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# HEALTH STATISTICS 

FROM THE U。S。 NATIONAL HEALTH SURVEY

## HOSPITALIZATION patients discharged from short-stay hospitals

## United States July 1957-June 1958

Statistics for short-stay hospitals on patients discharged and days of hospitalization, by selected characteristics of the patients, and types of hospitals. Based on data collected in household interviews during duly 1957 -June 1958.
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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 FederaI, State, or private agencies. For the national household 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.

## CONTENTS

Page
Introduction ..... 1
Sources and Limitations of the Data ..... 2
Comments on Detailed Tables ..... 3
Summary of Major Characteristics ..... 3
Socioeconomic Characteristics ..... 4
Hospital Ownership ..... 4
Length-of-Stay lntervals ..... 4
Hospitalized Conditions ..... 4
Number and Type of Surgical Cases ..... 4
Detailed Tables ..... 5
Population ..... 28
Appendix I. Technical Notes on Methods ..... 33
Background of This Report ..... 33
Data for This Report ..... 33
Statistical Design of the Household-Interview
Survey ..... 33
General Qualifications ..... 34
Appendix II. Definitions of Certain Terms Used
in This Report ..... 38
Terms Relating to Hospitalization ..... 38
Demographic, Social, and Economic Terms--- ..... 38
Location of Residence Terms ..... 40

## 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


## HOSPITALIZATION IN SHORT-STAY HOSPITALS

## INTRODUCTION

During the interview year, July 1957-June 1958, the questionnaire used in the Health Household Interview for the U. S. National Health Survey contained a series of questions designed to obtain information on all periods of hospitalization experienced by members of the sample households during the year prior to the interview. Characteristics of the hospitalization, such as the month of admission, number of days in the hospital, diagnosis, and operations performed were secured for each period of hospitalization. The volume of data that is available on hospitalization from the results of this interviewing is too large to be covered in a single report. Therefore, the
present report is limited to statistics on completed episodes of hospitalization, i.e., hospital discharges. It is further limited to discharges from certain types of hospitals, those in which most patients stay for less than 30 days. In this report these hospitals are referred to as shortstay hospitals.

Table I. shows the number of discharges for patients in short-stay hospitals as contrasted with all other hospitals. It can be seen from this table that a very high proportion of all discharges are from short-stay hospitals.

The characteristics of the hospitalizations and the persons hospitalized, which are presented in this first report, have been selected from a larger list available on the questionnaire as those believed to be of the greatest general interest.

Table I. Number of patients discharged from long- and short-stay hospitals, by type of hospital and age: United States, July 1957-June 1958

| Type of hospital | $\begin{aligned} & \text { A11 } \\ & \text { ages } \end{aligned}$ | Under 15 | 15-24 | 25-44 | 45-64 | $65+$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of discharges in thousands |  |  |  |  |  |
| All hospitals---- | 17,376 | 2,874 | 3,023 | 6,099 | 3,563 | 1,818 |
| Long-stay hospitals- | 417 | 46 | 60 | 156 | 110 | 45 |
| Psychiatric------- | 237 | 13 | 29 | 104 | 74 | 17 |
| Tuberculosis------ | 104 | 12 | 23 | 34 | 20 | 15 |
| A11 other--- | 76 | 21 | 8 | 18 | 16 | 13 |
| Short-stay hospitals-- | 16,738 | 2,801 | 2,901 | 5,868 | 3,413 | 1,754 |
| Unknown type---------- | 221 | 27 | 61 | 75 | 40 | 18 |

[^0]
# SOURCES AND LIMITATIONS OF THE DATA 

Thedetailed tables in this report contain estimates of the number of discharges and the number of days of hospital stay for persons discharged from short-stay hospitals in the United States.

The data are derived from household interviews obtained in a continuous probability sample of the civilian noninstitutional population of the United States during the period from July 1957 through June 1958. Interviews were conducted in approximately 36,000 households comprising 115,000 persons.

