# Health Characteristics by Geographic Region, Large Metropolitan Areas, and Other Places of Residence 

United States, 1973-74

Statistics on chronic activity limitation, disability days, acute conditions, persons injured, short-stay hospital discharges, and physician and dental visits, by geographic region, large metropolitan areas, and other places of residence. Based on data collected in health interviews during 1973 and 1974. Also comparisons of the above statistics with similar data collected in 1963-65 and 1969-70.

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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 Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

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## SYMBOLS



# HEALTH CHARACTERISTICS BY GEOGRAPHIC REGION, LARGE METROPOLITAN AREAS, AND OTHER PLACES OF RESIDENCE 

Augustine Gentile ${ }^{1}$

## INTRODUCTION

This report contains estimates for selected health characteristics on which data were collected in the Health Interview Survey during 1973 and 1974. The characteristics presented include activity limitation due to chronic disease; restricted-activity days, bed days, and work-loss days; incidence of acute conditions and persons injured; short-stay hospitalization; and physician and dental visits.

Information is given for the four geographic regions of the country. Estimates are shown for the Nation and within each region for persons residing inside and outside of standard metropolitan statistical areas (SMSA's). Within these major residential areas, data are provided for persons living in the central city of an SMSA and for those living outside the central city. For persons living outside SMSA's, the data are presented according to residence in farm and nonfarm areas. Data are also presented for each of the eight largest SMSA's in the Nation. Definitions of the geographic regions and SMSA's can be found in appendix II.

Earlier reports from the Health Interview Survey contain similar data based on information collected during 1963-65 and for 1969-70 (Series 10, No. 36 and Series 10, No. 86, respectively, in the Vital and Health Statistics series).

[^0]Comparison of data collected during 1973-74 with data collected in the earlier surveys is presented in the final section of this report.

The following statements summarize, by region and place of residence, some of the 197374 data shown in this report.

## Geographic Region

Northeast Region.-In the Northeast Region the rate for average number of dental visits per person per year was above the national average. Below the national average were the rates for chronic activity limitation, restricted-activity days, bed days, acute conditions, and discharges from short-stay hospitals. In this region, rates of the other health characteristics on which data are presented in this report were found to be similar to the national average.

North Central Region.-In the North Central Region the rates of acute conditions and discharges from short-stay hospitals were found to be above the national average. The rates for chronic activity limitation, restricted-activity days, and bed days were below the national average. Rates for the remaining health characteristics were similar to the national average.

South Region.-These data indicate that in the South Region the rates for chronic activity limitation, restricted-activity days, bed days, and discharges from short-stay hospitals were above the national average. The rates for physician and dental visits and for the proportion of the population who had seen a dentist in the past year were below the national average. For the
remaining health characteristics the rates were near the national average.

West Region.-The rates in the West Region were above the national average for restrictedactivity days, acute conditions, physician visits, and dental visits. In this region only the rate for discharges from short-stay hospitals was found to be below the national average. The rates of the other characteristics were close to the national average.

## Place of Residence

Central cities of SMSA's.-The rates for chronic activity limitation, restricted-activity days, bed days, work-loss days, and physician visits were above the national average among persons living in the central city portions of SMSA's. For the remaining health characteristics, the rates in this place of residence category were all at or near the national average.

Outside central cities of SMSA's.--Among persons living in this place of residence category, the rates for acute conditions, physician visits, and dental visits and for the proportion of the population who had seen a dentist in the past year were above the national average. Rates were below the national average for chronic activity limitation, restricted-activity days, bed days, and discharges from short-stay hospitals. The other rates were similar to the national average.

Nonfarm areas outside $S M S A$ 's.-Among persons living in these areas the rates were above the national average for chronic activity limitation and discharges from short-stay hospitals. The rates for physician visits and dental visits and for the proportion of the population who had seen a dentist in the past year were below the national average, and the rates for the other health characteristics were close to the national average.

Farm areas.-The only rate above the national average was for chronic activity limitation. The rates for restricted-activity days, bed days, work-loss days, acute conditions, physician visits, and dental visits were all below the national average. For persons injured and discharges from short-stay hospitals the rates among residents of farm areas were near the national average.

## SOURCES AND LIMITATIONS OF THE DATA

The information from the Health Interview Survey (HIS) presented in this report is based on data collected in a continuing nationwide survey conducted by household interview. Each week a probability sample of households is interviewed by personnel of the U.S. Bureau of the Census to obtain information about the health and other characteristics of each member of the household in the civilian noninstitutionalized population of the United States. During the 52 weeks in 1973 the sample was composed of approximately 42,000 households containing about 125,000 persons living at the time of the interview. In 1974 the sample included 41,000 households containing about 120,000 persons. The data presented in this report are based on about 237,000 persons living in approximately 81,000 interviewed households. The estimates are presented as average annual figures for the period 1973-74.

A description of the design of the survey, the methods used in estimation, and general qualifications of the data obtained from this survey is presented in appendix I. Since the estimates shown in this report are based on a sample of the population, they are subject to sampling error. Therefore, particular attention should be paid to the section of appendix I entitled "Reliability of Estimates." Sampling errors for most of the estimates are of relatively low magnitude. However, where an estimated number or the numerator or denominator of a rate or percentage is small, the sampling error may be high. Charts of relative sampling errors and instructions for their use are shown in appendix I.

Some of the estimates included in the tables shown in this report have levels of reliability which are below the standards usually required for publication. In order that the data user may combine cells to suit his particular purpose, it was decided to include the frequencies, rates, and percentages for cells usually covered by an asterisk. In this report the asterisk is inserted in front of a figure to indicate that it does not meet the usual standards of reliability for publication in HIS reports (that is, it has more than

30 -percent relative standard error). Figures with an asterisk should be used only to combine with quantities in other cells and not as the basis for independent estimates of incidence or prevalence.

Certain terms used in this report are defined in appendix II. Since many of these terms have specialized meanings for the purposes of this survey, familiarity with these definitions will assist in the interpretation of the data presented in this report. Of particular importance is the definition of the eight large metropolitan areas for which estimates are presented. The boundaries of these areas are defined as they were for the 1970 decennial census.

The questionnaires and other interviewing devices used during 1973 and 1974 are illustrated in Current Estimates reports in the Vital and Heàlth Statistics series: Series 10, No. 95 for 1973 and Series 10, No. 100 for 1974.

## Distribution of the Population

Table A shows the percent distribution by age for the United States and for the four geographic regions according to the place of residence categories discussed in this text. The distribution of persons by age and place of residence shows many variations between and within geographic regions which may influence rates for health characteristics. Rates for persons with limitation of activity, for example, are much higher for older persons; therefore, these rates will be higher than average in a geographic area or a place of residence category that has a larger than usual proportion of older persons. It is also known that other variables (for example, sex, race, income, education, and availability or accessibility to medical practitioners and hospitals) influence rates for health characteristics. While it is beyond the scope of this report to take into account any of these factors, it must be noted that the distribution of persons according to these variables accounts for many of the differences in the rates of health characteristics shown in the data.

Table B shows the percent of persons who live in each of the regions and place of residence categories discussed in the following sections. These percents reflect the large differences in the actual number of persons living in particular
regions or place of residence categories. Differences in distribution of the population are important to remember because differences in the actual number of occurrences of a health characteristic (shown in the detailed tables) are not reflected in the text tables, which show the relative number of times that a health characteristic occurred in a segment of the population. It may be important to know, for example, that while the proportion of persons with activity limitation among those living in farm areas (15.9 percent) does not appear to be a great deal different from the proportion of persons with activity limitation among persons living in central cities of SMSA's ( 14.4 percent), the actual number of persons with activity limitation living in farm areas is only about 1.2 million, compared to about 9 million persons with activity limitation living in central cities of SMSA's.

## Use of Crude Rates

In the two earlier survey reports dealing with the variables presented in this report, ageadjusted as well as actual (crude) rates were presented. In most cases a comparison of the ageadjusted and unadjusted rates for the two earlier time periods and also for the current survey period reveals little or no difference in the two sets of rates. Consequently, to simplify this discussion only the unadjusted, or crude, rates are presented here.

## Data on Particular SMSA's

As in the previous report on this topic, data are presented in the detailed tables for the following large SMSA's: Boston, Philadelphia, Detroit, Los Angeles, San Francisco, and Washington, D.C. Data are also presented for the two consolidated areas of New York and Chicago. The presentation of individual SMSA's is restricted to these eight large cities because the total number of interviews conducted in each of these cities is based on the work of more than one interviewer-ordinarily, in other SMSA's it is not. The data for these eight SMSA's and consolidated areas are not discussed in the text.

Again, the reader is urged to consult appendix II for definitions and criteria used in defining these SMSA's. The case of Los Angeles

Table A. Total population and percent distribution of persons in the population by age, according to geographic region and place of residence: United States, 1973-74

| Geographic region and place of residence | Total population in thousands | Ali ages | Under 17 years | $\begin{aligned} & 17-44 \\ & \text { years } \end{aligned}$ | $45-64$ years | 65 <br> years and over |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States |  | Percent distribution |  |  |  |  |
| All places of residence | 206,573 | 100.0 | 30.7 | 38.7 | 20.7 | 9.9 |
| SMSA | 142,475 | 100.0 | 30.4 | 39.7 | 20.7 | 9.2 |
| Central city | 62,348 | 100.0 | 29.3 | 39.3 | 20.8 | 10.6 |
| Outside central city | 80,126 | 100.0 | 31.3 | 39.9 | 20.5 | 8.2 |
| Outside SMSA | 64,099 | 100.0 | 31.4 | 36.5 | 20.7 | 11.4 |
| Nonfarm | 56,711 | 100.0 | 31.6 | 37.2 | 19.8 | 11.4 |
| Farm | 7,388 | 100.0 | 30.2 | 31.0 | 27.3 | 11.5 |
| Northeast |  |  |  |  |  |  |
| All places of residence | 48,771 | 100.0 | 29.3 | 37.8 | 22.3 | 10.6 |
| SMSA | 39,243 | 100.0 | 28.9 | 38.1 | 22.6 | 10.5 |
| Central city | 16,095 | 100.0 | 27.7 | 37.9 | 22.0 | 12.3 |
| Outside central city | 23,148 | 100.0 | 29.7 | 38.2 | 22.9 | 9.2 |
| Outside SMSA | 9,528 | 100.0 | 31.0 | 36.7 | 21.1 | 11.3 |
| Nonfarm | 9,149 | 100.0 | 37.0 | 36.8 | 21.1 | 11.2 |
| Farm | 378 | 100.0 | 31.7 | 34.9 | 20.6 | 13.0 |
| North Central |  |  |  |  |  |  |
| All places of residence | 56,373 | 100.0 | 31.1 | 38.5 | 20.2 | 10.2 |
| SMSA | 37,676 | 100.0 | 31.4 | 39.6 | 20.0 | 9.0 |
| Central city | 16,155 | 100.0 | 30.2 | 39.0 | 20.2 | 10.7 |
| Outside central city | 21,521 | 100.0 | 32.3 | 40.1 | 19.8 | 7.8 |
| Outside SMSA | 18,697 | 100.0 | 30.6 | 36.2 | 20.6 | 12.5 |
| Nonfarm | 15,231 | 100.0 | 30.1 | 37.4 | 19.3 | 13.2 |
| Farm | 3,466 | 100.0 | 32.8 | 30.8 | 26.7 | 9.7 |
| South |  |  |  |  |  |  |
| All places of residence | 65,161 | 100.0 | 31.3 | 38.7 | 20.3 | 9.7 |
| SMSA | 37,051 | 100.0 | 31.1 | 40.3 | 20.1 | 8.5 |
| Central city | 18,184 | 100.0 | 30.4 | 39.4 | 20.8 | 9.4 |
| Outside central city | 18,868 | 100.0 | 31.8 | 41.1 | 19.4 | 7.7 |
| Outside SMSA | 28,110 | 100.0 | 31.6 | 36.7 | 20.6 | 11.1 |
| Nonfarm | 25,208 | 100.0 | 32.2 | 37.4 | 19.6 | 10.8 |
| Farm | 2,902 | 100.0 | 26.5 | 30.6 | 28.9 | 13.9 |
| West |  |  |  |  |  |  |
| All places of residence | 36,268 | 100.0 | 30.9 | 40.1 | 19.9 | 9.0 |
| SMSA | 28,504 | 100.0 | 30.3 | 41.2 | 19.8 | 8.7 |
| Central city | 11,915 | 100.0 | 28.3 | 41.6 | 20.2 | 9.9 |
| Outside central city | 16,590 | 100.0 | 31.7 | 40.9 | 19.5 | 7.9 |
| Outside SMSA | 7,764 | 100.0 | 33.2 | 36.2 | 20.6 | 10.1 |
| Nonfarm | 7,122 | 100.0 | 33.4 | 36.6 | 19.9 | 10.1 |
| Farm | 642 | 100.0 | 31.3 | 31.2 | 27.7 | 9.7 |

Table B. Percent distributions of persons in the total population by place of residence and geographic region: United States, 1973-74

| Geographic region |
| :--- |

should be noted in particular, since the boundaries of this SMSA were defined differently for the previous reports on this topic than they were in the survey which produced the data shown here. Appendix II should also be consulted for a list of the States included in the four geographic regions and for definitions of the terms "central city," "farm," and "nonfarm."

## DISABILITY

Disability is measured in HIS in two forms, long-term and short-term disability. Long-term disability is associated with chronic diseases or impairments and is referred to as "chronic activity limitation." It describes an individual's ability to perform the normal activities of persons in a particular age, sex, or work status group. Short-term disability is associated with episodes of illnesses and injuries and is described in terms of disability days. Days of disability are further classified as restricted-activity days, bed days, and work-loss days. A more complete description and definition of these terms may be found in appendix II.

## Chronic Activity Limitation

For each person reported in HIS as having a chronic condition, the respondent was asked to indicate his ability in terms of health to carry on various activities. On the basis of the response to these questions persons are classified as: unable to carry on major activity, limited in amount or kind of major activity, not limited in major activity but otherwise limited, and not limited in activities. In order to reduce sampling
error, the three categories of activity limitation have been consolidated in this report, and the statistics are presented in terms of persons with or without chronic activity limitation.

The number and percent of persons with and without chronic activity limitation by age, geographic region, and place of residence are presented in tables 1-3. During the 2 -year period 1973-74 there were about 28.5 million persons annually ( 13.8 percent of the total population) who were classified as having chronic limitation of activity. Table C shows the percent of persons with chronic activity limitation by geographic region and selected places of residence. These estimates show that for all places of residence the percents for the South and West Regions are higher than those of the other two regions. The high rate for the South Region appears to be due io the relatively high rate in areas outside SMSA's, while the high rate for the West Region is apparently the result of high rates for this region in both SMSA place of residence categories. For all regions combined there is a higher percent of persons with chronic activity limitation living outside SMSA's, in both nonfarm and farm areas, than for persons who live in SMSA areas.

## Disability Days

Tables 4,5 , and 6 contain estimates for three types of disability days: restricted-activity days, bed days, and work-loss days. A day of restricted activity is defined as a day on which a person reduces his normal activities for the entire day because of illness or injury; a bed day is a day on which a person stays in bed for all or

Table C. Percent of persons with limitation of activity due to chronic conditions, by place of residence and geographic region:

|  | Geographic region | All places of residence | SMSA |  | Outside SMSA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Central city | Outside central city | Nonfarm | Farm |
|  |  | Percent of persons |  |  |  |  |
| United States |  | 13.8 | 14.4 | 12.1 | 15.3 | 15.9 |
| Northeast |  | 13.3 | 14.9 | 11.6 | 14.8 | 13.0 |
| North Central |  | 13.2 | 13.9 | 11.5 | 14.8 | 14.0 |
| South |  | 14.5 | 13.9 | 12.3 | 16.1 | 19.1 |
| West |  | 14.1 | 15.2 | 13.3 | 14.3 | 14.2 |

most of the day or is confined to a hospital as an inpatient; and a work-loss day is a day on which a currently employed person is absent from his job or business for at least half of his normal workday. A bed day or work-loss day is by definition also a restricted-activity day. A disability day is counted only once for the person involved even though it may have resulted from more than one illness or injury. These terms are further defined in appendix II.

The average annual number of restrictedactivity days in the United States during 1973-74 was about 3.5 billion, a rate of 16.8 days per person per year. For bed days, the average annual number was about 1.4 billion, a rate of 6.5 days per person per year, and the number of work-loss days was a little over 400 million, a rate of 5.2 days per currently employed person per year.

A summarization of the data on disability days is presented in table D. With regard to region, these data show that for restricted-activity and bed days the rates for the South and West are generally similar and are higher than the rates for the other two regions. The rates for these two regions are also generally high in each of the place of residence categories. The one exception is the relatively lower rates for the West in nonfarm areas. The rates for work-loss days are not appreciably different for the four regions.

In relation to place of residence, the data in table D show that the rates for each of the types of disability days are highest for persons living in the central city portions of SMSA's and are lowest for persons living in farm areas outside SMSA's.

## Acute Conditions

The estimates presented on the incidence of acute illnesses and injuries include conditions which began during the 2 -week period prior to the week of interview and which received medical attention or resulted in restricted activity. Excluded are certain conditions and impairments which are always classified as chronic regardless of the date of onset. These conditions and impairments are listed in appendix II.

Data on acute conditions are shown in tables 7 and 8. The average annual incidence of acute conditions for the 2-year period 1973-74 was about 362 million, a rate of 175.4 conditions per 100 persons per year. ${ }^{2}$ The rates were 256.6 for persons under 17 years, 174.0 for persons $17-44$ years, and 95.6 per 100 persons 45 years of age and older.

Table E shows the average number of acute conditions per 100 persons per year by region and place of residence categories. According to these data acute conditions occurred most frequently among persons living in the West and least frequently among persons living in the Northeast. The rates for the West are higher than those of the other three regions for both of the SMSA categories. Rates for acute conditions are highest for persons living in SMSA areas but outside central cities.

[^1]Table D. Number of disability days per person per year, by place of residence and geographic region: United States, 1973-74

| Geographic region |  | Alllacesofresi-dence | SMSA |  | Outside SMSA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Central city | Outside central city | Nonfarm | Farm |
|  |  |  | Restricted-activity days per person per year |  |  |  |  |
| United States |  | 16.8 | 18.5 | 15.3 | 17.4 | 15.2 |
| Northeast |  | 14.5 | 17.3 | 12.9 | 14.1 | *7.0 |
| North Central |  | 15.9 | 17.3 | 15.0 | 16.4 | 13.0 |
| South |  | 18.6 | 19.0 | 16.4 | 19.9 | 18.6 |
| West |  | 18.3 | 21.1 | 17.9 | 14.7 | 17.3 |

Bed days per person per year

| United States | 6.5 | 7.7 | 5.8 | 6.5 | 4.6 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Northeast | 5.9 | 7.7 | 5.1 | 5.2 | *2.4 |
| North Central | 5.9 | 7.0 | 5.7 | 5.5 | 3.5 |
| South | 7.5 | 8.4 | 6.5 | 7.7 | 5.6 |
| West .. | 6.7 | 7.8 | 6.4 | 5.7 | 7.0 |


| 91* | Work-loss days per person per year ${ }^{1}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| United States | 5.2 | 5.8 | 4.9 | 5.0 | 4.0 |
| Northeast | 5.0 | 5.9 | 4.3 | 4.9 | *5.6 |
| North Central | 4.9 | 5.9 | 4.6 | 4.7 | 3.5 |
| South | 5.5 | 5.7 | 5.5 | 5.6 | 3.8 |
| West | 5.2 | 5.6 | 5.4 | 3.5 | *6.5 |

${ }^{1}$ Work-loss days are for the currently employed population aged 17 years and over.
NOTE: Numbers preceded by an asterisk have a relative standard error of more than 30 percent; estimates given solely for combining with other cells.

## Persons injured

During the 2 -year period 1973-74, on the average about 60 million persons were injured each year, a rate of 28.8 persons injured for each 100 persons in the population (tables 9 and 10). The estimates of persons injured are based on injuries that occurred during the 2 -week period prior to the week of interview. Only injuries that resulted in medical attention or caused restricted activity for 1 or more days are included. As is the case with all survey estimates, data on persons who died prior to the date of interview (whether due to injury or to other causes) are not included.

The data on persons injured by region and place of residence categories are presented in table $F$. These data indicate that the average number of persons injured per 100 persons does not differ greatly between regions and place of residence categories.

## USE OF MEDICAL SERVICES

Three general measures of utilization of health care services are presented in this report: discharges from short-stay hospitals, physician visits, and dental visits. The data on hospital discharges are further classified by whether or not the hospitalization was for delivery of a child and by whether or not the patient underwent surgery in the hospital, and the data for physician visits are classified according to the place of visit. In addition to the numbers and rates for physician and dental visits, the data also give estimates of the number of persons who visited a physician or dentist within a 1-year period.

## Discharges from Short-Stay Hospitals

In HIS information is obtained on all hospitalizations which occurred during the 12 -month period prior to the interview. Since information

Table E. Number of acute conditions per 100 persons per year, by place of residence and geographic region: United States, 1973-74

| Geographic region | All places of residence | SMSA |  | Outside SMSA |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Central city | Outside central city | Nonfarm | Farm |
|  | Acute conditions per 100 persons per year |  |  |  |  |
| United States | 175.4 | 174.0 | 183.5 | 169.6 | 144.4 |
| Northeast | 155.3 | 143.8 | 160.8 | 162.9 | 134.1 |
| North Central | 186.5 | 184.3 | 189.0 | 193.4 | 151.0 |
| South | 168.6 | 173.0 | 181.3 | 160.4 | 130.5 |
| West | 197.4 | 202.5 | 210.5 | 160.1 | 177.6 |

is collected only on persons living in the household at the time of interview, hospitalization data for former household members who died during the reference period are excluded. As a result the estimates of hospital discharges are understated for the general population. These underestimates are especially marked for persons over 65 years of age. (See Series 10, No. 30.)

During the period 1973-74, about 29 million persons were discharged from short-stay hospitals yearly, a rate of 140.5 per 1,000 persons (table 11). Information on hospitalizations including and excluding deliveries is shown in table 12. Hospital discharges are shown in table 13 by whether or not surgery was performed.

Table G is a summary of hospital discharge rates by geographic region and place of residence. The rates for the South Region (152.5 discharges per 1,000 persons per year) and the North Central Region (148.3 per 1,000 persons
per year) are at about the same level, and they are substantially higher than the rates for the West (128.7) and Northeast (124.2). The high rate for the South Region is primarily due to high rates for persons living outside of SMSA's ( 174.2 discharges per 1,000 persons per year for persons living in nonfarm areas and "151.6 per 1,000 for persons living in farm areas). For the North Central Region the high rate apparently is due to the high rates for persons living in the central city portions of SMSA's (152.7) and for those living outside SMSA's in nonfarm areas (166.0).

When the rates for all regions combined are examined, it may be seen that the rate of hospital discharges is greatest by far for persons living outside SMSA's in nonfarm areas (163.5 per 1,000 ) and lowest for persons living in SMSA's outside the central city (1127.1 per 1,000 ).

Table F. Number of persons injured per 100 persons per year, by place of residence and geographic region: United States, 1973-74

| Geographic region |  | All places of residence | SMSA |  | Outside SMSA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Central city | Outside central city | Nonfarm | Farm |
| United States |  |  | Persons injured per 100 persons per year |  |  |  |  |
|  |  | 28.8 | 28.1 | 30.8 | 27.5 | 24.3 |
| Northeast |  | 26.0 | 22.7 | 27.6 | 27.6 | *29.4 |
| North Central |  | 29.2 | 31.6 | 28.3 | 28.2 | 27.5 |
| South |  | 28.9 | 28.2 | 30.9 | 28.8 | 21.3 |
| West |  | 32.1 | 30.6 | 38.2 | 21.4 | *17.9 |

NOTE: Numbers preceded by an asterisk have a relative standard error of more than 30 percent; estimates given solely for combining with other cells.

Table G. Number of discharges from short-stay hospitals per 1,000 persons per year, by place of residence and geographic region: United States, 1973-74

| Geographic region | All places of residence | SMSA |  | Outside SMSA |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Central city | Outside central city | Nonfarm | Farm |
| United States | Discharges per 1,000 persons per year |  |  |  |  |
|  | 140.5 | 136.2 | 127.1 | 163.5 | 144.8 |
| Northeast | 124.2 | 129.3 | 112.0 | 146.4 | *111.1 |
| North Central | 148.3 | 152.7 | 133.2 | 166.0 | 142.8 |
| South | 152.5 | 135.7 | 139.8 | 174.2 | 151.6 |
| West | 128.7 | 123.7 | 125.6 | 142.5 | 144.9 |

NOTE: Numbers preceded by an asterisk have a relative standard error of more than 30 percent; estimates given solely for combining with other cells.

## Physician Visits

An average of a little over 1 billion physician visits were reported each year during 1973 and 1974. Physician visits are occasions when persons received advice or treatment from a doctor of medicine or osteopathy, his nurse, or some other authorized person. Telephone consultations are also defined as physician visits, but calls for appointments only and visits by doctors to hospital inpatients are not. The reported 1 billion physician visits is an average of 5.0 visits per year for each person in the civilian noninstitutionalized population (see tables 14 and 15).

The average numbers of physician visits per person per year by geographic region and place of residence are summarized in table H . The average number of physician visits per person per year is slightly higher in the West Region (5.4) than in the other three regions. Persons living in SMSA's had relatively more physician visits ( 5.3 for central cities and 5.2 for areas outside of central cities) than persons living outside SMSA's (4.5 for persons living in nonfarm areas and 3.9 for persons living in farm areas).

Another measure of the utilization of physician services is presented in table 16, which shows the proportion of persons in the population who had at least one physician visit during the 12 months prior to interview. With the exception of farm areas these data are remarkably consistent and show that for most of the age, region, and place of residence categories about 75 percent of the population had seen a physi-
cian within a year. In the farm areas the proportion is about 68 percent. (Also see table J.)

## Dental Visits

For each of the 2 years on which the data in this report are based, an average of about 338 million dental visits were reported. This represents about 1.6 dental visits per year for each person in the population included in the study. Detailed information on dental visits is presented in tables 17 and 18. It should be noted that the age group under 17 years includes children under 5 years of age, who are less likely to receive dental care. Also, the rates for persons 65 years of age and over may be lower than average because about one-half of these persons are edentulous and may therefore require less dental care.

The rates of dental visits per person per year shown in table K indicate that for the Northeast and West Regions the rates were at about the same level, 2.0 and 1.9 , respectively, and were higher than the rates for the North Central and South Regions, 1.6 and 1.3, respectively. The rates were highest for persons living in areas of SMSA's outside central cities (1.9). The rates were 1.6 for persons living in central city areas of SMSA's and 1.3 for persons living in both farm and nonfarm areas outside SMSA's.

There was considerably more variation between regions and place of residence categories for the proportion of persons who had at least

Table H. Number of physician visits per person per year, by place of residence and geographic region: United States, 1973-74

| Geographic region | All places of residence | SMSA |  | Outside SMSA |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Central city | Outside central city | Nonfarm | Farm |
|  | Physician visits per person per year |  |  |  |  |
| United States | 5.0 | 5.3 | 5.2 | 4.5 | 3.9 |
| Northeast | 5.0 | 5.5 | 4.9 | 4.4 | 3.4 |
| North Central | 4.9 | 5.1 | 5.2 | 4.5 | 3.7 |
| South | 4.8 | 4.8 | 5.0 | 4.6 | 4.1 |
| West | 5.4 | 5.8 | 5.6 | 4.4 | 4.8 |

one dental visit in the 12 months prior to interview than there was for the proportion of persons who had at least one physician visit during the year. (See table 18.)

Overall about half the population (49.1 percent) had one or more dental visits during the year. The data in table $L$ (taken from table 18) show that the proportion of persons with one or more dental visits during the year was lowest for persons living in the South Region. The rates for the other three regions are similar to each other. Regarding place of residence, the population living outside central city portions of SMSA's had the highest proportion of persons who had seen a dentist within 1 year.

## SUMMARY

In this discussion an attempt has been made to summarize and point out some highlights of the data contained in the tables presented in this report and to provide some qualifying and definitional information about the specific charac-
teristics. As indicated earlier, this report presents only the frequency and rate of occurrence of selected health characteristics as they were reported in the survey, and no effort has been made to determine or hypothesize the reasons for differences that can be observed in the data. Population estimates for all categories used'in this report appear in tables 19 and 20.

Table M represents an effort to provide a quick visual summary of the survey findings. The table shows for each region and place of residence category the relationship of the rate of occurrence of each health characteristic to the national rate in terms of whether it is above, below, or about the national average.

## DATA COMPARISONS OVER TIME

The National Center for Health Statistics has published data from the Health Interview Survey describing health characteristics of the population by geographic region and place of residence

Table J. Percent of the population with one or more physician visits within a year, by place of residence and geographic region: United States, 1973-74

| Geographic region | All places of residence | SMSA |  | Outside SMSA |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Central city | Outside central city | Nonfarm | Farm |
|  | Percent of persons |  |  |  |  |
| United States | 74.9 | 75.5 | 76.5 | 72.9 | 68.1 |
| Northeast | 76.0 | 76.7 | 76.5 | 74.1 | 64.8 |
| North Central | 74.8 | 74.9 | 76.7 | 73.7 | 67.9 |
| South | 74.1 | 74.5 | 76.8 | 72.4 | 68.7 |
| West | 75.2 | 76.3 | 76.0 | 71.8 | 68.8 |

Table K. Number of dental visits per person per year, by place of residence and geographic region: United States, 1973-74

| Geographic region |  | All places of residence | SMSA |  | Outside SMSA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Central city | Outside central city | Nonfarm | Farm |
| United States |  |  | Dental visits per person per year |  |  |  |  |
|  |  | 1.6 | 1.6 | 1.9 | 1.3 | 1.3 |
| Northeast |  | 2.0 | 2.0 | 2.1 | 1.6 | *1.8 |
| North Central |  | 1.6 | 1.5 | 1.8 | 1.4 | 1.4 |
| South |  | 1.3 | 1.3 | 1.6 | 1.1 | 1.0 |
| West |  | 1.9 | 1.9 | 2.1 | 1.6 | 1.4 |

NOTE: Numbers preceded by an asterisk have a relative standard error of more than $\mathbf{3 0}$ percent; estimates given solely for combining with other cells.
for two. earlier time periods, July 1963-June 1965 and the years 1969-70 (Series 10, Nos. 36 and 86). In this section comparisons of the data from the 1973-74 study with the data from the two previous studies are presented and discussed.

The health characteristics of the United States population over the $11 \frac{1}{2}$-year period (June 1963-December 1974) have been influenced by many factors; it is beyond the scope of this report to consider them with any degree of specificity. Some of the major factors that have influenced the estimates of health characteristics for the three survey periods are discussed in general terms to point out the caution that must be exercised in interpreting the data presented in this section.

In summary, this section brings together for the convenience of readers similar data collected over a long time period, but no attempt is made
to explain the causative factors for any particular patterns or changes that can be observed in the data.

## Factors That Affect Time Comparisons of Survey Data

Some of the major factors to consider in making time comparisons of the data presented here may be described in general terms as follows:

- Changes in survey methodology and definitions
- Demographic changes in the population
- Population mobility
- Changes in the definition of SMSA's
- The advent of Medicare and Medicaid

Table L. Percent of the population with one or more dental visits within a year, by place of residence and geographic region: United States, 1973-74

| Geographic region |  | All places of residence | SMSA |  | Outside SMSA |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Central city | Outside central city | Nonfarm | Farm |
|  |  |  | Percent of persons |  |  |  |  |
| United States |  | 49.1 | 47.1 | 54.7 | 43.9 | 44.9 |
| Northeast |  | 53.6 | 48.8 | 58.2 | 50.7 | 50.5 |
| North Central |  | 50.7 | 47.2 | 55.9 | 46.9 | 50.9 |
| South |  | 43.4 | 42.6 | 50.3 | 39.5 | 37.7 |
| West |  | 50.7 | 51.3 | 53.4 | 44.3 | 41.7 |

Table M. Summary of health characteristics, by geographic region and place of residence, compared to national average: United States,
1973-74

| Health characteristic | Geographic region |  |  |  | Place of residence |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Northeast | North Central | South | West | SMSA |  | Outside SMSA |  |
|  |  |  |  |  | Central city | Outside central city | Nonfarm | Farm |
| Persons with chronic activity limitation .... | Below average | Below average | Above average | Average | Above average | Below average | Above average | Above average |
| Restricted-activity days per person per year | Below average | Below average | Above average | Above average | Above average | Below average | Average | Below average |
| Bed days per person per year .......... | Below average | Below average | Above average | Average | Above average | Below average | Average | Below average |
| Work-loss days per person per year. | Average | Average | Average | Average | Above average | Average | Average | Below average |
| Acute conditions per 100 persons per year | Below average | Above average | Average | Above average | Average | Above average | Average | Below average |
| Persons injured per 100 persons per year | Average | Average | Average | Average | Average | Average | Average | Average |
| Discharges from short-stay hospitals per 1,000 persons per year | Below average | Above average | Above average | Below average | Average | Below average | Above average | Average |
| Physician visits per person per year......... | Average | Average | Below average | Above average | Above average | Above average | Below average | Below average |
| Persons who had seen physician in past year $\qquad$ | Average | Average | Average | Average | Average | Average | Average | Average |
| Dental visits per person per year ........... | Above average | Average | Below average | Above average | Average | Above average | Below average | Below average |
| Persons who had seen dentist in past year .. | Average | Average | Below average | Average | Average | Above average | Below average | Average |

In the continuing Health Interview Survey efforts to improve the accuracy of the data are constantly being made. Many times these changes in survey methodology do not appreciably affect survey results. However, from time to time improvements in data collection have been made that have resulted in major changes in the estimates of health characteristics covered by the survey. Usually when these major changes have been made the survey has provided data users with analyses of the effect of such changes. For the purpose of this report the reader is referred to Series 2, No. 48, in the Vital and Health Statistics series, which describes the im-
pact of a major change in survey methodology initiated on July 1, 1967.

Some minor and some major changes in the demographic composition of the population have occurred between 1963 and 1974. There have been changes in income levels, educational attainment, and racial and age distributions of the population, to mention a few. These factors can result in changes in treatment and prevention of diseases, in utilization of medical services, and also in the willingness and ability of respondents to report information in health surveys. A change of particular importance to this report is the change in the age composition of
the population between 1963 and 1974. There was about a 13 -percent decrease in the proportion of persons under 17 years of age and about an 8 -percent increase in the proportion 65 years of age and over.

The movement of large numbers of persons from one region of the country to another and from urban and rural areas to suburban areas has resulted in changes in the demographic composition of the regions and place of residence categories which are the focus of this report. It has no doubt had an effect on the rates of health characteristics that are presented here.

Aside from population changes, the number of persons residing in SMSA's changes because the criteria for defining SMSA's change. Table N shows the number of persons in the United States residing in SMSA's in 1960 and 1970 according to how SMSA's were defined at the three time periods for which data are presented in this section. As may be noted, the use of different definitions is associated with different estimates. For instance, the number of persons residing in SMSA's in 1970 was $139,418,811$ using the 1970 definition of SMSA's and $148,131,506$ using the 1974 definition.

The surveys which produced the data for the two earlier reports on the topics considered here were based on the 1960 definition of SMSA's. The 1973 and 1974 surveys were, on the other hand, based on the 1970 definition of SMSA's. No adjustments have been made in the data to take these differences into account.

The introduction of the national Medicare and Medicaid programs has resulted in greater utilization of medical care facilities, as indicated by the approximately 10 -percent increase in the rate of hospital discharges and physician visits between 1963-65 and 1973-74. The effects of these programs on the incidence and prevalence of diseases and on the reporting of health infor-
mation in a survey are almost impossible to isolate and measure. For example, greater availability and utilization of health services might lead to more prevention and better treatment of disease conditions, which would tend to reduce the rate of occurrence of acute and chronic conditions and associated disability. On the other hand, greater access to health resources could lead to an increase in life expectancy and, as a consequence, increase the number of older persons who could become afflicted with infirmities common to the aged.

Other examples of factors that affect estimates of health characteristics based on data collected over long periods of time could be given here. However, it is believed that the above will suffice to point out the difficulties that arise in attempting to interpret the data presented in this section.

## Health Characteristics for Three Time Periods

Table $O$ shows rates of selected health characteristics during the three survey periods for the United States, geographic regions, and place of residence categories. Some brief observations on each of the health characteristics based on the data in this table follow.

Percent of persons with chronic activity limitation.-Between the 1963-65 and 1973-74 studies there was about a 14 -percent increase in the proportion of the population reporting some chronic limitation of activity. There was relatively little change for this health characteristic between the 1963-65 and 1969-70 studies. Rates for chronic activity limitation were highest for the South Region for each of the three study periods and for persons living outside SMSA's for the two study periods for which data are available.

Restricted-activity days.-The estimated numbers of days of restricted activity per per-

Table N. Number and population of SMSA's as defined at specified dates: United States, 1960 and 1970

| Time of SMSA definition | Number of SMSA's | Population |  |
| :---: | :---: | :---: | :---: |
|  |  | 1960 | 1970 |
| 1964 (Aug. 31, 1964) | 217 | 115,876,343 | 134,639,374 |
| 1970 census (Feb. 28, 1971) | 243 | 119,593,498 | 139,418,811 |
| 1974 (Apr. 5, 1974) . . . . . | 265 | 126,613,710 | 148,131,506 |

[^2]Table O. Selected heal th characteristics for 3 survey periods, by geographic region and place of residence: United States

| Health characteristic and survey period | Total | Geographic region |  |  |  | Place of residence |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Northeast | North Central | South | West | SMSA |  | Outside SMSA |  |
|  |  |  |  |  |  | Central city | Outside central city | Nonfarm | Farm |
| Percent of persons with chronic activity limitation: |  |  |  |  |  |  |  |  |  |
| 1963-65 . . . . . . . . . . . . . . . . . . . . . . | 12.1 | 9.5 | 12.0 | 14.3 | 11.8 | ... | ... | 14.6 | … 16.5 |
| 1969-70 | 11.7 | 11.1 | 10.9 | 12.9 | 11.7 | 11.9 | 10.1 | 13.0 | - 13.9 |
| 1973-74 . . . . . . . . . . . . . . . . . . . . . . | 13.8 | 13.3 | 13.2 | 14.5 | 14.1 | 14.4 | 12.1 | 15.3 | 15.9 |
| Restricted-activity days per person per year: |  |  |  |  |  |  |  |  |  |
| 1969-70 | 14.7 | 14.4 | 13.0 | 15.6 | 16.2 | 16.0 | 13.3 | 15.2 | 12.6 |
| 1973-74 | 16.8 | 14.5 | 15.9 | 18.6 | 18.3 | 18.5 | 15.3 | 17.4 | 15.2 |
| Bed days per person per year: |  |  |  |  |  |  |  |  |  |
| 1963-65 ........ | 6.1 6.1 | 5.1 5.8 | 5.7 | 6.9 7.1 | 6.8 | 7.0 | 5.4 | 6.7 | 5.6 4.5 |
| 1973-74 | 6.5 | 5.9 | 5.9 | 7.5 | 6.7 | 7.7 | 5.8 | 6.5 | 4.6 |
|  |  |  |  |  |  |  |  |  |  |
| 1963-65 ... | 5.6 | 5.3 | 5.3 | 6.2 | 5.5 | $\ldots$ | ... | 5.9 | 7.1 |
| 1969-70 | 5.3 | 5.4 | 5.0 | 5.6 | 4.9 | 5.9 | 4.9 | 5.2 | 4.7 |
| 1973-74 | 5.2 | 5.0 | 4.9 | 5.5 | 5.2 | 5.8 | 4.9 | 5.0 | 4.0 |
| Persons injured per 100 persons per year: |  |  |  |  |  |  |  |  |  |
| 1963-65 | 28.7 | 27.0 | 28.3 | 27.8 | 33.7 | $\ldots$ | ... | 27.0 | 24.9 |
| 1969-70 | 26.3 | 24.7 | 24.3 | 26.0 | 32.8 | 24.7 | 27.0 | 27.7 | 22.1 |
| 1973-74 | 28.8 | 26.0 | 29.2 | 28.9 | 32.1 | 28.1 | 30.8 | 27.5 | 24.3 |
| Discharges from short-stay hospitals per 1,000 persons per year: |  |  |  |  |  |  |  |  |  |
| 1963-65 . . . . . . . . . . . . . . . . . . . . . . . | 128.3 | 117.5 | 129.5 | 135.9 | 128.8 | $\cdots$ | ... | 145.0 | 111.7 |
| 1969-70 | 131.0 | 123.8 | 134.4 | 134.3 | 129.9 | 131.9 | 120.6 | 145.4 | 108.7 |
| 1973-74 | 140.5 | 124.2 | 148.3 | 152.5 | 128.7 | 136.2 | 127.1 | 163.5 | 144.8 |
| Physician visits per person per year: |  |  |  |  |  |  |  |  |  |
| 1963-65 . . . . . . . . . . . . . . . | 4.5 | 4.5 | 4.4 | 4.2 | 5.4 | $\ldots$ | $\ldots$ | 4.3 | 3.3 |
| 1969-70 | 4.4 | 4.6 | 4.2 | 4.4 | 4.8 | 4.7 | 4.5 | 4.3 | 3.2 |
| 1973-74 . . . . . . . . . . . . . . . . . . . . . | 5.0 | 5.0 | 4.9 | 4.8 | 5.4 | 5.3 | 5.2 | 4.5 | 3.9 |
| Dental visits per person per year: |  |  |  |  |  |  |  |  |  |
| 1963-65 ................. | 1.6 | 2.1 | 1.5 | 1.1 | 1.7 | $\ldots$ | ... | 1.2 | 0.9 |
| 1969-70 | 1.5 | 1.9 | 1.4 | 1.2 | 1.7 | 1.6 | 1.8 | 1.2 | 1.1 |
| 1973-74 .................. . . . . . . . | 1.6 | 2.0 | 1.6 | 1.3 | 1.9 | 1.6 | 1.9 | 1.3 | 1.3 |

${ }^{1}$ Work-loss days are for the currently employed population aged 17 years and over.
son per year were at about the same level for the 1963-65 study ( 16.3 days) and the 1973-74 study ( 16.8 days); however, this rate was slightly lower for the $1969-70$ study ( 14.7 days). The rates were highest in the South and West Regions for each of the three study periods. In the two study periods for which data on all four place of residence categories were available (1969-70 and 1973-74), the average number of restricted-activity days per person per year was
highest for persons living in central city portions of SMSA's.

Bed days and work-loss days.-In general the observations made about restricted-activity days can also be made about these two measures of short-term disability. There was very little change in the average numbers of bed days and work-loss days during the course of time covered by the three surveys. Also, for both types of disability days the rates were highest in the South

Region during each of the three survey periods and in central city portions of SMSA's during each of the two survey periods for which data are available.

Persons injured per 100 persons per year.The proportion of persons injured was at about the same level for the time periods covered by the three surveys. Rates for this characteristic were consistently highest in the West Region and consistently lowest among persons living in farm portions of areas outside SMSA's.

Discharges from short-stay hospitals.Nationally, the rates for short-stay hospital discharges were at about the same level for 1963-65 (128.3 per 1,000 persons per year) and 1969-70 (131.0 per 1,000 persons per year). However, in the 1973-74 study period the rate for this characteristic (140.5) was almost 10 percent higher than the 1963-65 rate and a little over 7 percent higher than the 1969-70 rate.

When the rates for hospital discharges are examined by geographic region it can be seen that over the course of the $111 / 2$-year period covered by the three studies the rates for the West Region remained about the same; rates for the Northeast Region rose by about 6 percent; rates for the South rose about 12 percent; and rates for the North Central Region rose almost 15 percent. The 1973-74 study shows rates for the South Region (152.5) and North Central Region (148.3) roughly 20 percent higher than rates for the West (128.7) and Northeast (124.2).

The rates of hospital discharges shown in table O indicate major increases in short-stay hospital utilization among persons living outside SMSA's. For persons living in nonfarm areas outside of SMSA's the percent increase between the

1963-65 and 1973-74 studies was about 13 percent, and for persons living in farm portions the increase was about 30 percent.

Physician visits.-Nationally, the average number of physician visits per person per year was similar in the 1963-65 and 1969-70 studies. However, data from the 1973-74 study show a rate of physician visits roughly 10 percent higher than the rates for the two earlier studies.

The rate for this health characteristic was consistently higher in the West Region than in the other three regions, and the rates for the two SMSA place of residence categories (central city and outside central city) were higher than the rates for the categories outside SMSA's (nonfarm and farm).

Dental visits.-The rates for dental visits were fairly constant for the three study periods-1.6 for 1963-65, 1.5 for 1969-70, and 1.6 for 1973-74. By region the rates were consistently highest for persons living in the Northeast Region, and by place of residence the rates were consistently highest for persons living in the two SMSA categories.

This brief review of data on selected health characteristics collected over about $11 \frac{1}{2}$ years indicates that nationally the rates for hospital discharges and physician visits rose about 10 percent, but the rates for the other characteristics remained at about the same levels.

There were some changes in rates between regions and place of residence categories for the three study periods. However, for the most part the regions and place of residence categories that had the highest or lowest rates for a particular health characteristic maintained that rank order over the time covered by these studies.

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Table 2. Average annusl number of persons, by whether they had limitation of activity due to chronic conditions, age, geographic regron, and place of residence: United States, 1973 -74


[^3]


[^4]Table 4. Average annual number of days of restricted activity and davs of restricted activity per person per year, by age, geographic region, and place of residence: Unated States, 1973.74

| Geographic region and place of residence | All ages | $\begin{aligned} & \text { Under } \\ & 17 \text { years } \end{aligned}$ | $\begin{aligned} & 17.44 \\ & \text { years } \end{aligned}$ | $\begin{aligned} & 45-64 \\ & \text { years } \end{aligned}$ | $\begin{gathered} 65 \text { years } \\ \text { and } \\ \text { aver } \end{gathered}$ | $\begin{aligned} & \text { ages } \end{aligned}$ | $\begin{aligned} & \text { Under } \\ & 17 \\ & \text { years } \end{aligned}$ | $\begin{aligned} & 17-44 \\ & \text { years } \end{aligned}$ | $\begin{aligned} & 45-64 \\ & \text { years } \end{aligned}$ | $\begin{gathered} 65 \\ \text { years } \\ \text { and } \\ \text { aver } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United Stares | Days of restricted acturity in thousands |  |  |  |  | Days of restricted activity per person per year |  |  |  |  |
| All places of residence | 3,478,808 | 677,990 | 1,081,004 | 986,721 | 733,093 | 16.8 | 10.7 | 13.5 | 23.1 | 35.8 |
| $\underset{\text { Central coty }}{\text { SMSA }}$ | $2,380,296$$1,153,957$ | 484,688 | 788,860370.489 | 661,989 <br> 334,143 | 444,758 | 16.718.5 | -11.2 | 14.0 | 22.5 | 33.836.0 |
|  |  |  |  |  | 237,183 |  |  | ${ }_{13.1}^{15.1}$ | 25.7 |  |
| Outside central city | 1,226,339 | 272,545 | 418,372 | 327,846 | 207.576 | 15.3 | 10.9 |  | 19.9 | 31.6 |
| Large SMSA | $\begin{array}{r} 830,705 \\ 1,549,590 \end{array}$ | 160,620 324,068 | 266,784 522,076 | $\begin{aligned} & 237,714 \\ & 42,275 \end{aligned}$ | $\begin{aligned} & 165.587 \\ & 279.171 \end{aligned}$ | $\begin{aligned} & 17.4 \\ & 18.3 \end{aligned}$ | $\begin{aligned} & 11.6 \\ & 11.0 \end{aligned}$ | $\begin{aligned} & 14.2 \\ & 13.9 \end{aligned}$ | $\begin{array}{r} 22.9 \\ 22.9 \end{array}$ | 36.132.6 |
| Outside SMSA$\substack{\text { Nonfarm } \\ \text { Farm }}$ |  |  |  |  |  |  |  |  | $24.5 \quad 39.3$ |  |
|  | $\begin{array}{r} 1,098,513 \\ 985,978 \\ 112,534 \end{array}$ | 193,302 <br> 118,341 <br> 14,961 | 292,144267,838 | 384,885 | $\begin{aligned} & 288,335 \\ & 255,915 \\ & 25 \end{aligned}$ | $\begin{aligned} & 171 \\ & 17.4 \end{aligned}$ | 9.610.0 | 12.512.7 |  |  |  |
|  |  |  |  |  |  |  |  |  | 25.3 | 39.5 |
|  |  |  | 24,306 | 40,846 | 32,421 | 15.2 | 6.7 | 10.6 | 20.2 | 38.1 |
| Northeast |  |  |  |  |  |  |  |  |  |  |
| All places of residence | 708,096 | 146,543 | 215,571 | 202,544 | 143,438 | 14.5 | 10.3 | 11.7 | 186 | 27.7 |
| SMSA ...........Central cityOutside central city | $\begin{gathered} 576,705 \\ 278,076 \\ 298,629 \end{gathered}$ | $\left\lvert\, \begin{gathered} 118,242 \\ 46,856 \\ 71,386 \end{gathered}\right.$ | 178,65488,642 | $\underset{\substack{166,095 \\ 80,524}}{2025}$ | 113.714 | 14.7 | 10.4 | 12.0 | 18.7 |  |
|  |  |  |  |  | 62.054 | 17.3 | 10.5 | 14.5 | 22.7 | 31.2 |
|  |  |  | 90,012 | 85,570 | 51,661 | 12.9 | 10.4 | 10.2 | 16.1 | 24.3 |
|  |  |  | $\begin{array}{r} 113,242 \\ 10.437 \\ 72,713 \\ 30.71 \\ 65,41 \end{array}$ | 105,867 | 76.459 | 15.9 | 11.0 | 12.7 | 20.3 | 31.6 |
| Boston, | 368,00630,573236.543100.890208,700 | $\begin{aligned} & 72,438 \\ & 6.236 \\ & 45,189 \\ & \hline 2,963 \\ & 45,804 \end{aligned}$ |  | 8.567 | 5,283 | 118 | 8.3 | 10.1 | 16.2 | 19.3 |
| New York Phurdelphia |  |  |  | 67.551 | 51,090 | 150 | 103 | 11.9 | ${ }^{18.6}$ | 31.0 |
| Philsdelphia |  |  |  | 29,749 | ${ }^{20,087}$ | 21.4 | 14.9 | 17.1 | 28.3 | 40.3 |
| Other SMSA |  |  |  | 60,228 | 37,255 | 129 | 9.6 | 10.8 | 16.5 | 22.0 |
| Outside SMSA Nonfarm Farm . | $\begin{aligned} & 131,391 \\ & 128,734 \\ & \\ & \hline 2,656 \end{aligned}$ | $\begin{array}{r} 28,2017 \\ 28.037 \\ 9264 \end{array}$ | $\begin{aligned} & 36,917 \\ & \mathbf{3}, 987 \\ & \hline 1,961 \end{aligned}$ | $\begin{aligned} & 36,449 \\ & 35.701 \\ & .749 \end{aligned}$ | $\begin{gathered} 29,724 \\ \substack{2,140 \\ 5883} \end{gathered}$ | $\begin{aligned} & 138 \\ & 14.1 \\ & 97.0 \end{aligned}$ | 9.6.9 .9.9 .2 | 10.610.710.7 | 18.2 <br> 18.5 <br> 8 | 27.7.88 .5 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | "8.0 | ${ }^{-9.6}$ | *11.9 |
| North Cenral |  |  |  |  |  |  |  |  |  |  |
| All places of restdence | 895,928 | 192,907 | 200,228 | 232,887 | 179.905 | 159 | 110 | 13.4 | $20.5 \quad 31.3$ |  |
| SMSA <br> Central city <br> Outside central city | $\begin{aligned} & 601,279 \\ & \begin{array}{l} 699,454 \\ 321,825 \end{array} \end{aligned}$ | $\begin{array}{r}134,839 \\ 57 \\ \\ 77.539 \\ \hline\end{array}$ | $\begin{array}{r} 202.828 \\ 90.505 \\ 112.322 \end{array}$ | (157,704 | 105.909529853,541 | 160173 | 11.411.8 | 13.414.4 | 21.024.3 | $\begin{aligned} & \begin{array}{l} 311 \\ 30.3 \\ 31.9 \end{array} \end{aligned}$ |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  | 77.535 |  |  |  | 150 | 112 | 130 | 18.4 |  |
| Large SMSAChicagoDetroitOther SMSA | $\begin{array}{r} 182,172 \\ 99,40 \\ 82,771 \\ 419,107 \end{array}$ | $\begin{aligned} & 37,107 \\ & 20,39 \\ & 16,709 \\ & 9,731 \end{aligned}$ | $\begin{array}{r} 55,788 \\ 31.996 \\ 23,792 \\ 147,040 \end{array}$ | $\begin{array}{r} 53.741 \\ 24.860 \\ 28888 \\ 103696 \end{array}$ | $\begin{aligned} & 35,537 \\ & 22.147 \\ & 13.389 \\ & 70.372 \end{aligned}$ | $\begin{aligned} & 156 \\ & 13.5 \\ & 194 \end{aligned}$ | $\begin{aligned} & 9.3 \\ & 92 \\ & 12.0 \end{aligned}$ | 12.310.914.7 | 22.1 | 33.9 |
|  |  |  |  |  |  |  |  |  | 16.1 | 32.8 |
|  |  |  |  |  |  |  |  |  | 32.3 | 36.0 |
| Outside SMSA Nonfarm Farm. | $\begin{gathered} 294,649 \\ 249.762 \\ 44,888 \end{gathered}$ | 58.069 <br> 50,615 <br> 7.453 |  |  |  |  |  |  |  |  |
|  |  |  | $\begin{aligned} & 87.401 \\ & 75.387 \\ & 12.014 \end{aligned}$ | 75.18359.64755.537 | 73.99664.1139.884 | $158$$164$ | 10.1110 | 12.913.2 | 19.520.3 | 31.531.98.9 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 130 | 65 | 11.3 | 168 | 29.4 |
| South |  |  |  |  |  |  |  |  |  |  |
| All places of residence | 1,211,481 | 204,929 | 355,340 | 362.045 | 289.168 | 186 | 100 | 14.1 | 27.4 | 460 |
| SMSA Central city Outside central cisy | 654,943 345,46 309,482 | 121.735 <br> 58.730 <br> 62.855 | 219,4851098110,4005 | (1867439 | +126.925 | 177 | 106106 |  | 251 | 402 |
|  |  |  |  |  |  |  |  | 153 | 27.6 | 428 |
|  |  |  |  |  | 5.1144 | 164 | 105 | 142 | 22.5 | 37.1 |
| Large SMSA, Washington | 52.777 | 13.806 | 21.774 | 13.131 | 6.067 | 177 | 151 | 166 | 19.5 | 35.1 |
| Other SMSA | 602,166 | 107.979 | 197.711 | 175.617 | 120.858 | 177 | 102 | 145 | 256 | 40.4 |
| Outside SMSA | 556,533 | 83.144 | 135.855 | 175.295 | 162243 | 198 | 94 | 13.2 | 303 | 518 |
| Nonfarm | 502,625 | 77.972 | 16.672 | 155.675 | 142.306 | 199 | 9.6 | 13.5 | 315 | 52.2 |
| Farm | 53,912 | 5.172 | 9.182 | ${ }^{19.621}$ | 19937 | 186 | 67 | 103 | 23.4 | 49.5 |
| West |  |  |  |  |  |  |  |  |  |  |
| All places of residence | 663,304 | 133.611 | 219,865 | 189.245 | 120582 | 183 | 119 | 151 | 262 | 369 |
| SMSA | 547,369 | 109,822 | 187.893 | 151.443 | 98211 | 192 | 12.7 | 160 | 269 | 39.5 |
| Central city Outside central city | 250.966 | ${ }^{49,052}$ | 81.861 | 70.077 | 49.981 | 211 | 145 | 165 | 29.1 | 42.6 |
| Outside central city | 296,403 | 60,770 | 106,032 | 81.372 | 48230 | 179 | 11.5 | 156 | 252 | 36.7 |
| Large SMSA | 227,750 | 37.269 | 75.981 |  |  |  | 13.8 | 186 | 308 | 500 |
| ${ }_{\text {Los Angeles }}^{\text {San Franciscr }}$ | ${ }^{169.697}$ | 27,068 | 54.549 | 49.872 | 38.209 | 247 | 14.3 | 19.4 | 32.4 | 59.6 |
|  | 58.053 | 10.202 | 21.432 | 17.103 | 9316 | 191 | 125 | 167 | 269 | 301 |
| Other SMSA | 319.618 | 72,553 | 111,913 | 34457 | 50,686 | 172 | 12.2 | 146 | 244 | 329 |
| Outside SMSA |  |  |  |  | 22.372 | 149 | 92 | 11.4 | 23.7 | 28.6 |
| Nonfarm Farm | 104,856 | 21.717 | 29.922 | 32.862 | 20,355 | 147 | 91 | 11.5 | 23.2 | 28.3 |
| Farm | 11.078 | $\cdot 2.072$ | -2,049 | 4.940 | -2,017 | 173 | $\cdot 103$ | -10.2 | 27.8 | ${ }^{-325}$ |

[^5]

NOTF Numbers preceded by an asterisk have a relative standard error of more than 30 percent; estimates given solely for combining with other cells.
 1973.74



Table 7. Average annual incidence of acute conditions and number of acute conditions per 100 persons per year, by age, geographic region, and place of residence: United States, 1973 - 74


NOTE: Numbers preceded by an asterask have a relative standard error of more than 30 percent; estimates given solely for combining with other cells.
 United States, 1973-74


[^6]

[^7] 1973-74


[^8]NOTE; Numbers preceded by an asterish have a relative standard error of more than 30 percent estimates given solely for sombining with other cells.



[^9]Table 12. Average annual number of discharges from short-stay hospitals and number of discharges per 1,000 persons per year, by sex, delivery status, geographic region, and place of residence United States, 1973-74

| Geographic region and place of residence |  | Both sexes | Male | Female |  | Both sexes | Male | Female |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Exclud- | Incluat |  |  | Exclud- |
| All places of residence $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ |  |  | Number of discharges in thousands |  |  |  | Number of discharges per 1,000 persons per year |  |  |  |
|  |  | 29,015 | 11,833 | 17,182 | 14,254 | 140.5 | 118.8 | 160.7 | 133.3 |
| SMSA . . . . . . . . . .Central cityOutside central city |  | 18,670 | 7.396 | 11,274 | 9,276 | 131.0 | 108.0 | 152.4 | 125.4 |
|  |  | 8,489 | 3,337 | 5,151 | 4,223 | 136.2 | 112.7 | 157.3 | 128.9 |
|  |  | 10,181 | 4,059 | 6,123 | 5,053 | 127.1 | 104.3 | 148.5 | 122.6 |
| Large SMSA Other SMSA |  | 5,901 | 2,288 | 3,613 | 2,950 | 123.8 | 100.4 | 145.3 | 118.6 |
|  |  | 12,769 | 5,108 | 7.661 | 6,326 | 134.7 | 111.7 | 1560 | 128.8 |
| Outside SMSA Nonfarm Farm . . . . |  | 10,345 | 4,437 | 5,907 | 4,997 | 161.4 | 142.5 | 179.2 | 151.6 |
|  |  | 9,274 | 3,911 | 5,364 | 4,496 | 163.5 | 143.1 | 1826 | 153.0 |
|  |  | 1,070 | 527 | 544 | 482 | 144.8 | 138.4 | 1519 | 134.6 |
| All places of residence | Northeast |  |  |  |  |  |  |  |  |
|  | - - . $\cdot$...... | 6,055 | 2,377 | 3,678 | 3,043 | 124.2 | 102.3 | 144.1 | 119.2 |
| SMSA |  | 4,674 | 1.788 | 2,886 | 2,370 | 119.1 | 95.9 | 140.1 | 115.0 |
| Central city |  | 2,081 | 745 | 1,336 | 1,081 | 129.3 | 98.7 | 156.3 | 126.4 |
| Outside central city |  | 2,593 | 1.043 | 1,550 | 1,288 | 112.0 | 94.0 | 128.6 | 106.9 |
| Large SMSA |  | 2,724 | 1,062 | 1,662 | 1,341 | 117.9 | 97.0 | 136.6 | 110.2 |
| Boston . |  | 336 | 160 | 175 | 152 | 129.7 | 131.1 | 127.7 | 110.9 |
| New York |  | 1.740 649 | 653 | 1.087 | 858 | 110.1 | 87.1 | 130.9 | 103.3 |
| Other SMSA . . |  | 649 1,949 | 249 725 | 1,080 $\mathbf{1 , 2 2 4}$ | 331 $\mathbf{1 , 0 2 9}$ | 137.6 120.8 | 1118 94.2 | 160.8 145.1 | 133.0 121.9 |
| Outside SMSA |  | 1,381 | 589 | 792 | 673 | 144.9 | 1280 | 160.7 | 136.6 |
| Nonfarm |  | 1,339 | 568 | 771 | 653 | 146.4 | 1289 | 1626 | 137.7 |
| Farm |  | -42 | -21 | $\bullet 21$ | *20 | -111.1 | *108.8 | *113.5 | *108.1 |
| North Centra! |  |  |  |  |  |  |  |  |  |
| All places of residence |  | 8,358 | 3,412 | 4,945 | 4.094 | 148.3 | 124.6 | 170.5 | 141.2 |
| SMSA . . . . . . . .Central cityOutside central city |  |  | 2,130 | 3,204 | 2,635 | 1416 | 116.5 | 165.2 | 135.9 |
|  |  | 2,467 | + 976 | 1,491 | 1,233 | 152.7 | 1271 | 175.9 | 145.5 |
|  |  | 2,867 | 1,154 | 1,713 | 1.402 | 133.2 | 1088 | 1570 | 128.5 |
| Large SMSA Chicago Detroit Other SMSA |  | 1,692 | 649 | 1.042 | 867 | 1453 | 1158 | 172.6 | 1436 |
|  |  | 1,041 | 369 | 672 | 550 | 141.3 | 1041 | 175.8 | 143.9 |
|  |  | 6,650 3,642 | 280 1.480 | 370 2.62 | 316 1.768 | 152.0 139.9 | 135.8 1167 | 167.1 | 1427 |
| Outside SMSA Nonfarm Farm .... |  |  |  |  |  |  |  |  |  |
|  |  | 2,528 | 1,029 | 1.499 | 1.242 | 166.0 | 1412 | 1887 | 1519 1563 |
|  |  | + 495 | 254 | +242 | +217 | 142.8 | 1406 | 1458 | 130.7 |
| South |  |  |  |  |  |  |  |  |  |
| All places of residence |  | 9,935 | 4,172 | 5,764 | 4.799 | 152.5 | 132.9 | 170.6 | 1421 |
| SMSA . .........Central cisy .Outside central city |  | 5,105 | 2.057 | 3.048 | 2.515 | 137.8 | 1159 | 157.9 | 1303 |
|  |  | 2,468 | 1,004 | 1.464 | 1.197 | 1357 | 1171 | 152.4 | 1246 |
|  |  | 2,637 | 1,053 | 1,584 | 1,318 | 1398 | 1148 | 1633 | 1359 |
| Large SMSA, Washington Other SMSA . . . . . . . . . |  | 322 | 137 | 185 | 146 | 108.3 | 95.3 | 120.5 | 951 |
|  |  | 4,782 | 1,920 | 2,863 | 2,369 | 140.3 | 117.7 | 161.1 | 1333 |
| Outside SMSA Nonfarm |  | 4,831 | 2,115 | 2.716 | 2.283 | 171.9 | 1550 | 187.7 | 157.8 |
|  |  | 4,391 | 1,907 | 2,484 | 2,082 | 174.2 | 156.8 | 1904 | 1596 |
| Farm... |  | 440 | 207 | 232 | 201 | 151.6 | 140.2 | 162.7 | 1410 |
| West |  |  |  |  |  |  |  |  |  |
| All places of residence |  | 4,667 | 1,872 | 2,794 | 2.318 | 128.7 | 1062 | 149.9 | 1244 |
| SMASA |  | 3,558 |  |  | 1,756 | 1248 | 1028 | 145.5 | 119.6 |
| Central city ...... Outside central cíty |  | 1,474 | 613 | 861 | 712 | 123.7 | 105.7 | 140.8 | 1165 |
|  |  | 2,084 | 809 | 1.276 | 1.045 | 1256 | 100.8 | 149.0 | 122.0 |
|  |  | 1,163 | 439 | 724 | 596 | 1172 | 916 | 141.2 | 1162 |
| Large SMSA . Los Angeles |  | 823 | 286 | 537 | 438 | 119.6 | 867 | 1499 | 1222 |
| San Franesco |  | 340 | 153 | 187 | 158 | 111.8 | 1023 | 1211 | 102.3 |
| Other SMSA ... |  | 2,395 | 983 | 1.412 | 1,160 | 128.5 | 108.8 | 147.9 | 1215 |
| Outside SMSA Nonfarm Farm ... |  |  | 451 | 658 | 562 | 142.8 | 118.5 | 166.3 | 1420 |
|  |  | 1,015 | 406 | 610 | 518 | 142.5 | 1168 | 1672 | 1420 |
|  |  | 93 | *45 | 49 | -43 | 144.9 | -135 1 | 158.6 | -1392 |

NOTE: Numbers preceded by an asterisk have a relative standard error of more than $\mathbf{3 0}$ percent. estimates given solely for combining with nther cells

Table 13 Average annual number of discharges from short-stay hospitals and number of discharges per 1,000 persons per year, by whether or not surgically treated, geographic region, and place of residence United States, 1973.74


NOTE. Numbers preceded by an asterisk have a relative standard error of more than 30 percent. estumates given golely for combining with other cells.



NOTE: Numbers preceded by an asterisk have a relative standard error of more than 30 percent; estimates given solely for combining with other cells.

Table 15. Number and percent distribution of physician visits by place of visit, according to geographic region and place of residence: United States, 1973 -74

| Geographic region and place of residence | Total | Office | Hospital clinic or emergency room | Telephone contact | Other ${ }^{1}$ | Total | Office | Hospital clonic or emergency room | Telephone contact | Dther ${ }^{\text {I }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | Number of physician visits in thousands |  |  |  |  | Percent distribution |  |  |  |  |
| All places of residence | 1.028,186 | 708,537 | 116,001 | 128,543 | 75,105 | 100.0 | 68.9 | 11.3 | 12.5 | 7.3 |
| SMSA | 741,701 | 497,788 | 89,253 | 99,040 | 55,620 | 100.0 | 67.1 | 12.0 | 13.4 | 7.5 |
| Central city | 327,491 | 212,248 | 49,438 | 38,512 | 27,293 | 100.0 | 64.8 | 15.1 | 11.8 | 8.3 |
| Outside central city | 414.210 | 285,540 | 39,815 | 60,528 | 28,327 | 100.0 | 68.9 | 9.6 | 14.6 | 6.8 |
| Large SMSA | 272,272 | 179,811 | 36,149 | 34,632 | 21,680 | 100.0 | 66.0 | 13.3 | 12.7 | 8.0 |
| Other SMSA | 469,428 | 317,977 | 53,103 | 64,408 | 33,940 | 100.0 | 67.7 | 11.3 | 13.7 | 7.2 |
| Outside SMSA | 286.486 | 210,749 | 26,748 | 29,504 | 19,485 | 100.0 | 73.6 | 9.3 | 10.3 | 6.8 |
| Nonfarm | 257,522 | 187,794 | 24,291 | 27.112 | 18,325 | 100.0 | 72.9 | 9.4 | 10.5 | 7.1 |
| Farm | 28,964 | 22,955 | 2.457 | 2,392 | 1.159 | 100.0 | 79.3 | 8.5 | 8.3 | 4.0 |
| Northeast |  |  |  |  |  |  |  |  |  |  |
| All places of residence | 243,990 | 159.084 | 32,302 | 31,254 | 21,351 | 100.0 | 65.2 | 13.2 | 12.8 | 8.8 |
| SMSA | 202,376 | 131,161 | 27,408 | 25,655 | 18,152 | 100.0 | 64.8 | 13.5 | 12.7 | 9.0 |
| Central city | 88,481 | 53,724 | 16,929 | 8,420 | 9,408 | 100.0 | 60.7 | 19.1 | 9.5 | 10.6 |
| Outside central city | 113,895 | 77,437 | 10,479 | 17,235 | 8,744 | 100.0 | 68.0 | 9.2 | 15.1 | 7.7 |
| Large SMSA | 129,095 | 83,057 | 18,849 | 14,884 | 12,305 | 100.0 | 64.3 | 14.6 | 11.5 | 9.5 |
| Boston | 11,996 | 6,577 | 2,437 | 1,640 | 1,342 | 100.0 | 54.8 | 20.3 | 13.7 | 11.2 |
| New York | 82,832 | 54,255 | 11,803 | 8,895 | 7.879 | 100.0 | 65.5 | 14.2 | 10.7 | 9.5 |
| Phıladelphia | 34,267 | 22,225 | 4,609 | 4,350 | 3,084 | 100.0 | 64.9 | 13.5 | 12.7 | 9.0 |
| Other SMSA | 73,281 | 48,104 | 8,559 | 10,771 | 5,846 | 100.0 | 65.6 | 11.7 | 14.7 | 8.0 |
| Outside SMSA | 41,615 | 27,923 | 4,894 | 5,599 | 3.199 | 100.0 | 67.1 | 11.8 | 13.5 | 7.7 |
| Nonfarm | 40,321 | 26,996 | 4,710 | 5,481 | 3,134 | 100.0 | 67.0 | 11.7 | 13.6 | 7.8 |
| Farm | 1,294 | 926 | *184 | *118 | *65 | 100.0 | 71.6 | *14.2 | *9.1 | *5.0 |
| North Central |  |  |  |  |  |  |  |  |  |  |
| All places of residence | 277,007 | 194,223 | 26,793 | 39,416 | 16,575 | 100.0 | 70.1 | 9.7 | 14.2 | 6.0 |
| SMSA | 195,285 | 131,726 | 20,609 | 30,054 | 12,896 | 100.0 | 67.5 | 10.6 | 15.4 | 6.6 |
| Centrat city | 82,454 | 54,126 | 10,932 | 11,137 | 6,259 | 100.0 | 65.6 | 13.3 | 13.5 | 7.6 |
| Outside central city | 112,831 | 77,600 | 9,677 | 18,917 | 6.637 | 100.0 | 68.8 | 8.6 | 16.8 | 5.9 |
| Large SMSA | 62,746 | 42,042 | 7,368 | 9,411 | 3,926 | 100.0 | 67.0 | 11.7 | 15.0 | 6.3 |
| Chicago | 38,492 | 25,508 | 3,846 | 6,709 | 2,429 | 100.0 | 66.3 | 10.0 | 17.4 | 6.3 |
| Detroit | 24,254 | 16,534 | 3,521 | 2.702 | 1,497 | 100.0 | 68.2 | 14.5 | 11.1 | 6.2 |
| Other SMSA | 132,538 | 89,684 | 13,241 | 20,643 | 8,970 | 100.0 | 67.7 | 10.0 | 15.6 | 6.8 |
| Outside SMSA | 81,722 | 62,497 | 6,184 | 9,362 | 3.679 | 100.0 | 76.5 | 7.6 | 11.5 | 4.5 |
| Nonfarm | 69,014 | 52,313 | 5,010 | 8,202 | 3,489 | 100,0 | 75.8 | 7.3 | 11.9 | 5.1 |
| Farm | 12,708 | 10.185 | 1,174 | 1,160 | *190 | 100.0 | 80.1 | 9.2 | 9.1 | *1.5 |
| South |  |  |  |  |  |  |  |  |  |  |
| All places of residence | 311,152 | 215.266 | 36,399 | 35,534 | 23,953 | 100.0 | 69.2 | 11.7 | 11.4 | 7.7 |
| SMSA | 182,569 | 121,307 | 23,567 | 24,464 | 13.230 | 100.0 | 66.4 | 12.9 | 13.4 | 7.2 |
| Central city | 87,506 | 56,064 | 13,316 | 11,166 | 6,960 | 100.0 | 64.1 | 15.2 | 12.8 | 8.0 |
| Outside cantral city | 95,063 | 65,243 | 10,251 | 13,299 | 6,270 | 100.0 | 68.6 | 10.8 | 14.0 | 6.6 |
| Large SMSA, Washsngton | 19,243 | 11,650 | 2,951 | 3,351 | 1.291 | 100.0 | 60.5 | 15.3 | 17.4 | 6.7 |
| Other SMSA . . . . . . | 163,325 | 109,657 | 20,616 | 21,113 | 11,939 | 100.0 | 67.1 | 12.6 | 12.9 | 7.3 |
| Outside SMSA | 128,584 | 93,959 | 12,832 | 11,070 | 10,723 | 100.0 | 73.1 | 10.0 | 8.6 | 8.3 |
| Nonfarm | 116,726 | 84,660 | 11,893 | 10,069 | 10,104 | 100.0 | 72.5 | 10.2 | 8.6 | 8.7 |
| Farm | 11,858 | 9,299 | 939 | 1,001 | *618 | 100.0 | 78.4 | 7.9 | 8.4 | *5.2 |
| West |  |  |  |  |  |  |  |  |  |  |
| All places of residence | 196,037 | 139,964 | 20,508 | 22,340 | 13,226 | 100.0 | 71.4 | 10.5 | 11.4 | 6.7 |
| SMSA | 161,472 | 113,594 | 17.668 | 18,866 | 11,343 | 100.0 | 70.3 | 10.9 | 11.7 | 7.0 |
| Central city | 69,050 | 48,334 | 8,261 | 7.788 | 4,667 | 100.0 | 70.0 | 12.0 | 11.3 | 6.8 |
| Outside central city | 92,422 | 65,260 | 9,408 | 11,078 | 6,676 | 100.0 | 70.6 | 10.2 | 12.0 | 7.2 |
| Large SMSA | 61,188 | 43,062 | 6,982 | 6,986 | 4.158 | 100.0 | 70.4 | 11.4 | 11.4 | 6.8 |
| Los Angeles | 41.196 | 30,251 | 3,903 | 4,637 | 2.406 | 100.0 | 73.4 | 9.5 | 11.3 | 5.8 |
| San Francisco | 19,992 | 12,812 | 3,079 | 2,349 | 1.752 | 100.0 | 64.1 | 15.4 | 11.7 | 8.8 |
| Other SMSA | 100,284 | 70,532 | 10,687 | 11,881 | 7,185 | 100.0 | 70.3 | 10.7 | 11.8 | 7.2 |
| Outside SMSA | 34,565 | 26,370 | 2,839 | 3.473 | 1,883 | 100.0 | 76.3 | 8.2 | 10.0 | 5.4 |
| Nonfarm | 31,461 | 23,825 | 2,679 | 3,360 | 1,597 | 100.0 | 75.7 | 8.5 | 10.7 | 5.1 |
| Farm | 3.104 | 2,545 | *160 | *113 | *286 | 100.0 | 82.0 | *5.2 | *3.6 | *9.2 |

${ }^{1}$ Includes home, company or industry health unit, other, and unknown.
NOTE. Numbers preceded by an asterisk have a relative standard error of more than 30 percent, estimates given solely for combining with other cells.

Table 16. Number and percent of the population with one or more physician visits within a year, by age, geographic region, and place of residence: United States, $1973 \times 74$


Table 17. Number of dental visits and number of dental visits per person per year, by age, geographic region, and place of residence• United States, 1973-74


[^10]| Geographic region and place of residence | All ages | Under 17 vears | $\begin{aligned} & 17-44 \\ & \text { years } \end{aligned}$ | $\begin{aligned} & \text { 45-64 } \\ & \text { years } \end{aligned}$ | $\begin{gathered} 65 \\ \text { years } \\ \text { and } \\ \text { over } \\ \hline \end{gathered}$ | All ages | $\begin{aligned} & \text { Under } \\ & 17 \\ & \text { years } \end{aligned}$ | $\begin{aligned} & 17-44 \\ & \text { years } \end{aligned}$ | $\begin{aligned} & \text { 45-64 } \\ & \text { years } \end{aligned}$ | 65 <br> years and over |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | Number of persons with a dental visit within a year in thousands |  |  |  |  | Percent of persons with a dental visit within a year |  |  |  |  |
| All places of residence | 101,420 | 31.449 | 44,276 | 19,976 | 5,720 | 49.1 | 49.5 | 55.4 | 46.8 | 27.9 |
| SMSA | 73,207 | 22,383 | 32,232 | 14,585 | 4,008 | 51.4 | 51.7 | 57.0 | 49.5 | 30.4 |
| Central city | 29,344 | 8,317 | 13,140 | 5,950 | 1,937 | 47.1 | 45.6 | 53.6 | 45.8 | 29.4 |
| Outside central city | 43,863 | 14,065 | 19,092 | 8,634 | 2,071 | 54.7 | 56.1 | 59.7 | 52.4 | 31.5 |
| Large SMSA | 25,279 | 7,427 | 10,887 | 5,489 | 1.477 | 53.1 | 53.8 | 57.8 | 528 | 32.2 |
| Other SMSA | 47,928 | 14,956 | 21,345 | 9,096 | 2,531 | 50.5 | 50.7 | 56.7 | 477 | 29.5 |
| Outside SMSA | 28,213 | 9,066 | 12,044 | 5,391 | 1,712 | 44.0 | 45.0 | 51.5 | 40.7 | 23.4 |
| Nonfarm | 24,898 | 7,908 | 10,831 | 4.613 | 1,547 | 43.9 | 44.1 | 51.4 | 41.1 | 23.9 |
| Farm | 3,315 | 1,159 | 1,213 | 778 | 165 | 44.9 | 52.0 | 53.0 | 38.5 | 19.4 |
| Northeast |  |  |  |  |  |  |  |  |  |  |
| All places of residence | 26,146 | 8,134 | 10.975 | 5,531 | 1,505 | 53.6 | 56.9 | 59.6 | 50.9 | 29.0 |
| SMSA .... | 21,320 | 6,534 | 8,963 | 4,601 | 1,223 | 54.3 | 57.6 | 60.0 | 51.9 | 29.7 |
| Central city ..... | 7,855 | 2,263 | 3,345 | 1,675 | 573 | 48.8 | 50.7 | 54.9 | 47.2 | 28.9 |
| Outside central city | 13,466 | 4,271 | 5,618 | 2,926 | 650 | 58.2 | 62.1 | 63.6 | 55.1 | 30.6 |
| Large SMSA | 12.465 | 3,700 | 5,202 | 2,797 | 766 | 53.9 | 56.3 | 58.4 | 53.6 | 31.6 |
| Boston | 1.526 | 492 | 674 | 279 | 81 | 58.9 | 65.3 | 65.2 | 52.6 | 29.6 |
| New York, | 8.440 | 2,461 | 3,506 | 1,965 | 509 | 53.4 | 55.8 | 57.4 | 54.1 | 30.8 |
| Philadelphia | 2,499 | 747 | 1.023 | 553 | 176 | 53.0 | 52.9 | 58.3 | 52.6 | 35.3 |
| Other SMSA | 8,855 | 2,833 | 3,761 | 1,804 | 457 | 54.9 | 59.4 | 62.4 | 49.5 | 27.0 |
| Outside SMSA | 4,825 | 1.600 | 2,013 | 930 | 282 | 50.6 | 54.2 | 57.6 | 463 | 26.3 |
| Nanfarm | 4,634 | 1.528 | 1,936 | 899 | 272 | 50.7 | 54.0 | 57.5 | 46.6 | 26.6 |
| Farm | 191 | 72 | 77 | 32 | *10 | 50.5 | 60.0 | 58.3 | 41.0 | -20.4 |
| North Central |  |  |  |  |  |  |  |  |  |  |
| All places of residence | 28,577 | 9,303 | 12,428 | 5,280 | 1.566 | 50.7 | 53.0 | 57.3 | 46.4 | 27.2 |
| SMSA | 19,668 | 6,325 | 8,674 | 3.672 | 998 | 52.2 | 53.5 | 58.1 | 48.8 | 29.3 |
| Central city ..... | 7,630 | 2,273 | 3,445 | 1.429 | 483 | 47.2 | 46.7 | 54.7 | 43.8 | 27.9 |
| Outside central city | 12,038 | 4,052 | 5,229 | 2,243 | 515 | 55.9 | 58.3 | 60.5 | 52.6 | 30.7 |
| Large SMSA | 5,870 | 1,837 | 2,540 | 1,184 | 308 | 50.4 | 50.8 | 55.9 | 48.6 | 29.4 |
| Chicago | 3,751 | 1,179 | 1,626 | 750 | 196 | 50.9 | 53.1 | 55.6 | 48.6 | 29.0 |
| Detroir | 2,119 | 658 | 914 | 434 | 113 | 49.6 | 47.2 | 56.6 | 48.5 | 30.4 |
| Other SMSA | 13,799 | 4.487 | 6,134 | 2.488 | 689 | 53.0 | 54.7 | 59.0 | 48.9 | 29.2 |
| Outside SMSA | 8,908 | 2.978 | 3.754 | 1.608 | 568 | 476 | 52.0 | 55.5 | 41.7 | 24.2 |
| Nonfarm | 7,145 | 2,298 | 3,129 | 1,221 | 498 | 46.9 | 50.1 | 54.9 | 41.6 | 24.8 |
| Farm | 1,763 | 680 | 625 | 387 | 70 | 50.9 | 59.8 | 58.6 | 47.8 | 20.8 |
| South |  |  |  |  |  |  |  |  |  |  |
| All places of residence | 28,297 | 8.419 | 12.745 | 5.561 | 1.573 | 43.4 | 41.2 | 50.5 | 42.1 | 25.0 |
| SMSA ...... | 17.244 | 5,073 | 7,870 | 3,396 | 905 | 46.5 | 440 | 52.8 | 45.7 | 28.6 |
| Central city ..... | 7.748 | 2.126 | 3.536 | 1,603 | 482 | 426 | 38.4 | 49.3 | 42.4 | 28.3 |
| Outside centrel city | 9,496 | 2,947 | 4,334 | 1,792 | 423 | 50.3 | 49.1 | 55.9 | 49.0 | 29.0 |
| Large SMSA, Washington | 1.716 | 510 | 793 | 352 | 61 | 577 | 557 | 60.3 | 61.6 | 35.3 |
| Other SMSA . | 15,528 | 4,563 | 7,077 | 3,044 | 844 | 456 | 430 | 52.0 | 44.3 | 28.2 |
| Outside SMSA | 11.053 | 3,346 | 4,875 | 2,165 | 658 | 393 | 37.6 | 47.3 | 37.4 | 213 |
| Nonfarm. | 9,961 | 3,028 | 4.452 | 1,885 | 597 | 395 | 373 | 47.3 | 38.1 | 219 |
| Farm | 1.093 | 318 | 423 | 281 | 71 | 377 | 413 | 47.6 | 33.5 | 176 |
| West |  |  |  |  |  |  |  |  |  |  |
| All places of residence | 18.401 | 5,594 | 8.128 | 3,603 | 1.077 | 507 | 499 | 55.9 | 49.8 | 32.9 |
| SMSA | 14,975 | 4,452 | 6,725 | 2,916 | 882 | 525 | 515 | 57.3 | 518 | 354 |
| Central city | 6,112 | 1,655 | 2.813 | 1.244 | 399 | 513 | 491 | 56.7 | 517 | 34.0 |
| Outside central city | 8,863 | 2,796 | 3.912 | 1,672 | 483 | 534 | 53.1 | 57.7 | 518 | 36.7 |
| Large SMSA | 5,229 | 1,379 | 2.352 | 1,156 | 341 | 527 | 510 | 57.5 | 53.1 | 35.9 |
| Los Angoles | 3.462 | 907 | 7.549 | 782 | 224 | 503 | 479 | 552 | 50.7 | 349 |
| San Francisco | 1.767 | 472 | 804 | 374 | 118 | 581 | 581 | 62.7 | 58.8 | 382 |
| Other SMSA | 9.746 | 3.073 | 4,373 | 1.760 | 541 | 524 | 518 | 57.1 | 509 | 352 |
| Outside SMSA | 3.426 | 1,142 | 7,402 | 687 | 194 | 441 | 44.3 | 49.9 | 43.0 | 24.8 |
| Nonfarm | 3,158 | 1.054 | 1,314 | 608 | 181 | 44.3 | 44.4 | 50.4 | 42.9 | 25.2 |
| Farm | 268 | 88 | 88 | 79 | -13 | 417 | 43.8 | 44.0 | 44.4 | -210 |

[^11]



NOTES. Numbers preceded by an asterisk have a relative standard error of more than 30 percent. estimates given solely for combining with other cells
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## APPENDIX I

## TECHNICAL NOTES ON METHODS

## Background of This Report

This report is one of a series of statistical reports prepared by the National Center for Health Statistics (NCHS). It is based on information collected in a continuing nationwide sample of households in the Health Interview Survey (HIS).

The Health Interview Survey utilizes a questionnaire which obtains information on personal and demographic characteristics, illnesses, injuries, impairments, chronic conditions, and other health topics. As data relating to each of these various broad topics are tabulated and analyzed, separate reports are issued which cover one or more of the specific topics. The present report is based on data collected in household interviews during 1973 and 1974.

The population covered by the sample for the Health Interview Survey is the civilian, noninstitutionalized population of the United States living at the time of the interview. The sample does not include members of the Armed Forces or U.S. nationals living in foreign countries. It should also be noted that the estimates shown do not represent a complete measure of any given topic during the specified calendar period since data are not collected in the interview for persons who died during the reference period. For many types of statistics collected in the survey, the reference period covers 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 (e.g., 1 year) might be sizable, especially for older persons.

## Statistical Design of the Health Interview Survey

General plan.-The sampling plan of the survey follows a multistage probability design which permits a continuous sampling of the civilian, noninstitutionalized population of the United States. The sample is designed in such a way that the sample of households interviewed each week is representative of the target population and that weekly samples are additive over time. This feature of the design permits both continuous measurement of characteristics of samples and more detailed analysis of less common characteristics and smaller categories of health-related items. The continuous collection has administrative and operational advantages as well as technical assets since it permits fieldwork to be handled with an experienced, stable staff.

The overall sample was designed so that tabulations can be provided for each of the four major geographic regions and for urban and rural sectors of the United States.

The first stage of the sample design consists of drawing a sample of 376 primary sampling units (PSU's) from approximately 1,900 geographically defined PSU's. A PSU consists of a county, a small group of contiguous counties, or a standard metropolitan statistical area. The PSU's collectively cover the 50 States and the District of Columbia.

With no loss in general understanding, the remaining stages can be combined and treated in this discussion as an ultimate stage. Within PSU's, then, ultimate stage units called segments are defined in such a manner that each segment contains an expected four households. Three general types of segments are used.

Area segments which are defined geographically.
List segments, using 1970 census registers as the frame.

Permit segments, using updated lists of building permits issued in sample PSU's since 1970.

Census address listings were used for all areas of the country where addresses were well defined and could be used to locate housing units. In general the list frame included the larger urban areas of the United States from which about two-thirds of the HIS sample was selected.

Descriptive material on data collection, field procedures, and questionnaire development in the HIS has been published ${ }^{3}$ as well as a detailed description of the sample design ${ }^{4}$ and a report on the estimation procedure and the method used to calculate sampling errors of estimates derived from the survey. ${ }^{5}$

Collection of data.-Field operations for the survey are performed by the U.S. Bureau of the Census under specifications established by the National Center for Health Statistics. In accordance with these specifications the Bureau of the Census participates in survey planning, selects the sample, and conducts the field interviewing as an agent of NCHS. The data are coded, edited, and tabulated by NCHS.

Estimating procedures.-Since the design of the HIS is a complex multistage probability sample, it is necessary to use complex procedures in the derivation of estimates. Four basic operations are involved:

[^12]1. Inflation by the reciprocal of the probability of selection.-The probability of selection is the product of the probabilities of selection from each step of selection in the design (PSU, segment, and household).
2. Nonresponse adjustment.-The estimates are inflated by a multiplication factor which has as its numerator the number of sample households in a given segment and as its denominator the number of households interviewed in that segment.
3. First-stage ratio adjustment.-Sampling theory indicates that the use of auxiliary information which is highly correlated with the variables being estimated improves the reliability of the estimates. To reduce the variability between PSU's within a region, the estimates are ratio adjusted to the 1970 populations within 12 color-residence classes.
4. Poststratification by age-sex-color.-The estimates are ratio adjusted within each of 60 age-sex-color cells to an independent estimate of the population of each cell for the survey period. These independent estimates are prepared by the Bureau of the Census. Both the first-stage and poststratified ratio adjustments take the form of multiplication factors applied to the weight of each elementary unit (person, household, condition, and hospitalization).

The effect of the ratio-estimating process is to make the sample more closely representative of the civilian, noninstitutionalized population by age, sex, color, and residence, which thereby reduces sampling variance.

As noted, each week's sample represents the population living during that week and characteristics of the population. Consolidation of samples over a time period, e.g., a calendar quarter, produces estimates of average characteristics of the U.S. population for the calendar quarter. Similarly, population data for a year are averages of the four quarterly figures.

For prevalence statistics, such as number of persons with speech impairments or number of persons classified by time interval since last physician visit, figures are first calculated for each calendar quarter by averaging estimates for
all weeks of interviewing in the quarter. Prevalence data for a year are then obtained by averaging the four quarterly figures.

For other types of statistics-namely those measuring the number of occurrences during a specified time period-such as incidence of acute conditions, number of disability days, or number of visits to a doctor or dentist, a similar computational procedure is used, but the statistics are interpreted differently. For these items, the questionnaire asks for the respondent's experience over the 2 calendar weeks prior to the week of interview. In such instances the estimated quarterly total for the statistic is 6.5 times the average 2 -week estimate produced by the 13 successive samples taken during the period. The annual total is the sum of the four quarters. Thus the experience of persons interviewed during a year-experience which actually occurred for each person in a 2 -calendar-week interval prior to week of interview-is treated as though it measured the total of such experience during the year. Such interpretation leads to no significant bias.

Explanation of hospital recall.-The survey questionnaire uses a 12 -month-recall period for hospitalizations. That is, the respondent is asked to report hospitalizations which occurred during the 12 months prior to the week of interview. Information is also obtained as to the date of entry into the hospital and duration of stay. Analysis of this information, and also the results of special studies, has shown that there is an increase in underreporting of hospitalizations with increase in time interval between the discharge and the interview. Exclusive of the hospital experience of decedents, the net underreporting with a 12 -month recall is in the neighborhood of 10 percent, but underreporting of discharges within 6 months of the week of interview is estimated to be less than 5 percent. For this reason hospital discharge data in this report are based on hospital discharges reported to have occurred within 6 months of the week of interview. Since the interviews were evenly distributed according to weekly probability samples throughout any interviewing year, no seasonal bias was introduced by doubling the 6 -monthrecall data to produce an annual estimate for that year of interviewing. Doubling the 6 -month
data in effect imputes to the entire year preceding the interview the rate of hospital discharges actually observed during the 6 months prior to interview. However, estirhates of the number of persons with hospital episodes (as opposed to estimates of the number of hospital discharges) are based on 12 -month recall data since a person's 12 -month experiences cannot be obtained by doubling his most recent 6 -month experience.

## General Qualifications

Nonresponse.-Data were adjusted for nonresponse by a procedure which imputes to persons in a household which was not interviewed the characteristics of persons in households in the same segment which were interviewed. The total noninterview rate was about 3.3 percent for the combined 1973-74 surveys.

The interview process.-The statistics presented in this report are based on replies obtained in interviews with persons in the sample households. Each person 19 years of age and over present at the time of interview was interviewed individually. For children and for adults not present in the home at the time of the interview, the information was obtained from a related household member such as a spouse or the mother of a child.

There are limitations to the accuracy of diagnostic and other information collected in household interviews. 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. However, other facts, such as the number of disability days caused by the condition, can be obtained more accurately from household members than from any other source since only the persons concerned are in a position to report this information.

Rounding of numbers.- The original tabulations on which the data in this report are based show all estimates to the nearest whole unit. All consolidations were made from the original tabulations using the estimates to the nearest unit. In the final published tables, the figures are
rounded to the nearest thousand, although these are not necessarily accurate to that detail. Devised statistics such as rates and percent distributions are computed after the estimates on which these are based have been rounded to the nearest thousand.

Population figures.-Some of the published tables include population figures for specified categories. Except for certain overall totals by age, sex, and color, which are adjusted to independent estimates, these figures are based on the sample of households in the HIS. These are given primarily to provide denominators for rate computation, and for this purpose 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 color mentioned above, the population figures differ from figures (which are derived from different sources) published in reports of the Bureau of the Census. Official population estimates are presented in Bureau of the Census reports in Series P-20, P-25, and P-60.

## Reliability of Estimates

Since the statistics presented in this report are based on a sample, they will differ somewhat from the figures that would have been obtained if a complete census had been taken using the same schedules, instructions, and interviewing personnel and procedures.

As in any survey, the results are also subject to reporting and processing errors and errors due to nonresponse. To the extent possible, these types of errors were kept to a minimum by methods built into survey procedures. ${ }^{6}$ Although it is very difficult to measure the extent of bias in the Health Interview Survey, a number of studies have been conducted to study this prob-

[^13]lem. The results have been published in several reports. ${ }^{7-10}$

The standard error is primarily a measure of sampling variability, that is, the variation that occurs by chance because only a sample of the population is surveyed. As calculated for this report, the standard error also reflects part of the variation which arises in the measurement process. However, it does not include systematic biases which might be in the data. 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 $21 / 2$ times as large.

The relative standard error of an estimate is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate. For this report, asterisks are shown for any cell with more than a 30 -percent relative standard error. Included in this appendix are charts from which the relative standard errors can be determined for estimates shown in the report. In order to derive relative errors which would be applicable to a wide variety of health statistics and which could be prepared at a moderate cost, a number of approxi-

[^14]mations were required. As a result, the charts provide an estimate of the approximate relative standard error rather than the precise error for any specific aggregate or percentage.

Three classes of statistics for the health survey are identified for purposes of estimating variances.

Narrow range.-This class consists of (1) statistics which estimate a population attribute, e.g., the number of persons in a particular income group, and (2) statistics for which the measure for a single individual during the reference period used in data collection is usually either 0 or 1 or on occasion may take on the value 2 or very rarely 3 .
Medium range.-This class consists of other statistics for which the measure for a single individual during the reference period used in data -collection will rarely lie outside the range 0 to 5 .

Wide range.-This class consists of statistics for which the measure for a single individual during the reference period used in data collection can range from 0 to a number in excess of 5 , e.g., the number of days of bed disability.

In addition to classifying variables according to whether they are narrow-, medium-, or wide-range, statistics in the survey are further classified as to whether they are based on a reference period of 2 weeks, 6 months, or 12 months.

General rules for determining relative standard errors.-The following rules will enable the reader to determine approximate relative standard errors from the charts (figures I-XI) for estimates presented in this report. These charts represent new and better approximations of the relative standard errors of HIS data. They should be used in preference to the charts which have appeared in all previous Series 10 publications.

Rule 1. Estimates of aggregates: Approximate relative standard errors for estimates of aggregates such as the number of persons with a given characteristic are obtained from the appropriate curve shown in figures I-V. The number of persons in the total U.S. population or in an age-sex-color class of the total population is
adjusted to official Bureau of the Census figures and is not subject to sampling error.
Rule 2. Estimates of percentages in a percent distribution: Relative standard errors for percentages in a percent distribution of a total are obtained from appropriate curves shown in figures VI-XI. For values which do not fall on one of the curves presented in the chart, visual interpolation will provide a satisfactory approximation.
Rule 3. Estimates of rates where the numerator is a subclass of the denominator: This rule applies for prevalence rates or where a unit of the numerator occurs, with few exceptions, only once in the year for any one unit in the denominator. For example, in computing the rate of visual impairments per 1,000 population, the numerator consisting of persons with the impairment is a subclass of the denominator, which includes all persons in the population. Such rates if converted to rates per 100 may be treated as though they were percentages and the relative standard errors obtained from the percentage charts for population estimates. Rates per 1,000 , or on any other base, must first be converted to rates per 100; then the percentage chart will provide the relative standard error per 100.
Rule 4. Estimates of rates where the numerator is not a subclass of the denominator: This rule applies where a unit of the numerator often occurs more than once for any one unit in the denominator. For example, in the computation of the number of persons injured per 100 currently employed persons per year, it is possible that a person in the denominator could have sustained more than one of the injuries included in the numerator. Approximate relative standard errors for rates of this kind may be computed as follows:
(a) Where the denominator is the total U.S. population or includes all persons in one or more of the age-sex-
color groups of the total population, the relative error of the rate is equivalent to the relative error of the numerator, which can be obtained directly from the appropriate chart.
(b) In other cases the relative standard error of the numerator and of the denominator can be obtained from the appropriate curve. Square each of these relative errors, add the resulting values, and extract the square root of the sum. This procedure will result in an upper bound on the standard error and often will overstate the error.
Rule 5. Estimates of difference between two statistics (mean, rate, total, etc.): The standard error of a difference is approximately the square root of the sum of the squares of each standard error considered separately. A formula for the standard error of a difference,

$$
d=X_{1}-X_{2}
$$

is

$$
\sigma_{d}=\sqrt{\left(X_{1} V_{x 1}\right)^{2}+\left(X_{2} V_{x 2}\right)^{2}}
$$

where $X_{1}$ is the estimate for class $1, X_{2}$ is the estimate for class 2 , and $V_{\mathrm{x} 1}$ and $V_{\mathrm{x} 2}$ are the relative errors of $X_{1}$ and $X_{2}$, respectively. This formula will represent the actual standard error quite accurately for the difference between separate and uncorrelated characteristics although it is only a rough approximation in most other cases. The relative standard error of each estimate involved in such a difference can be determined by one of the four rules above, whichever is appropriate.

Figure I. RELATIVE STANDARD ERRORS FOR POPULATION CHARACTERISTICS ${ }^{1}$

${ }^{1}$ This curve represents estimates of relative standard errors based on 8 quarters of data collection for narrow range estimates of population characteristics or narrow range estimates of aggregates using a 12 -month reference period.
Example of use of chart: An estimate of $10,000,000$ persons with annual family income of $\$ 15,000$ or more, or $10,000,000$ persons who were hospitalized one or more times in the past year (on scale at bottom of chart) has a relative standard error of 1.3

Figure II. RELATIVE STANDARD ERRORS FOR NUMBER OF ACUTE CONDITIONS OR PERSONS INJURED¹

${ }^{1}$ This curve represents estimates of relative standard errors based on 8 quarters of data collection for narrow range estimates of aggregates using a 2 -week reference period.

Example of use of chart: An estimate of $1,000,000$ persons injured (on scale at bottom of chart) has a relative standard error of 17.5 percent (read from scale at left side of chart), or a standard error of 175,000 ( 17.5 percent of $1,000,000$ ).

Figure III. RELATIVE STANDARD ERRORS FOR NUMBER OF PHYSICIAN OR DENTAL VISITS BASED ON A 2-WEEK REFERENCE PERIOD ${ }^{1}$


Example of use of chart: An estimate of $10,000,000$ dental visits (on scale at bottom of chart) has a relative standard error of 7.0 percent (read from scale at left side of chart), or a standard error of 700,000 ( 7.0 percent of $10,000,000$ ).

Figure IV. RELATIVE STANDARD ERRORS FOR DAYS OF RESTRICTED ACTIVITY OR BED DISABILITY (A) AND FOR DAYS LOST FROM WORK OR SCHOOL (B) ${ }^{1}$

${ }^{1}$ These curves represent estimates of relative standard errors based on 8 quarters of data collection for wide range estimates of aggregates using a 2 -week reference period.

Example of use of chart: An estimate of $10,000,000$ days of restricted activity (on scale at bottom of chart) has a relative standard error of 16.7 percent (read from Curve A on scale at left side of chart), or a standard error of $1,670,000$ ( 16.7 percent of $10,000,000$ ).

Figure V. RELATIVE STANDARD ERRORS FOR NUMBER OF SHORT-STAY HOSPITAL DISCHARGES¹

${ }^{1}$ The curve related to short-stay hospital discharges is based on 8 quarters of data collection for a narrow range estimate of aggregates using a 6 -month reference period.
Example of use of chart: An estimate of 1,000,000 hospital discharges (on scale at bottom of chart) has a relative standard error of 5.7 percent (read from scale at left side of chart), or a standard error of 57,000 ( 5.7 percent of $1,000,000$ ).

Figure VI. RELATIVE STANDARD ERRORS OF PERCENTAGES OF POPULATION CHARACTERISTICS ${ }^{1}$
(Base of percentage shown on curves in millions)


Example of use of chart: An estimate of 20 percent (on scale at bottom of chart) based on an estimate of $10,000,000$ has a relative standard error of 2.7 percent (read from the scale at the left side of chart), the point at which the curve for a base of $10,000,000$ intersects the vertical line for 20 percent. The standard error in percentage points is equal to 20 percent $X 2.7$ percent or 0.54 percentage points.

Figure VII. RELATIVE STANDARD ERRORS OF PERCENTAGES OF ACUTE CONDITIONS OR PERSONS INJURED ${ }^{1}$


Example of use of chart: An estimate of 20 percent (on scale at bottom of chart) based on an estimate of $10,000,000$ has a relative standard error of 11.0 percent (read from the scale at the left side of chart), the point at which the curve for a base of $10,000,000$ intersects the vertical line for 20 percent. The standard error in percentage points is equal to 20 percent $\times 11.0$ percent; or 2.2 percentage points.

Figure VIII. RELATIVE STANDARD ERRORS OF PERCENTAGES OF PHYSICIAN OR DENTAL VISITS ${ }^{1}$
(Base of percentage shown on curves in millions)


Example of use of chart: An estimate of 20 percent (on scale at bottom of chart) based on an estimate of $10,000,000$ has a relative standard error of 14.0 percent (read from the scale at the left side of chart), the point at which the curve for a base of $10,000,000$ intersects the vertical line for 20 percent. The standard error in percentage points is equal to 20 percent $X 14.0$ percent; or 2.8 percentage points.

Figure IX. RELATIVE STANDARD ERRORS OF PERCENTAGES OF DAYS OF RESTRICTED ACTIVITY OR BED DISABILITY ${ }^{1}$
(Base of percentage shown on curves in millions)

${ }^{1}$ These curves represent estimates of relative standard errors of percentages of days of restricted activity or bed disability based on 8 quarters of data collection for wide range estimates using a 2 -week reference period.
Example of use of chart: An estimate of 20 percent (on scale at bottom of chart) based on an estimate of $50,000,000$ has a relative standard error of 15.0 percent (read from the scale at the left side of chart), the point at which the curve for a base of $50,000,000$ intersects the vertical line for 20 percent. The standard error in percentage points is equal to 20 percent $\times 15.0$ percent or 3.0 percentage points.

Figure X. RELATIVE STANDARD ERRORS OF PERCENTAGES OF DAYS LOST FROM WORK OR SCHOOL ${ }^{1}$
(Base of percentage shown on curves in millions)


Example of use of chart: An estimate of 20 percent (on scale at bottom of chart) based on an estimate of $50,000,000$ has a relative standard error of 11.8 percent (read from the scale at the left side of chart), the point at which the curve for a base of $50,000,000$ intersects the vertical line for 20 percent. The standard error in percentage points is equal to 20 percent $X 11.8$ percent or 2.4 percentage points.

Figure XI. RELATIVE STANDARD ERRORS OF PERCENTAGES OF SHORT-STAY HOSPITAL DISCHARGES ${ }^{1}$
(Base of percentage shown on curves in millions)


Example of use of chart: An estimate of 20 percent (on scale at bottom of chart) based on an estimate of $10,000,000$ discharges has a relative standard error of 3.6 percent (read from scale at the left side of chart), the point at which the curve for a base of $10,000,000$ intersects the vertical line for 20 percent. The standard error in percentage points is equal to 20 percent $\times 3.6$ percent, or 0.72 percentage points.

## APPENDIX II

## DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

## Terms Relating to Conditions

Condition.-A morbidity condition, or simply a condition, is any entry on the questionnaire which describes a departure from a state of physical or mental well-being. It results from a positive response to one of a series of "medicaldisability impact" or "illness-recall" questions. In the coding and tabulating process conditions are selected or classified according to a number of different criteria such as whether they were medically attended, whether they resulted in disability, or whether they were acute or chronic; or according to the type of disease, injury, impairment, or symptom reported. For the purposes of each published report or set of tables, only those conditions recorded on the questionnaire which satisfy certain stated criteria are included.

Conditions except impairments are classified by type according to the Eighth Revision International Classification of Diseases, Adapted for Use in the United States, ${ }^{11}$ with certain modifications adopted to make the code more suitable for a household interview survey.

Acute condition.-An acute condition is defined as a condition which has lasted less than 3 months and which has involved either medical attention or restricted activity. Because of the procedures used to estimate incidence, the acute conditions included in this report are the conditions which had their onset during the 2 weeks

[^15]prior to the interview week and which involved either medical attention or restricted activity during that 2 -week period. However, certain conditions are always classified as chronic regardless of onset (see list under the definition of chronic condition).

Chronic condition.-A condition is considered chronic if (1) the condition is described by the respondent as having been first noticed more than 3 months before the week of the interview . or (2) it is one of the conditions listed below which are always considered chronic regardless of the date of onset.

Allergy, any
Arthritis or rheumatism
Asthma
Cancer
Cleft palate
Club foot
Condition present since birth
Deafness or serious trouble with hearing
Diabetes
Epilepsy
Hardening of the arteries
Hay fever
Heart trouble
Hemorrhoids or piles
Hernia or rupture
High blood pressure
Kidney stones
Mental illness
Missing fingers, hand, or arm-toes, foot, or leg
Palsy
Paralysis of any kind
Permanent stiffness or deformity of the foot, leg, fingers, arm, or back

## Prostate trouble

Repeated trouble with back or spine
Rheumatic fever
Serious trouble with seeing, even when wearing glasses
Sinus trouble, repeated attacks of
Speech defect, any
Stomach ulcer
Stroke
Thyroid trouble or goiter
Tuberculosis
Tumor, cyst, or growth
Varicose veins, trouble with
Incidence of conditions.-The incidence of conditions is the estimated number of conditions having their onset in a specified time period. As previously mentioned, minor acute conditions involving neither restricted activity nor medical attention are excluded from the statistics. The incidence data shown in some reports are further limited to various subclasses of conditions, such as "incidence of conditions involving bed disability."

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 when the person or his family was first told by a physician that he had a condition of which he was previously unaware.

## Terms Relating to Disability

Disability.-Disability is the general term used to describe any temporary or long-term reduction of a person's activity as a result of an acute or chronic condition.

Disability day.-Short-term disability days are classified according to whether they are days of restricted activity, bed days, hospital days, work-loss days, or school-loss days. All hospital days are, by definition, days of bed disability; all days of bed disability are, by definition, days of restricted activity. The converse form of these statements is, of course, not true. Days lost from work and days lost from school are special terms which apply to the working and school-age populations only, but these too are days of restricted activity. Hence "days of restricted activ-
ity" is the most inclusive term used to describe disability days.

Restricted-activity day.-A day of restricted activity is one on which a person cuts down on his usual activities for the whole of that day because of an illness or an injury. The term "usual activities" for any day means the things that the person would ordinarily do on that day. For children under school age, usual activities depend on whatever the usual pattern is for the child's day, which will in turn be affected by the age of the child, weather conditions, and so forth. For retired or elderly persons, usual activities might consist of almost no activity, but cutting down on even a small amount for as much as a day would constitute restricted activity. On Sundays or holidays, usual activities are the things the person usually does on such days-going to church, playing golf, visiting friends or relatives, or staying at home and listening to the radio, reading, looking at television, and so forth. Persons who have permanently reduced their usual activities because of a chronic condition might not report any restricted-activity days during a 2 -week period. Therefore absence of restricted-activity days does not imply normal health.

Restricted activity does not imply complete inactivity, but it does imply only the minimum of usual activities. A special nap for an hour after lunch does not constitute cutting down on usual activities, nor does the elimination of a heavy chore such as cleaning ashes out of the furnace or hanging out the wash. If a farmer or housewife carries on only the minimum of the day's chores, however, this is a day of restricted activity.

A day spent in bed or a day home from work or school because of illness or injury is, of course, a restricted-activity day.

Bed-disability day.-A day of bed disability is one on which a person stays in bed for all or most of the day because of a specific illness or injury. All or most of the day is defined as more than half of the daylight hours. All hospital days for inpatients are considered to be days of bed disability even if the patient was not actually in bed at the hospital.

Work-loss day.-A day lost from work is a day on which a person did not work at his job or
business for at least half of his normal workday because of a specific illness or injury. The number of days lost from work is determined only for persons 17 years of age and over who reported that at any time during the 2 -week period covered by the interview they either worked at or had a job or business. (See "Currently employed" persons under "Demographic Terms.")

Person-day.-Person-days of restricted activity, bed disability, and so forth are days of the various forms of disability experienced by any one person. The sum of days for all persons in a group represents an unduplicated count of all days of disability for the group.

Condition-day.-Condition-days of restricted activity, bed disability, and so forth are days of the various forms of disability associated with any one condition. Since any particular day of disability may be associated with more than one condition, the sum of days for conditions may add to more than the total number of person-days.

Chronic activity limitation.-Persons are classified into four categories according to the extent to which their activities are limited at present as a result of chronic conditions. Since the usual activities of preschool children, school-age children, housewives, and workers and other persons differ, a different set of criteria is used for each group. There is a general similarity between them, however, as will be seen in the following descriptions of the four categories:

1. Persons unable to carry on major activity for their group (major activity refers to ability to work, keep house, or engage in school or preschool activities)

Preschool children:
Inability to take part in ordinary play with other children.

School-age children: Inability to go to school.
Housewives:
Inability to do any housework.
Workers and all other persons: Inability to work at a job or business.
2. Persons limited in amount or kind of major activity performed (major activity refers to ability to work, keep house, or engage in school or preschool activities)

Preschool children:
Limited in amount or kind of play with other children, e.g., need special rest periods, cannot play strenuous games, or cannot play for long periods at a time.
School-age children:
Limited to certain types of schools or in school attendance, e.g., need special schools or special teaching or cannot go to school full time or for long periods at a time.

Housewives:
Limited in amount or kind of housework, e.g., cannot lift children, wash or iron, or do housework for long periods at a time.
Workers and all other persons:
Limited in amount or kind of work, e.g., need special working aids or special rest periods at work, cannot work full time or for long periods at a time, or cannot do strenuous work.
3. Persons not limited in major activity but otherwise limited (major activity refers to ability to work, keep house, or engage ir. school or preschool activities)

Preschool children:
Not classified in this category.
School-age children:
Not limited in going to school but limited in participation in athletics or other extracurricular activities.
Housewives:
Not limited in housework but limited in other activities such as church, clubs, hobbies, civic projects, or shopping.

Workers and all other persons:
Not limited in regular work activities but limited in other activities such as church, clubs, hobbies, civic projects, sports, or games.
4. Persons not limited in activities (includes persons whose activities are not limited in f. any of the ways described above)

## Terms Relating to Persons Injured

Injury condition.-An injury condition, or simply an injury, is a condition of the type that is classified according to the nature of injury code numbers (N800-N999) in the International Classification of Diseases. In addition to fractures, lacerations, contusions, burns, and so forth, which are commonly thought of as injuries, this group of codes includes effects of exposure, such as sunburn; adverse reactions to immunization and other medical procedures; and poisonings. Unless otherwise specified, the term injury is used to cover all of these.

Since a person may sustain more than one injury in a single accident, e.g., a broken leg and laceration of the scalp, the number of injury conditions may exceed the number of persons injured.

Statistics of acute injury conditions include only those injuries which involved at least 1 full day of restricted activity or medical attendance.

Person injured.-A person injured is one who has sustained one or more injuries in an accident or in some type of nonaccidental violence. (See definition of injury condition.) Each time a person is involved in an accident or in nonaccidental violence causing injury that results in at least 1 full day of restricted activity or medical attention he is included in the statistics as a separate person injured; hence one person may be included more than once.

The number of persons injured is not equivalent to the number of accidents for several reasons: (1) the term "accident" as commonly used may not involve injury at all, (2) more than one injured person may be involved in a single accident, so the number of accidents resulting in injury would be less than the number of persons injured in accidents, and (3) the term "accident" ordinarily implies an accidental origin whereas "persons injured" as used in the Health Interview Survey includes persons whose injuries resulted from certain nonaccidental violence.

The number of persons injured in a specified time interval is always equal to or less than
the incidence of injury conditions since one person may incur more than one injury in a single accident.

## Terms Relating to Class of Accident

Class of accident.-Injuries, injured persons, and resulting days of disability may be grouped according to class of accident. This is a broad classification of the types of events which resulted in personal injuries. Most of these events are accidents in the usual sense of the word, but some are other kinds of mishap, such as overexposure to the sun or adverse reactions to medical procedures, and others are nonaccidental violence, such as attempted suicide. The classes of accident are (1) moving motor vehicle accidents, (2) accidents occurring while at work, (3) home accidents, and (4) other accidents. These categories are not mutually exclusive. For example, a person may be injured in a moving motor vehicle accident which occurred while the person was at home or at work. The accident class "moving motor vehicle" includes "homemoving motor vehicle" and "while at workmoving motor vehicle." Similarly, the classes "while at work" and "home" include duplicated counts, e.g., "moving motor vehicle-while at work" is included under "while at work."

Accident while at work.-The class of accident is "while at work" if the injured person was 17 years of age or over and was at work at a job or a business at the time the accident happened.

Home accident.-The class of accident is "home" if the injury occurred either inside or outside the house. "Outside the house" refers to the yard, buildings, and sidewalks on the property. "Home" includes not only the person's own home but also any other home in which he may have been when he was injured.

Other accident.-The class of accident is "other" if the occurrence of injury cannot be classified in one of the first two class-of-accident categories (i.e., while at work or home). This category therefore includes persons injured in motor vehicle accidents or in public places (e.g., tripping and falling in a store or on a public sidewalk) and also nonaccidental injuries such as homicidal and suicidal attempts. The survey does not cover the military population, but
current disability of various types resulting from prior injury occurring while the person was in the Armed Forces is covered and is included in this class. The class also includes mishaps for which the class of accident could not be ascertained.

## Terms Relating to Hospitalization

Hospital.-For this survey a hospital is defined as any institution meeting one of the following criteria: (1) named in the listing of hospitals in the current Guide Issue of Hospitals, the Journal of the American Hospital Association, or (2) 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 by the hospital is general; maternity; eye, ear, nose, and throat; children's; or osteopathic; or it may be the hospital department of an institution.

Hospital ownership.-Hospital ownership is a classification of hospitals according to the type of organization that controls and operates the hospital. The category to which an individual hospital is assigned and the definition of these categories follows the usage of the American Hospital Association.

Surgical operation.-A surgical operation includes any cutting or piercing of the skin or other tissue, stitching of cuts or wounds, setting of fractures and dislocations, the introduction of tubes for drainage "tapping," and terms ending in "scopy" (e.g., cystoscopy). Deliveries are counted as operations. Injections and transfusions, however, are not included, nor are routine circumcisions. Only operations performed in hospitals upon inpatients 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.

Hospital discharge.-A hospital discharge is the completion of any continuous period of stay of 1 or more nights in a hospital as an inpatient except the period of stay of a well newborn in-
fant. A hospital discharge is recorded whenever a present member of the household is reported to have been discharged from a hospital in the 12 -month period prior to the interview week. (Estimates were based on discharges which occurred during the 6 -month period prior to the interview.)

## Terms Relating to Dental Visits

Dental visit.-A dental visit is defined as any visit to a dentist's office for treatment or advice, including services by a technician or. hygienist acting under a dentist's supervision.

Interval since last dental visit.-The interval since the last dental visit is the length of time prior to the week of interview since a dentist or dental hygienist was last visited for treatment or advice of any type.

## Terms Relating to Physician Visits

Physician visit.-A physician visit is defined as consultation with a physician, in person or by telephone, for examination, diagnosis, treatment, or advice. The visit is considered to be a physician visit 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 which is described here.

Physician visits 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 (e.g., test for diabetes) or a single procedure (e.g., smallpox vaccination) when this single service was administered identically to all persons who were 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 visit. However, a special chest X-ray given in a physician's office or in an outpatient clinic is considered a physician visit.

Physician visits to hospital inpatients are not included.

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

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

Interval since last physician visit.-The interval since the last physician visit 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 visit to a hospital inpatient may be counted as the last time a physician was seen.

Place of visit.-The place of visit is a classification of the types of places at which a physician visit occurs. Definitions of the various categories are as follows:

Home is defined as any place in which the person was staying at the time of the physician's visit. It may be his own home, the home of a friend, a hotel, or any other place the person may have been staying (except as an overnight patient in a hospital).
Office is defined as the office of a physician in private practice only. This may be an office in the physician's home, an individual office in an office building, or a suite of offices occupied by several physicians. For purposes of this survey, physicians connected with prepayment-grouppractice plans are considered to be in private practice.
Hospital clinic is defined as an outpatient clinic or emergency room in any hospital.
Company or industry health unit refers to treatment received from a physician or under a physician's supervision at a place of business (e.g., factory, store, office building). This includes emergency or first-aid rooms located in such places if treatment was received there from a physician or trained nurse.

Telephone contact refers to advice given in a telephone call by the physician directly or
through a nurse. (Calls for appointments are excluded.)
Other refers to advice or treatment received from a physician or under a physician's general supervision at a school, at an insurance office, at a health department clinic, or any other place at which a physician consultation might take place.

## 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 regıon.-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 shown in figure XII.

Place of residence.-The place of residence of a member of the civilian, noninstitutionalized population is classified as inside a standard metropolitan statistical area (SMSA) or outside an SMSA and either farm or nonfarm.

Standard metropolitan statistical areas. - The definitions and titles of SMSA's are established by the U.S. Office of Management and Budget with the advice of the Federal Committee on Standard Metropolitan Statistical Areas. There were 243 SMSA's defined for the 1970 decennial census.

The definition of an individual SMSA involves two considerations: first, a city or cities of specified population which constitute the central city and identify the county in which it is located as the central county; second, economic and social relationships with contiguous counties (except in New England) which are metropolitan in character so that the periphery of the specific metropolitan area may be determined. SMSA's are not limited by State boundaries. In New England SMSA's consist of towns and cities, rather than counties. The metropolitan population in this report is based on SMSA's as defined in the 1970 census and does not include any subsequent additions or changes.

Figure XII. States included in the four geographic regions.

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

Central cities.-Each SMSA must include at least one central city. The complete title of an SMSA identifies the central city or cities. If only one central city is designated, then it must have 50,000 inhabitants or more. The area title may include, in addition to the largest city, up to two city names on the basis and in the order of the following criteria: (1) the additional city has at least 250,000 inhabitants or (2) the additional city has a population of one-third or more of that of the largest city and a minimum population of 25,000 . An exception occurs where two cities have contiguous boundaries and constitute, for economic and social purposes, a single community of at least 50,000 , the smaller of which must have a population of at least 15,000.

Large metropolitan areas.-Statistics are presented in this report for eight large metropolitan areas. The titles and definitions of these areas as specified for the 1970 decennial census are shown below. Six of these areas were standard metropolitan statistical areas and two-New York and Chicago-were classified as standard consolidated areas and consisted of four SMSA's and two additional counties and of two SMSA's, respectively. (See figure XIII.)

Farm and nonfarm residence.-The population residing outside SMSA's is subdivided into the farm population, which comprises all non-SMSA residents living on farms, and the nonfarm population, which comprises the remaining outside SMSA population. The farm population includes persons living on places of 10 acres or more from which sales of farm products amounted to $\$ 50$ or more during the previous 12 months or on places of less than 10 acres from which sales of farm products amounted to $\$ 250$ or more during the preceding 12 months. Other persons living outside an SMSA were classified as nonfarm if their household paid rent for the house but their rent did not include any land used for farming.

Sales of farm products refer to the gross receipts from the sale of field crops, vegetables, fruits, nuts, livestock and livestock products (milk, wool, etc.), poultry and poultry products, and nursery and forest products produced on the place and sold at any time during the preceding 12 months.

Currently employed.-Persons 17 years of age and over who reported that at any time during the 2 -week period covered by the interview they either worked at or had a job or business are currently employed. Current employment includes paid work as an employee of someone else; self-employment in business, farming, or professional practice; and unpaid work in a family business or farm. Persons who were temporarily absent from a job or business because of a temporary illness, vacation, strike, or bad weather are considered as currently employed if they expected to work as soon as the particular event causing the absence no longer existed.

Figure XIII. Large metropolitan areas.

| Area | Formal Title | Counties |
| :---: | :---: | :---: |
| Boston | Boston, Mass. | Suffolk, Middlesex (part), Essex (part), Norfolk (part), Plymouth (part) |
| New York | New York-Northeastern New Jersey: New York, N.Y. SMSA | Bronx, Kings, New York, Queens, Richmond, Nassau, Rockland, Suffolk, Westchester |
|  | Newark, N.J. SMSA | Essex, Morris, Union |
|  | Jersey City, N.J. SMSA | Hudson |
|  | Paterson-Clifton-Passaic, N.J. SMSA Middlesex County | Bergen, Passaic |
|  | Somerset County |  |
| Philadelphia | Philadelphia, Pa.-N.J. | Bucks, Chester, Delaware, Montgomery, Philadelphia, Burlington, Camden, Gloucester |
| Detroit Chicago | Detroit, Mich. | Macomb, Oakland, Wayne |
|  | Chicago-Northwestern Indiana: Chicago, III. SMSA | Cook, Du Page, Kane, Lake, McHenry, Will, Chicago (city) |
|  | Gary-Hammond-East Chicago SMSA | Lake, Porter |
| Washington | Washington, D.C.-Md.-Va. | Washington, D.C.; Arlington, Fairfax, Loudoun, Montgomery, Prince Georges, Prince William (counties); Alexandria, Fairfax, Falls Church (cities) |
| Los Angeles | Los Angeles-Long Beach, Calif. | Los Angeles |
| San Francisco | San Francisco-Oakland, Calif. | Alameda, Contra Costa, Marin, San Francisco, San Mateo |

Free-lance workers are considered currently employed if they had a definite arrangement with one employer or more to work for pay according to a weekly or monthly schedule, either full time or part time.

Excluded from the currently employed population are persons who have no definite employment schedule but work only when their services are needed. Also excluded from the currently employed population are (1) persons receiving revenue from an enterprise but not participating in its operation, (2) persons doing housework or charity work for which they receive no pay, (3) seasonal workers during the portion of the year they were not working, and (4) persons who were not working, even though having a job or business, but were on layoff or looking for work.

The number of currently employed persons estimated from the Health Interview Survey (HIS) will differ from the estimates prepared from the Current Population Survey (CFS) of the U.S. Bureau of the Census for several reasons. In addition to sampling variability they include three primary conceptual differences, namely: (1) HIS estimates are for persons 17 years of age and over; CPS estimates are for persons 16 years of age and over. (2) HIS uses a 2 -week reference period, while CPS uses a 1 -week reference period. (3) HIS is a continuing survey with separate samples taken weekly; CPS is a monthly sample taken for the survey week which includes the 12 th of the month.

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[^0]:    ${ }^{1}$ Mr. Gentile was Chief of Survey Methods Branch of the Division of Health Interview Statistics and later Director of the Office of Demographic Studies at Gallaudet College. He is now retired.

[^1]:    ${ }^{2}$ There is evidence that the inclusion in HIS of a supplement on acute conditions during 1973 and 1974 led to sizable decreases in the number of conditions reported to have begun in the 2 weeks prior to the interview. Comparisons of estimates of the number or rate of acute conditions with HIS data from other years should be made with extreme caution. For a more detailed discussion of this issue, see Series 10, No. 102, pp. 1-10.

[^2]:    SOURCE: U.S. Bureau of the Census: Statistical Abstract of the United States, 1974, 95th ed. U.S. Government Printing Office. Washington, D.C., 1974. p. 864.

[^3]:    NOTE: Numbers preceded hy an asterisk have a relative standard error of more than 30 percent; estimates given solels for combirme with wither cells.

[^4]:    NOTE. Numbers preceded by an asterisk have a relative standard error of more than $\mathbf{3 0}$ percent, estimates given solely for combintng with other cells.

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[^6]:    NOTE: Numbers preceded by an asterisk have a relative standard error of more than 30 percent, estimater given ratisls for cumbining uath othey cells

[^7]:    NOTE Numbers preceded bv an asterisk have a relative standard efror of more than 30 percent, estomates given solely for combining with other cells

[^8]:    ${ }^{1}$ Excluded from these statistics are all injuries involving neither restricted activity nor medical attention.

[^9]:    NOTE - Numbers preceded by an asterisk have a relative standard error of more than 30 percent; estimates given solely for combining with other cells.

[^10]:    NOTI Numbers preceded by an asterisk have a relative standard error of more than 30 percent; estimates given solely for combining with other cells.

[^11]:    NOTE: Numbers preceded by an asterisk have a relative standard error of more than 30 percent: estimates given solely for combining with other ceils

[^12]:    ${ }^{3}$ National Center for Health Statistics: Health survey procedure: concepts, questionnaire development, and definitions in the Health Interview Survey. Vital and Health Statistics. PHS Pub. No. 1000-Series 1-No. 2. Public Health Service. Washington. U.S. Government Printing Office, May 1964.
    ${ }^{4}$ U.S. National Health Survey: The statistical design of the health household interview survey. Health Statistics. PHS Pub. No. 584-A2. Public Health Service. Washington, D.C., July 1958.
    ${ }^{5}$ National Center for Health Statistics: Estimation and sampling variance in the Health Interview Survey. Vital and Health Statistics. PHS Pub. No. 1000-Series 2-No. 38. Public Health Service. Washington. U.S. Government Printing Office, June 1970.

[^13]:    ${ }^{6}$ National Center for Health Statistics: Quality control and measurement of nonsampling error in the Health Interview Survey. Vital and Health Statistics. Series 2-No. 54. DHEW Pub. No. (HSM) 73-1328. Health Services and Mental Health Administration. Washington. U.S. Government Printing Office, Mar. 1973.

[^14]:    ${ }^{7}$ National Center for Health Statistics: Health interview responses compared with medical records. Vital and Health Statistics. PHS Pub. No. 1000-Series 2-No. 7. Public Health Service. Washington. U.S. Government Printing Office, July 1965.
    ${ }^{8}$ National Center for Health Statistics: Comparison of hospitalization reporting in three survey procedures. Vital and Health Statistics. PHS Pub. No. 1000 -Series 2-No. 8. Public Health Service. Washington. U.S. Government Printing Office, July 1965.
    ${ }^{9}$ National Center for Health Statistics: Interview data on chronic conditions compared with information derived from medical records. Vital and Health Statistics. PHS Pub. No. 1000-Series 2-No. 23. Public Health Service. Washington. U.S. Government Printing Office, May 1967.
    ${ }^{10}$ National Center for Health Statistics: The influence of interviewer and respondent psychological and behavioral variables on the reporting in household interviews. Vital and Health Statistics. PHS Pub. No. 1000-Series 2-No. 26. Public Health Service. Washington. U.S. Government Printing Office, Mar. 1968.

[^15]:    ${ }^{11}$ National Center for Health Statistics: Eighth Revision International Classification of Diseases, Adapted for Use in the United States. PHS Pub. No. 1693. Public Health Service. Washington. U.S. Government Printing Office, 1967.

