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SERIES B-No. 17

# HEALTH STATISTICS

*FROM THE U. S. NATIONAL HEALTH SURVEY*

## Peptic Ulcers

## reported in interviews

## United States

## July 1957 - June 1959

**Statistics on prevalence of peptic ulcers and associated disability by age, sex, and medical care status. Based on data collected in household interviews during the period July 1957-June 1959.**

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**Washington, D. C.** **June 1960**

# U. S. NATIONAL HEALTH SURVEY

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The U. S. National Health Survey is a continuing program under which the Public Health Service makes studies to determine the extent of illness and disability in the population of the United States and to gather related information. It is authorized by Public Law 652, 84th Congress.

## CO-OPERATION OF THE 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. For the Health Interview Survey the Bureau of the Census designed and selected the sample, conducted the household interviews, and processed the data in accordance with specifications established by the Public Health Service.

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## EXPLANATION OF SYMBOLS

| | |
|---|---|
| Data not available (three dashes)---------- | --- |
| Category not applicable (three dots)---------- | ... |
| Quantity is zero (1 dash)---------- | - |
| Magnitude greater than zero but less than one-half of the unit used---------- | 0 or 0.0 |
| Magnitude of the sampling error precludes showing separate estimates---------- | (*) |

# PEPTIC ULCERS

## QUALIFICATIONS OF THE DATA

Estimates of the prevalence of chronic conditions may be derived from a number of sources. In general, this source material can be classified into (1) surveys conducted by household interview, and (2) studies based on medical records and examinations.

There are advantages and disadvantages to both of these methods of estimating prevalence, and the method of choice is often determined by the nature of the disease. For a disease such as sinusitis, which is often self-diagnosed on the basis of recognizable symptoms and never seen by a physician, the household interview undoubtedly yields a more complete prevalence estimate than one obtained from medical records. On the other hand, for a condition such as cancer, which can be accurately diagnosed only by clinical tests, and which may not be reported in an interview because of reluctance to discuss it, the prevalence can be estimated more accurately from clinical records or clinical examination.

Peptic ulcers and many other chronic conditions fall somewhere between these extremes. It is possible to estimate their prevalence from data collected either by household interview or by clinical studies. However, the estimates will probably differ because of the concept of illness inherent in each method. On the basis of clinical studies, the prevalence estimate will include only cases of peptic ulcer that have been recorded by a physician and he can record only those cases which are clinically detectable at the time of examination. Because of practical considerations, the scope of such a study will necessarily be limited and the records may not be a representative sample of the population. An estimate of prevalence from household interviews can be expected to include only those conditions of which the individual is aware, and the individual is usually aware only of those conditions which have caused him discomfort or interfered with his usual routine. The diagnostic accuracy of such cases depends, of course, on their having been seen by a physician.

One other point in estimating the prevalence of peptic ulcers from interviews should be considered if the estimates are to have any meaning. This is the possibility that some respondents may not be aware of the chronicity of a recurrent condition if no symptoms are present at the time of interview. Flood[1] and Feldman[2] have found that the majority of individuals who have once been hospitalized for an ulcer do experience a recurrence at some time. In Flood's cases the average recurrence rate was once every 2.1 years for duodenal ulcers and once every 2.4 years for gastric ulcers. For persons who had never been hospitalized for the ulcer, the recurrence rate was approximately once every four years. Since the illness-recall period for ulcers used in the National Health Survey is 12 months—considerably

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This report was prepared by Mary Grace Kovar of the U. S. National Health Survey staff.

less than the average period between recurrences—it is possible that persons who had suffered no serious manifestation of the ulcer during that period might have thought that the condition no longer existed, and thus failed to report it. Some idea of whether these people actually did report the presence of the condition even though it had not bothered them in the past 12 months can be obtained from the data.

It seems reasonable to assume that if there had been a serious recurrence during the 12-month-recall period, it would have involved medical attention. Only 34 percent of the persons for whom a peptic ulcer was reported had consulted a physician about the ulcer within 12 months. The other 66 percent, who had not had a clinical recurrence, were apparently aware of the chronicity of the condition and so reported its presence.

## PEPTIC ULCERS

Conditions codable to numbers 540-542 of the International Classification of Diseases, 1955 Revision, are included in this report. These three code numbers include all forms of gastric, duodenal, and gastrojejunal ulcers. However, because the household respondent is so often unable to furnish a differential description, all ulcers reported have been placed in one diagnostic category for the purposes of this report and will be referred to collectively as peptic ulcers.

It is possible, of course, for an individual to have more than one type of ulcer, and the respondent might report, for example, both a gastric and a duodenal ulcer. If this happened, it would result in an over-estimate of the number of persons with a peptic ulcer when all types of ulcers are grouped into one category. However, a review of the literature revealed that the coexistence of two types is uncommon, and a review of a sample of National Health Survey questionnaires did not reveal any reporting of two types. It is unlikely, therefore, that there is great inflation of the prevalence estimates due to the grouping procedures.

The morbidity surveys conducted before 1930 did not place ulcers in a separate diagnostic category. Neither interest nor diagnostic accuracy had developed sufficiently to support such a category, and consequently ulcers were included with other digestive disorders. By the time of the nationwide health survey of 1935-1936,[3] radiologic methods of ulcer detection had come into being, and interest in the condition was increasing. Ulcers were coded as a separate category and the prevalence was estimated to be 2.6 persons with an ulcer per 1,000 population. In the Eastern Health District Survey of 1938-1943[4] the estimate was 2.9 per 1,000.

By the 1950's, radiologic equipment was in common use throughout the United States and it was relatively easy to obtain laboratory confirmation of a suspected ulcer diagnosis. Partly as a result of this, and of improved modern survey methods, prevalence rates based on three recent surveys are higher than those from earlier surveys and are in very close agreement with one another. The California Survey of 1954-1955[5] reported 13.2 per 1,000 persons. The Kansas City Survey[6] conducted in 1954-1957 also reported a prevalence of 13.2 persons with peptic ulcer per 1,000 persons, and the data collected by the National Health Survey from July 1957-June 1959 yielded an estimate of 14.4 cases per 1,000 persons of all ages.

It is interesting to compare the results from these household interview surveys with recent prevalence estimates derived from sources other than interviews. For example, the Health Insurance Plan of Greater New York analyzed the records of visits to its member physicians for the years 1948-1951. An average annual prevalence estimate of 9.7 persons with an ulcer per 1,000 members of the plan, based on persons visiting a member physician because of an ulcer, was de-

Estimated prevalence of persons with peptic ulcers per 1,000 persons

| Type of study | Time covered | Sex | | | Method |
|---|---|---|---|---|---|
| | | Both | Male | Female | |
| Earlier surveys | | | | | |
| National Health Survey | 1935-1936 | 2.6 | | | Household interview |
| Eastern Health District of Baltimore | 1938-1943 | 2.9 | | | Household interview |
| Recent surveys | | | | | |
| California | 1954-1955 | 13.2 | 19.1 | 7.6 | Household interview |
| Kansas City Metropolitan Area | 1954-1957 | 13.2 | 21.5 | 5.7 | Household Interview |
| U.S. National Health Survey | 1957-1959 | 14.5 | 21.6 | 7.7 | Household interview |
| Medical examination | | | | | |
| Health Insurance Plan of Greater New York | 1948-1951 | 9.7 | 14.1 | 4.8 | Utilization of medical services |
| Autopsy | | | | | |
| National and Regional Survey (England) | 1956 | 25 | 37 | 15 | Chronic active ulcers unrelated to death (adults) |
| | | 62 | 83 | 39 | Chronic ulcers unrelated to death (adults) |

rived from this analysis.[7] Another method of obtaining prevalence estimates is the use of autopsy material as a basis for estimating the prevalence of a chronic condition in a living population. An example of the use of this method to estimate the prevalence of ulcers was the analysis of more than 7,000 records of autopsies performed in English hospitals in 1956.[8] The estimate of the prevalence of chronic ulcers in the living population, based on the proportion of autopsies of persons 15 years of age or over which revealed chronic ulcers unrelated to the cause of death, was 62 per 1,000 persons. The estimate based on autopsies which revealed the presence of active chronic ulcers unrelated to the cause of death comes closer perhaps to a measure comparable to that obtained from living persons. This estimate was 25 per 1,000 persons, an estimate which is in close agreement with the U.S. National Health Survey estimate of 20.8 cases per 1,000 persons 15 years of age or over.

## SOURCE OF THE DATA

Material presented in this report is derived from approximately 235,000 persons who were included in the 73,000 household interviews conducted by the U.S. National Health Survey during the period July 1, 1957-June 28, 1959. The data obtained from two years of interviewing of a continuous sample of the civilian noninstitutional population of the United States have been combined and averaged to obtain estimates of the prevalence of recognized peptic ulcers in this population.

A description of the statistical design of the survey, the methods used in estimation, and the general qualifications of data obtained from surveys is presented in Appendix I. Since all estimates presented in this report are based on a sample of approximately 1/750th of the population rather than on the entire population, they are subject to sampling error and particular attention

should be paid to the section entitled "Reliability of Estimates" which includes tables of sampling errors and instructions for their use.

Definitions of certain terms used in this report are given in Appendix II. Since many of the terms have specialized meanings for the purposes of the survey, familiarity with these definitions will assist the reader in interpreting the material.

The questionnaire which was used during the year July 1958-June 1959 is reproduced as Appendix III. Those sections which apply to this report include questions 10-16 and table I. The interviewer was instructed to ask these items of each adult who was home at the time of her call. For adults not at home and for children under the age of 18, the wife, parent, or other responsible member of the family, living in the same household, was an eligible respondent. Lodgers and similar unrelated members of the household were asked all questions for themselves even if it involved additional calls for the interviewer.

## U. S. NATIONAL HEALTH SURVEY ESTIMATES

### Prevalence According to Medical Attention Status

Data from the National Health Survey agree with data from other sources in reporting a much higher prevalence of ulcers among males than among females. The estimated prevalence for males for the period July 1957-June 1959 was 21.4 ulcer cases per 1,000 persons. For females during the same period the estimated prevalence was 7.7 cases per 1,000 persons. In the civilian noninstitutional population of the United States then, 73 percent of the persons for whom peptic ulcers were reported were males.