Each week, during the 52 -week period, interviews were conducted in a new sample of households. The hospitalization experience of household members for the 12 months prior to the week of interview was obtained. Consolidation of the 52 samples provides an estimate of one year's experience for all persons in the population. The specific year differs chronologically for persons interviewed in different weeks. Thus the estimates are based on hospital discharges that actually occurred sometime between July 1956 and June 1958. The computational procedure used is such that the published estimates represent the average experience for all 12 -month periods ending during the year, July 1957-June 1958.

Additional information about the manner of making these estimates, a description of the statistical design of the household survey, and general qualifications of the data presented in this report are given in Appendix I. Special attention is called to the section entitled Reliability of estimates in this Appendix. The data in all of the cells in the tables that follow are subject to errors of sampling, i.e., errors resulting from the use of a sample of households instead of all of the households in the United States. In cells where the estimated number or the numerator or denominator of a rate or percentage is small, the relative error due to sampling may be high. Therefore, such estimates
of numbers, rates, or percentages must be interpreted with caution.

Explanations and definitions of terms and concepts used in this report are presented in Appendix II. Most of the terms have specialized technical meanings for the purposes of this survey, and familiarity with these definitions is necessary for the interpretation of the findings presented.

It is necessary also to emphasize that there are some factors in the survey method which tend to result in an underestimate of the volume of hospital discharges during the period covered. Since the survey data refer only to persons who were alive at the time of interview, the hospital experience of persons who died in the year prior to the interview period is not counted. For the older age groups and certain disease groups the understatement due to this factor is likely to be quite high. Another factor that undoubtedly reduces the volume of discharges in comparison with hospital records is that the survey excludes an unknown number of inpatients who were not hospitalized overnight. This omission probably has a negligible effect upon the estimates of hospital days since each instance contributes only one day to the sample total. Furthermore, although direct transfers from one hospital to another are usually recorded as a discharge and an admission by hospitals, survey respondents may regard such a continuous period of hospitalization as a single episode and, therefore, erroneously report the event as having occurred in a single hospital. The effect of this particular error on the statistics is not known but is believed to be small.

The data in this report are based on responses to questions in the sections of the household-interview questionnaire that follow.

The two following hospitalization-recall questions are designed to elicit from the respondent information as to whether or not members of the household have been in any type of institution that might be considered to be a hospital according to the survey definition. They serve as a steppingoff point for further questions aimed at describing the circumstances of hospital episodes.

Hospitalization-Recall Questions

| 25. (a) DURING THE PAST 12 mONTHS bas anyone in the family been a patient in a bospital overnight or longer? <br> If "Yes": <br> (b) Bow many times were you in the hospital? | Yes (Table II) $\square$ No $\qquad$ No. of times |
| :---: | :---: |
| 26. (a) During the past 12 months has myone in the family been a patient in a nursing home or sanitariom? <br> If "Yes" <br> (b) How many times were you in a nursing boue or sanitarion? | $\square$ No $\qquad$ No. of times |

For each episode of hospitalization that is reported in response to the hospitalization-recall
questions an entry! is made in each of the columns of Table II, which is shown below.

Table II - Hospitalization During Past Twelve Months

| Col. No. of person <br> (a) | Question No. <br> (b) | When did you enter the hospital? <br> (Month, Year) <br> (c) | How meny days vere you in the hospital, not counting the day you left? <br> (d) | To Interviamer: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | How many of these--days were in the past 12 months? <br> (e) | How rany of these--days were during the past 2 weeks, ending last Sunday? <br> (f) | Was this person still in the hospital last Sunday night? <br> (Verify that no hosp. days after Sunday are in Col.d) (g) | hat was the matter? Anything else? <br> (Record each condition in same detail as called for in Table I. If condition is result of accident or injury, also fill table A.) <br> (h) |
|  |  | Ho. $\qquad$ <br> Year $\qquad$ | _ Days | Ail <br> or $\qquad$ Days | $\ldots$ Days | Yes No |  |


| Tere any operations perforned on you during this stay in the hospital? <br> If "Yes": <br> (a) That was the operation? <br> (b) Any other operations? <br> (i) | That is the name and address of the hospital you were in? (Enter name, city or county, and State) <br> (j) |
| :---: | :---: |
| $\begin{aligned} & \square \text { Yes } \rightarrow \\ & \square \text { No } \end{aligned}$ | . |

The information thus obtained in Table Il permits the identification and counting of admissions, discharges, and persons still in the hospital. The number of days of hospital stay can also be tabulated. Column (h) provides diagnostic information that is used in this report. If the respondent reports more than one condition, each condition is recorded. During the coding process one condition is selected for tabulation, this being the condition which is believed to have contributed the major portion of the hospital stay. The coding is done in accordance with the International Statistical Classification as modified for use in the U. S. National Health Survey. All operations reported are recorded in column (i). In the coding process up to three operations are coded. For the few rare cases in which more than three operations are reported, only the first three are coded. The type of operation classification used by the U. S. National Health Survey is one designed to classify the kinds of responses that are obtained from lay respondents.

Column (j) serves several purposes. First it makes it possible to determine if the institution reported is one that meets the definition of a hospital used in this sürvey (see Appendix II). In case the institution is determined not to be a hospital, the reported event is excluded from the statistics. If the institution is listed on the survey list of hospitals, it is then possible to determine the type of ownership, the type of service, and whether it is a short- or long-stay hospital.

Included in this report are population figures for selected characteristics. They are given solely for the purpose of providing denominators for rate computations. These figures based on the U. S. National Health Survey sample are not official estimates and, therefore, should be used only in conjunction with data given in this report.

## COMMENTS ON DETAILED TABLES

The tables that follow give estimates of the number of discharges and the number of hospital days for patients discharged from short-stay hospitals. Excluded from the data are cases of newborn, well infants. The mothers of newborn infants, referred to as "deliveries," are included in all tables except table 2. Tables 1 and 2 and figures 1 and 2 indicate the importance of "deliveries" in the total hospitalization picture. Approximately 21 percent of the total discharges and 33 percent of the female discharges were due to deliveries. This point should be borne in mind in making age-sex comparison of rates, average length of stay, etc., from the detailed tables.

It also should be mentioned that estimates of the number of discharges include a few cases ( 0.2 percent of all cases) for which the number of hospital days was unknown. Since the number of cases with unknown days was so small, no attempt was made to adjust the estimates for hospital days. Hence, the number of hospital days are based on cases with known days of hospitalization. Average length-of-stay statistics are also unadjusted and are based on the published estimates for discharges and days.

## Summary of Major Characteristics

Tables 1-4 show estimates of discharges and days, percent distributions, rate per 1,000 persons per year, and average length of stay for four major characteristics, i.e., age, sex, type of service, and type of ownership.


Figure 1. Number of discharges per 1,000 persons per year by sex and age.

## Socioeconomic Characteristics:

The next group of tables (5-9) presents datadistributed by sex and age according to several socioeconomic variables, i.e., race, marital status, family income, and residence of the patient classified by urban, rural nonfarm, or rural farm, and by region of country.

## Hospital Ownershipi

The data on discharges and days are distributed by sex, age, and family income according to type of hospital ownership in tables 10-12. The definitions of hospital ownership categories follow usage of the American Hospital Association.

## Length-of-Stay Intervals

In tables 13-16 the same data are shown by sex and age for several length-of-stay intervals.

## Hospitalized Conditions

The next two tables (17 and 18) present the data classified by the nature of the hospitalized condition. Whether or not surgery was performed for the hospitalized condition is also shown. For


Figure 2. Number of hospital days per 1,000 persons per year by sex and age.
a-list of the inclusions in each category shown, see Appendix II. The diagnostic information should be interpreted in the light of the method of col-lection. It is information provided by the physicians in attendance to members of the family and passed on to the interviewers.

It should be noted that a person who underwent surgery for some condition other than the hospitalized condition is counted as "not surgically treated" in this group of tables. All delivery cases, including spontaneous deliveries, were counted as surgically treated.

## Number and Type of Surgical Cases

The final group of tables (19-22) contains data on the volume and type of operations. Table 19 shows by sex and age the number of patients who underwent surgery during the hospital episode regardless of whether or not the surgery was for the hospitalized condition. The total number of operations is shown in table 20 by age and sex. In table 21 the total number of operations is distributed by type. The final table (22) gives the number of cases, number of days, and average length of stay by type of operation for patients who had only one operation performed during the hospital episode.

The reasons cited previously for interpreting diagnostic information cautiously also apply to the interpretation of data on type of operation.

# DETAILED TABLES 

Page
Table 1. Number of patients discharged, number per 1,000 persons per year, and percent dis- tribution; number of hospital days, number per 1,000 persons per year, and per- cent distribution; and average length of stay of patients discharged by sex and 
2. Number of patients discharged, number per 1,000 persons per year, and percent dis-tribution; number of hospital days, number per 1,000 persons per year, and per-cent distribution; and average length of stay of patients discharged, excludingdeliveries, by sex and age: Short-Stay Hospitals, United States, July 1957-June 1958--June 1958-
3. Number and percent of patients discharged, number and percent of hospital days, and average length of stay, by sex and hospital type of service: Short-Stay

4. Number and percent of patients discharged, number and percent of hospital days, and average length of stay, by sex and hospital type of ownership: Short-Stay Hospitals, United States, July 1957-June 1958

Number of patients discharged, number per 1,000 persons per year, and average length of stay by sex, age, and race: Short-Stay Hospitals, United States, July 1957-June 1958
6. Number of patients discharged and number per 1,000 persons per year by sex, age, and marital status: Short-Stay Hospitals, United States, July 1957-June 1958---
7. Number of patients discharged, number per 1,000 persons per year, and average length of stay, by age and family income: Short-Stay Hospitals, United States, July 1957-June 1958
8. Number of patients discharged, number per 1,000 persons per year, and average stay in hospital by sex, age, and residence: Short-Stay Hospitals, United States, July 1957-June 1958
9. Number of patients discharged, number per 1,000 persons per year, and average length of stay by age and region: Short-Stay Hospitals, United States, July 1957-June 1958

10. Number of patients discharged by sex, hospital ownership, and age: Short-Stay
Hospitals, United States, July 1957-June
11. Average length of stay in days of patients discharged by sex, hospital ownership,

12. Number of patients discharged by sex, age, and length-of-stay/ intervals: Short
Stay Hospitals, United States, July 1957-June 1958 ..... 19
13. Percent distribution of patients discharged by length-of-stay intervals according
to sex and age: Short-Stay Hospitals, United States, July 1957-June 1958 ..... 20
14. Number of hospital days by sex, age, and length-of-stay intervals: Patients discharged from Short-Stay Hospitals, United States, July 1957-June 1958-------
15. Number of patients discharged, percent distribution, and average length of stay by
hospital ownership and family income: Short-Stay Hospitals, United States; July
1957-June 1958 ..... 18
hospital ownership and family income: Short-Stay Hospitals, United States; July 1957-June 1958
16. Number of patients discharged and number per 1,000 persons per year, by hospital
ized condition and whether or not the condition was surgically treated: Short
Stay Hospitals, United States, July 1957-June 1958
17. Number of days and average length of stay by patients discharged, by hospita1
ized condition and whether or not the condition was surgically treated:

 ..... 24

19. Number of patients discharged, with and without surgery, and percent of patients
with surgery by sex and age: Short-Stay Hospitals, United States, July 1957
June 1958 ..... 25
20. Number and percent distribution of total operations performed on patients dis- charged by - age and sex: Short-Stay Hospitals, United States, July 1957-June 1958- ..... 26
21. Number and percent distribution of totai operations performed on patients dis- charged by type of operation and sex: Short-Stay Hospitals, United States, July 1957-June 1958 ..... 26
22. Number of discharges and average length of stay by type of operation and sex for patients discharged who had only one operation during the hospital episode: Short-Stay Hospitals, United States, July 1957-June 1958 ..... 27
23. Population used in obtaining rates shown in this publication by age and sex: United States, July 1957-June 1958 ..... 28
Population used in obtaining rates shown in this publication by sex, age, race, and marital status: United States, July 1957-June 1958 ..... 29
24. Population used in obtaining rates shown in this publication by sex, age, and  ..... 30
25. Population used in obtaining rates shown in this publication by sex, age, and region: United States, July 1957-June 1958 ..... 31
26. Population used in obtaining rates shown in this publication by sex, age, and family income: United States; July 1957-June 1958 ..... 32

Table 1. Number of patients discharged, number per 1,000 persons per year, and percent distribution; number of hospital days, number per 1,000 persons per year, and percent distribution; and average length of stay of patients discharged by sex and age: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during July 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix 11]


Table 2. Number of patients discharged, number per 1,000 persons per year, and percent distribution; number of hospital days, number per 1,000 persons per year, and percent distribution; and average length of stay of patients discharged, excluding deliveries, by sex and age: ShortStay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during July 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix 1 . Definitions of terms are given in Appendix il]

| Sex and age | Discharges(excluding deliveries) |  |  | Hospital days (excluding deliveries) |  |  | Average length of stay (in days) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number (in thousands) | $\begin{gathered} \text { Number } \\ \text { per• } 1,000 \\ \text { persons } \end{gathered}$ | Percent | Number (in thousands) | Number per 1,000 persons | Percent |  |
| Both sexes |  |  |  |  |  |  |  |
| All ages----------- | 13,231 | 78.6 | 100.0 | 127,437 | 756.9 | 100.0 | 9.6 |
|  | 2,796 | 53.1 | 21.1 | 15,515 | 294.8 | 12.2 | 5.5 |
| 15-24--------------------- | 1,508 | 71.5 | 11.4 | 12,974 | 615.1 | 10.2 | 8.6 |
| 25-44---------------------- | 3,775 | 82.7 | 28.5 | 32,229 | 705.9 | 25.3 | 8.5 |
| 45-64--------------------- | 3,397 | 98.5 | 25.7 | 40,910 | 1,186.8 | 32.1 | 12.0 |
| 65-74--------------------- | 1,148 | 119.2 | 8.7 | 16,363 | 1,699.7 | 12.8 | 14.3 |
| 75+- | 606 | 124.0 | 4.6 | 9,446 | 1,933.3 | 7.4 | 15.6 |
| Male |  |  |  |  |  |  |  |
| All ages----------- | 6,090 | 74.4 | 100.0 | 66,743 | 814.9 | 100.0 | 11.0 |
| Under 15--m-0------------- | 1,591 | 59.3 | 26.1 | 8,456 | 315.1 | 12.7 | 5.3 |
| 15-24--------------------- | 610 | 62.2 | 10.0 | 7,310 | 745.8 | 11.0 | 12.0 |
|  | 1,408 | 64.3 | 23.1 | 15,291 | 698.7 | 22.9 | 10.9 |
| 45-64---------------------- | 1,670 | 99.8 | 27.4 | 22,877 | 1,366.7 | 34.3 | 13.7 |
| 65-74- | 547 | 121.3 | 9.0 | 8,663 | 1,920.4 | 13.0 | 15.8 |
| 75+------------------------ | 263 | 123.4 | 4.3 | 4,145 | 1,945.1 | 6.2 | 15.8 |
| Female |  |  |  |  |  |  |  |
| A11 ages----------- | 7,141 | 82.6 | 100.0 | 60,694 | 702.0 | 100.0 | 8.5 |
| Under 15----------------- | 1,205 | 46.7 | 16.9 | 7,059 | 273.6 | 11.6 | 5.9 |
| 15-24---------------------- | 898 | 79.5 | 12.6 | 5,664 | 501.6 | 9.3 | 6.3 |
| 25-44--------------------- | 2,367 | 99.6 | 33.1 | 16,937 | 712.5 | 27.9 | 7.2 |
| 45-64---------------------- | 1,727 | 97.4 | 24.2 | 18,033 | 1,017.0 | 29.7 | 10.4 |
| 65-74--------------------- | 601 | 117.5 | 8.4 | 7,699 | 1,504.9 | 12.7 | 12.8 |
| 75+----------------------- | 343 | 124.5 | 4.8 | 5,301 | 1,924.1 | 8.7 | 15.5 |

Table 3. Number and percent of patients discharged, number and percent of hospital days, and average length of stay, by sex and hospital type of service: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during July l957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and infomation on the reliability of the estimates are given in Appendix 1 . Definitions of terms are given in Appendix 11 .]

| Sex and hospital type of service | Discharges |  | Hospital days |  | Average length of stay (in days) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number (in thousands) | Percent | Number (in thousands) | Percent |  |
| Both sexes |  |  |  |  |  |
| Total------------------------- | 16,738 | 100.0 | 143,322 | 100.0 | 8.6 |
| General----------------------------- | 16,131 | 96.4 | 138,983 | 97.0 | 8.6 |
| Maternity----------------------------- | 76 | 0.5 | 435 | 0.3 | 5.7 |
| Eye, ear, nose, and throat--------- | 75 | 0.4 | 456 | 0.3 | 6.1 |
| Children---------------------------- | 123 | 0.7 | 1,177 | 0.8 | 9.6 |
| Osteopathic-------------------------- | 333 | 2.0 | 2,271 | 1.6 | 6.8 |
| Male |  |  |  |  |  |
| Total-------------------------- | 6,090 | 100.0 | 66,743 | 100.0 | 11.0 |
| General------------------------------1-20- | 5,875 | 96.5 | 64,718 | 97.0 | 11.0 |
|  | 1 | 0.0 | 15 | 0.0 | 15.0 |
| Eye, ear, nose, and throat--------- | 43 | 0.7 | 283 | 0.4 | 6.6 |
| Children----------------------------- | 55 | 0.9 | 739 | 1.1 | 13.4 |
| Osteopathic------------------------ | 116 | 1.9 | 988 | 1.5 | 8.5 |
| Female |  |  |  |  |  |
| Total------------------------ | 10,648 | 100.0 | 76,579 | 100.0 | 7.2 |
| General----------------------------- | 10,257 | 96.3 | 74,265 | 97.0 | 7.2 |
| Maternity---------------------------1-2- | 75 | 0.7 | 420 | 0.5 | 5.6 |
| Eye, ear, nose, and throat--------- | 33 | 0.3 | 173 | 0.2 | 5.2 |
| Children---------------------------- | 68 | 0.6 | 437 | 0.6 | 6.4 |
|  | 216 | 2.0 | 1,283 | 1.7 | 5.9 |

Table 4. Number and percent of patients discharged, number and percent of hospital days, and average length of stay, by sex and hospital type of ownership: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during July 1957-June.l958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix 11.]


Table 5. Number of patients discharged, number per 1,000 persons per year, and average length of stay by sex, age, and race: Short-Stay Hospitals, United States, July 1957-June 1958
[Oata are based on household interviews during july $1957-j u n e 1958$. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix 11 ]


Table 6. Number of patients discharged and number per 1,000 persons per year by sex, age, and marital status: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during July 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix 11 .]

| Sex and age | Marital status |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of discharges in thousands |  |  |  | Number of discharges per 1,000 persons |  |  |  |
|  | Total | Never married | Married | Widowed, divorced, or separated | Total | Never married | Married | Widowed, divorced, or separated |
| Both sexes |  |  |  |  |  |  |  |  |
| All ages----- | 16,738 | 4,215 | 10,868 | 1,655 | 99.4 | 57.4 | 134.3 | 118.5 |
| Under 15-*--------- | 2,801 | 2,801 | 1 | - | 53.2 | 53.2 | 83.3 | - |
| 15-24-------------- | 2,901 | 869 | 1,967 | 65 | 137.5 | 63.2 | 283.3 | 162.9 |
| 25-44--------------- | 5,868 | 261 | 5,277 | 331 | 128.5 | 65.8 | 135.3 | 123.4 |
|  | $\begin{aligned} & 3,413 \\ & 1,754 \end{aligned}$ | 189 95 | 2,680 943 | 544 716 | 99.0 120.9 | 86.4 101.5 | 97.7 125.0 | 112.3 118.7 |
| Male |  |  |  |  |  |  |  |  |
|  | 6,090 | 2,385 | 3,290 | 415 | 74.4 | 62.6 | 81.8 | 115.9 |
| Under 15----------- | 1,591 | 1,591 | - | - | 59.3 | 59.3 | - | - |
| 15-24-------------- | 610 | 471 | 138 | 1 | 62.2 | 62.8 | 62.6 | 10.8 |
| 25-44--------------- | 1,408 | 156 | 1,199 | 53 | 64.3 | 67.9 | 63.7 | 70.4 |
|  | 1,670 810 | 121 46 | 1,381 570 | 168 194 | 99.8 122.0 | 117.5 111.1 | 94.8 122.8 | 146.5 122.5 |
| Female |  |  |  |  |  |  |  |  |
| All ages----- | 10,648 | 1,830 | 7,578 | 1,240 | 123.2 | 51.7 | 186.2 | 119.4 |
| Under 15----------- | 1,210 | 1,209 | 1 | - | 46.9 | 46.9 | 90.9 | - |
| 15-24--------------- | 2,291 | 399 | 1,829 | 63 | 202.9 | 63.9 | 385.9 | 205.9 |
| 25-44--------------- | 4,460 | 105 | 4,077 | 278 | 187.6 | 63.0 | 202.1 | 144.0 |
| 45-64---------------- | 1,743 | 68 | 1,299 | 376 | 98.3 | 58.7 | 100.9 | 101.6 |
| 65+----------------- | 944 | 49 | 373 | 522 | 119.9 | 93.9 | 128.5 | 117.4 |

Table 7. Number of patients discharged, number per 1,000 persons per year, and average length of stay, by age and family income: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during july l957-june l958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix 11 ]

| Age | Family income |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | $\begin{aligned} & \text { Under } \\ & 2,000 \end{aligned}$ | $\begin{aligned} & 2,000- \\ & 3,999 \end{aligned}$ | $\begin{aligned} & 4,000= \\ & 6,999 \end{aligned}$ | 7,000+ | Unknown |
|  | Number of discharges in thousands |  |  |  |  |  |
|  | 16,738 | 2,363 | 3,731 | 6,306 | 3,381 | 957 |
| Under 15- | 2,801 | 258 | 540 | 1,312 | 569 | 123 |
| 15-24- | 2,901 | 387 | 823 | 1,098 | 433 | 161 |
| 25-44- | 5,868 | 503 | 1,139 | 2,622 | 1,379 | 225 |
| 45-64 | 3,413 | 553 | 785 | 999 | 765 | 311 |
|  | 1,754 | 662 | 443 | 276 | 235 | 139 |

Number of discharges per 1,000 persons













| 8.6 | 11.7 | 8.5 | 7.2 | 7.9 | 12.2 |
| ---: | ---: | ---: | ---: | ---: | ---: |
| 5.5 | 8.1 | 6.3 | 4.6 | 5.4 | 7.2 |
| 6.5 | 6.5 | 5.3 | 7.9 | 6.2 | 4.9 |
| 7.2 | 10.1 | 8.0 | 6.2 | 7.0 | 8.6 |
| 12.0 | 14.7 | 11.6 | 10.1 | 10.2 | 18.7 |
| 14.7 | 14.8 | 13.4 | 15.2 | 15.7 | 15.8 |

Table 8. Number of patients discharged, number per 1,000 persons per year, and average stay in hospital by sex, age, and residence: Short-Stay Hospitals, United States; July 1957-June 1958
[Date are based on household interviews during July 1957-June 1958. Data refer to the civilian noninstitutional population

 Appendix 1I]


Table 9. Number of patients discharged, number per 1,000 persons per year, and average length of stay by age and region: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during july 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix. 1I]

| Age | Region |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { A11 } \\ & \text { areas } \end{aligned}$ | Northeast | North Central | South | West |
|  | Number of discharges in thousands |  |  |  |  |
| A11 ages--------------------- | 16,738 | 4,090 | 5,291 | 4,958 | 2,398 |
|  | 2,801 | 735 | 937 | 739 | 391 |
|  | 2,901 | 578 | 908 | 964 | 452 |
|  | 5,868 | 1,462 | 1,794 | 1,773 | 839 |
|  | 3,413 1,754 | 909 406 | 1,056 597 | 973 510 | 475 241 |
| . ${ }^{\text {c }}$ | Number of discharges per 1,000 persons |  |  |  |  |
| Al1 ages--------------------- | . 99.4 | 97.1 | 105.1 | 95.5 | 99.9 |
| Under 15----------------------------- | 53.2 | 62.7 | 59.1 | 43.0 | 49.8 |
| 15-24--- | 137.5 | 120.9 | 148.8 | 130.4 | 160.6 |
|  | 128.5 | 123.2 | 132.1 | 132.5 | 122.9 |
|  | 99.0 120.9 | 91.1 107.4 | 104.3 | 98.8 | 105.3 |
|  | Average length of stay in days |  |  |  |  |
| A11 ages----------------------- | 8.6 | 9.4 | 9.0 | 7.8 | 7.5 |
| Under 15------------------------------ | 5.5 | 5.5 | 6.1 | 5.5 | 4.3 |
|  | 6.5 | 6.9 | 7.5 | 6.0 | 5.1 |
|  | 7.2 | 7.9 | 6.6 | 7.4 | 6.4 |
|  | 12.0 | 13.5 | 12.9 | 10.4 | 10.5 |
| 654----------------------------------- | 14.7 | 16.5 | 16.4 | 11.1 | 15.0 |

Table 10. Number of patients discharged by sex, hospital ownership, and age: ShortStay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during july 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix 1 . Definitions of terms are given in Appendix 11.]

| Sex and hospital ownership | Age |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Al1 <br> ages | Under 15 | 15-24 | 25-44 | 45-64 | 65+ |
|  | Number of discharges in thousands |  |  |  |  |  |
| Total | 16,738 | 2,801 | 2,901 | 5,868 | 3,413 | 1,754 |
|  | 2,811 | 428 | 639 | 862 | 540 | 341 |
|  | 4,657 | 784 | 740 | 1,754 | 939 | 439 |
|  | 7,172 | 1,295 | 1,113 | 2,499 | 1,491 | 774 |
| Proprietary | 1,081 | 178 | 160 | 396 | 237 | 110 |
|  | 1,017 | 115 | 249 | 358 | 205 | 90 |
| Male |  |  |  |  |  |  |
| Total-------------------------- | 6,090 | 1,591 | 610 | 1,408 | 1,670 | 810 |
| Govermmental non-Federal----------- | 945 | 239. | 128 | 186 | 250 | 142 |
|  | 1,624 | 454 | 157 | 364 | 434 | 215 |
|  | 2,545 | 721 | 186 | 580 | 712 | 346 |
|  | 430 | 102 | 48 | 119 | 117 | 44 |
|  | 547 | 75 | 91 | 159 | 158 | 63 |
| Female |  |  |  |  |  |  |
| Toital----- | 10,648 | 1,210 | 2,291 | 4,460 | 1,743 | 944 |
| Governmental non-Federal----------- | 1,866 | 189 | 512 | 676 | 290 | 199 |
| Nonprofit church--------------------- | 3,033 | 331 | . 583 | 1,390 | 505 | 224 |
|  | 4,627 | 574 | 926 | 1,918 | 780 | 428 |
|  | 652 | 76 | 112 | 277 | 120 | 67 |
|  | 471 | 40 | 158 | 199 | 47 | 27 |

[^1]Table 11. Average length-of stay in days of patients discharged by sex, hospital ownership, and age: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during July 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general quallfications, and information on the reliability of the estimates are given in Appendix 1. Definitions of terms are given in Appendix 11.]

| Sex and hospital ownership | Age |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All ages | Under 15 | 15-24 | 25-44 | 45-64 | $65+$ |
| Both sexes <br> Total | 8.6 | 5.5 | 6.5 | 7.2 | 12.0 | 14.7 |
|  |  |  |  |  |  |  |
| