	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	79.0	---	---
Physician contacts per person	5.5	---	---	6.4	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	10.2	7.9	1.29
Hospital days per person with a hospital episode	8.0	---	---	8.7	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	189.1	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	117.7	119.5	0.98
Deafness and other hearing impairments	71.0	87.4	0.81	84.1	83.1	1.01
Deformities or orthopedic impairments	121.6	133.9	0.91	132.7	129.0	1.03
Heart disease	71.6	80.0	0.90	83.5	76.1	1.10
High blood pressure	108.2	119.4	0.91	156.8	111.4	1.41
Hemorrhoids	43.6	---	---	*36.0	---	---
Chronic bronchitis	46.2	---	---	46.8	---	---
Asthma	44.0	---	---	*22.2	---	---
Hay fever	88.6	---	---	58.3	---	---
Chronic sinusitis	114.2	---	---	173.6	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 18. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Cincinnati primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Cincinnati PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	28.0	---	---
18–44 years	44.4	---	---	44.1	---	---
45–64 years	18.9	---	---	16.1	---	---
65–74 years	6.9	---	---	6.9	---	---
75 years and over	4.2	---	---	4.8	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	14.0	13.2	1.06
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	11.5	9.5	1.21
Disability days:						
Restricted-activity days per 100 person	1,389.8	---	---	1,439.3	---	---
Bed-disability days per 100 persons	603.3	---	---	616.4	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	624.2	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	*660.1	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	80.0	---	---
Physician contacts per person	5.5	---	---	6.3	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	10.7	8.0	1.34
Hospital days per person with a hospital episode	8.0	---	---	8.3	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year . .	171.7	---	---	212.3	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	106.0	123.8	0.86
Deafness and other hearing impairments	71.0	87.4	0.81	87.9	86.0	1.02
Deformities or orthopedic impairments	121.6	133.9	0.91	136.5	130.6	1.05
Heart disease	71.6	80.0	0.90	91.5	78.7	1.16
High blood pressure	108.2	119.4	0.91	165.6	114.4	1.45
Hemorrhoids	43.6	---	---	*43.6	---	---
Chronic bronchitis	46.2	---	---	*47.9	---	---
Asthma	44.0	---	---	*26.9	---	---
Hay fever	88.6	---	---	61.7	---	---
Chronic sinusitis	114.2	---	---	187.4	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 19. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Cleveland–Akron–Lorain consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Cleveland–Akron–Lorain CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	24.2	---	---
18–44 years	44.4	---	---	42.0	---	---
45–64 years	18.9	---	---	21.9	---	---
65–74 years	6.9	---	---	7.4	---	---
75 years and over	4.2	---	---	4.5	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	12.9	14.2	0.91
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	10.1	10.3	0.98
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,502.0	---	---
Bed-disability days per 100 persons	603.3	---	---	608.1	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	404.6	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	457.2	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	76.2	---	---
Physician contacts per person	5.5	---	---	5.3	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.6	8.3	1.04
Hospital days per person with a hospital episode	8.0	---	---	9.4	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	197.6	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	158.7	139.1	1.14
Deafness and other hearing impairments	71.0	87.4	0.81	70.7	92.5	0.76
Deformities or orthopedic impairments	121.6	133.9	0.91	145.7	136.9	1.06
Heart disease	71.6	80.0	0.90	67.7	84.9	0.80
High blood pressure	108.2	119.4	0.91	110.4	128.5	0.86
Hemorrhoids	43.6	---	---	58.7	---	---
Chronic bronchitis	46.2	---	---	57.4	---	---
Asthma	44.0	---	---	53.4	---	---
Hay fever	88.6	---	---	95.0	---	---
Chronic sinusitis	114.2	---	---	190.7	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 20. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Cleveland consolidated metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Cleveland PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	24.4	---	---
18-44 years	44.4	---	---	41.6	---	---
45-64 years	18.9	---	---	20.9	---	---
65-74 years	6.9	---	---	8.1	---	---
75 years and over	4.2	---	---	5.1	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	12.0	14.4	0.83
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	9.3	10.5	0.89
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,163.7	---	---
Bed-disability days per 100 persons	603.3	---	---	494.5	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	364.6	---	---
School-loss days per 100 children 5-17 years of age . .	530.2	---	---	*446.1	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	76.5	---	---
Physician contacts per person	5.5	---	---	4.8	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.6	8.4	0.90
Hospital days per person with a hospital episode	8.0	---	---	10.5	---	---
Conditions:						
Incidence of acute conditions per 100 persons per						
year	171.7	---	---	173.3	---	---
Prevalence of selected chronic conditions per						
1,000 persons per year:						
Arthritis	113.1	128.3	0.88	190.2	142.5	1.33
Deafness and other hearing impairments	71.0	87.4	0.81	86.4	95.0	0.91
Deformities or orthopedic impairments	121.6	133.9	0.91	141.8	137.1	1.03
Heart disease	71.6	80.0	0.90	63.9	87.3	0.73
High blood pressure	108.2	119.4	0.91	116.8	130.6	0.89
Hemorrhoids	43.6	---	---	65.4	---	---
Chronic bronchitis	46.2	---	---	56.9	---	---
Asthma	44.0	---	---	37.4	---	---
Hay fever	88.6	---	---	89.9	---	---
Chronic sinusitis	114.2	---	---	151.8	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 21. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Columbus metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Columbus MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	24.0	---	---
18-44 years	44.4	---	---	46.1	---	---
45-64 years	18.9	---	---	19.1	---	---
65-74 years	6.9	---	---	6.5	---	---
75 years and over	4.2	---	---	4.3	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	12.8	13.5	0.95
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	9.1	9.8	0.93
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,508.1	---	---
Bed-disability days per 100 persons	603.3	---	---	600.0	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	601.7	---	---
School-loss days per 100 children 5-17 years of age	530.2	---	---	*366.8	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	80.6	---	---
Physician contacts per person	5.5	---	---	5.5	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.7	8.2	1.06
Hospital days per person with a hospital episode	8.0	---	---	6.4	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	183.5	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	174.8	128.5	1.36
Deafness and other hearing impairments	71.0	87.4	0.81	*50.4	87.6	*0.58
Deformities or orthopedic impairments	121.6	133.9	0.91	133.1	135.8	0.98
Heart disease	71.6	80.0	0.90	82.7	79.8	1.04
High blood pressure	108.2	119.4	0.91	124.4	119.8	1.04
Hemorrhoids	43.6	---	---	*44.1	---	---
Chronic bronchitis	46.2	---	---	*39.4	---	---
Asthma	44.0	---	---	55.1	---	---
Hay fever	88.6	---	---	82.7	---	---
Chronic sinusitis	114.2	---	---	177.2	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 22. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Detroit–Ann Arbor consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Detroit–Ann Arbor CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	26.9	---	---
18–44 years	44.4	---	---	43.7	---	---
45–64 years	18.9	---	---	19.5	---	---
65–74 years	6.9	---	---	5.8	---	---
75 years and over	4.2	---	---	4.0	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	16.0	13.2	1.21
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	10.5	9.5	1.11
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,401.8	---	---
Bed-disability days per 100 persons	603.3	---	---	654.9	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	485.1	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	588.8	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	79.8	---	---
Physician contacts per person	5.5	---	---	6.9	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.3	7.9	0.92
Hospital days per person with a hospital episode	8.0	---	---	8.2	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	183.8	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	152.1	123.6	1.23
Deafness and other hearing impairments	71.0	87.4	0.81	105.0	84.5	1.24
Deformities or orthopedic impairments	121.6	133.9	0.91	157.4	132.0	1.19
Heart disease	71.6	80.0	0.90	105.9	77.1	1.37
High blood pressure	108.2	119.4	0.91	131.3	115.5	1.14
Hemorrhoids	43.6	---	---	40.9	---	---
Chronic bronchitis	46.2	---	---	53.8	---	---
Asthma	44.0	---	---	47.8	---	---
Hay fever	88.6	---	---	91.3	---	---
Chronic sinusitis	114.2	---	---	206.1	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 23. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Detroit primary metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Detroit PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	26.6	---	---
18-44 years	44.4	---	---	43.6	---	---
45-64 years	18.9	---	---	19.5	---	---
65-74 years	6.9	---	---	6.1	---	---
75 years and over	4.2	---	---	4.2	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	16.2	13.4	1.21
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	10.5	9.6	1.09
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,404.6	---	---
Bed-disability days per 100 persons	603.3	---	---	639.6	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	447.3	---	---
School-loss days per 100 children 5-17 years of age . .	530.2	---	---	606.9	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	79.8	---	---
Physician contacts per person	5.5	---	---	6.9	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.2	8.0	0.90
Hospital days per person with a hospital episode	8.0	---	---	7.9	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	184.5	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	154.0	126.0	1.22
Deafness and other hearing impairments	71.0	87.4	0.81	106.1	85.9	1.24
Deformities or orthopedic impairments	121.6	133.9	0.91	160.2	132.7	1.21
Heart disease	71.6	80.0	0.90	108.8	78.5	1.39
High blood pressure	108.2	119.4	0.91	135.7	117.4	1.16
Hemorrhoids	43.6	---	---	38.7	---	---
Chronic bronchitis	46.2	---	---	54.8	---	---
Asthma	44.0	---	---	46.6	---	---
Hay fever	88.6	---	---	90.8	---	---
Chronic sinusitis	114.2	---	---	215.9	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 24. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Indianapolis metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Indianapolis MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	28.9	---	---
18–44 years	44.4	---	---	42.1	---	---
45–64 years	18.9	---	---	18.2	---	---
65–74 years	6.9	---	---	6.4	---	---
75 years and over	4.2	---	---	4.4	---	---
Rate						
Health characteristics						
Percent limited in activity	12.4	13.5	0.92	10.7	13.2	0.81
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	8.3	9.5	0.87
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,338.0	---	---
Bed-disability days per 100 persons	603.3	---	---	676.4	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	621.3	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	*436.1	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	73.8	---	---
Physician contacts per person	5.5	---	---	4.3	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	6.3	7.9	0.80
Hospital days per person with a hospital episode	8.0	---	---	7.9	---	---
Conditions:						
Incidence of acute conditions per 100 persons per						
year	171.7	---	---	170.5	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	100.7	124.2	0.81
Deafness and other hearing impairments	71.0	87.4	0.81	*54.8	85.3	*0.64
Deformities or orthopedic impairments	121.6	133.9	0.91	81.8	129.8	0.63
Heart disease	71.6	80.0	0.90	*32.7	78.2	*0.42
High blood pressure	108.2	119.4	0.91	107.2	115.0	0.93
Hemorrhoids	43.6	---	---	*19.6	---	---
Chronic bronchitis	46.2	---	---	56.5	---	---
Asthma	44.0	---	---	*28.6	---	---
Hay fever	88.6	---	---	*54.0	---	---
Chronic sinusitis	114.2	---	---	131.8	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 25. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Kansas City metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Kansas City MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	28.9	---	---
18–44 years	44.4	---	---	42.2	---	---
45–64 years	18.9	---	---	17.7	---	---
65–74 years	6.9	---	---	6.9	---	---
75 years and over	4.2	---	---	4.2	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	8.4	13.2	0.64
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	7.6	9.5	0.80
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	759.0	---	---
Bed-disability days per 100 persons	603.3	---	---	372.0	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	277.2	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	*520.9	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	77.0	---	---
Physician contacts per person	5.5	---	---	4.6	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.8	7.9	0.99
Hospital days per person with a hospital episode	8.0	---	---	6.6	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	164.1	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	65.3	124.0	0.53
Deafness and other hearing impairments	71.0	87.4	0.81	78.7	85.2	0.92
Deformities or orthopedic impairments	121.6	133.9	0.91	90.3	129.5	0.70
Heart disease	71.6	80.0	0.90	54.4	78.3	0.69
High blood pressure	108.2	119.4	0.91	91.5	115.0	0.80
Hemorrhoids	43.6	---	---	44.2	---	---
Chronic bronchitis	46.2	---	---	44.2	---	---
Asthma	44.0	---	---	53.8	---	---
Hay fever	88.6	---	---	81.9	---	---
Chronic sinusitis	114.2	---	---	145.3	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 26. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Milwaukee–Racine consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Milwaukee–Racine CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	27.9	---	---
18–44 years	44.4	---	---	43.9	---	---
45–64 years	18.9	---	---	19.1	---	---
65–74 years	6.9	---	---	5.5	---	---
75 years and over	4.2	---	---	3.6	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	14.3	12.9	1.11
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	9.0	9.2	0.97
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,177.7	---	---
Bed-disability days per 100 persons	603.3	---	---	584.5	---	---
Work-loss days per 100 currently employed persons 18–64 years of age	537.1	---	---	411.9	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	*537.6	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	77.1	---	---
Physician contacts per person	5.5	---	---	5.1	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.8	7.8	1.00
Hospital days per person with a hospital episode	8.0	---	---	7.6	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	200.4	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	103.2	119.2	0.87
Deafness and other hearing impairments	71.0	87.4	0.81	81.0	82.0	0.99
Deformities or orthopedic impairments	121.6	133.9	0.91	142.3	130.4	1.09
Heart disease	71.6	80.0	0.90	74.1	74.8	0.99
High blood pressure	108.2	119.4	0.91	122.4	112.0	1.09
Hemorrhoids	43.6	---	---	39.7	---	---
Chronic bronchitis	46.2	---	---	58.3	---	---
Asthma	44.0	---	---	57.1	---	---
Hay fever	88.6	---	---	42.6	---	---
Chronic sinusitis	114.2	---	---	147.5	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 27. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Milwaukee primary metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Milwaukee PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	28.1	---	---
18-44 years	44.4	---	---	44.3	---	---
45-64 years	18.9	---	---	18.8	---	---
65-74 years	6.9	---	---	5.4	---	---
75 years and over	4.2	---	---	3.4	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	13.8	12.8	1.08
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	9.0	9.2	0.98
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,106.3	---	---
Bed-disability days per 100 persons	603.3	---	---	587.7	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	343.9	---	---
School-loss days per 100 children 5-17 years of age ..	530.2	---	---	*554.6	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	77.0	---	---
Physician contacts per person	5.5	---	---	4.9	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.5	7.8	0.96
Hospital days per person with a hospital episode	8.0	---	---	7.4	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	206.5	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	101.9	117.0	0.87
Deafness and other hearing impairments	71.0	87.4	0.81	80.1	80.8	0.99
Deformities or orthopedic impairments	121.6	133.9	0.91	134.0	129.9	1.03
Heart disease	71.6	80.0	0.90	69.9	73.7	0.95
High blood pressure	108.2	119.4	0.91	126.9	110.4	1.15
Hemorrhoids	43.6	---	---	43.6	---	---
Chronic bronchitis	46.2	---	---	53.8	---	---
Asthma	44.0	---	---	59.0	---	---
Hay fever	88.6	---	---	46.8	---	---
Chronic sinusitis	114.2	---	---	148.7	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 28. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Minneapolis–St. Paul metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Minneapolis–St. Paul MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	28.6	---	---
18–44 years	44.4	---	---	46.9	---	---
45–64 years	18.9	---	---	17.0	---	---
65–74 years	6.9	---	---	4.4	---	---
75 years and over	4.2	---	---	3.1	---	---
Health characteristics						
	Rate					
Percent limited in activity	12.4	13.5	0.92	11.9	12.1	0.98
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	5.2	8.6	0.60
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,080.2	---	---
Bed-disability days per 100 persons	603.3	---	---	421.9	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	457.3	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	581.1	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	77.5	---	---
Physician contacts per person	5.5	---	---	5.6	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.2	7.6	0.95
Hospital days per person with a hospital episode	8.0	---	---	5.5	---	---
Conditions:						
Incidence of acute conditions per 100 persons per						
year	171.7	---	---	291.6	---	---
Prevalence of selected chronic conditions per 1,000						
persons per year:						
Arthritis	113.1	128.3	0.88	76.8	107.4	0.72
Deafness and other hearing impairments	71.0	87.4	0.81	88.1	76.0	1.16
Deformities or orthopedic impairments	121.6	133.9	0.91	177.0	128.3	1.38
Heart disease	71.6	80.0	0.90	51.7	68.9	0.75
High blood pressure	108.2	119.4	0.91	100.6	102.6	0.98
Hemorrhoids	43.6	---	---	*13.7	---	---
Chronic bronchitis	46.2	---	---	39.6	---	---
Asthma	44.0	---	---	32.7	---	---
Hay fever	88.6	---	---	108.3	---	---
Chronic sinusitis	114.2	---	---	61.4	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 29. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and St. Louis metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			St. Louis MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	25.8	---	---
18-44 years	44.4	---	---	45.5	---	---
45-64 years	18.9	---	---	18.7	---	---
65-74 years	6.9	---	---	6.8	---	---
75 years and over	4.2	---	---	3.2	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	12.9	13.1	0.98
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	8.6	9.4	0.91
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,197.2	---	---
Bed-disability days per 100 persons	603.3	---	---	533.8	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	482.1	---	---
School-loss days per 100 children 5-17 years of age	530.2	---	---	623.0	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	76.7	---	---
Physician contacts per person	5.5	---	---	5.5	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.8	8.0	1.10
Hospital days per person with a hospital episode	8.0	---	---	8.6	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	171.0	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	115.8	112.6	0.94
Deafness and other hearing impairments	71.0	87.4	0.81	58.5	83.8	0.70
Deformities or orthopedic impairments	121.6	133.9	0.91	164.3	132.9	1.24
Heart disease	71.6	80.0	0.90	62.3	76.7	0.81
High blood pressure	108.2	119.4	0.91	123.4	115.5	1.07
Hemorrhoids	43.6	---	---	38.2	---	---
Chronic bronchitis	46.2	---	---	52.0	---	---
Asthma	44.0	---	---	36.7	---	---
Hay fever	88.6	---	---	101.3	---	---
Chronic sinusitis	114.2	---	---	195.6	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 30. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and South Region large consolidated metropolitan statistical areas and metropolitan statistical areas: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			South Region		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	26.5	---	---
18-44 years	44.4	---	---	45.4	---	---
45-64 years	18.9	---	---	18.1	---	---
65-74 years	6.9	---	---	6.4	---	---
75 years and over	4.2	---	---	3.7	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	12.2	13.1	0.93
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	8.8	9.4	0.94
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,421.6	---	---
Bed-disability days per 100 persons	603.3	---	---	601.3	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	568.1	---	---
School-loss days per 100 children 5-17 years of age . .	530.2	---	---	478.2	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	76.3	---	---
Physician contacts per person	5.5	---	---	5.4	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.9	8.0	0.99
Hospital days per person with a hospital episode	8.0	---	---	7.5	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	168.6	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	106.6	121.8	0.88
Deafness and other hearing impairments	71.0	87.4	0.81	64.1	83.8	0.76
Deformities or orthopedic impairments	121.6	133.9	0.91	100.2	132.3	0.76
Heart disease	71.6	80.0	0.90	77.9	76.6	1.02
High blood pressure	108.2	119.4	0.91	116.2	114.3	1.02
Hemorrhoids	43.6	---	---	44.5	---	---
Chronic bronchitis	46.2	---	---	43.8	---	---
Asthma	44.0	---	---	53.2	---	---
Hay fever	88.6	---	---	97.9	---	---
Chronic sinusitis	114.2	---	---	138.8	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 31. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Atlanta metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Atlanta MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	25.8	---	---
18–44 years	44.4	---	---	49.3	---	---
45–64 years	18.9	---	---	15.3	---	---
65–74 years	6.9	---	---	6.9	---	---
75 years and over	4.2	---	---	2.7	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	9.3	12.5	0.74
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	8.3	8.9	0.93
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,048.9	---	---
Bed-disability days per 100 persons	603.3	---	---	538.7	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	552.9	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	535.9	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	76.6	---	---
Physician contacts per person	5.5	---	---	4.6	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	6.9	7.9	0.87
Hospital days per person with a hospital episode	8.0	---	---	6.1	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	160.7	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	66.7	113.1	0.59
Deafness and other hearing impairments	71.0	87.4	0.81	35.6	79.4	0.45
Deformities or orthopedic impairments	121.6	133.9	0.91	34.6	131.6	0.26
Heart disease	71.6	80.0	0.90	76.5	72.5	1.06
High blood pressure	108.2	119.4	0.91	73.4	107.8	0.68
Hemorrhoids	43.6	---	---	*22.9	---	---
Chronic bronchitis	46.2	---	---	38.4	---	---
Asthma	44.0	---	---	30.0	---	---
Hay fever	88.6	---	---	51.1	---	---
Chronic sinusitis	114.2	---	---	87.1	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 32. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Baltimore metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Baltimore MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	22.1	---	---
18-44 years	44.4	---	---	44.1	---	---
45-64 years	18.9	---	---	20.1	---	---
65-74 years	6.9	---	---	8.8	---	---
75 years and over	4.2	---	---	4.9	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	15.7	14.5	1.08
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	9.1	10.6	0.86
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,635.2	---	---
Bed-disability days per 100 persons	603.3	---	---	601.1	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	766.9	---	---
School-loss days per 100 children 5-17 years of age . .	530.2	---	---	*535.2	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	79.9	---	---
Physician contacts per person	5.5	---	---	5.9	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	9.2	8.5	1.08
Hospital days per person with a hospital episode	8.0	---	---	8.2	---	---
Conditions:						
Incidence of acute conditions per 100 persons per						
year	171.7	---	---	119.6	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	122.2	143.7	0.85
Deafness and other hearing impairments	71.0	87.4	0.81	76.7	95.9	0.80
Deformities or orthopedic impairments	121.6	133.9	0.91	117.1	139.5	0.84
Heart disease	71.6	80.0	0.90	67.5	88.0	0.77
High blood pressure	108.2	119.4	0.91	146.1	132.1	1.11
Hemorrhoids	43.6	---	---	49.6	---	---
Chronic bronchitis	46.2	---	---	40.9	---	---
Asthma	44.0	---	---	47.3	---	---
Hay fever	88.6	---	---	73.5	---	---
Chronic sinusitis	114.2	---	---	91.4	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 33. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Dallas–Fort Worth consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Dallas–Fort Worth CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	29.5	---	---
18–44 years	44.4	---	---	46.6	---	---
45–64 years	18.9	---	---	17.5	---	---
65–74 years	6.9	---	---	4.2	---	---
75 years and over	4.2	---	---	2.2	---	---
Health characteristics						
	Rate					
Percent limited in activity	12.4	13.5	0.92	11.7	11.8	0.99
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	9.2	8.4	1.10
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,413.8	---	---
Bed-disability days per 100 persons	603.3	---	---	597.6	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	548.0	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	456.0	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	74.9	---	---
Physician contacts per person	5.5	---	---	5.5	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.3	7.5	1.11
Hospital days per person with a hospital episode	8.0	---	---	6.8	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year . .	171.7	---	---	167.1	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	85.6	102.9	0.83
Deafness and other hearing impairments	71.0	87.4	0.81	79.4	72.8	1.09
Deformities or orthopedic impairments	121.6	133.9	0.91	114.7	126.7	0.91
Heart disease	71.6	80.0	0.90	99.3	66.1	1.50
High blood pressure	108.2	119.4	0.91	111.6	99.5	1.12
Hemorrhoids	43.6	---	---	70.4	---	---
Chronic bronchitis	46.2	---	---	48.7	---	---
Asthma	44.0	---	---	82.5	---	---
Hay fever	88.6	---	---	153.7	---	---
Chronic sinusitis	114.2	---	---	191.9	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 34. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Dallas primary metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Dallas PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	30.7	---	---
18-44 years	44.4	---	---	49.1	---	---
45-64 years	18.9	---	---	15.0	---	---
65-74 years	6.9	---	---	3.2	---	---
75 years and over	4.2	---	---	2.0	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	9.9	11.1	0.89
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	8.1	7.8	1.04
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,473.5	---	---
Bed-disability days per 100 persons	603.3	---	---	667.8	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	490.3	---	---
School-loss days per 100 children 5-17 years of age . . .	530.2	---	---	562.6	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	76.7	---	---
Physician contacts per person	5.5	---	---	5.6	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.4	7.3	1.15
Hospital days per person with a hospital episode	8.0	---	---	6.5	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	170.4	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	53.2	91.8	0.58
Deafness and other hearing impairments	71.0	87.4	0.81	62.4	67.5	0.92
Deformities or orthopedic impairments	121.6	133.9	0.91	109.8	124.1	0.88
Heart disease	71.6	80.0	0.90	105.8	60.9	1.74
High blood pressure	108.2	119.4	0.91	111.2	90.3	1.23
Hemorrhoids	43.6	---	---	73.3	---	---
Chronic bronchitis	46.2	---	---	36.8	---	---
Asthma	44.0	---	---	81.0	---	---
Hay fever	88.6	---	---	150.3	---	---
Chronic sinusitis	114.2	---	---	202.4	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 35. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Fort Worth–Arlington primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Fort Worth–Arlington PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	27.5	---	---
18–44 years	44.4	---	---	42.8	---	---
45–64 years	18.9	---	---	21.3	---	---
65–74 years	6.9	---	---	5.6	---	---
75 years and over	4.2	---	---	2.7	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	14.4	12.9	1.12
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	10.9	9.3	1.17
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,322.5	---	---
Bed-disability days per 100 persons	603.3	---	---	490.2	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	640.6	---	---
School-loss days per 100 children 5–17 years of age.	530.2	---	---	*288.1	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	72.3	---	---
Physician contacts per person	5.5	---	---	5.3	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.2	7.8	1.05
Hospital days per person with a hospital episode	8.0	---	---	7.4	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year.	171.7	---	---	162.1	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	135.0	120.2	1.12
Deafness and other hearing impairments	71.0	87.4	0.81	105.5	81.3	1.30
Deformities or orthopedic impairments	121.6	133.9	0.91	122.2	130.8	0.93
Heart disease	71.6	80.0	0.90	89.8	74.5	1.21
High blood pressure.	108.2	119.4	0.91	112.2	113.9	0.99
Hemorrhoids.	43.6	---	---	65.8	---	---
Chronic bronchitis	46.2	---	---	67.0	---	---
Asthma	44.0	---	---	84.8	---	---
Hay fever	88.6	---	---	158.5	---	---
Chronic sinusitis	114.2	---	---	176.3	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 36. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Houston–Galveston–Brazoria consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Houston–Galveston–Brazoria CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	31.5	---	---
18–44 years	44.4	---	---	47.9	---	---
45–64 years	18.9	---	---	15.7	---	---
65–74 years	6.9	---	---	3.1	---	---
75 years and over	4.2	---	---	1.7	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	9.2	11.1	0.83
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	8.0	7.8	1.03
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,377.4	---	---
Bed-disability days per 100 persons	603.3	---	---	610.7	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	571.8	---	---
School-loss days per 100 children 5–17 years of age.	530.2	---	---	439.7	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	73.2	---	---
Physician contacts per person	5.5	---	---	4.6	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.0	7.2	1.11
Hospital days per person with a hospital episode	8.0	---	---	7.6	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	174.4	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	73.6	91.1	0.81
Deafness and other hearing impairments	71.0	87.4	0.81	54.1	66.6	0.81
Deformities or orthopedic impairments	121.6	133.9	0.91	85.5	122.9	0.70
Heart disease	71.6	80.0	0.90	62.2	60.2	1.03
High blood pressure	108.2	119.4	0.91	105.0	89.8	1.17
Hemorrhoids.	43.6	---	---	35.2	---	---
Chronic bronchitis	46.2	---	---	46.8	---	---
Asthma	44.0	---	---	53.8	---	---
Hay fever.	88.6	---	---	96.9	---	---
Chronic sinusitis	114.2	---	---	175.1	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 37. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Houston primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Houston PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	32.1	---	---
18–44 years	44.4	---	---	48.1	---	---
45–64 years	18.9	---	---	15.3	---	---
65–74 years	6.9	---	---	2.9	---	---
75 years and over	4.2	---	---	1.6	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	8.8	10.9	0.81
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	7.4	7.6	0.97
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,398.2	---	---
Bed-disability days per 100 persons	603.3	---	---	623.3	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	578.2	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	456.5	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	73.5	---	---
Physician contacts per person	5.5	---	---	4.6	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.0	7.2	1.11
Hospital days per person with a hospital episode	8.0	---	---	7.0	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	173.2	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	63.3	88.7	0.71
Deafness and other hearing impairments	71.0	87.4	0.81	51.1	65.4	0.78
Deformities or orthopedic impairments	121.6	133.9	0.91	80.0	122.1	0.66
Heart disease	71.6	80.0	0.90	54.2	59.1	0.92
High blood pressure	108.2	119.4	0.91	100.7	87.8	1.15
Hemorrhoids	43.6	---	---	31.5	---	---
Chronic bronchitis	46.2	---	---	40.9	---	---
Asthma	44.0	---	---	49.9	---	---
Hay fever	88.6	---	---	100.7	---	---
Chronic sinusitis	114.2	---	---	171.1	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 38. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Miami–Fort Lauderdale consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Miami–Fort Lauderdale CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	23.3	---	---
18–44 years	44.4	---	---	41.3	---	---
45–64 years	18.9	---	---	19.2	---	---
65–74 years	6.9	---	---	8.4	---	---
75 years and over	4.2	---	---	7.8	---	---
Health characteristics			Rate			
Percent limited in activity	12.4	13.5	0.92	14.1	15.2	0.93
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	9.5	11.2	0.85
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,754.8	---	---
Bed-disability days per 100 persons	603.3	---	---	629.5	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	493.7	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	501.6	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	73.6	---	---
Physician contacts per person	5.5	---	---	4.5	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.4	8.7	0.97
Hospital days per person with a hospital episode	8.0	---	---	7.6	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	126.8	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	118.9	153.5	0.77
Deafness and other hearing impairments	71.0	87.4	0.81	55.2	103.0	0.54
Deformities or orthopedic impairments	121.6	133.9	0.91	71.5	139.8	0.51
Heart disease	71.6	80.0	0.90	101.0	94.4	1.07
High blood pressure	108.2	119.4	0.91	87.0	137.3	0.63
Hemorrhoids	43.6	---	---	*16.9	---	---
Chronic bronchitis	46.2	---	---	30.9	---	---
Asthma	44.0	---	---	*12.0	---	---
Hay fever	88.6	---	---	29.9	---	---
Chronic sinusitis	114.2	---	---	35.1	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 39. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Fort Lauderdale–Hollywood–Pompano Beach primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Fort Lauderdale–Hollywood–Pompano Beach PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	22.9	---	---
18–44 years	44.4	---	---	42.4	---	---
45–64 years	18.9	---	---	16.8	---	---
65–74 years	6.9	---	---	9.3	---	---
75 years and over	4.2	---	---	8.6	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	14.9	15.4	0.97
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	8.9	11.3	0.79
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,995.8	---	---
Bed-disability days per 100 persons	603.3	---	---	740.9	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	621.9	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	*503.3	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	76.1	---	---
Physician contacts per person	5.5	---	---	5.8	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.3	8.9	0.93
Hospital days per person with a hospital episode	8.0	---	---	8.7	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	144.6	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	105.3	155.9	0.68
Deafness and other hearing impairments	71.0	87.4	0.81	75.6	105.5	0.72
Deformities or orthopedic impairments	121.6	133.9	0.91	70.2	140.4	0.50
Heart disease	71.6	80.0	0.90	163.4	96.6	1.69
High blood pressure	108.2	119.4	0.91	115.3	138.3	0.83
Hemorrhoids	43.6	---	---	*22.1	---	---
Chronic bronchitis	46.2	---	---	*32.1	---	---
Asthma	44.0	---	---	*20.6	---	---
Hay fever	88.6	---	---	*34.4	---	---
Chronic sinusitis	114.2	---	---	62.6	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 40. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Miami-Hialeah primary metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Miami-Hialeah PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	23.5	---	---
18-44 years	44.4	---	---	40.5	---	---
45-64 years	18.9	---	---	21.0	---	---
65-74 years	6.9	---	---	7.7	---	---
75 years and over	4.2	---	---	7.3	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	13.5	15.1	0.89
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	9.9	11.1	0.89
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,576.3	---	---
Bed-disability days per 100 persons	603.3	---	---	547.0	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	398.2	---	---
School-loss days per 100 children 5-17 years of age . .	530.2	---	---	*500.7	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	71.7	---	---
Physician contacts per person	5.5	---	---	3.6	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.5	8.6	0.99
Hospital days per person with a hospital episode	8.0	---	---	6.7	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	113.6	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	128.9	152.2	0.85
Deafness and other hearing impairments	71.0	87.4	0.81	40.1	101.5	0.40
Deformities or orthopedic impairments	121.6	133.9	0.91	72.4	139.5	0.52
Heart disease	71.6	80.0	0.90	54.8	92.9	0.59
High blood pressure	108.2	119.4	0.91	66.7	136.8	0.49
Hemorrhoids	43.6	---	---	*12.4	---	---
Chronic bronchitis	46.2	---	---	*30.0	---	---
Asthma	44.0	---	---	*5.7	---	---
Hay fever	88.6	---	---	*26.0	---	---
Chronic sinusitis	114.2	---	---	*15.3	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 41. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and New Orleans metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			New Orleans MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	26.4	---	---
18-44 years	44.4	---	---	41.3	---	---
45-64 years	18.9	---	---	18.7	---	---
65-74 years	6.9	---	---	9.7	---	---
75 years and over	4.2	---	---	3.8	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	16.2	14.0	1.16
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	10.5	10.2	1.03
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,999.9	---	---
Bed-disability days per 100 persons	603.3	---	---	710.5	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	674.5	---	---
School-loss days per 100 children 5-17 years of age.	530.2	---	---	*309.1	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	72.6	---	---
Physician contacts per person	5.5	---	---	6.3	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	9.5	8.2	1.16
Hospital days per person with a hospital episode	8.0	---	---	9.0	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year.	171.7	---	---	182.7	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	163.0	136.7	1.19
Deafness and other hearing impairments	71.0	87.4	0.81	60.8	91.5	0.66
Deformities or orthopedic impairments	121.6	133.9	0.91	140.4	133.4	1.05
Heart disease	71.6	80.0	0.90	*21.1	84.9	*0.25
High blood pressure	108.2	119.4	0.91	88.9	126.2	0.70
Hemorrhoids.	43.6	---	---	*39.0	---	---
Chronic bronchitis	46.2	---	---	*42.1	---	---
Asthma	44.0	---	---	*51.5	---	---
Hay fever.	88.6	---	---	93.6	---	---
Chronic sinusitis	114.2	---	---	165.4	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 42. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Norfolk–Virginia Beach–Newport News metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Norfolk–Virginia Beach–Newport News MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	31.8	---	---
18–44 years	44.4	---	---	46.0	---	---
45–64 years	18.9	---	---	15.3	---	---
65–74 years	6.9	---	---	4.2	---	---
75 years and over	4.2	---	---	2.7	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	10.0	11.6	0.86
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	8.7	8.2	1.06
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,179.4	---	---
Bed-disability days per 100 persons	603.3	---	---	492.9	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	774.7	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	*293.7	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	79.4	---	---
Physician contacts per person	5.5	---	---	4.9	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.5	7.4	1.15
Hospital days per person with a hospital episode	8.0	---	---	6.5	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	226.5	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	144.5	99.3	1.46
Deafness and other hearing impairments	71.0	87.4	0.81	52.2	71.7	0.73
Deformities or orthopedic impairments	121.6	133.9	0.91	83.4	123.7	0.67
Heart disease	71.6	80.0	0.90	*35.3	65.2	*0.54
High blood pressure	108.2	119.4	0.91	130.9	95.5	1.37
Hemorrhoids	43.6	---	---	*27.8	---	---
Chronic bronchitis	46.2	---	---	*38.0	---	---
Asthma	44.0	---	---	*33.9	---	---
Hay fever	88.6	---	---	112.6	---	---
Chronic sinusitis	114.2	---	---	256.4	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 43. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and San Antonio metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			San Antonio MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	27.0	---	---
18-44 years	44.4	---	---	39.9	---	---
45-64 years	18.9	---	---	19.6	---	---
65-74 years	6.9	---	---	9.1	---	---
75 years and over	4.2	---	---	4.5	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	12.9	14.2	0.91
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	10.5	10.4	1.01
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,215.8	---	---
Bed-disability days per 100 persons	603.3	---	---	568.6	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	*291.8	---	---
School-loss days per 100 children 5-17 years of age	530.2	---	---	*532.5	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	76.5	---	---
Physician contacts per person	5.5	---	---	5.5	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.4	8.2	0.90
Hospital days per person with a hospital episode	8.0	---	---	8.3	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	183.0	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	81.4	139.5	0.58
Deafness and other hearing impairments	71.0	87.4	0.81	74.4	93.2	0.80
Deformities or orthopedic impairments	121.6	133.9	0.91	84.9	133.5	0.64
Heart disease	71.6	80.0	0.90	82.3	86.3	0.95
High blood pressure	108.2	119.4	0.91	162.0	127.9	1.27
Hemorrhoids	43.6	---	---	*34.2	---	---
Chronic bronchitis	46.2	---	---	78.8	---	---
Asthma	44.0	---	---	109.5	---	---
Hay fever	88.6	---	---	153.2	---	---
Chronic sinusitis	114.2	---	---	120.8	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 44. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Tampa–St. Petersburg–Clearwater metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Tampa–St. Petersburg–Clearwater MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	22.2	---	---
18–44 years	44.4	---	---	43.2	---	---
45–64 years	18.9	---	---	17.6	---	---
65–74 years	6.9	---	---	11.1	---	---
75 years and over	4.2	---	---	5.9	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	17.3	15.1	1.15
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	9.7	11.1	0.87
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,770.3	---	---
Bed-disability days per 100 persons	603.3	---	---	832.8	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	656.4	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	*477.9	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	79.4	---	---
Physician contacts per person	5.5	---	---	6.4	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.0	8.7	0.92
Hospital days per person with a hospital episode	8.0	---	---	8.0	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year . .	171.7	---	---	189.3	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	192.1	152.1	1.26
Deafness and other hearing impairments	71.0	87.4	0.81	98.1	101.6	0.97
Deformities or orthopedic impairments	121.6	133.9	0.91	179.5	140.1	1.28
Heart disease	71.6	80.0	0.90	138.1	93.9	1.47
High blood pressure	108.2	119.4	0.91	146.5	137.7	1.06
Hemorrhoids	43.6	---	---	69.3	---	---
Chronic bronchitis	46.2	---	---	42.3	---	---
Asthma	44.0	---	---	43.7	---	---
Hay fever	88.6	---	---	68.8	---	---
Chronic sinusitis	114.2	---	---	192.6	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 45. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Washington, D.C., metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Washington, D.C., MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	24.3	---	---
18-44 years	44.4	---	---	46.6	---	---
45-64 years	18.9	---	---	21.5	---	---
65-74 years	6.9	---	---	4.9	---	---
75 years and over	4.2	---	---	2.8	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	10.9	12.9	0.84
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	7.0	9.3	0.75
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,115.9	---	---
Bed-disability days per 100 persons	603.3	---	---	496.5	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	471.7	---	---
School-loss days per 100 children 5-17 years of age	530.2	---	---	570.4	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	78.7	---	---
Physician contacts per person	5.5	---	---	6.8	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	6.5	7.9	0.82
Hospital days per person with a hospital episode	8.0	---	---	8.3	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	188.7	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	100.5	120.0	0.84
Deafness and other hearing impairments	71.0	87.4	0.81	60.6	81.6	0.74
Deformities or orthopedic impairments	121.6	133.9	0.91	111.4	134.8	0.83
Heart disease	71.6	80.0	0.90	57.3	74.0	0.77
High blood pressure	108.2	119.4	0.91	142.2	114.5	1.24
Hemorrhoids	43.6	---	---	55.3	---	---
Chronic bronchitis	46.2	---	---	44.2	---	---
Asthma	44.0	---	---	66.9	---	---
Hay fever	88.6	---	---	130.3	---	---
Chronic sinusitis	114.2	---	---	111.1	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 46. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and West Region large consolidated metropolitan statistical areas and large metropolitan statistical areas: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			West Region		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	26.0	---	---
18-44 years	44.4	---	---	45.0	---	---
45-64 years	18.9	---	---	18.5	---	---
65-74 years	6.9	---	---	6.6	---	---
75 years and over	4.2	---	---	4.0	---	---
	Rate					
Percent limited in activity	12.4	13.5	0.92	12.5	13.3	0.94
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	8.2	9.6	0.85
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,596.4	---	---
Bed-disability days per 100 persons	603.3	---	---	682.3	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	570.4	---	---
School-loss days per 100 children 5-17 years of age . .	530.2	---	---	680.4	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	76.2	---	---
Physician contacts per person	5.5	---	---	5.9	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	6.7	8.0	0.84
Hospital days per person with a hospital episode	8.0	---	---	7.3	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	208.4	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	110.7	125.2	0.88
Deafness and other hearing impairments	71.0	87.4	0.81	84.4	85.7	0.98
Deformities or orthopedic impairments	121.6	133.9	0.91	148.1	133.3	1.11
Heart disease	71.6	80.0	0.90	65.5	78.3	0.84
High blood pressure	108.2	119.4	0.91	101.1	116.9	0.86
Hemorrhoids	43.6	---	---	51.8	---	---
Chronic bronchitis	46.2	---	---	47.1	---	---
Asthma	44.0	---	---	43.2	---	---
Hay fever	88.6	---	---	100.9	---	---
Chronic sinusitis	114.2	---	---	96.4	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 47. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Denver-Boulder consolidated metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Denver-Boulder CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	25.6	---	---
18-44 years	44.4	---	---	47.3	---	---
45-64 years	18.9	---	---	17.4	---	---
65-74 years	6.9	---	---	6.3	---	---
75 years and over	4.2	---	---	3.5	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	13.9	12.9	1.08
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	6.3	9.3	0.68
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,454.2	---	---
Bed-disability days per 100 persons	603.3	---	---	530.5	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	413.0	---	---
School-loss days per 100 children 5-17 years of age . .	530.2	---	---	654.1	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	78.6	---	---
Physician contacts per person	5.5	---	---	6.3	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.2	8.0	0.90
Hospital days per person with a hospital episode	8.0	---	---	6.8	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	226.7	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	133.2	119.3	1.12
Deafness and other hearing impairments	71.0	87.4	0.81	68.5	82.7	0.83
Deformities or orthopedic impairments	121.6	133.9	0.91	127.4	133.0	0.96
Heart disease	71.6	80.0	0.90	49.9	75.3	0.66
High blood pressure	108.2	119.4	0.91	92.4	112.6	0.82
Hemorrhoids	43.6	---	---	37.2	---	---
Chronic bronchitis	46.2	---	---	88.6	---	---
Asthma	44.0	---	---	*34.5	---	---
Hay fever	88.6	---	---	200.1	---	---
Chronic sinusitis	114.2	---	---	140.1	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 48. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Los Angeles–Anaheim–Riverside consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Los Angeles–Anaheim–Riverside CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	27.7	---	---
18–44 years	44.4	---	---	44.8	---	---
45–64 years	18.9	---	---	17.9	---	---
65–74 years	6.9	---	---	6.0	---	---
75 years and over	4.2	---	---	3.7	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	10.6	12.9	0.82
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	9.0	9.3	0.97
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,670.1	---	---
Bed-disability days per 100 persons	603.3	---	---	741.6	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	640.0	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	731.5	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	74.6	---	---
Physician contacts per person	5.5	---	---	5.4	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	6.6	7.9	0.84
Hospital days per person with a hospital episode	8.0	---	---	7.1	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	207.9	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	92.3	119.2	0.77
Deafness and other hearing impairments	71.0	87.4	0.81	66.3	82.3	0.81
Deformities or orthopedic impairments	121.6	133.9	0.91	132.5	130.7	1.01
Heart disease	71.6	80.0	0.90	70.4	75.3	0.93
High blood pressure	108.2	119.4	0.91	94.5	111.9	0.84
Hemorrhoids	43.6	---	---	47.3	---	---
Chronic bronchitis	46.2	---	---	37.1	---	---
Asthma	44.0	---	---	37.2	---	---
Hay fever	88.6	---	---	68.2	---	---
Chronic sinusitis	114.2	---	---	79.8	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 49. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Anaheim–Santa Ana primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Anaheim–Santa Ana PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	26.8	---	---
18–44 years	44.4	---	---	43.9	---	---
45–64 years	18.9	---	---	20.8	---	---
65–74 years	6.9	---	---	5.5	---	---
75 years and over	4.2	---	---	2.9	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	10.0	12.9	0.78
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	6.2	9.3	0.67
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,559.5	---	---
Bed-disability days per 100 persons	603.3	---	---	640.1	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	512.0	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	591.8	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	73.6	---	---
Physician contacts per person	5.5	---	---	6.5	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	5.7	7.8	0.73
Hospital days per person with a hospital episode	8.0	---	---	8.0	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	183.2	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	97.4	120.0	0.81
Deafness and other hearing impairments	71.0	87.4	0.81	79.4	81.6	0.97
Deformities or orthopedic impairments	121.6	133.9	0.91	148.7	131.6	1.13
Heart disease	71.6	80.0	0.90	75.0	74.5	1.01
High blood pressure	108.2	119.4	0.91	91.7	113.7	0.81
Hemorrhoids	43.6	---	---	70.2	---	---
Chronic bronchitis	46.2	---	---	73.3	---	---
Asthma	44.0	---	---	43.0	---	---
Hay fever	88.6	---	---	82.9	---	---
Chronic sinusitis	114.2	---	---	111.0	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 50. Percent distribution of population by age and rate of selected health characteristics according to all large metropolitan statistical areas and Los Angeles–Long Beach primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Los Angeles–Long Beach PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	27.2	---	---
18–44 years	44.4	---	---	45.9	---	---
45–64 years	18.9	---	---	17.5	---	---
65–74 years	6.9	---	---	5.8	---	---
75 years and over	4.2	---	---	3.6	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	9.7	12.8	0.76
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	10.0	9.2	1.09
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,535.5	---	---
Bed-disability days per 100 persons	603.3	---	---	750.3	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	606.0	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	719.1	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	75.0	---	---
Physician contacts per person	5.5	---	---	5.0	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	6.6	7.9	0.84
Hospital days per person with a hospital episode	8.0	---	---	7.3	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year .	171.7	---	---	198.4	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	84.7	117.2	0.72
Deafness and other hearing impairments	71.0	87.4	0.81	55.5	81.4	0.68
Deformities or orthopedic impairments	121.6	133.9	0.91	127.9	130.9	0.98
Heart disease	71.6	80.0	0.90	48.9	74.2	0.66
High blood pressure	108.2	119.4	0.91	90.6	110.4	0.82
Hemorrhoids	43.6	---	---	42.2	---	---
Chronic bronchitis	46.2	---	---	30.9	---	---
Asthma	44.0	---	---	33.3	---	---
Hay fever	88.6	---	---	57.2	---	---
Chronic sinusitis	114.2	---	---	56.1	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 51. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Riverdale–San Bernardino primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Riverdale–San Bernardino PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	----	----	100.0	----	----
Age						
Under 18 years	25.6	----	----	29.4	----	----
18–44 years	44.4	----	----	43.3	----	----
45–64 years	18.9	----	----	15.4	----	----
65–74 years	6.9	----	----	7.1	----	----
75 years and over	4.2	----	----	4.7	----	----
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	14.1	13.1	1.08
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	8.2	9.4	0.87
Disability days:						
Restricted-activity days per 100 persons	1,389.8	----	----	2,252.1	----	----
Bed-disability days per 100 persons	603.3	----	----	844.7	----	----
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	----	----	867.7	----	----
School-loss days per 100 children 5–17 years of age . .	530.2	----	----	766.1	----	----
Physician contacts:						
Percent with a physician contact in the past year	76.7	----	----	73.0	----	----
Physician contacts per person	5.5	----	----	5.5	----	----
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.1	8.0	0.89
Hospital days per person with a hospital episode	8.0	----	----	5.9	----	----
Conditions:						
Incidence of acute conditions per 100 persons per year . .	171.7	----	----	259.0	----	----
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	121.7	121.9	1.00
Deafness and other hearing impairments	71.0	87.4	0.81	89.0	85.0	1.05
Deformities or orthopedic impairments	121.6	133.9	0.91	123.0	128.7	0.96
Heart disease	71.6	80.0	0.90	141.2	78.1	1.81
High blood pressure	108.2	119.4	0.91	104.4	112.5	0.93
Hemorrhoids	43.6	----	----	46.3	----	----
Chronic bronchitis	46.2	----	----	*28.1	----	----
Asthma	44.0	----	----	35.9	----	----
Hay fever	88.6	----	----	85.3	----	----
Chronic sinusitis	114.2	----	----	93.1	----	----