Almost all of the people for whom a peptic ulcer was reported had consulted a physician about the condition. Some 97.7 percent of the males and 99.6 percent of the females were reported to have talked with a physician at some time about their ulcers. However, the estimated prevalence of medically attended cases of peptic ulcer was 20.9 per 1,000 for males and 7.6 per 1,000 for females, and the proportion of cases which had been medically attended was so high that one can speak of the prevalence of total cases or the prevalence of medically attended cases with very little difference in the rates. Therefore, when prevalence is referred to in this report with no modifying phrase, it will be the prevalence of total cases.

The third kind of prevalence which can be obtained from the data is the prevalence of cases currently under care. In answer to the questions "Do you still take any medicine or treatment that the doctor prescribed for your ulcer? Or, follow any advice he gave?," 76.4 percent of the respondents said "yes." The use of this positive response as an index provided estimates of the number of cases under care. For these cases, prevalence was 11.0 per 1,000 persons (fig. 1). It was estimated that there were 16.0 cases of peptic ulcers under care per 1,000 males and 6.2 cases per 1,000 females. The proportion of total cases which was under care was higher for females than for males; 81.2 percent of the females and 74.6

Table A. Prevalence of peptic ulcers per 1,000 population and ratio of males to females: United States, July 1957-June 1959

| Age | Prevalence per 1,000 | | Ratio of males to females |
|---|---|---|---|
| | Male | Female | |
| All ages-- | 21.4 | 7.7 | 2.8 |
| 0-24--------- | (*) | (*) | (*) |
| 25-34--------- | 29.3 | 7.0 | 4.2 |
| 35-44--------- | 42.5 | 13.9 | 3.1 |
| 45-54--------- | 40.5 | 17.5 | 2.3 |
| 55-64--------- | 39.0 | 14.2 | 2.7 |
| 65+---------- | 33.0 | 13.3 | 2.5 |

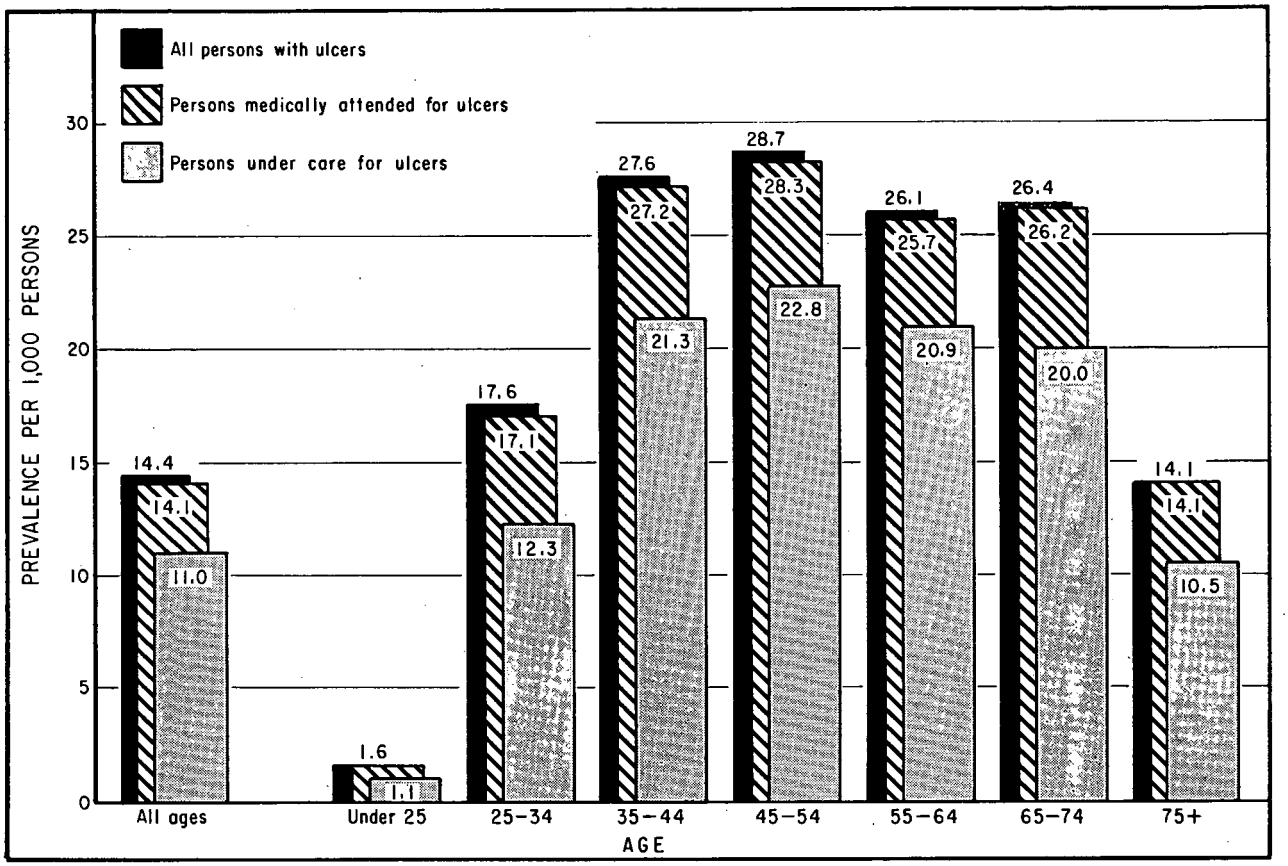


Figure 1. Prevalence of peptic ulcer according to medical attention status by age.

percent of the males were reported as being under care.

No matter which estimate of prevalence is used—total cases, medically attended cases, or cases under care—the highest prevalence for males was in the age group 35-44 while the highest prevalence for females was in the age group 45-54. In general, the ratio of males with a peptic ulcer to females with a peptic ulcer is highest in the younger age groups and then decreases after age 45, but in no case is the prevalence rate among females as much as half as high as that among males (table A).

## Long-Term Disability

In a household interview survey it is difficult to measure the severity of peptic ulcer cases in terms of continuing disability since ulcers do not usually necessitate well-defined periods of limitation of specific physical activities. An ulcer seldom renders a man incapable of working or of moving about freely. The limitations attributed to ulcers are often self-imposed measures designed to prevent a recurrence rather than limitations due to an actual inability to perform certain functions as might be the case with conditions such as arthritis or blindness. Nevertheless, because it is easier for a household respondent to understand and answer, and because for many conditions it is a useful measure of persons in need of rehabilitation, the concept of physical limitation is the one which was used for this survey.

### Chronic Limitation of Activity

In answer to the questions about chronic limitation of activity (See Appendix 3, Cards C-F), the respondents reported that 85.0 percent of the

persons with ulcers were not limited in their activities in any of the specified ways because of the condition. The 15.0 percent who were limited because of the condition were divided into 11.7 percent who were limited in outside activities or in amount or kind of major activity and 3.3 percent who were completely unable to carry on their major activity (fig. 2).

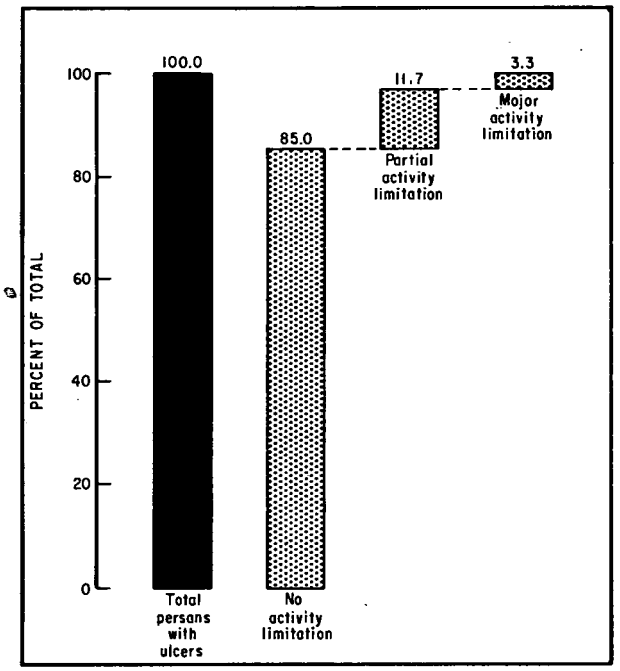


Figure 2. Peptic ulcer cases according to chronic activity limitation.

The percent of those whose peptic ulcer did not cause them to limit their activities decreased as they grew older. Although 92.6 percent of those under 25 years of age and 90.4 percent of those 25-44 years of age reported no activity limitation because of the ulcers, only 70.3 percent of those 65 years of age or over reported that no chronic limitation resulted from the ulcer.

In any case, the contribution of peptic ulcers to the problem of chronic limitation is very slight. Of the 16,919,000 persons estimated by the National Health Survey to have chronic activity limitation, only 366,000 or 2.2 percent named peptic ulcer as a cause of this limitation.

## Conditions Causing Bed Disability

Another measure of the severity of a condition is the number of persons who spent at least one day in bed during the 12 months prior to the interview because of the condition. Some 589,000 persons, 24.1 percent of those with an ulcer, spent one day or more in bed because of the ulcer. The percent of cases with one or more bed-days within the year was somewhat higher for females (26.3 percent) than for males (23.3 percent). No relationship between age and the percent of cases with one or more days in bed during the year was apparent.

Approximately two thirds of these persons with one or more days in bed during the year actually spent seven or more days in bed. As can be seen in figure 3, the prevalence of persons who

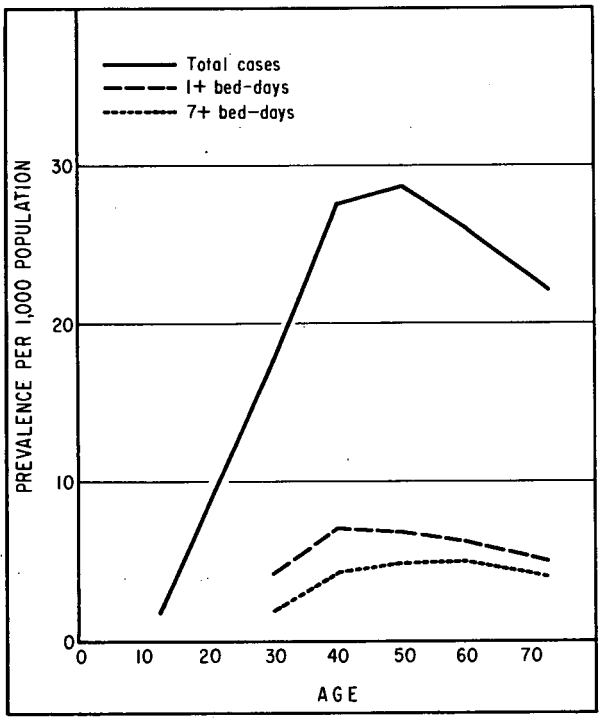


Figure 3. Prevalence per 1,000 persons of total cases of peptic ulcers, of cases with one or more bed-days, and of cases with seven or more bed-days in the year prior to interview by age.

spent seven or more days in bed during the year because of an ulcer remained almost constant from the age group 35-44 through the group 65

years and over. However, since the prevalence of total cases declined somewhat in the older ages and the prevalence of cases with seven or more bed-days remained constant, the percent of cases with seven or more bed-days actually increased slightly. Thus, there is some indication that in the older age groups the severity of peptic ulcers is increased. This might be expected since there is an increased likelihood of the coexistence of other, complicating conditions in the older ages.

## Temporary Disability

As a measure of the impact of peptic ulcers on the economy, data are presented on the number of disability days caused by ulcers. Three measures of the extent of disability are used in this report—days of restricted activity, days of bed disability, and days lost from work. By definition, a day of restricted activity is the most inclusive measure. It is any day on which a person had to cut down on his usual activities all day long because of his condition. A day of restricted activity is also a day of bed disability if the condition kept the person in bed for all or most of the day. For persons 17 years of age or over, a day of restricted activity can also be a day lost from work if the person would have been working on this day if he had not been ill. Since a person may have stayed home from work but not stayed in bed, a day lost from work may or may not be a day of bed disability. Similarly, the person who spent the day in bed may have done so on a day when he would normally have been at work or on a nonworking day; he may also be a person who does not work at a job or business. Therefore, days of bed disability and days lost from work are not mutually exclusive.

### Days of Restricted Activity

The average annual number of days of restricted activity due to peptic ulcers in the two-year period July 1957-June 1959 was 47 million. Persons with peptic ulcers averaged 19.3 days of restricted activity a year because of the ulcers. The number of days per person per year increased sharply with age from 13.9 days per person in the age group 25-44, to 21.4 days per person in the age group 45-64, and to 31.5 days per person in the age group 65 years and over. Because both the prevalence of peptic ulcers and the number of days per person were high in the age group 45-64, these ages contributed the greatest number of days, 21 million, to the total.

The number of days of restricted activity per person with a peptic ulcer was almost the same for both sexes, 19.5 days per person for males and 18.6 days per person for females (fig. 4). Although this over-all rate was almost the same for both sexes, the age specific rates were quite different, being higher for females under 45 years of age and higher for males 45 years and over. The sharp increase with age referred to above was due largely to the increase for males as can be seen in figure 4.

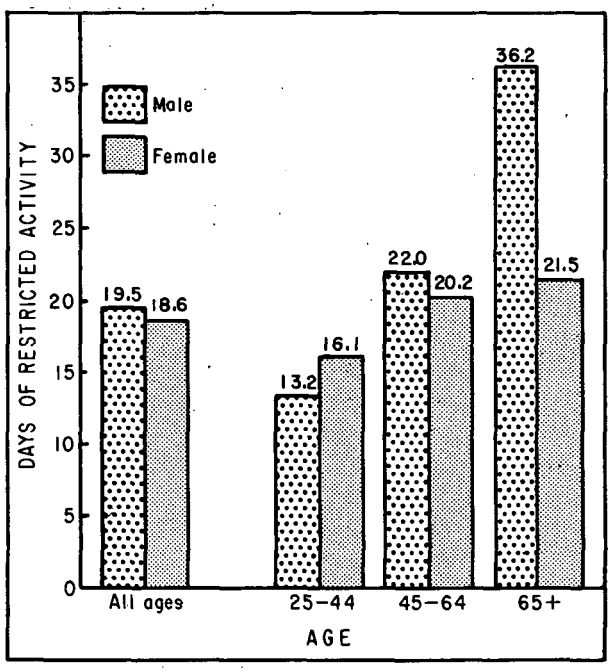


Figure 4. Number of days of restricted activity per person with peptic ulcer per year by sex and age.

### Days of Bed Disability

Peptic ulcers caused 13 million days of bed disability per year during the period July 1957-June 1959. Of this total, 9 million days were for males and 4 million, for females. Persons with peptic ulcers spent an average of 5.3 days in bed each year because of the ulcers. The number of days per person was slightly higher for females than for males, 5.8 days per female and 5.1 days per male. The number of days of bed disability increased greatly with age for both sexes.

For those persons who reported one or more bed-days during the preceding year because of a peptic ulcer, the number of bed-days per persor was 21.8 (table B). Persons between the ages of 25 and 45 who spent at least one day in bed because of an ulcer averaged 14.4 days in bed; from age 45 to 65 the average number was 24.2; for the age group 65 and over, the number of bed-days per person with bed-days was 43.4.

Table B. Number of days of bed disability per year due to peptic ulcers per person with a peptic ulcer and per person with 1+ bed-days due to peptic ulcers

| Age | Number of days of bed disability | |
|---|---|---|
| | Per person with ulcers | Per person with bed-days due to ulcers |
| All ages- | 5.3 | 21.8 |
| 0-24-------- | (*) | (*) |
| 25-44------- | 3.6 | 14.4 |
| 45-64------- | 5.8 | 24.2 |
| 65+--------- | 9.8 | 43.4 |

Thus, although the number of bed-days per year per person with a peptic ulcer was only 5.3, the number of days for those persons who were sick enough to spend at least one day in bed during the year was 21.8. The difference is large because all of the days were associated with only 24.1 percent of the cases.

### Days Lost From Work

It is estimated that peptic ulcers caused 14 million days to be lost from work each of the two years covered by this report. People whose major activity during the year prior to the interview was working lost 12 million days or 7.4 days per person with a peptic ulcer per year. As was the case with days of restricted activity and days in bed, the largest number of work-loss days was for males in the age group 45-64 where the average number of days lost each year was 12.4 for each man whose usual activity was working.

If it is assumed that the usual work year is 245 days, it is possible to estimate the number of persons absent from work each day because of peptic ulcers. The results of such a computation are shown in table C. On the average work day there were 49,000 of the usually working people absent, 18,000 in the age group 17-44 and 30,000 in the age group 45-64.

Table C. Average number of persons absent each working day due to peptic ulcers

| Age | Total (in thousands) | Usually working (in thousands) |
|---|---|---|
| All ages-17+--- | 58 | 49 |
| 17-44---------- | 21 | 18 |
| 45-64---------- | 35 | 30 |
| 65+---------- | (*) | (*) |

One final measure of the contribution of peptic ulcers to the problem of disability can be obtained by relating the number of disability days for which a peptic ulcer was the only cause, or one of several contributing causes, to the total days of disability from all causes. The total in-

Table D. Number of disability days from all causes and percent caused by peptic ulcers

| Type of disability days | Total days (in thousands) | Days caused by peptic ulcers | Percent of total |
|---|---|---|---|
| Restricted activity--- | 3,035,283 | 47,010 | 1.5 |
| Bed disability- | 1,148,753 | 12,865 | 1.1 |
| Work loss---- | 505,918 | 14,185 | 2.8 |

cludes days of disability caused by injuries, impairments, acute conditions, and chronic conditions. Peptic ulcers were a cause of 1.5 percent of all days of restricted activity, of 1.1 percent of all days of bed disability, and of 2.8 percent of all days lost from work (table D). Both days of restricted activity and days of bed disability were recorded for all ages including the younger ages where acute conditions were the major cause of disability days. Days of work loss were recorded only for persons 17 years of age or over. And it is in the adult male population, the segment of the population in which the workers are concentrated, that peptic ulcers had their greatest impact. Ulcers are most prevalent in adult males and thus they have an effect on the economy of the Nation out of proportion to their prevalence in the total population.

## REFERENCES


[1]Flood, Charles A.: The Results of Medical Treatment of Peptic Ulcer. J. Chronic Dis. Vol.1, No. 1, Jan. 1955.

[2]Feldman, Maurice: Statistical Study of Life Cycle of 1,154 Cases of Duodenal Ulcer. J.A.M.A., Vol. 136, No. 11, pp. 736-739, March 13, 1948.

[3]National Health Survey, 1935-36. The Magnitude of the Chronic Disease Problem in the United States. Preliminary Reports, Sickness and Medical Care Series, Bulletin 6, Public Health Service, Washington, D. C., 1938.

[4]Collins, S.D.; Phillips, F.R.; and Oliver, D.S.: Specific Causes of Illness Found in Monthly Canvasses of Families. Sample of the Eastern Health District of Baltimore, 1938-43. Pub. Health Rep. 65: 1235, September 1950.

[5]State of California, Department of Public Health. Health in California. California State Printing Office, Sacramento, Calif.

[6]Peterson, Warren A.: Kansas City Metropolitan Area Health Survey. Community Studies, Inc., Kansas City, Mo., 1959.

[7]Densen, Paul M.; Balamuth, Eve; and Deardorff, Neva R.: Medical Care Plans As a Source of Morbidity Data: The Prevalence of Illness and Associated Volume of Service. The Milbank Memorial Fund Quarterly, Vol. 38, No. 1, January 1960.

[8]Watkinson, G.: The Autopsy Incidence of Chronic Peptic Ulceration, a National and Regional Survey of 20,000 Examinations Performed in Leeds, England Between 1930 and 1949 and in 9 Towns in England and Scotland in 1956. Schweitz. Z. Path. Bakt. 21: 405-432, 1958.