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 52. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Phoenix metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Phoenix MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	25.8	---	---
18–44 years	44.4	---	---	42.8	---	---
45–64 years	18.9	---	---	19.7	---	---
65–74 years	6.9	---	---	7.7	---	---
75 years and over	4.2	---	---	4.0	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	12.7	13.7	0.93
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	8.7	10.0	0.87
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,630.3	---	---
Bed-disability days per 100 persons	603.3	---	---	798.1	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	598.5	---	---
School-loss days per 100 children 5–17 years of age	530.2	---	---	*531.4	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	74.4	---	---
Physician contacts per person	5.5	---	---	5.0	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	8.2	8.1	1.01
Hospital days per person with a hospital episode	8.0	---	---	8.5	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	181.3	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	97.7	132.2	0.74
Deafness and other hearing impairments	71.0	87.4	0.81	104.3	89.1	1.17
Deformities or orthopedic impairments	121.6	133.9	0.91	163.7	134.1	1.22
Heart disease	71.6	80.0	0.90	70.0	81.9	0.85
High blood pressure	108.2	119.4	0.91	119.9	122.7	0.98
Hemorrhoids	43.6	---	---	57.4	---	---
Chronic bronchitis	46.2	---	---	43.3	---	---
Asthma	44.0	---	---	50.4	---	---
Hay fever	88.6	---	---	107.3	---	---
Chronic sinusitis	114.2	---	---	140.6	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA metropolitan statistical area.

Table 53. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Portland–Vancouver consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Portland–Vancouver CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	23.3	---	---
18–44 years	44.4	---	---	47.0	---	---
45–64 years	18.9	---	---	18.0	---	---
65–74 years	6.9	---	---	6.7	---	---
75 years and over	4.2	---	---	4.9	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	16.4	13.6	1.21
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	8.6	9.9	0.87
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,441.4	---	---
Bed-disability days per 100 persons	603.3	---	---	576.6	---	---
Work loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	445.1	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	*578.3	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	74.1	---	---
Physician contacts per person	5.5	---	---	6.6	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.0	8.3	0.84
Hospital days per person with a hospital episode	8.0	---	---	5.1	---	---
Conditions:						
Incidence of acute conditions per 100 persons per						
year	171.7	---	---	189.4	---	---
Prevalence of selected chronic conditions per 1,000						
persons per year:						
Arthritis	113.1	128.3	0.88	139.1	130.0	1.07
Deafness and other hearing impairments	71.0	87.4	0.81	87.7	89.1	0.98
Deformities or orthopedic impairments	121.6	133.9	0.91	188.4	136.7	1.38
Heart disease	71.6	80.0	0.90	84.1	81.1	1.04
High blood pressure	108.2	119.4	0.91	71.0	120.6	0.59
Hemorrhoids	43.6	---	---	55.1	---	---
Chronic bronchitis	46.2	---	---	*40.6	---	---
Asthma	44.0	---	---	*45.7	---	---
Hay fever	88.6	---	---	129.7	---	---
Chronic sinusitis	114.2	---	---	87.7	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 54. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Portland primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Portland PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	21.8	---	---
18–44 years	44.4	---	---	47.2	---	---
45–64 years	18.9	---	---	18.3	---	---
65–74 years	6.9	---	---	7.0	---	---
75 years and over	4.2	---	---	5.7	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	16.7	14.1	1.18
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	9.1	10.3	0.88
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,552.9	---	---
Bed-disability days per 100 persons	603.3	---	---	567.6	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	489.8	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	*717.9	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	74.0	---	---
Physician contacts per person	5.5	---	---	6.8	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	6.7	8.5	0.79
Hospital days per person with a hospital episode	8.0	---	---	5.3	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	194.1	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	148.0	136.5	1.08
Deafness and other hearing impairments	71.0	87.4	0.81	81.8	93.1	0.88
Deformities or orthopedic impairments	121.6	133.9	0.91	210.6	139.4	1.51
Heart disease	71.6	80.0	0.90	96.6	84.6	1.14
High blood pressure	108.2	119.4	0.91	80.9	125.6	0.64
Hemorrhoids	43.6	---	---	*55.7	---	---
Chronic bronchitis	46.2	---	---	*45.3	---	---
Asthma	44.0	---	---	*42.6	---	---
Hay fever	88.6	---	---	151.4	---	---
Chronic sinusitis	114.2	---	---	94.9	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 55. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Sacramento metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Sacramento MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	26.5	---	---
18–44 years	44.4	---	---	46.9	---	---
45–64 years	18.9	---	---	19.0	---	---
65–74 years	6.9	---	---	4.4	---	---
75 years and over	4.2	---	---	3.3	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	17.7	11.1	1.59
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	10.6	9.0	1.18
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,580.5	---	---
Bed-disability days per 100 persons	603.3	---	---	811.2	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	463.9	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	885.1	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	75.5	---	---
Physician contacts per person	5.5	---	---	6.0	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	5.7	7.8	0.73
Hospital days per person with a hospital episode	8.0	---	---	6.5	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	181.4	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	128.2	113.8	1.13
Deafness and other hearing impairments	71.0	87.4	0.81	175.4	79.1	2.22
Deformities or orthopedic impairments	121.6	133.9	0.91	190.7	131.7	1.45
Heart disease	71.6	80.0	0.90	45.2	71.6	0.63
High blood pressure	108.2	119.4	0.91	116.9	108.3	1.08
Hemorrhoids	43.6	---	---	66.4	---	---
Chronic bronchitis	46.2	---	---	*45.2	---	---
Asthma	44.0	---	---	74.4	---	---
Hay fever	88.6	---	---	112.3	---	---
Chronic sinusitis	114.2	---	---	146.8	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 56. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and San Diego metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			San Diego MSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	26.4	---	---
18-44 years	44.4	---	---	41.3	---	---
45-64 years	18.9	---	---	18.3	---	---
65-74 years	6.9	---	---	8.9	---	---
75 years and over	4.2	---	---	5.1	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	12.5	14.2	0.88
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	6.4	10.3	0.62
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,358.6	---	---
Bed-disability days per 100 persons	603.3	---	---	481.3	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	486.4	---	---
School-loss days per 100 children 5-17 years of age	530.2	---	---	*482.9	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	81.7	---	---
Physician contacts per person	5.5	---	---	7.4	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	6.4	8.3	0.77
Hospital days per person with a hospital episode	8.0	---	---	6.4	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	188.5	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	104.8	139.0	0.75
Deafness and other hearing impairments	71.0	87.4	0.81	88.1	93.7	0.94
Deformities or orthopedic impairments	121.6	133.9	0.91	135.8	134.1	1.01
Heart disease	71.6	80.0	0.90	85.3	86.5	0.99
High blood pressure	108.2	119.4	0.91	96.4	126.9	0.76
Hemorrhoids	43.6	---	---	72.3	---	---
Chronic bronchitis	46.2	---	---	65.8	---	---
Asthma	44.0	---	---	64.4	---	---
Hay fever	88.6	---	---	58.4	---	---
Chronic sinusitis	114.2	---	---	137.2	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 57. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and San Francisco–Oakland–San Jose consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			San Francisco–Oakland–San Jose CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	22.8	---	---
18–44 years	44.4	---	---	45.8	---	---
45–64 years	18.9	---	---	19.9	---	---
65–74 years	6.9	---	---	7.2	---	---
75 years and over	4.2	---	---	4.3	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	13.0	13.8	0.94
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	7.6	10.1	0.75
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,642.5	---	---
Bed-disability days per 100 persons	603.3	---	---	692.8	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	638.6	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	713.6	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	77.3	---	---
Physician contacts per person	5.5	---	---	6.3	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	6.1	8.3	0.73
Hospital days per person with a hospital episode	8.0	---	---	8.4	---	---
Conditions:						
Incidence of acute conditions per 100 persons per						
year	171.7	---	---	231.1	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	141.1	133.6	1.06
Deafness and other hearing impairments	71.0	87.4	0.81	82.6	90.2	0.92
Deformities or orthopedic impairments	121.6	133.9	0.91	148.8	137.7	1.08
Heart disease	71.6	80.0	0.90	47.5	82.3	0.58
High blood pressure	108.2	119.4	0.91	114.9	124.3	0.92
Hemorrhoids	43.6	---	---	50.6	---	---
Chronic bronchitis	46.2	---	---	39.2	---	---
Asthma	44.0	---	---	46.2	---	---
Hay fever	88.6	---	---	150.3	---	---
Chronic sinusitis	114.2	---	---	76.9	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 58. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and San Francisco–Oakland primary metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			San Francisco–Oakland PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	21.5	---	---
18–44 years	44.4	---	---	46.9	---	---
45–64 years	18.9	---	---	19.0	---	---
65–74 years	6.9	---	---	7.7	---	---
75 years and over	4.2	---	---	4.9	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	13.0	14.1	0.92
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	8.6	10.3	0.83
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,566.0	---	---
Bed-disability days per 100 persons	603.3	---	---	669.6	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	618.5	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	447.3	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	76.8	---	---
Physician contacts per person	5.5	---	---	6.2	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	6.0	8.4	0.71
Hospital days per person with a hospital episode	8.0	---	---	7.8	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	212.4	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	143.0	137.2	1.04
Deafness and other hearing impairments	71.0	87.4	0.81	62.7	92.8	0.68
Deformities or orthopedic impairments	121.6	133.9	0.91	143.9	139.6	1.03
Heart disease	71.6	80.0	0.90	53.3	84.6	0.63
High blood pressure	108.2	119.4	0.91	130.7	126.8	1.03
Hemorrhoids	43.6	---	---	55.9	---	---
Chronic bronchitis	46.2	---	---	39.7	---	---
Asthma	44.0	---	---	34.1	---	---
Hay fever	88.6	---	---	136.3	---	---
Chronic sinusitis	114.2	---	---	73.9	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 59. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and San Jose primary metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			San Jose PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
Percent distribution						
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	23.7	---	---
18-44 years	44.4	---	---	48.0	---	---
45-64 years	18.9	---	---	20.9	---	---
65-74 years	6.9	---	---	5.5	---	---
75 years and over	4.2	---	---	2.0	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	11.3	12.8	0.88
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	5.8	9.2	0.63
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,369.3	---	---
Bed-disability days per 100 persons	603.3	---	---	560.4	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	670.4	---	---
School-loss days per 100 children 5-17 years of age	530.2	---	---	*680.4	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	76.2	---	---
Physician contacts per person	5.5	---	---	5.8	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	6.3	7.9	0.80
Hospital days per person with a hospital episode	8.0	---	---	4.5	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	220.0	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	102.8	117.5	0.87
Deafness and other hearing impairments	71.0	87.4	0.81	84.2	80.0	1.05
Deformities or orthopedic impairments	121.6	133.9	0.91	152.8	135.0	1.13
Heart disease	71.6	80.0	0.90	*49.9	72.6	*0.69
High blood pressure	108.2	119.4	0.91	92.4	113.2	0.82
Hemorrhoids	43.6	---	---	*38.0	---	---
Chronic bronchitis	46.2	---	---	*49.9	---	---
Asthma	44.0	---	---	*38.0	---	---
Hay fever	88.6	---	---	150.5	---	---
Chronic sinusitis	114.2	---	---	97.6	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 60. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Seattle–Tacoma consolidated metropolitan statistical area: United States, 1988–89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Seattle–Tacoma CMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	25.5	---	---
18–44 years	44.4	---	---	45.0	---	---
45–64 years	18.9	---	---	18.7	---	---
65–74 years	6.9	---	---	6.8	---	---
75 years and over	4.2	---	---	4.0	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	14.5	13.4	1.08
Percent with fair or poor respondent-assessed health . . .	8.7	9.8	0.89	6.9	9.7	0.71
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,476.1	---	---
Bed-disability days per 100 persons	603.3	---	---	518.5	---	---
Work-loss days per 100 currently employed persons						
18–64 years of age	537.1	---	---	360.2	---	---
School-loss days per 100 children 5–17 years of age . .	530.2	---	---	554.4	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	78.3	---	---
Physician contacts per person	5.5	---	---	6.6	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.6	8.1	0.94
Hospital days per person with a hospital episode	8.0	---	---	7.2	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	209.7	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	109.7	126.6	0.87
Deafness and other hearing impairments	71.0	87.4	0.81	122.1	86.4	1.41
Deformities or orthopedic impairments	121.6	133.9	0.91	196.1	133.8	1.47
Heart disease	71.6	80.0	0.90	74.3	79.0	0.94
High blood pressure	108.2	119.4	0.91	107.3	118.1	0.91
Hemorrhoids	43.6	---	---	57.5	---	---
Chronic bronchitis	46.2	---	---	80.0	---	---
Asthma	44.0	---	---	30.9	---	---
Hay fever	88.6	---	---	92.8	---	---
Chronic sinusitis	114.2	---	---	101.2	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

Table 61. Percent distribution of population by age and rate of selected health characteristics, according to all large metropolitan statistical areas and Seattle primary metropolitan statistical area: United States, 1988-89

[Data are based on household interviews of the civilian noninstitutionalized population. The survey design, general qualifications, and information on the reliability of the estimates are given in appendix I. Definitions of terms are given in appendix II]

Age and health characteristic	All large CMSA's and MSA's			Seattle PMSA		
	Observed	Expected	Morbidity ratio	Observed	Expected	Morbidity ratio
	Percent distribution					
Total	100.0	---	---	100.0	---	---
Age						
Under 18 years	25.6	---	---	24.2	---	---
18-44 years	44.4	---	---	46.0	---	---
45-64 years	18.9	---	---	19.5	---	---
65-74 years	6.9	---	---	6.9	---	---
75 years and over	4.2	---	---	3.4	---	---
Health characteristics						
Rate						
Percent limited in activity	12.4	13.5	0.92	14.4	13.4	1.07
Percent with fair or poor respondent-assessed health	8.7	9.8	0.89	6.2	9.7	0.64
Disability days:						
Restricted-activity days per 100 persons	1,389.8	---	---	1,384.1	---	---
Bed-disability days per 100 persons	603.3	---	---	508.8	---	---
Work-loss days per 100 currently employed persons						
18-64 years of age	537.1	---	---	359.0	---	---
School-loss days per 100 children 5-17 years of age	530.2	---	---	606.4	---	---
Physician contacts:						
Percent with a physician contact in the past year	76.7	---	---	77.5	---	---
Physician contacts per person	5.5	---	---	6.3	---	---
Hospitalization:						
Percent with hospital episode in the past year	7.5	8.1	0.93	7.2	8.1	0.89
Hospital days per person with a hospital episode	8.0	---	---	7.3	---	---
Conditions:						
Incidence of acute conditions per 100 persons per year	171.7	---	---	200.4	---	---
Prevalence of selected chronic conditions per 1,000 persons per year:						
Arthritis	113.1	128.3	0.88	99.2	126.5	0.78
Deafness and other hearing impairments	71.0	87.4	0.81	122.8	85.9	1.43
Deformities or orthopedic impairments	121.6	133.9	0.91	184.5	135.2	1.36
Heart disease	71.6	80.0	0.90	86.9	78.5	1.11
High blood pressure	108.2	119.4	0.91	109.4	118.9	0.92
Hemorrhoids	43.6	---	---	63.8	---	---
Chronic bronchitis	46.2	---	---	94.9	---	---
Asthma	44.0	---	---	*26.3	---	---
Hay fever	88.6	---	---	95.4	---	---
Chronic sinusitis	114.2	---	---	112.6	---	---

NOTE: CMSA is consolidated metropolitan statistical area; PMSA is primary metropolitan statistical area; and MSA is metropolitan statistical area.

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Appendix I

Technical notes on methods

Background

This report is one of a series of statistical reports published by the National Center for Health Statistics (NCHS). It is based on information collected in a continuing nationwide sample of households included in the National Health Interview Survey (NHIS). Data are obtained on the personal, sociodemographic, and health characteristics of family members and unrelated individuals living in these households.

Field operations for the survey are conducted by the U.S. Bureau of the Census under specifications established by NCHS. The U.S. Bureau of the Census participates in the survey planning, selects the sample, and conducts the interviews. The data are then transmitted to NCHS for preparation, processing, and analysis.

Summary reports and reports on special topics for each year's data are prepared by the staff of the Division of Health Interview Statistics for publication in Series 10 of *Vital and Health Statistics*. Data are also tabulated for other reports prepared by NCHS staff and for use by other organizations and by researchers within and outside the Government. Since 1969, public-use data tapes have been prepared for each year of data collection.

It should be noted that estimates of health characteristics obtained during the NHIS pertain only to the resident civilian noninstitutionalized population of the United States living at the time of the interview. The sample does not include persons residing in nursing homes, members of the Armed Forces, institutionalized persons, or U.S. nationals living abroad.

Statistical design of the NHIS

General design

Data from the NHIS have been collected continuously since 1957. The sample design of the survey has undergone changes following each decennial census. This periodic redesign of the NHIS sample allows the incorporation of the latest population information and statistical methodology into the survey design. The data presented in this report are from an NHIS sample design first used in 1985. It is anticipated that this design will be used until 1995.

The sample design plan of the NHIS follows a multi-stage probability design that permits a continuous

sampling of the civilian noninstitutionalized population residing in the United States. The survey is designed in such a way that the sample scheduled for each week is representative of the target population, and the weekly samples are additive over time. This design permits estimates for high-frequency measures or for large population groups to be produced from a short period of data collection. Estimates for low-frequency measures or for smaller population subgroups can be obtained from a longer period of data collection. The annual sample is designed so that tabulations can be provided for each of the four geographic regions. Because interviewing is done throughout the year, there is no seasonal bias for annual estimates.

The continuous data collection also has administrative and operational advantages because fieldwork can be handled on a continuing basis with an experienced, stable staff.

Sample selection

The target population for the NHIS is the civilian noninstitutionalized population residing in the United States. For the first stage of the sample design, the United States is considered to be a universe composed of approximately 1,900 geographically defined primary sampling units (PSU's). A PSU consists of a county, small group of contiguous counties, or a metropolitan statistical area. The PSU's collectively cover the 50 States and the District of Columbia. The 52 largest PSU's are selected into the sample with certainty and are referred to as self-representing PSU's. The other PSU's in the universe are referred to as non-self-representing PSU's. These PSU's are clustered into 73 strata, and 2 sample PSU's are chosen from each stratum with probability proportional to population size. This gives a total of 198 PSU's selected in the first stage.

Within a PSU, two types of second-stage units are used: area segments and permit-area segments. Area segments are defined geographically and contain an expected eight households. Permit-area segments cover geographic areas containing housing units built after the 1980 census. The permit-area segments are defined using updated lists of building permits issued in the PSU since 1980 and contain an expected four households.

Within each segment all occupied households are targeted for interview. On occasion, a sample segment

may contain a large number of households. In this situation, the households are subsampled to provide a manageable interviewer workload.

The sample was designed so that a typical NHIS sample for the data collection years 1985 to 1995 will consist of approximately 7,500 segments containing about 59,000 assigned households. Of these households, an expected 10,000 will be vacant, demolished, or occupied by persons not in the target population of the survey. The expected sample of 49,000 occupied households will yield a probability sample of about 127,000 persons.

Features of the NHIS sample redesign

Starting in 1985, the NHIS design incorporated several new design features (8). The major changes include the following:

- *The use of an all-area frame.* The NHIS sample is now designed so that it can serve as a sample frame for other NCHS population-based surveys. In previous NHIS designs, about two-thirds of the sample was obtained from lists of addresses compiled at the time of the decennial census; that is, a list frame. Because of the U.S. Bureau of the Census confidentiality restrictions, these sample addresses could be used only for those surveys being conducted by the U.S. Bureau of the Census. The methodology used to obtain addresses in the 1985 NHIS area frame does not use the census address lists. The sample addresses thus obtained can be used as a sampling frame for other NCHS surveys.
- *The NHIS as four panels.* Four national subdesigns, or panels, constitute the full NHIS. Each panel contains a representative sample of the U.S. civilian noninstitutionalized population. Each of the four panels has the same sampling properties, and any combination of panels defines a national design. Panels were constructed to facilitate the linkage of the NHIS to other surveys and also to efficiently make large reductions in the size of the sample by eliminating panels from the survey.
During 1988–89, the sample consisted of 16,368 segments containing 121,766 assigned households. Of the 98,115 households eligible for interview, 93,196 households were actually interviewed, resulting in a sample of 239,239 persons.
- *The oversampling of black persons.* One of the goals in designing the current NHIS was to improve the precision of estimates for black persons. This was accomplished by the use of differential sampling rates in PSU's with between about 5 and 50 percent black population. Sampling rates for selection of segments were increased in areas known to have the highest concentrations of black persons. Segment sampling rates were decreased in other areas within the PSU to ensure that the total sample in each PSU was the

same size as it would have been without oversampling black persons.

- *The reduction of the number of sampled PSU's.* Interviewer travel to sample PSU's constitutes a large component of the total field costs for the NHIS. The previous NHIS design included 376 PSU's. Research showed that reducing the number of sample PSU's while increasing the sample size within PSU's would reduce travel costs and also maintain the reliability of health estimates. The design now contains 198 PSU's.
- *The selection of two PSU's per non-self-representing stratum.* In the previous design, one PSU was selected from each non-self-representing stratum. This feature necessitated the use of less efficient variance estimation procedures; the selection of two PSU's allows more efficient variance estimation methodology.

Collection and processing of data

The NHIS questionnaire contains two major parts, the first of which consists of topics that remain relatively similar from year to year. Among these topics are the incidence of acute conditions, the prevalence of chronic conditions, persons limited in activity due to chronic conditions, restriction in activity due to impairment or health problems, and utilization of health care services involving physician care and short-stay hospitalization. Occasionally new questions are incorporated into the main questionnaire. Since 1985, questions have been included that ask the household members' city and State of birth, social security number, and father's last name. In 1989, questions were added that ask the location (city, county, and State) of any physician contact whether by telephone or in person. For household members born in the United States, questions were added asking how many years they have lived in their State of residence, and, for household members born in a foreign country, how many years they have lived in the United States.

The second part consists of special topics added as supplements to each year's questionnaire. Beginning in August 1987, a special set of supplemental questions on the adult population's knowledge and attitudes about acquired immunodeficiency syndrome (AIDS) was added to the NHIS through computer-assisted personal interview (CAPI). A copy of the most recent AIDS questionnaire is shown in the 1989 *Current Estimates* report (6).

Careful procedures are followed to assure the quality of data collected in the interview. Most households in the sample are contacted by mail before the interviewers arrive. Potential respondents are informed of the importance of the survey and assured that all information obtained in the interview will be held in strict confidence. Interviewers make repeated trips to a household when a respondent is not immediately found. The success of these procedures is indicated by the response rate for the survey, which has been between 95 and 98 percent over the years.

When contact is made, the interviewer attempts to have all family members of the household 19 years of age and over present during the interview. When this is not possible, proxy responses for absent adult family members are accepted. In most situations, proxy respondents are used for persons under 19 years of age. Persons 17 and 18 years of age may respond for themselves, however.

Interviewers undergo extensive training and retraining. The quality of their work is checked by means of periodic observation and by reinterview. Their work is also evaluated by statistical studies of the data they obtain in their interviews. A field edit is performed on all completed interviews so that, if there are any problems with the information on the questionnaire, respondents can be recontacted to solve the problem.

Completed questionnaires are sent from the U.S. Bureau of the Census field offices to NCHS for coding and editing. To ensure the accuracy of coding, a 5-percent sample of all questionnaires is recoded and keyed by other coders. A 100-percent verification procedure is used if certain error tolerances are exceeded. Staff of the Division of Health Interview Statistics then edit the files to remove impossible and inconsistent codes.

The interview, fieldwork, and data processing procedures summarized above are described in detail in Series 1 of *Vital and Health Statistics* (9).

Estimation procedures

Because the design of the NHIS is a complex multi-stage probability sample, it is necessary to reflect these complex procedures in the derivation of estimates (8). The estimates presented in this report are based on 1988–89 sample person counts weighted to produce national estimates. The weight for each sample person is the product of four component weights:

- *Probability of selection*—The basic weight for each person is obtained by multiplying the reciprocals of the probabilities of selection at each step in the design: PSU, segment, and household.
- *Household nonresponse adjustment within segment*—In the NHIS, interviews are completed in about 95 percent of all eligible households. Because of household nonresponse, a weighting adjustment is required. The nonresponse adjustment weight is a ratio with the number of households in a sample segment as the numerator and the number of households actually interviewed in that segment as the denominator. This adjustment reduces bias in an estimate to the extent that persons in the noninterviewed households have the same characteristics as the persons in the interviewed households in the same segment.
- *First-stage ratio adjustment*—The weight for persons in the non-self-representing PSU's is ratio adjusted to the 1980 population within four race–residence classes of the non-self-representing strata within each geographic region.

Table I. The 60 poststratification age–sex–race cells in the National Health Interview Survey

Age	Black		All other	
	Male	Female	Male	Female
Under 1 year	X	X	X	X
1–4 years	X	X	X	X
5–9 years	X	X	X	X
10–14 years	X	X	X	X
15–17 years	X	X	X	X
18–19 years	X	X	X	X
20–24 years	X	X	X	X
25–29 years	X	X	X	X
30–34 years	X	X	X	X
35–44 years	X	X	X	X
45–49 years	X	X	X	X
50–54 years	X	X	X	X
55–64 years	X	X	X	X
65–74 years	X	X	X	X
75 years and over	X	X	X	X

- *Poststratification by age–sex–race*—Within each of 60 age–sex–race cells (table I), a weight is constructed each quarter to ratio-adjust the first-stage population estimate based on the NHIS to an independent estimate of the population of each cell. These independent estimates are prepared by the U.S. Bureau of the Census and are updated quarterly.

The main effect of the ratio-estimating process is to make the sample more closely representative of the target population by age, sex, race, and residence. The poststratification adjustment helps to reduce the component of bias resulting from sampling frame undercoverage; furthermore, this adjustment frequently reduces sampling variance.

Types of estimates

As noted, NHIS data were collected on a weekly basis, with each week's sample representing the resident civilian noninstitutionalized population of the United States living during that week. The weekly samples are consolidated to produce quarterly files (each consisting of data for 13 weeks). Weights to adjust the data to represent the U.S. population are assigned to each of the four quarterly files. These quarterly files are later consolidated to produce the annual file, which is the basis of most tabulations of the NHIS data.

The NHIS uses various reference periods to reduce the amount of bias associated with respondent memory loss. A 2-week reference period is used in collecting data on the incidence of acute conditions, restriction in activity due to a health problem, and physician contacts. Each of these measures health events that may be forgotten soon after they occur. Examples of such events are telephoning a physician about a minor illness, missing a day from work because of a routine health problem, or having a cold. Either a 12- or 6-month (depending on the type of statistic) reference period is used for hospitalization data because hospitalization ordinarily involves a major event

in a person's life and is not quickly forgotten. Chronic-condition prevalence estimates are based on a 12-month reference period.

Because most NHIS estimates based on a 2-week reference period are designed to represent the number of health events for a 12-month period, these data must be adjusted to an annual basis. Data based on a 2-week reference period are multiplied by 6.5 to produce the 13-week estimate for the quarter. These reference-period adjustments are made at the time that the quarterly files are produced. Therefore, the data can be used to produce estimates for each quarter and are used that way to study seasonal variation. The data from the four quarterly files (representing the number of events in each quarter) are summed to produce the annual estimate. Although these data are collected for only 2 weeks for each person included in the survey, any unusual event that may have occurred during a particular 2-week period does not bias the estimate because the quarterly estimate is a sum of the estimates produced for each week's sample during the entire quarter, and the annual estimate is the sum of the four quarters.

For prevalence statistics, such as the number of persons limited in activity due to chronic conditions, the annual estimate results from summing the weighted quarterly files and dividing by 4. This division is necessary because, as noted above, each quarterly file has been weighted to produce an estimate of the number of persons in the U.S. population with a given characteristic. Summing the four quarters and dividing by 4 in effect averages these quarterly results for the year. Thus, the type of prevalence estimate ordinarily derived from NHIS data is an annual-average-prevalence estimate.

For data related to short-stay hospital discharges that are based on a 6-month reference period, cases identified during any quarter of data collection are multiplied by 2 to produce a quarterly estimate of the annual number of characteristics associated with short-stay hospital discharges. The NHIS average annual estimate of hospital discharges is derived by summing the four quarterly estimates and dividing by 4, just as the prevalence estimates are.

Reliability of the estimates

Because NHIS estimates are based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same survey and processing procedures. There are two types of errors possible in an estimate based on a sample survey: nonsampling and sampling errors. To the extent possible, these types of errors are kept to a minimum by methods built into the survey procedures described earlier (10). Although it is very difficult to measure the extent of bias in the NHIS, several studies have been conducted to examine this problem. The results have been published in several reports (11–14).

Nonsampling errors

Interviewing process—Information, such as the number of days of restricted activity caused by the condition, can be obtained more accurately from household members than from any other source because only the persons concerned are in a position to report this information. However, there are limitations to the accuracy of diagnostic and other information collected in household interviews. For example, for diagnostic information, the household respondent can usually pass on to the interviewer only the information the physician has given to the family. For conditions not medically attended, diagnostic information is often no more than a description of symptoms. Further, a respondent may not answer a question in the intended manner because he or she has not properly understood the question, has forgotten the event, does not know, or does not wish to divulge the answer. Regardless of the type of measure, all NHIS data are estimates of known reported morbidity, disability, and so forth.

Reference period bias—NHIS estimates do not represent a complete measure of any given topic during the specified calendar period because data are not collected in the interview for persons who died or became institutionalized during the reference period. For many types of statistics collected in the survey, the reference period is the 2 weeks prior to the interview week. For such a short period, the contribution by decedents to a total inventory of conditions or services should be very small. However, the contribution by decedents during a long reference period (such as 1 year) might be significant, especially for older persons.

Underreporting associated with a long reference period is most germane to data on hospitalization. Analysis has shown that there is an increase in underreporting of hospitalizations with an increase in the time interval between the discharge and the interview. Exclusive of the hospital experience of decedents, the net underreporting using a 12-month-recall period is about 10 percent (15). The underreporting of discharges within 6 months of the week of interview is estimated to be about 5 percent (15). For this reason, hospital discharge data are based on hospital discharges reported to have occurred within 6 months of the week of interview.

Because hospitalization is common in the period immediately preceding death or institutionalization and older persons are much more likely to die than younger ones, the data should not be used to estimate the volume of hospitalization of the elderly, although the data can be used to measure characteristics of elderly people.

It should further be noted that, although the reported frequencies and rates related to hospital episodes are presented by the year in which the data were collected, the estimates are, in most cases, based on hospitalizations that occurred during the year of data collection and the prior year. Overall, approximately one-half of the reported

hospitalizations for the 12-month reference period occurred in the year prior to the year of data collection.

Population estimates—Some of the published tables include population figures for specified categories. Except for overall totals for the 60 age, sex, and race groups, which are adjusted to independent estimates, these figures are based on the sample of households in the NHIS. They are given primarily to provide denominators for rate computation; and, for this purpose, they are more appropriate for use with the accompanying measures of health characteristics than other population data that may be available. With the exception of the overall totals by age, sex, and race mentioned above, the population figures may differ from figures (which are derived from different sources) published in reports of the U.S. Bureau of the Census. Official population estimates are presented in U.S. Bureau of the Census reports in Series P-5, P-20, and P-60.

Rounding of numbers—In published tables, the figures are rounded to the nearest thousand, although they are not necessarily accurate to that detail. Derived statistics, such as rates and percent distributions, are computed after the estimates on which these are based have been rounded to the nearest thousand.

Combining data years—To reduce sampling error, data for a number of years may be combined. However, in so doing, the questionnaire for each of the years should be checked, because even a small change in the questionnaire design may lead to large changes in the derived estimates. This caution also applies to using NHIS data on health measures where changes in other events, such as legislative changes, have occurred over time.

Sampling errors

The standard error is primarily a measure of sampling error, that is, the variations that might occur by chance because only a sample of the population is surveyed. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 out of 100

that the difference would be less than twice the standard error and about 99 out of 100 that it would be less than 2 1/2 times as large.

Individual standard errors were not computed for each estimate in this report. Instead, standard errors were computed for a broad spectrum of estimates. Regression techniques were then applied to produce equations from which a standard error for any estimate can be approximated. The regression equations, represented by parameters *a* and *b*, are presented in table II. Also shown are the cutoff values—the estimated number of persons or events below which the relative standard error is greater than 30 percent and estimates do not meet NHIS standards of statistical reliability. Rules explaining their use are presented in the section below.

The reader is cautioned that this procedure will give an approximate standard error of an estimate rather than the precise standard error. The reader is further cautioned that particular care should be exercised when the denominator is small.

General rules for determining standard errors

To produce approximate standard errors for NHIS estimates, the reader must first determine the type of characteristic to be estimated, that is, the parameter set in table II to be used. The reader must then determine the type of estimate for which the standard error is needed. The type of estimate corresponds to one of five general rules for determining standard errors. Examples of their use are available in the 1988 and 1989 *Current Estimates* reports (5,6).

Rule 1. *Estimated number of people or events*—For the estimated number of people or events published in this report, there are two cases to consider. For the first case, if the estimated number is any combination of the post-stratification age–sex–race cells in table I, then its value has been adjusted to official U.S. Bureau of the Census figures, and its standard error is assumed to be 0.0. This corresponds to parameter set VIII in table II. As an

Table II. Estimated standard error parameters and 30-percent relative standard error cutoff points for the National Health Interview Survey, 1988–89

Parameter set	Characteristic	Estimated parameters		30-percent RSE cutoff points ¹
		a	b	
I	Number of acute conditions	0.0001125	33,900	377,000
II	Days of restricted-activity or bed days	0.0001815	237,500	2,644,000
III	Days lost from work or school	0.0001085	177,500	1,975,000
IV	Prevalence of chronic conditions	0.00004465	6,100	68,000
V	Number of physician contacts based on a 2-week reference period	0.0000141	83,000	900,000
VI	Hospital days based on a 12-month reference period	0.00016	27,150	300,000
VII	Population estimates for demographic, socioeconomic, and health characteristics	0.00001535	1,820	21,000
VIII	Age–sex–race population based on combining the poststratification cells of table I	0.0	0	21,000

¹Estimates below the cutoff points have a relative standard error (RSE) of more than 30 percent and are considered to be statistically unreliable.

example, this would be the case for the number of persons in the U.S. target population or a specific metropolitan statistical area. Although the race class "white" is not specifically adjusted to U.S. Bureau of the Census figures, it dominates the poststratification "all other" race class; consequently, age-sex-all-other-race combinations of table I can be treated as age-sex-white combinations for the purpose of approximating standard errors.

For the second case, the standard errors for all other estimates of numbers of people or events, such as the number of people limited in activity or the number of acute conditions, are approximated by using the parameters provided in table II and formula 1 below.

If the aggregate x for a characteristic has associated parameters a and b , then the approximate standard error for x , $SE(x)$, can be computed by the formula

$$SE(x) = \sqrt{ax^2 + bx} \quad (1)$$

Rule 2. *Proportions and percents when the denominator is not generated by the poststratification age-sex-race classes*—If p represents an estimated percent, b is the parameter from table II associated with the numerator characteristics, and y is the number of persons in the denominator on which p is based, then the standard error of p may be approximated by

$$SE(p) = \sqrt{\frac{bp(100-p)}{y}} \quad (2)$$

(If p is a proportion, then the above formula can be used but with 100 replaced by 1.0.)

Rule 3. *For rates, proportions, and percents when the denominator is generated by the poststratification age-sex-race classes* (table I)—In this case, the denominator has no sampling error. For example, rule 3 would apply to the estimated number of hearing impairments among persons 18 years of age and over because the denominator is a combination of the poststratification cells. Approximate standard errors for such estimates can be computed using table II a and b parameters associated with the numerator characteristics along with formula 3 below.

If the estimate of rate, proportion, or percent p is the ratio of two estimated numbers, $p = x/Y$ (where p may be inflated by 100 for percents or 1,000 for rates per 1,000 persons), with Y having no sampling error, then the approximate standard error for p is given by the formula

$$SE(p) = p \sqrt{a + \frac{b}{x}} \quad (3)$$

In this report, the value of the denominator Y is always provided, but, in a few cases, the numerator value x is not published. For these cases the value of x may be computed by the formula

$$x = \begin{cases} pY & \text{if } p \text{ is a proportion or rate per unit or} \\ \frac{pY}{100} & \text{if } p \text{ is a percent or rate per 100 units or} \\ 100 & \\ \frac{pY}{1,000} & \text{if } p \text{ is a rate per 1,000 units} \end{cases}$$

Rule 4. *Rates where the denominator is not generated by the poststratification age-sex-race classes*—If the estimated rate p is expressed as the ratio of two estimates, $p = x/y$ (inflated by 100 or 1,000 when appropriate), then the estimated standard error for p is given by the formula

$$SE(p) = p \sqrt{\frac{SE(x)^2}{x^2} + \frac{SE(y)^2}{y^2} - 2r \frac{SE(x)}{x} \frac{SE(y)}{y}} \quad (4)$$

where $SE(x)$ and $SE(y)$ are computed using rule 1, and x and y are obtained from the tables. No estimates of r , the correlation between the numerator and denominator, are presented in this report; therefore, only the first two terms are available. The reader must assume that $r = 0.0$. Assuming $r = 0.0$ will yield an overestimate of the standard error if r is actually positive and an underestimate if r is negative.

Rule 5. *Difference between two statistics (mean, rate, total, and proportion)*—If x_1 and x_2 are two estimates, then the standard error of the difference ($x_1 - x_2$) can be computed as follows:

$$SE(x_1 - x_2) = \sqrt{SE(x_1)^2 + SE(x_2)^2 - 2r SE(x_1)SE(x_2)} \quad (5)$$

where $SE(x_1)$ and $SE(x_2)$ are computed using rules 1–4 as appropriate and r is the correlation coefficient between x_1 and x_2 .

Assuming $r = 0.0$ will result in an accurate standard error if the two estimates are actually uncorrelated and will result in an overestimate of the standard error if the correlation is positive, or an underestimate if the correlation is negative.

Relative standard errors

Prior to 1985, relative standard error (RSE) curves were present in *Current Estimates* for approximating relative standard errors. For readers who wish to continue using them, the following provides guidance. The RSE of an estimate is obtained by dividing the standard error (SE) of the estimate by the estimate x itself. This quantity is expressed as a percent of the estimate:

$$RSE = 100 \frac{SE(x)}{x}$$

Appendix II

Definitions of certain terms used in this report

Terms relating to conditions

Condition—Condition is a general term that includes any specific illness, injury, or impairment. Condition data are derived from the survey in two ways. First, respondents are asked to identify any conditions that caused certain types of impact associated with health, such as a visit to a doctor or a day spent in bed. Second, respondents are read lists of selected chronic conditions and asked whether they or any of their family members have any of these conditions.

At a later point in the survey, a series of questions is asked about each of the conditions identified in either of the two ways just described. The information obtained on each condition helps to clarify the nature of the condition and whether medical services have been involved in its diagnosis or treatment. It also aids in the coding of the condition. All conditions except impairments are coded according to the ninth revision of the *International Classification of Diseases* (16), with certain modifications adopted to make the codes more suitable for information derived from a household survey. A special set of codes devised by NHIS is used to code impairments (17).

Chronic condition—A condition is considered chronic if the respondent indicates it was first noticed more than 3 months before the reference date of the interview or it is a type of condition that ordinarily has a duration of more than 3 months (See definition of acute condition). Examples of conditions that are considered chronic regardless of their time of onset are diabetes, heart conditions, emphysema, and arthritis. A complete list of these conditions may be obtained by contacting the Division of Health Interview Statistics, National Center for Health Statistics.

Impairment—An impairment is a chronic or permanent defect, usually static in nature, that results from disease, injury, or congenital malformation. It represents a decrease in or loss of ability to perform various functions, particularly those of the musculoskeletal system and the sense organs. Impairments are grouped according to type of functional impairment and etiology in the special NHIS impairment codes.

Acute condition—A condition is considered acute if it was first noticed no more than 3 months before the reference date of the interview and it is not one of the conditions considered chronic regardless of the time of onset (See definition of chronic condition). However, any acute condition not associated with either at least one

doctor visit or at least 1 day of restricted activity during the reference period is considered to be of minor consequence and is excluded from the final data produced by the survey.

Onset of condition—A condition is considered to have had its onset when it was first noticed. This could be the time the person first felt sick or became injured, or it could be the time the person or family was first told by a physician that the person had a condition of which he or she had been previously unaware.

Incidence of conditions—The incidence of a condition is the number of cases that had onset during a specified period of time. A person may have more than one acute condition during a period of time or may have the same condition, such as a headache, more than once. Ordinarily, however, a chronic condition can begin only one time during a given reference period.

Prevalence of conditions—The prevalence of a condition is the number of persons who have the condition at a given point in time. Although the prevalence of acute conditions is a meaningful concept, it is seldom used in health statistics, which generally focus on the incidence of acute conditions. If the prevalence of a chronic condition is measured during a period of time (for example, each week during a year), then the resulting estimate of prevalence is an average of 52 weekly prevalence estimates. This is called an average-annual-point-prevalence estimate.

Terms relating to disability

Disability—Disability is a general term that refers to any long- or short-term reduction of a person's activity as a result of an acute or chronic condition. *Limitation of activity* refers to a long-term reduction in a person's capacity to perform the average kind or amount of activities associated with his or her age group. *Restriction of activity* refers to particular kinds of behavior usually associated with a reduction in activity due to either long- or short-term conditions. Thus limitation of activity refers to what a person is generally capable of doing, but restriction of activity ordinarily refers to a relatively short-term reduction in a person's activities below his or her normal capacity.

Limitation of activity because of chronic conditions—Persons are classified in terms of the major activity

usually associated with their particular age group. The major activities for the age groups are:

- Ordinary play, for children under 5 years of age,
- Attending school, for those 5–17 years of age,
- Working or keeping house, for persons 18–69 years of age, and
- Capacity for independent living (for example, the ability to bathe, shop, dress, eat, and so forth, without needing the help of another person), for those 70 years of age and over

People aged 18–69 years who are classified as keeping house are also classified by their ability to work at a job or business. (In this report, the major activity of persons 65–69 years old is assumed to be working or keeping house; however, questions also were asked about the capacity for independent living in this age group, which would permit an alternative definition of limitation.)

In regard to these activities, each person is classified into one of four categories:

- Unable to perform the major activity,
- Able to perform the major activity but limited in the kind or amount of this activity,
- Not limited in the major activity but limited in the kind or amount of other activities, or
- Not limited in any way

In regard to these four categories, NHIS publications often classify persons only by whether they are limited (the first three categories) or not limited (the last category). Persons are not classified as limited in activity unless one or more chronic conditions are reported as the cause of the activity limitation. If more than one condition is reported, the respondent is asked to identify the condition that is the major cause of the limitation.

Restriction of activity—Four types of restricted activity are measured in NHIS:

- A *bed day* is one during which a person stayed in bed more than half a day because of illness or injury. All hospital days for inpatients are considered bed days even if the patient was not in bed more than half a day.
- A *work-loss day* is one on which a currently employed person 18 years of age or over missed more than half a day from a job or business.
- A *school-loss day* is one on which a student 5–17 years of age missed more than half a day from the school in which he or she was currently enrolled.
- A *cut-down day* is one on which a person cuts down for more than half a day on the things he usually does.

Work-loss, school-loss, and cut-down days refer to the short-term effects of illness or injury. However, bed days are a measure of both long- and short-term disability, because a chronically ill bedridden person and a person with a cold could both report having spent more than half a day in bed due to an illness.

The number of *restricted-activity days* is the number of days a person experienced at least one of the four types of

activity restriction just described. It is the most inclusive measure of disability days and the least descriptive; 4 days of restricted activity may mean 4 bed days associated with serious illness or 4 days during which a person merely cut down on his or her activities due to a mild illness.

A single restricted-activity day may involve both a bed day and a work-loss or school-loss day. However, a cut-down day cannot overlap any of these three types of disability days. In calculating the sum of restricted-activity days, each day is counted only once even if more than one type of activity restriction was involved.

Restricted-activity days may be associated with either persons or conditions. *Person days* are the number of days during which a person restricted his or her activity. *Condition days* are the number of days during which a condition caused a person to restrict his or her activity. A person day of restricted activity can be caused by more than one condition. In such a case, each condition causing restriction is associated with that day of restricted activity. Therefore, the number of condition days of restricted activity may exceed the number of person days of restricted activity. This relationship holds for each type of restricted-activity day.

When two or more conditions cause a day of restricted activity, the conditions may be:

- *One*—both (all) acute
- *Two*—one (some) acute and the other (some) chronic
- *Three*—both (all) chronic

The number of restricted-activity days associated with acute conditions includes groups one and two; the number of such days associated with chronic conditions includes groups two and three. The phrase “associated with” (rather than “caused by”) is used to indicate that some days associated with acute or chronic conditions are not necessarily caused solely by that type of condition.

Assessed health status—The categories related to this concept result from asking the respondent, “Would you say _____’s health is excellent, very good, good, fair, or poor?” As such, it is based on a respondent’s opinion and not directly on any clinical evidence.

Terms relating to physician contacts

Physician contact—A physician contact is defined as consultation with a physician, in person or by telephone, for examination, diagnosis, treatment, or advice. (Physician contacts with hospital inpatients are not included.) The contact is considered to be a physician contact if the service is provided directly by the physician or by a nurse or other person acting under a physician’s supervision. For the purpose of this definition, “physician” includes doctors of medicine and osteopathic physicians. The term “doctor” is used in the interview rather than “physician” because of popular usage. However, the concept toward which all instructions are directed is that described here.

Physician contacts for services provided on a mass basis are not included in the tabulations. A service received on a mass basis is defined as any service involving only a single test (such as a test for diabetes) or a single procedure (such as a measles inoculation) when this single service is administered identically to all persons who are at the place for this purpose. Hence obtaining a chest x ray in a tuberculosis chest x-ray trailer is not included as a physician contact. However, a special chest x ray given in a physician's office or in an outpatient clinic is considered a physician contact.

If a physician is called to a house to see more than one person, the call is considered a separate physician contact for each person about whom the physician is consulted.

A physician contact is associated with the person about whom the advice is sought even if that person does not actually see or consult the physician. For example, if a mother consults a physician about one of her children, the physician contact is ascribed to the child.

Interval since last physician contact—The interval since the last physician contact is the length of time prior to the week of interview since a physician was last consulted in person or by telephone for treatment or advice of any type whatever. A physician contact with a hospital inpatient can be counted as the last time a physician was seen even though it is not included in the "physician contact" category.

Terms relating to hospitalization

Hospital—For this survey, a hospital is defined as any institution either named in the listing of hospitals in the current *American Hospital Association Guide to the Health Care Field* or found on the Master Facility Inventory List maintained by the National Center for Health Statistics.

Short-stay hospital—A short-stay hospital is one in which the type of service provided is general; maternity; eye, ear, nose, and throat; children's; or osteopathic; or it may be the hospital department of an institution.

Hospital day—A hospital day is a day on which a person is confined to a hospital. It is counted as a hospital day only if the patient stays overnight. Thus a patient who enters the hospital on Monday afternoon and leaves Wednesday noon is considered to have had two hospital days.

Hospital days during the year—The number of hospital days during the year is the total number for all hospital episodes in the 12-month period prior to the interview week. For the purposes of this estimate, episodes overlapping the beginning or end of the 12-month period are subdivided so that only those days falling within the period are included.

Hospital episode—A hospital episode is any continuous period of stay of 1 night or more in a hospital as an inpatient except the period of stay of a well newborn infant. A hospital episode is recorded for a family member whenever any part of his hospital stay is included in the 12-month period prior to the interview week.

Average length of stay—The average length of stay per discharged patient is computed by dividing the total number of hospital days for a specified group by the total number of discharges for that group.

Demographic terms

Age—The age recorded for each person is the age at last birthday. Age is recorded in single years and grouped in a variety of distributions depending on the purpose of the table.

Geographic region—For the purpose of classifying the population by geographic area, the States are grouped into four regions. These regions, which correspond to those used by the U.S. Bureau of the Census, are as follows:

<i>Region</i>	<i>States included</i>
Northeast	Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania
Midwest	Michigan, Ohio, Illinois, Indiana, Wisconsin, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas
South	Delaware, Maryland, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Kentucky, Tennessee, Alabama, Mississippi, Arkansas, Louisiana, Oklahoma, and Texas
West	Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Hawaii, and Alaska

Place of residence—The place of residence of a member of the civilian noninstitutionalized population is classified as inside a metropolitan statistical area (MSA) or outside an MSA. Place of residence inside an MSA is further classified as either central city or not central city.

Metropolitan statistical area—The definition and titles of MSA's are established by the U.S. Office of Management and Budget (OMB) with the advice of the Federal Committee on Metropolitan Statistical Areas. Generally speaking, an MSA consists of a county or group of counties containing at least one city (or twin cities) having a population of 50,000 or more plus adjacent counties that are metropolitan in character and are economically and socially integrated with the central city. In New England, towns and cities rather than counties are the units used in defining MSA's. There is no limit to the number of

adjacent counties included in the MSA as long as they are integrated with the central city, nor is an MSA limited to a single State; boundaries may cross State lines.

Central city of an MSA—The largest city in an MSA is always a central city. One or two additional cities may be secondary central cities in the MSA on the basis of either of the following criteria:

- The additional city or cities must have a population one-third or more of that of the largest city and a minimum population of 25,000.
- The additional city or cities must have at least 250,000 inhabitants.

Not central city of an MSA—This includes all of the MSA that is not part of the central city itself.

Not in MSA—This includes all other places in the country.

The most detailed operational definitions of all of these terms are found in the *NHIS Interviewer's Manual* (18). Instructions are given in the manual on how problem cases associated with each concept are to be handled.

Appendix III

Questionnaire items

OMB No. 0920-0214; Approval Expires March 31, 1990

NOTICE - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m). Public reporting burden for this collection of information is estimated 15 average minutes per response. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to PHS Reports Clearance Officer, ATTN: PRA; Humphrey Building, Room 721-H, 200 Independence Avenue, SW; Washington, DC 20201; and to the Office of Management and Budget, Paperwork Reduction Project (0920-0214), Washington, DC 20503.

FORM **HIS-1 (1989)**
(12-21-89) (Revised)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
U.S. PUBLIC HEALTH SERVICE

NATIONAL HEALTH INTERVIEW SURVEY

1. Book ___ of ___ books

2. R.O. number

3. Sample

4. Segment type
 Area Permit Block

5. Control number
PSU | Segment | Serial

6a. What is your exact address? (Include House No., Apt. No., or other identification, county and ZIP Code)

City _____ State _____ County _____ ZIP Code _____

b. Is this your mailing address? (Mark box or specify if different. Include county and ZIP Code.) Same as 6a

City _____ State _____ County _____ ZIP Code _____

c. Special place name _____ Sample unit number _____ Type code _____

7. YEAR BUILT
 Ask
 Do not ask

When was this structure originally built?
 Before 4-1-80 (Continue interview)
 After 4-1-80 (Complete item 8c when required; end interview)

8. COVERAGE QUESTIONS
 Ask items that are marked
 Do not ask

a. Are there any occupied or vacant living quarters besides your own in this building? Yes (Fill Table X) No

b. Are there any occupied or vacant living quarters besides your own on this floor? Yes (Fill Table X) No

c. Is there any other building on this property for people to live in, either occupied or vacant? Yes (Fill Table X) No

9a. LAND USE
1 URBAN (10)
2 RURAL
- Reg. units and SP. PL. units coded 85-88 in 6c - Ask item 9b
- SP. PL. units not coded 85-88 in 6c - Mark "No" in item 9b without asking

b. During the past 12 months did sales of crops, livestock, and other farm products from this place amount to \$1,000 or more?
1 Yes } (10)
2 No }

10. CLASSIFICATION OF LIVING QUARTERS -- Mark by observation

a. LOCATION of unit
Unit is:
 in a Special Place - Refer to Table A in Part C of manual; then complete 10c or d
 NOT in a Special Place (10b)

b. Access
 Direct (10c)
 Through another unit - Not a separate HU; combine with unit through which access is gained. (Apply merged unit procedures if additional living quarters space was listed separately.)

c. HOUSING unit (Mark one, THEN page 2)
01 House, apartment, flat
02 HU in nontransient hotel, motel, etc.
03 HU-permanent in transient hotel, motel, etc.
04 HU in rooming house
05 Mobile home or trailer with no permanent room added
06 Mobile home or trailer with one or more permanent rooms added
07 HU not specified above - Describe in footnotes

d. OTHER unit (Mark one)
08 Quarters not HU in rooming or boarding house
09 Unit not permanent in transient hotel, motel, etc.
10 Unoccupied site for mobile home, trailer, or tent
11 Student quarters in college dormitory
12 OTHER unit not specified above - Describe in footnotes

11. What is the telephone number here? Area code/number _____ 12. Interview observed? None 1 Yes 2 No

13a. Interviewer's name _____ Code _____ b. Language of interview
1 English 3 Both English and Spanish
2 Spanish 4 Other

14. Noninterview reason

TYPE A
01 Refusal - Describe in footnotes
02 No one at home, repeated calls
03 Temporarily absent - Footnote
04 Other (Specify) _____

TYPE B
05 Vacant - nonseasonal
06 Vacant - seasonal
07 Occupied entirely by persons with URE
08 Occupied entirely by Armed Forces members
09 Unfit or to be demolished
10 Under construction, not ready
11 Converted to temporary business or storage
12 Unoccupied site for mobile home, trailer, or tent
13 Permit granted, construction not started
14 Other (Specify) _____

TYPE C
15 Unused line of listing sheet
16 Demolished
17 House or trailer moved
18 Outside segment
19 Converted to permanent business or storage
20 Merged
21 Condemned
22 Built after April 1, 1980
23 Other (Specify) _____

15. Record of calls

Month	Date	Beginning time	Ending time	Completed Mark (X)
1		P T	a.m. p.m.	a.m. p.m.
2		P T	a.m. p.m.	a.m. p.m.
3		P T	a.m. p.m.	a.m. p.m.
4		P T	a.m. p.m.	a.m. p.m.
5		P T	a.m. p.m.	a.m. p.m.
6		P T	a.m. p.m.	a.m. p.m.

16. List column numbers of persons requiring callbacks, and mark appropriately.
 None

Household Resp.	Diabetic	Sample Person
Col. No.	SS No.	Sect. M-Q1 Sect. Q2 Sect. R-T AIDS

17. Record of additional contacts

Month	Date	Beginning time	Ending time	Completed Col. No.
1		P T	a.m. p.m.	a.m. p.m.
2		P T	a.m. p.m.	a.m. p.m.
3		P T	a.m. p.m.	a.m. p.m.
4		P T	a.m. p.m.	a.m. p.m.

GO TO HOUSEHOLD COMPOSITION PAGE

A. HOUSEHOLD COMPOSITION PAGE

1

1 a. What are the names of all persons living or staying here? Start with the name of the person or one of the persons who owns or rents this home. Enter name in REFERENCE PERSON column.

b. What are the names of all other persons living or staying here? Enter names in columns.

c. I have listed (read names). Have I missed:

- any babies or small children?
- any lodgers, boarders, or persons you employ who live here?
- anyone who USUALLY lives here but is now away from home traveling or in a hospital?
- anyone else staying here?

d. Do all of the persons you have named usually live here? Yes (2) No (APPLY HOUSEHOLD MEMBERSHIP RULES. Delete nonhousehold members by an "X" from 1-C2 and enter reason.)

Probe if necessary:
Does -- usually live somewhere else?

Ask for all persons beginning with column 2:

2. What is -- relationship to (reference person)?

3. What is -- date of birth? (Enter date and age and mark sex.)

If "Yes," enter names in columns	
Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

1. First name	Mid. init.	Age		
Last name		Sex 1 <input type="checkbox"/> M 2 <input type="checkbox"/> F		
2. Relationship REFERENCE PERSON				
3. Date of birth	Date	Year		
C1	HOSP. 00 <input type="checkbox"/> None	WORK 1 <input type="checkbox"/> Wa	RD 1 <input type="checkbox"/> Yes	2-WK. DV 00 <input type="checkbox"/> None
	Number 2 <input type="checkbox"/> Wb	2 <input type="checkbox"/> No	Number	

REFERENCE PERIODS	
A1	2-WEEK PERIOD
	12-MONTH DATE
	13-MONTH HOSPITAL DATE
A2	ASK CONDITION LIST.....

C2	LA	TRA	IDV	TINJ	TCLL	TR	HSTC	COND.

A3 Refer to ages of all related HH members.

4a. Are any of the persons in this family now on full-time active duty with the armed forces? Yes No (5)

b. Who is this? Delete column number(s) _____ by an "X" from 1-C2.

c. Anyone else? Yes (Reask 4b and c) No

Ask for each person in armed forces:

d. Where does -- usually live and sleep, here or somewhere else? Mark box in person's column.

A3	<input type="checkbox"/> All persons 65 and over (5)
	<input type="checkbox"/> Other (4)
4d.	<input type="checkbox"/> Living at home
	<input type="checkbox"/> Not living at home

5. We would like to have all adult family members who are at home take part in the interview. Are (names of persons 17 and over) at home now? If "Yes," ask: Could they join us? (Allow time)

Read to respondent(s):
This survey is being conducted to collect information on the nation's health. I will ask about hospitalizations, disability, visits to doctors, illness in the family, and other health related items.

HOSPITAL PROBE

6a. Since (13-month hospital date) a year ago, was -- a patient in a hospital OVERNIGHT?

b. How many different times did -- stay in any hospital overnight or longer since (13-month hospital date) a year ago?

Ask for each child under one:

7a. Was -- born in a hospital?

Ask for mother and child:

b. Have you included this hospitalization in the number you gave me for --?

6a.	1 <input type="checkbox"/> Yes
	2 <input type="checkbox"/> No (Mark "HOSP." box, THEN NP)
b.	Number of times } (Make entry in "HOSP." box THEN NP)
7a.	1 <input type="checkbox"/> Yes
	2 <input type="checkbox"/> No (NP)
b.	<input type="checkbox"/> Yes (NP)
	<input type="checkbox"/> No (Correct 6 and "HOSP." box)

FOOTNOTES

B. LIMITATION OF ACTIVITIES PAGE			
B1	Refer to age.	B1	1 <input type="checkbox"/> 18-69(1) 2 <input type="checkbox"/> Other (NP)
1. What was -- doing MOST OF THE PAST 12 MONTHS; working at a job or business, keeping house, going to school, or something else? <i>Priority if 2 or more activities reported: (1) Spent the most time doing; (2) Considers the most important.</i>		1.	1 <input type="checkbox"/> Working (2) 2 <input type="checkbox"/> Keeping house (3) 3 <input type="checkbox"/> Going to school (5) 4 <input type="checkbox"/> Something else (5)
2a. Does any impairment or health problem NOW keep -- from working at a job or business?		2a.	1 <input type="checkbox"/> Yes (7) <input type="checkbox"/> No
b. Is -- limited in the kind OR amount of work -- can do because of any impairment or health problem?		b.	2 <input type="checkbox"/> Yes (7) 3 <input type="checkbox"/> No (6)
3a. Does any impairment or health problem NOW keep -- from doing any housework at all?		3a.	4 <input type="checkbox"/> Yes (4) <input type="checkbox"/> No
b. Is -- limited in the kind OR amount of housework -- can do because of any impairment or health problem?		b.	5 <input type="checkbox"/> Yes (4) 6 <input type="checkbox"/> No (5)
4a. What (other) condition causes this? <i>Ask if injury or operation: When did [the (injury) occur?/ -- have the operation?] Ask if operation over 3 months ago: For what condition did -- have the operation? If pregnancy/delivery or 0-3 months injury or operation -- Reask question 3 where limitation reported, saying: Except for -- (condition), ...? OR reask 4b/c.</i>		4a.	(Enter condition in C2, THEN 4b) 1 <input type="checkbox"/> Old age (Mark "Old age" box, THEN 4c)
b. Besides (condition) is there any other condition that causes this limitation?		b.	<input type="checkbox"/> Yes (Reask 4a and b) <input type="checkbox"/> No (4d)
c. Is this limitation caused by any (other) specific condition?		c.	<input type="checkbox"/> Yes (Reask 4a and b) <input type="checkbox"/> No
d. Which of these conditions would you say is the MAIN cause of this limitation? <i>Mark box if only one condition.</i>		d.	<input type="checkbox"/> Only 1 condition Main cause
5a. Does any impairment or health problem keep -- from working at a job or business?		5a.	1 <input type="checkbox"/> Yes (7) <input type="checkbox"/> No
b. Is -- limited in the kind OR amount of work -- could do because of any impairment or health problem?		b.	2 <input type="checkbox"/> Yes (7) 3 <input type="checkbox"/> No
B2	Refer to questions 3a and 3b.	B2	1 <input type="checkbox"/> "Yes" in 3a or 3b (NP) 2 <input type="checkbox"/> Other (6)
6a. Is -- limited in ANY WAY in any activities because of an impairment or health problem?		6a.	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (NP)
b. In what way is -- limited? <i>Record limitation, not condition.</i>		b.	_____ Limitation
7a. What (other) condition causes this? <i>Ask if injury or operation: When did [the (injury) occur?/ -- have the operation?] Ask if operation over 3 months ago: For what condition did -- have the operation? If pregnancy/delivery or 0-3 months injury or operation -- Reask question 2, 5, or 6 where limitation reported, saying: Except for -- (condition), ...? OR reask 7b/c.</i>		7a.	(Enter condition in C2, THEN 7b) 1 <input type="checkbox"/> Old age (Mark "Old age" box, THEN 7c)
b. Besides (condition) is there any other condition that causes this limitation?		b.	<input type="checkbox"/> Yes (Reask 7a and b) <input type="checkbox"/> No (7d)
c. Is this limitation caused by any (other) specific condition?		c.	<input type="checkbox"/> Yes (Reask 7a and b) <input type="checkbox"/> No
d. Which of these conditions would you say is the MAIN cause of this limitation? <i>Mark box if only one condition.</i>		d.	<input type="checkbox"/> Only 1 condition Main cause