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Table 1. Average prevalence of peptic ulcers according to medical care status *as reported in interviews* and average prevalence per 1,000 population by sex and age: United States, July 1957–June 1959

[Data are based on household interviews during July 1957–June 1959. Data refer to the civilian noninstitutional population of the United States. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

| Sex and age | Total cases | Medically attended cases | | Total cases | Medically attended cases | |
|---|---|---|---|---|---|---|
| | | Total | Under care | | Total | Under care |
| | Number in thousands | | | Rate per 1,000 population | | |
| **Both sexes** | | | | | | |
| All ages | 2,440 | 2,397 | 1,865 | 14.4 | 14.1 | 11.0 |
| 0-24 | 121 | 116 | 86 | 1.6 | 1.6 | 1.1 |
| 25-34 | 397 | 386 | 277 | 17.6 | 17.1 | 12.3 |
| 35-44 | 636 | 627 | 491 | 27.6 | 27.2 | 21.3 |
| 45-54 | 569 | 561 | 452 | 28.7 | 28.3 | 22.8 |
| 55-64 | 390 | 383 | 312 | 26.1 | 25.7 | 20.9 |
| 65-74 | 256 | 254 | 194 | 26.4 | 26.2 | 20.0 |
| 75+ | 70 | 70 | 52 | 14.1 | 14.1 | 10.5 |
| **Male** | | | | | | |
| All ages | 1,771 | 1,731 | 1,322 | 21.4 | 20.9 | 16.0 |
| 0-24 | 93 | 89 | 69 | 2.5 | 2.4 | 1.9 |
| 25-34 | 316 | 304 | 218 | 29.3 | 28.2 | 20.2 |
| 35-44 | 471 | 463 | 356 | 42.5 | 41.8 | 32.2 |
| 45-54 | 392 | 384 | 304 | 40.5 | 39.7 | 31.4 |
| 55-64 | 280 | 273 | 220 | 39.0 | 38.0 | 30.6 |
| 65-74 | 176 | 174 | 124 | 38.9 | 38.4 | 27.4 |
| 75+ | (*) | (*) | (*) | (*) | (*) | (*) |
| **Female** | | | | | | |
| All ages | 669 | 666 | 543 | 7.7 | 7.6 | 6.2 |
| 0-24 | (*) | (*) | (*) | (*) | (*) | (*) |
| 25-34 | 82 | 82 | 59 | 7.0 | 7.0 | 5.0 |
| 35-44 | 166 | 164 | 135 | 13.9 | 13.7 | 11.3 |
| 45-54 | 178 | 177 | 148 | 17.5 | 17.4 | 14.6 |
| 55-64 | 110 | 110 | 92 | 14.2 | 14.2 | 11.9 |
| 65-74 | 81 | 81 | 70 | 15.7 | 15.7 | 13.5 |
| 75+ | (*) | (*) | (*) | (*) | (*) | (*) |

Table 2. Average number of persons with peptic ulcers and number and percent of persons whose ulcers caused no chronic limitation of activity *as reported in interviews* by age: United States, July 1958–June 1959

[Data are based on household interviews during July 1958–June 1959. Data refer to the civilian noninstitutional population of the United States. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

| Age | Number of persons with peptic ulcers (in thousands) | Persons whose ulcers caused no limitation of activity | | Number of males with peptic ulcers (in thousands) | Males whose ulcers caused no limitation of activity | | Number of females with peptic ulcers (in thousands) | Females whose ulcers caused no limitation of activity | |
|---|---|---|---|---|---|---|---|---|---|
| | | Number (in thousands) | Percent | | Number (in thousands) | Percent | | Number (in thousands) | Percent |
| All ages- | 2,440 | 2,075 | 85.0 | 1,771 | 1,502 | 84.8 | 669 | 573 | 85.7 |
| 0-24---------- | 121 | 112 | 92.6 | 93 | 88 | 94.6 | (*) | (*) | (*) |
| 25-44---------- | 1,034 | 935 | 90.4 | 786 | 710 | 90.3 | 248 | 224 | 90.3 |
| 45-64---------- | 959 | 799 | 83.3 | 672 | 552 | 82.1 | 287 | 247 | 86.1 |
| 65+---------- | 327 | 230 | 70.3 | 221 | 152 | 68.8 | 106 | 78 | 73.6 |

Estimates in this table are based on the second year of data collection only. Therefore, the standard errors are 1.25 times the standard errors shown in Appendix I.

Table 3. Average prevalence of peptic ulcers according to bed disability *as reported in interviews* by age: United States, July 1957–June 1959

(See headnote on table 2)

| Age | Cases of peptic ulcers | | | Cases of peptic ulcers | | |
|---|---|---|---|---|---|---|
| | Total | With bed disability in year | | Total | With bed disability in year | |
| | | 1+ days | 7+ days | | 1+ days | 7+ days |
| | Number in thousands | | | Rate per 1,000 population | | |
| All ages---------- | 2,440 | 589 | 385 | 14.4 | 3.5 | 2.3 |
| 0-24---------- | 121 | (*) | (*) | 1.6 | (*) | (*) |
| 25-34---------- | 397 | 95 | 43 | 17.6 | 4.2 | 1.9 |
| 35-44---------- | 636 | 160 | 99 | 27.6 | 7.0 | 4.3 |
| 45-54---------- | 569 | 135 | 97 | 28.7 | 6.8 | 4.9 |
| 55-64---------- | 390 | 93 | 74 | 26.1 | 6.2 | 5.0 |
| 65+---------- | 327 | 74 | 59 | 22.3 | 5.0 | 4.0 |

Table 4. Average number of persons with peptic ulcers according to bed disability *as reported in interviews* by sex and age: United States, July 1957–June 1959

[Data are based on household interviews during July 1957–June 1959. Data refer to the civilian noninstitutional population of the United States. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

| Sex and age | Persons with ulcers | With no bed-disability days in year | With 1+ bed-disability days in year | Persons with ulcers | With no bed-disability days in year | With 1+ bed-disability days in year |
|---|---|---|---|---|---|---|
| | Number of persons in thousands | | | Percent distribution | | |
| **Both sexes** | | | | | | |
| All ages | 2,440 | 1,851 | 589 | 100.0 | 75.9 | 24.1 |
| Under 25 | 121 | 89 | (*) | 100.0 | 73.6 | (*) |
| 25-44 | 1,034 | 779 | 255 | 100.0 | 75.3 | 24.7 |
| 45-64 | 959 | 731 | 228 | 100.0 | 76.2 | 23.8 |
| 65+ | 327 | 253 | 74 | 100.0 | 77.4 | 22.6 |
| **Male** | | | | | | |
| All ages | 1,771 | 1,358 | 413 | 100.0 | 76.7 | 23.3 |
| Under 25 | 93 | 70 | (*) | 100.0 | 75.3 | (*) |
| 25-44 | 786 | 606 | 180 | 100.0 | 77.1 | 22.9 |
| 45-64 | 672 | 508 | 164 | 100.0 | 75.6 | 24.4 |
| 65+ | 221 | 174 | 47 | 100.0 | 78.7 | 21.3 |
| **Female** | | | | | | |
| All ages | 669 | 493 | 176 | 100.0 | 73.7 | 26.3 |
| Under 25 | (*) | (*) | (*) | 100.0 | (*) | (*) |
| 25-44 | 248 | 172 | 75 | 100.0 | 69.4 | 30.2 |
| 45-64 | 287 | 223 | 64 | 100.0 | 77.7 | 22.3 |
| 65+ | 106 | 79 | (*) | 100.0 | 74.5 | (*) |

Table 5. Average annual number of disability days associated with peptic ulcers as reported in interviews and number of days per person with peptic ulcers by sex and age: United States, July 1957–June 1959

[Data are based on household interviews during July 1957–June 1959. Data refer to the civilian noninstitutional population of the United States. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

| Sex and age | Disability days associated with peptic ulcers | | | |
|---|---|---|---|---|
| | Restricted activity | | Bed disability | |
| | Number (in thousands) | Per person with ulcers per year | Number (in thousands) | Per person with ulcers per year |
| **Both sexes** | | | | |
| All ages | 47,010 | 19.3 | 12,865 | 5.3 |
| 0-24 | (*) | (*) | (*) | (*) |
| 25-44 | 14,399 | 13.9 | 3,682 | 3.6 |
| 45-64 | 20,538 | 21.4 | 5,523 | 5.8 |
| 65+ | 10,291 | 31.5 | 3,210 | 9.8 |
| **Male** | | | | |
| All ages | 34,593 | 19.5 | 9,007 | 5.1 |
| 0-24 | (*) | (*) | (*) | (*) |
| 25-44 | 10,404 | 13.2 | 2,359 | 3.0 |
| 45-64 | 14,754 | 22.0 | 4,117 | 6.1 |
| 65+ | 8,008 | 36.2 | 2,191 | 9.9 |
| **Female** | | | | |
| All ages | 12,417 | 18.6 | 3,858 | 5.8 |
| 0-24 | (*) | (*) | (*) | (*) |
| 25-44 | 3,995 | 16.1 | (*) | (*) |
| 45-64 | 5,784 | 20.2 | (*) | (*) |
| 65+ | 2,283 | 21.5 | (*) | (*) |

Table 6. Average annual number of work-loss days associated with peptic ulcers lost by all persons and by "usually working" persons *as reported in interviews* and number of days per person with ulcers by sex and age: United States, July 1957–June 1959

[Data are based on household interviews during July 1957–June 1959. Data refer to the civilian noninstitutional population of the United States. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

| Sex and age | Days lost from work | | | |
|---|---|---|---|---|
| | All persons | | "Usually working" persons | |
| | Number (in thousands) | Per person with ulcers per year | Number (in thousands) | Per person with ulcers per year |
| **Both sexes** | | | | |
| All ages-17+---- | 14,185 | 5.8 | 11,928 | 7.4 |
| 17-44---------- | 5,108 | 4.5 | 4,312 | 4.9 |
| 45-64---------- | 8,634 | 9.0 | 7,444 | 11.0 |
| 65+---------- | (*) | (*) | (*) | (*) |
| **Male** | | | | |
| All ages-17+---- | 13,070 | 7.4 | 11,482 | 8.0 |
| 17-44---------- | 4,503 | 5.2 | 4,140 | 5.2 |
| 45-64---------- | 8,124 | 12.1 | 7,170 | 12.4 |
| 65+---------- | (*) | (*) | (*) | (*) |
| **Female** | | | | |
| All ages-17+---- | (*) | (*) | (*) | (*) |

Table 7. Average population used in obtaining rates shown in this report by sex and age: United States, July 1957–June 1959

(See headnote on table 6)

| Age | Both sexes | | Male | | Female | |
|---|---|---|---|---|---|---|
| | Total | With peptic ulcer | Total | With peptic ulcer | Total | With peptic ulcer |
| | Population in thousands | | | | | |
| All ages---------- | 169,835 | 2,440 | 82,633 | 1,771 | 87,202 | 669 |
| 0-24---------- | 74,826 | 121 | 37,233 | 93 | 37,593 | (*) |
| 25-34---------- | 22,558 | 397 | 10,783 | 316 | 11,776 | 82 |
| 35-44---------- | 23,021 | 636 | 11,072 | 471 | 11,949 | 166 |
| 45-54---------- | 19,833 | 569 | 9,675 | 392 | 10,157 | 178 |
| 55-64---------- | 14,930 | 390 | 7,183 | 280 | 7,747 | 110 |
| 65-74---------- | 9,698 | 256 | 4,530 | 176 | 5,167 | 81 |
| 75+---------- | 4,969 | 70 | 2,157 | (*) | 2,812 | (*) |

Table 8. Average population used in obtaining work-loss rates shown in this report by sex and age: United States, July 1957–June 1959

[Data are based on household interviews during July 1957–June 1959. Data refer to the civilian noninstitutional population of the United States. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

| Sex and age | Total cases with peptic ulcers | "Usually working persons" with peptic ulcers | "Usually working persons" |
|---|---|---|---|
| | Population in thousands | | |
| **Both sexes** | | | |
| All ages-17+ | 2,427 | 1,622 | 59,393 |
| 17-44 | 1,141 | 886 | 35,230 |
| 45-64 | 959 | 674 | 21,452 |
| 65+ | 327 | 63 | 2,711 |
| **Male** | | | |
| All ages-17+ | 1,761 | 1,430 | 41,672 |
| 17-44 | 869 | 796 | 24,494 |
| 45-64 | 672 | 578 | 15,083 |
| 65+ | 221 | 55 | 2,095 |
| **Female** | | | |
| All ages-17+ | 665 | 193 | 17,721 |
| 17-44 | 272 | 89 | 10,736 |
| 45-64 | 287 | 95 | 6,368 |
| 65+ | 106 | (*) | 617 |

# APPENDIX I

# TECHNICAL NOTES ON METHODS

## Background of This Report

This report on Peptic Ulcers is one of a series of statistical reports covering separate health-related topics which are prepared by the U.S. National Health Survey. The report is based on information collected in the continuing nationwide sample of households in the Health Interview Survey, which is a main aspect of the program.

The Health Interview Survey uses a questionnaire which, in addition to personal and demographic characteristics, elicits information on illnesses, injuries, chronic conditions, medical care, dental care, and hospitalization. As interview data relating to each of these various broad subject areas are tabulated and analyzed, separate reports are issued covering one or more specific topics. The present report contains data for 104 weeks of interviewing ending June 28, 1959.

The population covered by the sample for the Health Interview Survey is the civilian population living in the United States at the time of the household interview. Although the sample collection covers persons who are inmates of institutions, data for these persons are not included in the figures given in these reports. Also the sample does not include members of the Armed Forces, United States nationals living in foreign countries, and crews of vessels.

## 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 population of the United States. This plan utilizes the 1,900 Primary Sampling Units consisting of counties, groups of contiguous counties, and Standard Metropolitan Areas into which the country has been divided. The first stage of the design consists of drawing a sample from these Primary Sampling Units (PSU's). During the first 18 months of the Health Interview Survey the sample size was 372 PSU's. This was increased to 500 PSU's in January 1959. However, the basic sampling design and methods of estimating remained unchanged during the two-year period covered by this report. The number of ratio estimating classes shown subsequently in this Appendix are those which applied to the first 18 months of the survey.

With no loss in general understanding, the remaining stages of the sampling can be telescoped and treated in this discussion as an ultimate stage. Within PSU's, then, ultimate stage units called segments are defined, also geographically, in such a manner that each segment contains an expected six households. Each week a random sample of about 120 segments is drawn. In the approximately 700 households in those segments, persons are interviewed concerning illnesses, injuries, chronic conditions, disability, and other factors related to health.

The household members interviewed each week are a representative sample of the population so that samples for successive weeks can be combined into larger samples for, say, a calendar quarter, a year, or more. Thus the design permits both continuous measurement of characteristics of high incidence or prevalence in the population and, through the larger consolidated samples, more detailed analysis of less common characteristics and smaller categories. The continuous collection has administrative and operational advantages as well as technical assets, since it permits field work to be handled with an experienced, stable staff.

Sample size and geographic detail.—The national sample plan during the 24-month period ending June 1959 included approximately 235,000 persons from 73,000 households in 12,200 segments. The over-all sample was designed in such a fashion that tabulations can be provided for various geographic sections of the United States and for urban and rural sectors of the Nation.

Collection of data.—The field operations for the household survey are performed by the Bureau of the Census under specifications established by the Public Health Service. In accordance with these specifications the Bureau of the Census designs and selects the sample, conducts the field interviewing, and edits and codes the questionnaires. Tabulations are prepared by the Public Health Service using the Bureau of the Census electronic computers.

Estimating methods.—Each statistic produced by the survey is the result of two stages of ratio estimation. In the first of these, the factor is the ratio of the 1950 decennial U.S. total population count to the estimated population in 1950 of the U.S. National Health Survey's first-stage sample of PSU's. This factor is applied separately for more than 50 color-residence classes.

Later, ratios of sample-produced estimates of the population to official Bureau of the Census figures for current population in about 60 age-sex-color classes are computed, and serve as second-stage factors for ratio estimating.

The effect of the ratio estimating process is to make the sample more closely representative of the population by age, sex, color, and residence, thus reducing sampling variance.

As noted, each week's sample represents the population living during that week and characteristics of that population. Consolidation of samples over a time period such as a calendar quarter produces estimates of average characteristics of the United States population for that calendar quarter.

For prevalence statistics based on two years of data collection, figures are first calculated for each calendar quarter by averaging estimates for all weeks of interviewing in that quarter. Prevalence data based

on eight quarters of interviewing are then obtained by averaging the eight quarterly figures.

For statistics measuring the number of occurrences during a specified time period, a similar computational procedure is used, but the statistics have a different interpretation. For the disability-day items, the interviewer asks for the respondent's experience over the two calendar weeks prior to the week of interview. Then, the estimated quarterly total for a statistic is simply 6.5 times the average two-week estimate produced by the 13 successive samples taken during the period. Thus, the experience of persons interviewed during a year—experience which actually occurred for each person in a two-calendar-week interval prior to week of interview—is treated in analysis as though it measured the total of such experience occurring in the year. For most statistics such interpretation leads to no significant bias. As noted earlier, the interviewing and estimation procedures are designed to reproduce the experience during the reference period of the questionnaire only for the population still living at the time of interview.

### General Qualifications

Nonresponse.—Data are adjusted for nonresponse by a procedure which imputes to persons in a household not interviewed the characteristics of persons in households which were interviewed in the same segment. The total noninterview rate is 5 percent; 1 percent is refusal, and the remainder is accounted for by other reasons, such as failure to find any household respondent after repeated trials.

The interview process.—The statistics presented in this report are based on replies secured by interviewing members of the sampled households. Each person, 18 years and over, available at the time of interview, is interviewed individually. Proxy respondents within the household are employed for children and for adults who are not available at the time of the interview, provided the respondent is closely related to the person about whom information is being obtained.

There are limitations to the accuracy of diagnostic and other information collected in household interviews. For diagnostic information the household respondent, can, at best, 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 types of 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.

Rounding of numbers.—The original tabulations on which data in this report are based show all estimates to the nearest whole unit. All consolidations are made from these original tabulations before the numbers are rounded to the nearest thousand for the published tables. Derived statistics such as rates and percent distributions are computed after the estimates have been rounded. Rounding to thousands has been done throughout this report even though, because of sampling error, the estimates may not be accurate to that detail.

Population figures.—Some of the published tables include population figures for specified categories. Except for certain over-all totals by age and sex (which are independently estimated), these figures are based on the sample of households in the U.S. National Health Survey. They are given primarily for the purpose of providing denominators for rate computation, and for this purpose are more appropriate for use with the accompanying measures of health characteristics than other population data which may be available. In some instances they will permit users to recombine published data into classes more suitable to their specific needs. With the exception of the over-all totals by age and sex mentioned above, the population figures may in some cases differ from corresponding figures (which are derived from different sample surveys) published in reports of the Bureau of the Census. For population data for general use, see the official estimates presented in Bureau of the Census reports in the P-20, P-25, P-50, P-57, and P-60 series.

### Reliability of Estimates

Since the estimates are based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same schedules, instructions, and interviewing personnel and procedures. As in any survey, the results are also subject to measurement error.

The standard error is primarily a measure of sampling variability, that is, the variations that might occur 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. It does not include estimates of any biases which might lie in the data. The chances are about 68 out of 100 that an estimate from the sample differs from the value obtained from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference is less than twice the standard error and about 99 out of 100 that it is less than 2½ times as large.

In order to derive standard errors which are applicable to a wide variety of health statistics and which can be prepared at a moderate cost, a number of approximations are required. As a result, tables I through III, included in this Appendix should be interpreted as providing an estimate of the standard error rather than as the precise standard error for any specific statistic.

The following guides will enable the reader to determine sampling errors for the statistics presented in this report:

1. Approximate standard errors for estimates of the number of cases of a chronic condition, the number of disability days associated with a chronic condition, and the number of persons in a population group[1] are obtained from the appropriate columns of table I.
2. Approximate standard errors for percentage distributions of a chronic condition according to the number of bed-disability days or the extent of activity or mobility limitation associated with it are given in table II.
3. Approximate standard errors for prevalence estimates of a chronic condition per 1,000 persons in an age, sex, or color group or per 1,000 total population are obtained from table II. Since table II is set up for the estimation of the standard error of a rate per 100, the prevalence per 1,000 must first be converted to a percentage; table II is then entered with this percentage and the number of persons in the category (base of

[1] The number of persons in an age, sex, or color group, or the total number of persons in the population is not subject to sampling error.

the percentage). The entry in the body of the table must then be multiplied by 10 to apply to the rate per 1,000 persons.

4. Approximate standard errors of percentage distributions of disability days associated with a chronic condition (not computed in this report) are given in table III.
5. A rough approximation of the standard errors for rates showing the average number of disability days per "persons with the condition[2] per year" is obtained by taking the square root of the sum of the square of the standard error of the numerator used in obtaining the rate divided by the numerator itself and the square of the standard error of the denominator used divided by the denominator itself, and then multiplying by the rate. This computation will normally give an overestimate of the true sampling error.

Example: It is estimated that each "usually working" person with an ulcer loses an average of 7.4 days from work during the year because of the ulcer. The numerator of 11,928,000 days lost has a standard error of 1,308,000. The denominator of 1,622,000 persons has a standard error of 72,000. Using these numbers as shown below yields an answer of 0.87, the standard error of the estimated rate.

$$7.4 \times \sqrt{\left(\frac{1{,}308{,}000}{11{,}928{,}000}\right)^2 + \left(\frac{72{,}000}{1{,}622{,}000}\right)^2} = 0.87$$

[2]Note that where the rate refers to persons in a disease category, rule 5 applies, even if the group is further subdivided by age, sex, or color.

Table I. Standard errors of estimates of aggregates

(All numbers shown in thousands)

| Size of estimate | Persons with ulcers | Disability days |
|---|---|---|
| 100 | 18 | - |
| 500 | 40 | - |
| 1,000 | 60 | 400 |
| 2,000 | 80 | 560 |
| 3,000 | 100 | 720 |
| 5,000 | 130 | 960 |
| 10,000 | 180 | 1,200 |
| 20,000 | 240 | 1,760 |
| 30,000 | 260 | 2,160 |
| 50,000 | 280 | 2,800 |
| 100,000 | 320 | 4,400 |
| 200,000 | - | 6,400 |
| 500,000 | - | 12,000 |
| 750,000 | - | 16,800 |
| 1,250,000 | - | 25,600 |

Illustration of use of table I.—The estimated number of persons under care for ulcers is 1,865,000. Since this is not given in the table, it is necessary to interpolate for the standard error. The standard error for an estimate of 2,000,000 is 80,000 and the standard error for an estimate of 1,000,000 is 60,000. Interpolation gives 77,000 as the standard error for 1,865,000.

Table II. Standard errors of percentages based on persons with ulcers

| When the base of the percentage is: (in thousands) | For estimated percentages of | | | | |
|---|---|---|---|---|---|
| | 2 or 98 | 5 or 95 | 10 or 90 | 25 or 75 | 50 |
| | The approximate standard error (expressed in percentage points) is: | | | | |
| 100 | 2.9 | 4.5 | 5.4 | 7.8 | 10.3 |
| 500 | 1.3 | 2.0 | 2.4 | 3.5 | 4.6 |
| 1,000 | 0.9 | 1.4 | 1.7 | 2.5 | 3.3 |
| 2,000 | 0.6 | 1.0 | 1.2 | 1.8 | 2.3 |
| 3,000 | 0.6 | 0.8 | 1.0 | 1.4 | 1.9 |
| 5,000 | 0.4 | 0.6 | 0.8 | 1.1 | 1.4 |
| 10,000 | 0.3 | 0.5 | 0.6 | 0.8 | 1.0 |
| 20,000 | 0.2 | 0.3 | 0.4 | 0.6 | 0.7 |

Illustration of use of table II.—Of the 2,440,000 persons reported as having ulcers, 15.8 percent had seven or more days of bed disability in the year. Since neither of these values can be read directly from the table, interpolation may be carried out as follows: for a base of 2,000,000 a statistic of 10 percent has a standard error of 1.2 percentage points and a statistic of 25 percent has a standard error of 1.8 percentage points. Interpolating, with a base of 2,000,000 an estimate of 15.8 percent would have a standard error of 1.4 percentage points. Corresponding calculations with a base of 3,000,000 produce a standard error of 1.2 percentage points. A final interpolation between these two results yields an estimate of 1.3 percentage points for statistic of 15.8 percent with a base of 2,440,000. (Although interpolation has been carried out in two dimensions here to illustrate the use of the table, a simple scanning of the table will provide an approximate answer which will usually be sufficient.)

Table III. Standard errors of percentages based on disability days

| When the base of the percentage is: (in thousands) | For estimated percentages of | | | | |
|---|---|---|---|---|---|
| | 2 or 98 | 5 or 95 | 10 or 90 | 25 or 75 | 50 |
| | The approximate standard error (expressed in percentage points) is: | | | | |
| 2,500 | 3.4 | 5.2 | 7.2 | 10.4 | 12.0 |
| 12,500 | 1.5 | 2.3 | 3.2 | 4.6 | 5.4 |
| 25,000 | 1.0 | 1.7 | 2.2 | 3.3 | 3.8 |
| 50,000 | 0.7 | 1.2 | 1.6 | 2.3 | 2.7 |
| 75,000 | 0.6 | 1.0 | 1.3 | 1.9 | 2.2 |
| 125,000 | 0.5 | 0.7 | 1.0 | 1.4 | 1.7 |
| 250,000 | 0.3 | 0.6 | 0.7 | 1.0 | 1.2 |
| 500,000 | 0.2 | 0.4 | 0.5 | 0.7 | 0.9 |

Illustration of use of table III.—Of the 47,010,000 restricted-activity days due to ulcers, 43.7 percent were for persons 45-64 years of age. Since neither of these values can be read directly from the table, interpolation may be carried out as follows: with a base of 25,000,000 a statistic of 25 percent has a standard error of 3.3 percentage points and a statistic of 50 percent has a standard error of 3.8 percentage points. Interpolating, a statistic of 43.7 percent with a base of 25,000,000 would have a standard error of 3.7 percentage points. Corresponding calculations with a base of 50,000,000 produce a standard error of 2.6 percentage points. A final interpolation between these two results yields a standard error of 2.7 percentage points for a statistic of 43.7 percent with a base of 47,010,000. (Although interpolation has been carried out in two dimensions here to illustrate the use of the table, a simple scanning of the table will provide an approximate answer which will be sufficient for most purposes.)

# APPENDIX II

# DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

## Terms Relating to Chronic Conditions

Condition.—A condition is defined by an entry on the questionnaire which describes a departure from a state of physical or mental well-being. In the coding and tabulating process, conditions are first classified according to the type of disease, injury or impairment, or symptom and then according to a number of other criteria such as whether they were medically attended, whether they resulted in disability, and whether they were acute or chronic. 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 coded by type according to the International Classification of Diseases, 1955 Revision, with certain modifications adopted to make the coding procedure more suitable for a household-interview survey. Impairments, defined as chronic or permanent defects resulting from disease, injury, or congenital malformation, are coded according to a special supplementary classification which permits the classification of impairments by type of functional disability and etiology.

Chronic condition.—A condition is considered to be chronic if it is described by the respondent (1) in terms of one of the conditions on the "Check List of Chronic Conditions" or in terms of one of the impairments on the "Check List of Impairments" (Cards A and B, Appendix III), or (2) as having been first noticed more than three months before the interview. For this purpose, first noticed is defined as the time at which the person first felt sick or when he or his family was first told by a physician that he had a disease of which he was previously unaware. For a condition which is episodic in nature, the onset is always considered to be the original onset rather than the onset of the most recent episode.

Prevalence of a condition.—In general, the prevalence of a condition is the estimated number of cases existing in a population at a specific point in time or the average number existing during a specified period of time.

In the National Health Survey, the prevalence of a chronic condition is the number of cases reported to be present at the time of the interview or at any time during the 12 months prior to the interview. Estimates of the prevalence of chronic conditions may be restricted to cases which satisfy certain additional criteria. For example, only cases involving a day or more in bed during the past year or cases under care may be included.

Medically attended condition.—A condition is considered to be medically attended if a physician has been consulted about it either at its onset or at any time thereafter. Medical attention includes consultation either in person or by telephone for treatment or advice. Advice from the physician transmitted to the patient through the nurse is counted as well as visits to physicians in clinics or hospitals. If during the course of a single visit the physician is consulted about more than one condition for each of several patients, each condition of each patient is counted as medically attended.

Discussions of a child's condition by the physician and a responsible member of the household are considered as medical attention even if the child was not seen at that time.

For the purpose of this definition, the term "physician" includes doctors of medicine and osteopathic physicians.

Condition under care.—By under care is meant one or more of the following: (1) currently taking medicine or treatment prescribed by a physician, (2) observing a systematic course of diet or activity prescribed by a physician, (3) visiting the physician regularly for checking on the condition, or (4) under instruction from the physician to return if some particular thing happens.

Physician is again defined as a doctor of medicine or an osteopathic physician.

## Terms Relating to Disability

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

### Long-Term Disability

Chronic activity limitation.—Chronic activity limitation is ascertained for all persons with one or more chronic conditions. These persons are divided into 4 categories according to the extent to which their activities are limited as a result of the conditions (Cards C, D, E, and F, Appendix III). For the purpose of this report categories 2 and 3 have been combined.

Since the major activities of preschool children, school-age children, housewives, and workers and other persons differ, a different set of criteria is used to determine the amount of reduction of major activities for each group. However, there is a general similarity between the criteria as will be seen in the descriptions of the categories below.

Major limitation of activity.—Inability to carry on major activity of the group:

| | |
|---|---|
| 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 |

Partial limitation of activity.—Limitation of amount or kind of participation in major activity of the group:

| | |
|---|---|
| Preschool children: | limited in the amount or kind of play with other children |

| | |
|---|---|
| School-age children: | limited to certain types of schools or in school attendance; limited in participation in athletics or other extracurricular activities |
| Housewives: | limited in amount or kind of housework or limited in recreational or community activities |
| Workers and all other persons: | limited in amount of work or kind of employment or limited in recreational or community activities |

No limitation of activity.—No limitation as described above.

Temporary Disability

Disability days.—Disability days are classified according to whether they are days of restricted activity, days in bed, days in the hospital, days lost from work, or days lost from school. 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 also days of restricted activity for the working and school-age populations. Hence, restricted activity is the most inclusive term used in describing disability days.

Restricted-activity day.—A day on which because of a specific illness or injury a person substantially reduces the amount of activity normal for that day. The type of reduction will vary with the age and occupation of the individual as well as with the day of the week or the season. Restricted activity thus covers a range from substantial reduction of normal activity to complete inactivity.

Bed-disability day.—A day on which more than half the daylight hours were spent in bed because of a specific illness or injury. 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 normal working day on which a person did not work at his job or business because of a specific illness or injury. The number of days lost from work is determined only for persons 17 years of age or older.

Demographic Terms

Age.—The age of the person on his last birthday recorded on the questionnaire in single years. Ages are then grouped in intervals suitable for the topic under discussion.

Usually working.—A term applied to an individual 17 years of age or older who was gainfully employed as a paid employee, a self-employed person, or as a worker in a family business for more than half of the 12 months prior to the interview. A person who does only volunteer or unpaid work—such as work in his own home or work for the church or community—is not considered to be gainfully employed.

# APPENDIX III

## QUESTIONNAIRE

The items below show the exact content and wording of the questionnaire used in the household survey. The actual questionnaire is designed for a household as a unit and includes additional spaces for reports on more than one person.

**CONFIDENTIAL:** The National Health Survey is authorized by Public Law 652 of the 84th Congress (70 Stat 489; 42 U.S.C. 305). All information which would permit identification of the individual will be held strictly confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to others for any other purposes (22 FR 1687).

Form NHS-2 (4-18-58)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
Acting as Collecting Agent for the
U.S. PUBLIC HEALTH SERVICE

**NATIONAL HEALTH SURVEY**

1. Questionnaire _____ of _____ Questionnaires

2. (a) Address or description of location

| 3. Iden. Code | 4. Sub-sample weight | 5. Sample | 6. PSU Number | 7. Segment No. | 8. Serial No. |
|---|---|---|---|---|---|
| | | | | | |

9. Is this house on a farm or ranch? ☐ Yes ☐ No

(b) Type of living quarters: ☐ Dwelling unit ☐ Other | (c) Name of Special Dwelling Place | Code

10. What is the telephone number here? ☐ No phone

11. What is the best time to call?

12. Are there any other living quarters, occupied or vacant, in this building (apartment)? ☐ Yes ☐ No

14. Does anyone else living in this building use YOUR ENTRANCE to get to his living quarters? ☐ Yes ☐ No

Ask at all units except apartment houses

13. Is there any other building on this property for people to live in - either occupied or vacant? ☐ Yes ☐ No

**INSTRUCTIONS**

If "Yes" to questions 12, 13 or 14 apply definition of a dwelling unit to determine whether one or more additional questionnaires should be filled and whether the listing is to be corrected.

**15. RECORD OF CALLS AT HOUSEHOLDS**

| Item | | 1 | Com. | 2 | Com. | 3 | Com. | 4 | Com. | 5 | Com. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Entire household | Date | | | | | | | | | | |
| | Time | | | | | | | | | | |
| Callbacks for individual respondents (Col. No. ___) | Date | | | | | | | | | | |
| | Time | | | | | | | | | | |

**16. REASON FOR NON-INTERVIEW**

| TYPE: | A | B | C | Z |
|---|---|---|---|---|
| Reason: | ☐ Refusal<br>☐ No one at home-repeated calls<br>☐ Temporarily absent<br>☐ Other (Specify) | ☐ Vacant - non-seasonal<br>☐ Vacant - seasonal<br>☐ Usual residence elsewhere<br>☐ Armed Forces<br>☐ Other (Specify) | ☐ Demolished<br>☐ In sample by mistake<br>☐ Eliminated in sub-sample<br>☐ Other (Specify) | Interview not obtained for:<br>Cols. _____<br>because: |

Comments on non-interview

17. Signature of Interviewer

18. Code

Special instructions or notes

| | |
|---|---|
| 1. (a) What is the name of the head of this household? (Enter name in first column)<br>(b) What are the names of all other persons who live here? (List all persons who usually live here, and all persons staying here who have no usual place of residence elsewhere. List these persons in the prescribed order.)<br>(c) Do any (other) lodgers or roomers live here? ☐ No ☐ Yes (List) →<br>(d) Is there anyone else who lives here who is now away on business? On a visit? Temporarily in a hospital? ☐ No ☐ Yes (List) →<br>(e) Is there anyone else staying here now? ☐ No ☐ Yes (List) →<br>(f) Do any of these people have a home elsewhere?<br>☐ No (leave on questionnaire) ☐ Yes (If not a household member, delete) | Last name (1)<br>First name and initial |
| 2. How are you related to the head of the household? (Enter relationship to head; for example: head, wife, daughter, grandson, mother-in-law, partner, lodger, lodger's wife, etc.) | Relationship<br>Head |
| 3. How old were you on your last birthday? | Age ☐ Under 1 year |
| 4. Race (Check one box for each person) | ☐ White ☐ Negro ☐ Other |
| 5. Sex (Check one box for each person) | ☐ Male ☐ Female |
| 6. Where were you born? (Record state or foreign country) | (State or foreign country) |
| If 14 years old or over, ask:<br>7. Are you now married, widowed, divorced, separated or never married? (Check one box for each person) | ☐ Under 14 years<br>☐ Married ☐ Divorced<br>☐ Widowed ☐ Separated<br>☐ Never married |
| If 14 years old or over, ask:<br>8. What is the highest grade you completed in school? (Circle highest grade completed or check "None") | ☐ None ☐ Under 14 years<br>Elem: 1 2 3 4 5 6 7 8<br>High: 1 2 3 4<br>College: 1 2 3 4 5+ |

If Male and 14 years old or over, ask:

9. (a) Did you ever serve in the Armed Forces of the United States?
If "Yes," ask:
(b) Are you now in the Armed Forces, not counting the reserves?
If "Yes," delete this person from questionnaire) →
(c) Was any of your service during a war or was it peace-time only?
If "War," ask:
(d) During which war did you serve?
If "Peace-time" only, ask:
(e) Was any of your service between June 27, 1950 and January 31, 1955?

☐ Fem. or und. 14 yrs.
☐ Yes ☐ No
☐ Yes ☐ No
☐ War ☐ Peace-time only
☐ Spanish American ☐ WW-II
☐ WW-I ☐ Korean
☐ Yes ☐ No

If 6 years old or over, ask:

10. (a) What were you doing most of the past 12 months —
(For males over 16): working, looking for work, or doing something else?
(For females over 16): working, looking for work, keeping house, or doing something else?
(For children 6-16): going to school or doing something else?
If "Something else" checked, and person is 50 years old or over, ask:
(b) Are you retired?

☐ Under 6 years
☐ Working
☐ Looking for work
☐ Keeping house
☐ Going to school
☐ Something else
☐ Yes ☐ No

**R** Interview each adult person for himself for questions 11-26 and Tables I, II, and A, if he is at home. Enter column number of respondent in each column.

☐ Responded for self
Col. No. _____ was respondent

We are interested in all kinds of illness, whether serious or not —

11. Were you sick at any time LAST WEEK OR THE WEEK BEFORE? (a) What was the matter? (b) Anything else? ☐ Yes ☐ No

12. Last week or the week before did you have any accidents or injuries, either at home or away from home? (a) What were they? (b) Anything else? ☐ Yes ☐ No

13. Did you feel any ill effects last week or the week before from an accident or injury that happened before that time? (a) What were these effects? (b) Anything else? ☐ Yes ☐ No

14. Last week or the week before did you take any medicine or treatment for any condition (besides . . . which you told me about)? (a) For what conditions? (b) Anything else? ☐ Yes ☐ No

15. AT THE PRESENT TIME do you have any ailments or conditions that have lasted for a long time? (If "No") Even though they don't bother you all the time? (a) What are they? (b) Anything else? ☐ Yes ☐ No

## Table I - ILLNESSES, IMPAIRMENTS AND ACCIDENTS

| Line number | Col. No. of person (a) | Question No. (b) | Did you ever talk to a doctor about . . .? (c) | What did the doctor say it was? —did he use any medical terms? (If doctor not talked to - "No" in col. (c) - record respondent's description) (If ill-effects of earlier accident, record ill effects and also fill Table A) For an accident or injury occurring during past 2 weeks, ask: What part of the body was hurt? What kind of injury was it? Anything else? (Also, fill Table A) (d-1) | If an impairment or symptom or a condition from q. 13 or q. 17, ask: What was the cause of. . .? (If accident or injury, also fill Table A) (d-2) | If eye trouble of any kind and 6 yrs. old or over, ask: Can you read ordinary newspaper print with glasses? (d-3) | What kind of. . .trouble is it? Ask only for: allergy, asthma, anemia, rheumatism, arthritis, stroke, tumor (or cysts) OR Any entry in col. (d-1) or (d-2) of: trouble, condition, disease, coupled with seeing or hearing; a part of the body; "mental" or any internal organ (d-4) | What part of the body is affected? Show in following detail for members listed below: Head - (Skull, scalp or face) Spine - (Upper, middle or lower) back Arm - (Shoulder, upper, elbow, lower, wrist, hand) Leg - (Hip, upper, knee, lower, ankle, foot) ALSO If arm, leg, eye, or ear, state whether ONE or BOTH. (d-5) | LAST WEEK OR THE WEEK BEFORE did . . . cause you to cut down on your usual activities for as much as a day? Check one: No / Yes (Go to Col. (h)) (e) (f) | How many days, including the 2 weekends? (g) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | ☐ Yes ☐ No | | X | ☐ Yes ☐ No | X | X | | Days |

## Table II - HOSPITALIZATION DURING PAST 12 MONTHS

| Line number | Col. No. of person (a) | Question No. (b) | When did you enter the hospital? (Month, Year) (c) | How many days were you in the hospital, not counting the day you left? (d) | To Interviewer: How many of these — days were in the past 12 months? (e) | To Interviewer: How many of these — days were in the past 2 weeks? (f) | To Interviewer: Was this person still in the hospital on Sunday night? (g) | What did they say at the hospital the condition was — did they use any medical terms? (If "they" didn't say, ask): What did the last doctor you talked to say it was? (Show same detail as in cols. (d-1)-(d-5) of T.I) (If condition from accident or injury, fill TableA) (h) | Were any operations performed on you during this stay at the hospital? If "Yes" (a) What was the name of the operation? (b) Any other operations? (i) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | | Mo: _____ Yr: _____ | _____ Days | ☐ All or _____ Days | _____ Days | ☐ Yes ☐ No | | ☐ Yes ☐ No |

## TABLE A (Accidents and Injuries)

Line No. from Table I: _____

1. What part of the body was hurt? What kind of injury was it? Anything else? ☐ Accident happened during past 2 weeks

2. When did it happen? Year _____ (Enter month also if the year is 1957 or 1958) Month _____ ☐ Accident happened during past 2 weeks

3. Where did the accident happen? ☐ At home (inside or outside the house) (own home or someone else's) ☐ While in Armed Services ☐ Some other place

4. Was a car, truck, bus or other motor vehicle involved in the accident in any way? ☐ Yes ☐ No

5. Were you at work at your job or business when the accident happened? ☐ Yes ☐ No ☐ Under 14 years at time of accident

16. Has anyone in the family - you, your--, etc. -had any of these conditions DURING THE PAST 12 MONTHS?

(Read Card A, condition by condition; record any conditions mentioned in the column for the person)

☐ Yes ☐ No

17. Does anyone in the family have any of these conditions?

(Read Card B, condition by condition; record any conditions mentioned in the column for the person)

☐ Yes ☐ No

18. (a) LAST WEEK OR THE WEEK BEFORE did anyone in the family - you, your--, etc.-talk to a doctor or go to a doctor's office or clinic? Anyone else?

☐ Yes ☐ No

If "Yes"

(b) How many times during the past 2 weeks?

_____ No. of times

(c) Where did you talk to the doctor?

(d) How many times at -- (home, office, clinic, etc.)?

(Record total number of times for each type of place)

("Hospital clinic" excludes overnight stays)

| Place | Times |
|---|---|
| At home | |
| At office | |
| Hospital clinic | |
| Company or industry | |
| Over telephone | |
| Other (Specify) | |

19. (a) Last week or the week before did anyone in the family go to a dentist? Anyone else?

☐ Yes ☐ No

If "Yes"

(b) How many times during the past 2 weeks?

_____ No. of times

20. How many times altogether in the past 12 months did you go to a dentist?

☐ One ☐ Two ☐ Three ☐ Four or more ☐ None

21. (a) DURING THE PAST 12 MONTHS has anyone in the family been a patient in a hospital overnight or longer?

☐ Yes (Table II) ☐ No

If "Yes"

(b) How many times were you in the hospital?

_____ No. of times

22. (a) During the past 12 months has anyone in the family been a patient in a nursing home or sanitarium?

☐ Yes (Table II) ☐ No

If "Yes"

(b) How many times were you in a nursing home or sanitarium?

_____ No. of times

25. During the past 12 months in which group did the total income of your family fall, that is, your's, your--'s, etc.? (Show Card H) Include income from all sources, such as wages, salaries, rents from property, pensions, help from relatives, etc.

Group No.

## Table I - ILLNESSES, IMPAIRMENTS AND ACCIDENTS

| How many of these -- days were you in bed all or most of the day? | If 6 years old or over, ask: | | Did you first notice . . . DURING THE PAST 3 MONTHS or before that time? | | | To interviewer: | Did you first notice . . . DURING THE PAST 12 MONTHS or before that time? | How long since you last talked to a doctor about . . . ? | Do you still take any medicine or treatment that the doctor prescribed for . . . ? | About how many days during the past 12 months, has . . . kept you in bed for all or most of the day? | Ask after completing last condition for each person: | | | | Line number |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Last week or the week before would you have been working at a job or business except for . . . ? (If 6-16 yrs., ask, ("going to school") | If "Yes" in col. (i): How many days did . . . keep you from work (going to school)? | Check one: Before 3 months (Go to col. (n)) | Check one: During 3 months → | Did . . . start during the past 2 weeks or before that time? (If during past 2 weeks, ask): Which week, last week or the week before? | If col. (k) is checked, or the condition is on either one of Cards A or B, continue; otherwise STOP | (If during past 12 months, ask): Which month? | (If less than one month, enter "Und. 1" for "Mo.") | Or, follow any advice he gave? | (Show Cards C-F, as appropriate) | Please look at this card and read each statement. Then tell me which statement fits you best. | If 1, 2 or 3 in col. (r): Is this because of any of the conditions you have told me about? | If "Yes" in col. (s): Which (Enter X on line for each condition named) | If "1," or "2" or "3" in col. (r) ask: Please look at this card and read each statement. Then tell me which statement fits you best. (Show Card G) | |
| (h) | (i) | (j) | (k) | (l) | (m) | (aa) | (n) | (o) | (p) | (q) | (r) | (s) | (t) | (u) | |
| ____ Days or ☐ None | ☐ Yes ☐ No | ____ Days or ☐ None | | | ☐ Last week ☐ Week before ☐ Before 2 wks. | | Mo. ____ Yr. ____ ☐ Before ☐ Birth | ____ Mos. ____ Yrs. ☐ No Dr. | ☐ Yes ☐ No ☐ No Dr. | ____ Days or ☐ None | | ☐ Yes ☐ No | | | 1 |

## Table II - HOSPITALIZATION DURING PAST 12 MONTHS

| What is the name and address of the hospital you were in? (Enter name, city or county and State) | For completed hospitalizations only: Was any of the hospital bill paid for by any kind of insurance? | If "No" to col. (k), ask: Or, by any kind of plan that pays for hospital costs? | If "No" to both cols. (k) and (l) Do you expect any of the hospital bill to be paid for by insurance or any plan of this kind? | What part of the hospital bill was (will be) taken care of by insurance? | Who carries the cost of this insurance--that is, who pays the premium? |
|---|---|---|---|---|---|
| (j) | (k) | (l) | (m) | (n) | (o) |
| | ☐ Yes (Skip to col. n) ☐ No | ☐ Yes (Skip to col. n) ☐ No | ☐ Yes ☐ No (Stop) | ☐ Under ½ ☐ ½ up to ¾ ☐ ¾ or more | ☐ Family member(s) ☐ Employer ☐ Union, clubs, etc. ☐ Other (Specify) |

FOOTNOTES AND COMMENTS

Card A

NATIONAL HEALTH SURVEY

Check List of Chronic Conditions

1. Asthma
2. Any allergy
3. Tuberculosis
4. Chronic bronchitis
5. Repeated attacks of sinus trouble
6. Rheumatic fever
7. Hardening of the arteries
8. High blood pressure
9. Heart trouble
10. Stroke
11. Trouble with varicose veins
12. Hemorrhoids or piles
13. Gallbladder or liver trouble
14. Stomach ulcer
15. Any other chronic stomach trouble
16. Kidney stones or other kidney trouble
17. Arthritis or rheumatism
18. Prostate trouble
19. Diabetes
20. Thyroid trouble or goiter
21. Epilepsy or convulsions of any kind
22. Mental or nervous trouble
23. Repeated trouble with back or spine
24. Tumor or cancer
25. Chronic skin trouble
26. Hernia or rupture

Card B

NATIONAL HEALTH SURVEY

Check List of Impairments

1. Deafness or serious trouble with hearing.
2. Serious trouble with seeing, even with glasses.
3. Condition present since birth, such as cleft palate or club foot.
4. Stammering or other trouble with speech.
5. Missing fingers, hand, or arm.
6. Missing toes, foot, or leg.
7. Cerebral palsy.
8. Paralysis of any kind.
9. Any permanent stiffness or deformity of the foot or leg, fingers, arm, or back.

Card C

NATIONAL HEALTH SURVEY

For:

Workers and other persons except Housewives and Children

1. Cannot work at all at present.
2. Can work but limited in amount or kind of work.
3. Can work but limited in kind or amount of outside activities.
4. Not limited in any of these ways.

Card D

NATIONAL HEALTH SURVEY

For: Housewife

1. Cannot keep house at all at present.
2. Can keep house but limited in amount or kind of housework.
3. Can keep house but limited in outside activities.
4. Not limited in any of these ways.

Card E

NATIONAL HEALTH SURVEY

For:

Children from 6 to 16 years old and others going to school

1. Cannot go to school at all at present time.
2. Can go to school but limited to certain types of schools or in school attendance.
3. Can go to school but limited in other activities.
4. Not limited in any of these ways.

Card F

NATIONAL HEALTH SURVEY

For: Children under 6 years old

1. Cannot take part at all in ordinary play with other children.
2. Can play with other children but limited in amount or kind of play.
4. Not limited in any of these ways.

Card G

NATIONAL HEALTH SURVEY

1. Confined to the house all the time, except in emergencies.
2. Can go outside but need the help of another person in getting around outside.
3. Can go outside alone but have trouble in getting around freely.
4. Not limited in any of these ways.

Card H

NATIONAL HEALTH SURVEY

Family income during past 12 months

1. Under $500 (including loss)
2. $500 - $999
3. $1,000 - $1,999
4. $2,000 - $2,999
5. $3,000 - $3,999
6. $4,000 - $4,999
7. $5,000 - $6,999
8. $7,000 - $9,999
9. $10,000 and over.

* U. S. GOVERNMENT PRINTING OFFICE: 1960 O - 551093

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## Catalog Card

U. S. *National Health Survey.*
Peptic ulcers reported in interviews, United States July 1957-June 1959; statistics on prevalence of peptic ulcers and associated disability by age, sex, and medical care status. Based on data collected in household interviews during the period July 1957-June 1959. Washington, U.S. Dept. of Health, Education, and Welfare, Public Health Service, Division of Public Health Methods, 1960.
26 p. tables. diagrs. 27cm. (*Its* Health statistics, ser. B17)
U.S. Public Health Service. Publication no. 584-B17.
1. Peptic ulcer.
I. Title. (Series. Series: U.S. Publication no. 584-B17)
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