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B. LIMITATION OF ACTIVITIES PAGE, Continued

B4	Refer to age.	B4	<input type="checkbox"/> Under 5 (NP) <input type="checkbox"/> 60-69 (14) <input type="checkbox"/> 5-59 (B5) <input type="checkbox"/> 70 and over (NP)
B5	Refer to "Old age" and "LA" boxes. Mark first appropriate box.	B5	<input type="checkbox"/> "Old age" box marked (14) <input type="checkbox"/> Entry in "LA" box (14) <input type="checkbox"/> Other (NP)
14a. Because of any impairment or health problem, does --- need the help of other persons with --- personal care needs, such as eating, bathing, dressing, or getting around this home? <i>If under 18, skip to next person; otherwise ask:</i>		14a.	<input type="checkbox"/> Yes (15) <input type="checkbox"/> No
b. Because of any impairment or health problem, does --- need the help of other persons in handling --- routine needs, such as everyday household chores, doing necessary business, shopping, or getting around for other purposes?		b.	<input type="checkbox"/> Yes <input type="checkbox"/> No (NP)
15a. What (other) condition causes this? <i>Ask if injury or operation: When did (the (injury) occur?) --- have the operation?</i> <i>Ask if operation over 3 months ago: For what condition did --- have the operation?</i> <i>If pregnancy/delivery or 0-3 months injury or operation -</i> <i>Reask question 14 where limitation reported, saying: Except for --- (condition), ...?</i> <i>OR reask 15b/c.</i>		15a.	<i>(Enter condition in C2, THEN 15b)</i> <input type="checkbox"/> Old age (Mark "Old age" box, THEN 15c)
b. Besides (condition) is there any other condition that causes this limitation?		b.	<input type="checkbox"/> Yes (Reask 15a and b) <input type="checkbox"/> No (15d)
c. Is this limitation caused by any (other) specific condition?		c.	<input type="checkbox"/> Yes (Reask 15a and b) <input type="checkbox"/> No
<i>Mark box if only one condition.</i> d. Which of these conditions would you say is the MAIN cause of this limitation?		d.	<input type="checkbox"/> Only 1 condition <hr/> Main cause

FOOTNOTES

D. RESTRICTED ACTIVITY PAGE PERSON 1	
<p><i>Hand calendar.</i> {The next questions refer to the 2 weeks outlined in red on that calendar, beginning Monday, (date) and ending this past Sunday (date).}</p>	<p>D2 Refer to 2b and 3b. <input type="checkbox"/> No days in 2b or 3b (6) <input type="checkbox"/> 1 or more days in 2b or 3b (5)</p>
<p>D1 Refer to age. <input type="checkbox"/> Under 5 (4) <input type="checkbox"/> 5-17 (3) <input type="checkbox"/> 18 and over (1)</p>	<p>5. On how many of the (number in 2b or 3b) days missed from [work/school] did --- stay in bed more than half of the day because of illness or injury? <input type="checkbox"/> None _____ No. of days</p>
<p>1a. DURING THOSE 2 WEEKS, did --- work at any time at a job or business not counting work around the house? (Include unpaid work in the family [farm/business].) 1 <input type="checkbox"/> Yes (Mark "Wa" box, THEN 2) 2 <input type="checkbox"/> No</p> <p>b. Even though --- did not work during those 2 weeks, did --- have a job or business? 1 <input type="checkbox"/> Yes (Mark "Wb" box, THEN 2) 2 <input type="checkbox"/> No (4)</p>	<p>Refer to 2b, 3b, and 4b.</p> <p>6a. (Not counting the day(s) [missed from work missed from school (and) in bed]), Was there any (OTHER) time during those 2 weeks that --- cut down on the things --- usually does because of illness or injury? <input type="checkbox"/> Yes <input type="checkbox"/> No (D3)</p> <p>b. (Again, not counting the day(s) [missed from work missed from school (and) in bed]), During that period, how many (OTHER) days did --- cut down for more than half of the day because of illness or injury? <input type="checkbox"/> None <input style="width: 50px;" type="text"/> No. of cut-down days</p>
<p>2a. During those 2 weeks, did --- miss any time from a job or business because of illness or injury? <input type="checkbox"/> Yes <input type="checkbox"/> No (4)</p> <p>b. During that 2-week period, how many days did --- miss more than half of the day from --- job or business because of illness or injury? <input type="checkbox"/> None (4) <input style="width: 50px;" type="text"/> No. of work-loss days (4)</p>	<p>D3 Refer to 2-6. <input type="checkbox"/> No days in 2-6 (Mark "No" in RD, THEN NP) <input type="checkbox"/> 1 or more days in 2-6 (Mark "Yes" in RD, THEN 7)</p>
<p>3a. During those 2 weeks, did --- miss any time from school because of illness or injury? <input type="checkbox"/> Yes <input type="checkbox"/> No (4)</p> <p>b. During that 2-week period, how many days did --- miss more than half of the day from school because of illness or injury? <input type="checkbox"/> None <input style="width: 50px;" type="text"/> No. of school-loss days</p>	<p>Refer to 2b, 3b, 4b, and 6b.</p> <p>7a. What (other) condition caused --- to [miss work miss school (or) stay in bed (or) cut down] during those 2 weeks? (Enter condition in C2, THEN 7b)</p> <p>b. Did any other condition cause --- to [miss work miss school (or) stay in bed (or) cut down] during that period? 1 <input type="checkbox"/> Yes. (Reask 7a and b) 2 <input type="checkbox"/> No</p>
<p>4a. During those 2 weeks, did --- stay in bed because of illness or injury? <input type="checkbox"/> Yes <input type="checkbox"/> No (6)</p> <p>b. During that 2-week period, how many days did --- stay in bed more than half of the day because of illness or injury? <input type="checkbox"/> None (6) <input style="width: 50px;" type="text"/> No. of bed days (D2)</p>	<p>FOOTNOTES</p>

E. 2-WEEK DOCTOR VISITS PROBE PAGE

Read to respondent(s):

These next questions are about health care received during the 2 weeks outlined in red on that calendar.

E1	Refer to age.	E1	<input type="checkbox"/> Under 14 (1b) <input type="checkbox"/> 14 and over (1a)
	1 a. During those 2 weeks, how many times did --- see or talk to a medical doctor? {Include all types of doctors, such as dermatologists, psychiatrists, and ophthalmologists, as well as general practitioners and osteopaths.} (Do not count times while an overnight patient in a hospital.) b. During those 2 weeks, how many times did anyone see or talk to a medical doctor about ---? (Do not count times while an overnight patient in a hospital.)	1 a. and b.	00 <input type="checkbox"/> None <input type="text"/> } (NP) Number of times
	2 a. (Besides the time(s) you just told me about) During those 2 weeks, did anyone in the family receive health care at home or go to a doctor's office, clinic, hospital or some other place? Include care from a nurse or anyone working with or for a medical doctor. Do not count times while an overnight patient in a hospital. <input type="checkbox"/> Yes <input type="checkbox"/> No (3a) b. Who received this care? Mark "DR Visit" box in person's column. c. Anyone else? <input type="checkbox"/> Yes (Reask 2b and c) <input type="checkbox"/> No Ask for each person with "DR Visit" in 2b: d. How many times did --- receive this care during that period?	2 b.	<input type="checkbox"/> DR Visit d. <input type="text"/> Number of times
	3 a. (Besides the time(s) you already told me about) During those 2 weeks, did anyone in the family get any medical advice, prescriptions or test results over the PHONE from a doctor, nurse, or anyone working with or for a medical doctor? <input type="checkbox"/> Yes <input type="checkbox"/> No (E2) b. Who was the phone call about? Mark "Phone call" box in person's column. c. Were there any calls about anyone else? <input type="checkbox"/> Yes (Reask 3b and c) <input type="checkbox"/> No Ask for each person with "Phone call" in 3b: d. How many telephone calls were made about ---?	3 b.	<input type="checkbox"/> Phone call d. <input type="text"/> Number of calls
E2	Add numbers in 1, 2d, and 3d for each person. Record total number of visits and calls in "2-WK. DV" box in item C1.		

FOOTNOTES

F. 2-WEEK DOCTOR VISITS PAGE		DR VISIT 1
Refer to C1, "2-Wk. DV" box.		PERSON NUMBER _____
F1 Refer to age.	F1	<input type="checkbox"/> Under 14 (1b) <input type="checkbox"/> 14 and over (1a)
1 a. On what (other) date(s) during those 2 weeks did --- see or talk to a medical doctor, nurse, or doctor's assistant? b. On what (other) date(s) during those 2 weeks did anyone see or talk to a medical doctor, nurse, or doctor's assistant about ---? <i>Ask after last DR visit column for this person:</i> c. Were there any other visits or calls for --- during that period? Make necessary correction to 2-Wk. DV box in C1.	1 a. and b. Month _____ Date _____ OR $\left\{ \begin{array}{l} 7777 \square \text{ Last week} \\ 8888 \square \text{ Week before} \end{array} \right.$ c. 1 <input type="checkbox"/> Yes (Reask 1a or b and c) 2 <input type="checkbox"/> No (Ask 2-6 for each visit)	
2. Where did --- receive health care on (date in 1), at a doctor's office, clinic, hospital, some other place, or was this a telephone call? <i>If doctor's office: Was this office in a hospital?</i> <i>If hospital: Was it the outpatient clinic or the emergency room?</i> <i>If clinic: Was it a hospital outpatient clinic, a company clinic, a public health clinic, or some other kind of clinic?</i> <i>If lab: Was this lab in a hospital?</i> What was done during this visit? (Footnote)	2. 01 <input type="checkbox"/> Telephone Not in hospital: 02 <input type="checkbox"/> Home 03 <input type="checkbox"/> Doctor's office 04 <input type="checkbox"/> Co. or ind. clinic 05 <input type="checkbox"/> Other clinic 06 <input type="checkbox"/> Lab 07 <input type="checkbox"/> Other (Specify) \checkmark Hospital: 08 <input type="checkbox"/> O.P. clinic 09 <input type="checkbox"/> Emergency room 10 <input type="checkbox"/> Doctor's office 11 <input type="checkbox"/> Lab 12 <input type="checkbox"/> Overnight patient(6) 88 <input type="checkbox"/> Other (Specify) \checkmark	
<i>Ask 3b if under 14.</i> 3 a. Did --- actually talk to a medical doctor? b. Did anyone actually talk to a medical doctor about ---? c. What type of medical person or assistant was talked to? d. Does the (entry in 3c) work with or for ONE doctor or MORE than one doctor? e. For this [visit/call] what kind of doctor was the (entry in 3c) working with or for --- a general practitioner or a specialist? f. Is that doctor a general practitioner or a specialist? g. What kind of specialist?	3 a. and b. 1 <input type="checkbox"/> Yes (3f) 2 <input type="checkbox"/> No (3c) 8 <input type="checkbox"/> DK if M.D. (3c) 9 <input type="checkbox"/> DK who was seen (3f) c. _____ Type 99 <input type="checkbox"/> DK d. 1 <input type="checkbox"/> One (3f) 2 <input type="checkbox"/> More 3 <input type="checkbox"/> None (4) 9 <input type="checkbox"/> DK e. and f. 1 <input type="checkbox"/> GP (4) 2 <input type="checkbox"/> Specialist (3g) 9 <input type="checkbox"/> DK (4) g. _____ Kind of specialist	
<i>Ask 4b if under 14.</i> 4 a. For what condition did --- see or talk to the [doctor/(entry in 3c)] on (date in 1)? Mark first appropriate box. b. For what condition did anyone see or talk to the [doctor/(entry in 3c)] about --- on (date in 1)? Mark first appropriate box. c. Was a condition found as a result of the (test(s)/examination)? d. Was this (test/examination) because of a specific condition --- had? e. During the past 2 weeks was --- sick because of her pregnancy? f. What was the matter? g. During this (visit/call) was the [doctor/(entry in 3c)] talked to about any (other) condition? h. What was the condition?	4 a. and b. 1 <input type="checkbox"/> Condition (Item C2, THEN 4g) 2 <input type="checkbox"/> Pregnancy (4e) 3 <input type="checkbox"/> Test(s) or examination (4c) 8 <input type="checkbox"/> Other (Specify) \checkmark _____ (4g) c. <input type="checkbox"/> Yes (4h) <input type="checkbox"/> No d. <input type="checkbox"/> Yes (4h) <input type="checkbox"/> No (4g) e. <input type="checkbox"/> Yes <input type="checkbox"/> No (4g) f. _____ Condition (Item C2, THEN 4g) g. <input type="checkbox"/> Yes <input type="checkbox"/> No (5) h. <input type="checkbox"/> Pregnancy (4e) _____ Condition (Item C2, THEN 4g)	
<i>Mark box if "Telephone" in 2.</i> 5 a. Did --- have any kind of surgery or operation during this visit, including bone settings and stitches? b. What was the name of the surgery or operation? If name of operation not known, describe what was done. c. Was there any other surgery or operation during this visit?	5 a. 0 <input type="checkbox"/> Telephone in 2 (Next Dr. visit) 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (6) b. (1) _____ (2) _____ c. <input type="checkbox"/> Yes (Reask 5b and c) <input type="checkbox"/> No	
6. In what city (town), county, and State is the (place in 2) located? <i>Go to next DV if "Home" in 2.</i>	6. City/County _____ / _____ State/ZIP Code _____ / _____	

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G. HEALTH INDICATOR PAGE

<p>1a. During the 2-week period outlined in red on that calendar, has anyone in the family had an injury from an accident or other cause that you have not yet told me about? <input type="checkbox"/> Yes <input type="checkbox"/> No (2)</p> <p>b. Who was this? Mark "Injury" box in person's column.</p> <p>c. What was -- injury? Enter injury(ies) in person's column.</p> <p>d. Did anyone have any other injuries during that period? <input type="checkbox"/> Yes (Reask 1b, c, and d) <input type="checkbox"/> No</p> <p>Ask for each injury in 1c:</p> <p>e. As a result of the (injury in 1c) did --/anyone see or talk to a medical doctor or assistant (about --) or did -- cut down on -- usual activities for more than half of a day?</p>	<p>1b. <input type="checkbox"/> Injury</p> <p>c. _____ Injury</p> <p>e. <input type="checkbox"/> Yes (Enter injury in C2, THEN 1e for next injury) <input type="checkbox"/> No (1e for next injury)</p>
<p>2. During the past 12 months, (that is, since (12-month date) a year ago) ABOUT how many days did illness or injury keep -- in bed more than half of the day? (Include days while an overnight patient in a hospital.)</p>	<p>2. 000 <input type="checkbox"/> None _____ No. of days</p>
<p>3a. During the past 12 months, ABOUT how many times did --/anyone see or talk to a medical doctor or assistant (about --)? (Do not count doctors seen while an overnight patient in a hospital.) (Include the (number in 2-WK DV box) visit(s) you already told me about.)</p> <p>b. About how long has it been since --/anyone last saw or talked to a medical doctor or assistant (about --)? Include doctors seen while a patient in a hospital.</p>	<p>3a. 000 <input type="checkbox"/> None (3b) 000 <input type="checkbox"/> Only when overnight patient in hospital } (NP) _____ No. of visits</p> <p>b. 1 <input type="checkbox"/> Interview week (Reask 3b) 2 <input type="checkbox"/> Less than 1 yr. (Reask 3a) 3 <input type="checkbox"/> 1 yr., less than 2 yrs. 4 <input type="checkbox"/> 2 yrs., less than 5 yrs. 5 <input type="checkbox"/> 5 yrs. or more 0 <input type="checkbox"/> Never</p>
<p>4. Would you say -- health in general is excellent, very good, good, fair, or poor?</p>	<p>4. 1 <input type="checkbox"/> Excellent 4 <input type="checkbox"/> Fair 2 <input type="checkbox"/> Very good 5 <input type="checkbox"/> Poor 3 <input type="checkbox"/> Good</p>
<p>Mark box if under 18. 5a. About how tall is -- without shoes?</p> <p>b. About how much does -- weigh without shoes?</p>	<p>5a. <input type="checkbox"/> Under 18 (NP) _____ Feet _____ Inches</p> <p>b. _____ Pounds</p>
<p>FOOTNOTES</p>	

FORM HIS-1 (1989) (2-21-89)

H. CONDITION LISTS 1 AND 2

Read to respondent(s) and ask list specified in A2:
 Now I am going to read a list of medical conditions. Tell me if anyone in the family has had any of these conditions, even if you have mentioned them before.

<p>1</p> <p>1a. Does anyone in the family {read names} NOW HAVE — <i>If "Yes," ask 1b and c.</i></p> <p>b. Who is this?</p> <p>c. Does anyone else NOW have — <i>Enter condition and letter in appropriate person's column.</i></p> <hr/> <p>A. PERMANENT stiffness or any deformity of the foot, leg, fingers, arm, or back? (Permanent stiffness — joints will not move at all.)</p> <hr/> <p>B. Paralysis of any kind?</p> <hr/> <p>1d. DURING THE PAST 12 MONTHS, did anyone in the family have — <i>If "Yes," ask 1e and f.</i></p> <p>e. Who was this?</p> <p>f. DURING THE PAST 12 MONTHS, did anyone else have — <i>Enter condition and letter in appropriate person's column.</i> <i>C—L are conditions affecting the bone and muscle.</i> <i>M—W are conditions affecting the skin.</i></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:30%; padding: 2px;">C. Arthritis of any kind or rheumatism?</td> <td style="width:10%; text-align: center; padding: 2px;"><i>Reask 1d</i></td> <td style="width:60%; padding: 2px;">M. A tumor, cyst, or growth of the skin?</td> </tr> <tr> <td style="padding: 2px;">D. Gout?</td> <td></td> <td style="padding: 2px;">N. Skin cancer?</td> </tr> <tr> <td style="padding: 2px;">E. Lumbago?</td> <td></td> <td style="padding: 2px;">O. Eczema or Psoriasis? (ek'se-ma) or (so-rye'uh-sis)</td> </tr> <tr> <td style="padding: 2px;">F. Sciatica?</td> <td></td> <td style="padding: 2px;">P. TROUBLE with dry or itching skin?</td> </tr> <tr> <td style="padding: 2px;">G. A bone cyst or bone spur?</td> <td></td> <td style="padding: 2px;">Q. TROUBLE with acne?</td> </tr> <tr> <td style="padding: 2px;">H. Any other disease of the bone or cartilage?</td> <td></td> <td style="padding: 2px;">R. A skin ulcer?</td> </tr> <tr> <td style="padding: 2px;">I. A slipped or ruptured disc?</td> <td></td> <td style="padding: 2px;">S. Any kind of skin allergy?</td> </tr> <tr> <td style="padding: 2px;">J. REPEATED trouble with neck, back, or spine?</td> <td></td> <td style="padding: 2px;">T. Dermatitis or any other skin trouble?</td> </tr> <tr> <td style="padding: 2px;">K. Bursitis?</td> <td></td> <td style="padding: 2px;">U. TROUBLE with ingrown toenails or fingernails?</td> </tr> <tr> <td style="padding: 2px;">L. Any disease of the muscles or tendons?</td> <td></td> <td style="padding: 2px;">V. TROUBLE with bunions, corns, or calluses?</td> </tr> <tr> <td></td> <td></td> <td style="padding: 2px;">W. Any disease of the hair or scalp?</td> </tr> </table>	C. Arthritis of any kind or rheumatism?	<i>Reask 1d</i>	M. A tumor, cyst, or growth of the skin?	D. Gout?		N. Skin cancer?	E. Lumbago?		O. Eczema or Psoriasis? (ek'se-ma) or (so-rye'uh-sis)	F. Sciatica?		P. TROUBLE with dry or itching skin?	G. A bone cyst or bone spur?		Q. TROUBLE with acne?	H. Any other disease of the bone or cartilage?		R. A skin ulcer?	I. A slipped or ruptured disc?		S. Any kind of skin allergy?	J. REPEATED trouble with neck, back, or spine?		T. Dermatitis or any other skin trouble?	K. Bursitis?		U. TROUBLE with ingrown toenails or fingernails?	L. Any disease of the muscles or tendons?		V. TROUBLE with bunions, corns, or calluses?			W. Any disease of the hair or scalp?	<p>2</p> <p>2a. Does anyone in the family {read names} NOW HAVE — <i>If "Yes," ask 2b and c.</i></p> <p>b. Who is this?</p> <p>c. Does anyone else NOW have — <i>Enter condition and letter in appropriate person's column.</i> <i>A—L are conditions affecting</i> { Hearing Vision Speech } <i>Conditions M—AA are impairments.</i></p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:30%; padding: 2px;">A. Deafness in one or both ears?</td> <td style="width:10%; text-align: center; padding: 2px;"><i>Reask 2a</i></td> <td style="width:60%; padding: 2px;">O. A missing joint?</td> </tr> <tr> <td style="padding: 2px;">B. 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FORM HIS-1 (1989) (3-21-89)

H. CONDITION LISTS 5 AND 6

Read to respondent(s) and ask list specified in A2.
 Now I am going to read a list of medical conditions. Tell me if anyone in the family has had any of these conditions, even if you have mentioned them before.

<p>5</p> <p>5a. Has anyone in the family <i>(read names)</i> EVER had — If "Yes," ask 5b and c.</p> <p>b. Who was this?</p> <p>c. Has anyone else EVER had — Enter condition and letter in appropriate person's column. Conditions affecting the heart and circulatory system.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 50%; padding: 2px;">A. Rheumatic fever?</td> <td style="width: 50%; padding: 2px;">G. A stroke or a cerebrovascular accident? (ser'a-bro vas ku-lar)</td> </tr> <tr> <td style="padding: 2px;">B. Rheumatic heart disease?</td> <td style="padding: 2px;">H. A hemorrhage of the brain?</td> </tr> <tr> <td style="padding: 2px;">C. Hardening of the arteries or arteriosclerosis?</td> <td style="padding: 2px;">I. Angina pectoris? (pek'to-ria)</td> </tr> <tr> <td style="padding: 2px;">D. Congenital heart disease?</td> <td style="padding: 2px;">J. A myocardial infarction?</td> </tr> <tr> <td style="padding: 2px;">E. Coronary heart disease?</td> <td style="padding: 2px;">K. Any other heart attack?</td> </tr> </table> <p>5d. DURING THE PAST 12 MONTHS, did anyone in the family have — If "Yes," ask 5e and f.</p> <p>e. Who was this?</p> <p>f. DURING THE PAST 12 MONTHS, did anyone else have — Enter condition and letter in appropriate person's column. Conditions affecting the heart and circulatory system.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 50%; padding: 2px;">L. Damaged heart valves?</td> <td style="width: 50%; padding: 2px;">Q. Any blood clots?</td> </tr> <tr> <td style="padding: 2px;">M. Tachycardia or rapid heart?</td> <td style="padding: 2px;">R. Varicose veins?</td> </tr> <tr> <td style="padding: 2px;">N. A heart murmur?</td> <td style="padding: 2px;">S. Hemorrhoids or piles?</td> </tr> <tr> <td style="padding: 2px;">O. Any other heart trouble?</td> <td style="padding: 2px;">T. 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DURING THE PAST 12 MONTHS, did anyone else have — Enter condition and letter in appropriate person's column. Make no entry in item C2 for cold; flu; red, sore, or strep throat; or "virus" even if reported in this list. Conditions affecting the respiratory system.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 50%; padding: 2px;">A. Bronchitis?</td> <td style="width: 50%; padding: 2px;">Reask 6a. K. A missing lung?</td> </tr> <tr> <td style="padding: 2px;">B. Asthma?</td> <td style="padding: 2px;">L. Lung cancer?</td> </tr> <tr> <td style="padding: 2px;">C. Hay fever?</td> <td style="padding: 2px;">M. Emphysema?</td> </tr> <tr> <td style="padding: 2px;">D. Sinus trouble?</td> <td style="padding: 2px;">N. Pleurisy?</td> </tr> <tr> <td style="padding: 2px;">E. A nasal polyp?</td> <td style="padding: 2px;">O. Tuberculosis?</td> </tr> <tr> <td style="padding: 2px;">F. A deflected or deviated nasal septum?</td> <td style="padding: 2px;">P. Any other work-related respiratory condition, such as dust on the lungs, silicosis, asbestosis, or pneu-mo-co-ni-o-sis?</td> </tr> <tr> <td style="padding: 2px;">G. *Tonsillitis or enlargement of the tonsils or adenoids?</td> <td style="padding: 2px;">Q. During the past 12 months did anyone (else) in the family have any other respiratory, lung, or pulmonary condition? If "Yes," ask: Who was this? — What was the condition? Enter in item C2, THEN reask Q.</td> </tr> <tr> <td style="padding: 2px;">H. *Laryngitis?</td> <td></td> </tr> <tr> <td style="padding: 2px;">I. A tumor or growth of the throat, larynx, or trachea?</td> <td></td> </tr> <tr> <td style="padding: 2px;">J. A tumor or growth of the bronchial tube or lung?</td> <td></td> </tr> </table> <p><i>*If reported in this list only, ask:</i></p> <p>1. How many times did — have <i>(condition)</i> in the past 12 months? If 2 or more times, enter condition in item C2. If only 1 time, ask:</p> <p>2. How long did it last? If 1 month or longer, enter in item C2. If less than 1 month, do not record.</p> <p>If tonsils or adenoids were removed during past 12 months, enter the condition causing removal in item C2.</p>	A. Bronchitis?	Reask 6a. K. A missing lung?	B. Asthma?	L. Lung cancer?	C. Hay fever?	M. Emphysema?	D. Sinus trouble?	N. Pleurisy?	E. A nasal polyp?	O. Tuberculosis?	F. A deflected or deviated nasal septum?	P. Any other work-related respiratory condition, such as dust on the lungs, silicosis, asbestosis, or pneu-mo-co-ni-o-sis?	G. *Tonsillitis or enlargement of the tonsils or adenoids?	Q. During the past 12 months did anyone (else) in the family have any other respiratory, lung, or pulmonary condition? If "Yes," ask: Who was this? — What was the condition? Enter in item C2, THEN reask Q.	H. *Laryngitis?		I. A tumor or growth of the throat, larynx, or trachea?		J. 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FORM HS-1 (1988) (2-21-88)

J. HOSPITAL PAGE		HOSPITAL STAY 1		
1. Refer to C1, "HOSP." box.		1. PERSON NUMBER _____		
2. You said earlier that — was a patient in the hospital since (1.3-month hospital date) a year ago. On what date did — enter the hospital ([the last time/the time before that])? Record each entry date in a separate Hospital Stay column.		Month	Date	Year 19 ____
3. How many nights was — in the hospital?		3. 0000 <input type="checkbox"/> None (Next HS) _____ Nights		
4. For what condition did — enter the hospital? <ul style="list-style-type: none"> • For delivery ask: Was this a normal delivery? If "No," ask: What was the matter? • For newborn ask: Was the baby normal at birth? If "No," ask: What was the matter? • For initial "No condition" ask: Why did — enter the hospital? • For tests, ask: What were the results of the tests? If no results, ask: Why were the tests performed? 		4. <ul style="list-style-type: none"> 1 <input type="checkbox"/> Normal delivery 2 <input type="checkbox"/> Normal at birth 3 <input type="checkbox"/> No condition <input type="checkbox"/> Condition \bar{z} 		
J1	Refer to questions 2, 3, and 2-week reference period.	J1		
5a. Did — have any kind of surgery or operation during this stay in the hospital, including bone settings and stitches?		5a. 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (6)		
b. What was the name of the surgery or operation? If name of operation not known, describe what was done.		b. (1) _____ (2) _____ (3) _____		
c. Was there any other surgery or operation during this stay?		c. <input type="checkbox"/> Yes (Reask 5b and c) <input type="checkbox"/> No		
6. What is the name and address of this hospital?		6. Name _____ Number and street _____ City or County State		
FOOTNOTES				

FORM HIS-1 (1989) (3-21-89)

CONDITION 1	PERSON NO. _____																				
1. Name of condition																					
Mark "2-wk. ref. pd." box without asking if "DV" or "HS" in C2 as source.																					
2. When did [---/anyone] last see or talk to a doctor or assistant about --- (condition)?																					
<input type="checkbox"/> Interview week (Reask 2) <input type="checkbox"/> 2-wk. ref. pd. <input type="checkbox"/> Over 2 weeks, less than 6 mos. <input type="checkbox"/> 6 mos., less than 1 yr. <input type="checkbox"/> 1 yr., less than 2 yrs.	<input type="checkbox"/> 2 yrs., less than 5 yrs. <input type="checkbox"/> 5 yrs. or more <input type="checkbox"/> Dr. seen, DK when <input type="checkbox"/> DK if Dr. seen <input type="checkbox"/> Dr. never seen } (3b)																				
3a. (Earlier you told me about --- (condition) Did the doctor or assistant call the (condition) by a more technical or specific name?																					
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK																					
Ask 3b if "Yes" in 3a, otherwise transcribe condition name from item 1 without asking:																					
b. What did he or she call it? _____ (Specify)																					
<input type="checkbox"/> Color Blindness (NC) <input type="checkbox"/> Normal pregnancy, normal delivery, vasectomy } (5)	<input type="checkbox"/> Cancer (3e) <input type="checkbox"/> Old age (NC) <input type="checkbox"/> Other (3c)																				
c. What was the cause of --- (condition in 3b)? (Specify) ↴																					
Mark box if accident or injury. <input type="checkbox"/> Accident/injury (5) d. Did the (condition in 3b) result from an accident or injury? <input type="checkbox"/> Yes (5) <input type="checkbox"/> No																					
Ask 3e if the condition name in 3b includes any of the following words:																					
<table border="0" style="width: 100%;"> <tr> <td>Allment</td> <td>Cancer</td> <td>Disease</td> <td>Problem</td> </tr> <tr> <td>Anemia</td> <td>Condition</td> <td>Disorder</td> <td>Rupture</td> </tr> <tr> <td>Asthma</td> <td>Cyst</td> <td>Growth</td> <td>Trouble</td> </tr> <tr> <td>Attack</td> <td>Defect</td> <td>Measles</td> <td>Tumor</td> </tr> <tr> <td>Bad</td> <td></td> <td></td> <td>Ulcer</td> </tr> </table>	Allment	Cancer	Disease	Problem	Anemia	Condition	Disorder	Rupture	Asthma	Cyst	Growth	Trouble	Attack	Defect	Measles	Tumor	Bad			Ulcer	
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e. What kind of (condition in 3b) is it? _____ (Specify)																					
Ask 3f only if allergy or stroke in 3b-e:																					
f. How does the [allergy/stroke] NOW affect ---? (Specify) ↴																					
For Stroke, fill remainder of this condition page for the first present effect. Enter in item C2 and complete a separate condition page for each additional present effect.																					

Ask 3g if there is an impairment (refer to Card CP2) or any of the following entries in 3b-f:

Abcess	Damage	Palsy
Ache (except head or ear)	Growth	Paralysis
Bleeding (except menstrual)	Hemorrhage	Rupture
Blood clot	Infection	Sore(ness)
Boll	Inflammation	Stiff(ness)
Cancer	Neuralgia	Tumor
Cramps (except menstrual)	Neuritis	Ulcer
Cyst	Pain	Varicose veins
		Weak(ness)

g. What part of the body is affected? _____ (Specify)

Show the following detail:

Head skull, scalp, face
 Back/spine/vertebrae upper, middle, lower
 Side left or right
 Ear inner or outer; left, right, or both
 Eye left, right, or both
 Arm shoulder, upper, elbow, lower or wrist; left, right, or both
 Hand entire hand or fingers only; left, right, or both
 Leg hip, upper, knee, lower, or ankle; left, right, or both
 Foot entire foot, arch, or toes only; left, right, or both

Except for eyes, ears, or internal organs, ask 3h if there are any of the following entries in 3b-f:

Infection	Sore	Soreness
-----------	------	----------

h. What part of the (part of body in 3b-g) is affected by the [infection/sore/soreness] — the skin, muscle, bone, or some other part?

(Specify) _____

Ask if there are any of the following entries in 3b-f:

Tumor	Cyst	Growth
-------	------	--------

4. Is this [tumor/cyst/growth] malignant or benign?

Malignant Benign DK

5. a. When was --- (condition in 3b/3f) first noticed?

2-wk. ref. pd.
 Over 2 weeks to 3 months
 Over 3 months to 1 year
 Over 1 year to 5 years
 Over 5 years

b. When did --- (name of injury in 3b)?

Ask probes as necessary:
 (Was it on or since (first date of 2-week ref. period) or was it before that date?)
 (Was it less than 3 months or more than 3 months ago?)
 (Was it less than 1 year or more than 1 year ago?)
 (Was it less than 5 years or more than 5 years ago?)

K1 Refer to RD and C2.
 1 "Yes" in "RD" box AND more than 1 condition in C2 (6)
 8 Other (K2)

6a. During the 2 weeks outlined in red on that calendar, did --- (condition) cause --- to cut down on the things --- usually does?
 Yes No (K2)

b. During that period, how many days did --- cut down for more than half of the day?
 00 None (K2) _____ Days

7. During those 2 weeks, how many days did --- stay in bed for more than half of the day because of this condition?
 00 None _____ Days

Ask if "Wa/Wb" box marked in C1:
 8. During those 2 weeks, how many days did --- miss more than half of the day from --- job or business because of this condition?
 00 None _____ Days

Ask if age 5-17:
 9. During those 2 weeks, how many days did --- miss more than half of the day from school because of this condition?
 00 None _____ Days

K2 Condition has "CL LTR" in C2 as source (10)
 Condition does not have "CL LTR" in C2 as source (K4)

10. About how many days since (12-month date) a year ago, has this condition kept --- in bed more than half of the day? (Include days while an overnight patient in a hospital.)
 000 None _____ Days

11. Was --- ever hospitalized for --- (condition in 3b)?
 1 Yes 2 No

K3 Missing extremity or organ (K4)
 Other (12)

12a. Does --- still have this condition?
 1 Yes (K4) No

b. Is this condition completely cured or is it under control?
 2 Cured 8 Other (Specify) _____ (K4)
 3 Under control (K4)

c. About how long did --- have this condition before it was cured?
 000 Less than 1 month OR Number { 1 Months
 2 Years

d. Was this condition present at any time during the past 12 months?
 1 Yes 2 No

K4 0 Not an accident/injury (NC)
 1 First accident/injury for this person (14)
 8 Other (13)

13. Is this (condition in 3b) the result of the same accident you already told me about?
 Yes (Record condition page number where accident questions first completed.) → _____ (NC) Page No.
 No

14. Where did the accident happen?
 1 At home (inside house)
 2 At home (adjacent premises)
 3 Street and highway (includes roadway and public sidewalk)
 4 Farm
 5 Industrial place (includes premises)
 6 School (includes premises)
 7 Place of recreation and sports, except at school
 8 Other (Specify) _____

Mark box if under 18. Under 18 (16)
 15a. Was --- under 18 when the accident happened?
 1 Yes (16) No

b. Was --- in the Armed Forces when the accident happened?
 2 Yes (16) No

c. Was --- at work at --- job or business when the accident happened?
 3 Yes 4 No

16a. Was a car, truck, bus, or other motor vehicle involved in the accident in any way?
 1 Yes 2 No (17)

b. Was more than one vehicle involved?
 1 Yes 2 No

c. Was [it/either one] moving at the time?
 1 Yes 2 No

17a. At the time of the accident what part of the body was hurt? What kind of injury was it? Anything else?

Part(s) of body *	Kind of injury

Ask if box 3, 4, or 5 marked in Q.5:
 b. What part of the body is affected now? How is --- (part of body) affected? Is --- affected in any other way?

Part(s) of body *	Present effects **

* Enter part of body in same detail as for 3g.
 ** If multiple present effects, enter in C2 each one that is not the same as 3b or C2 and complete a separate condition page for it.

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For answers to questions about this report or for a list of reports published in these series, contact:

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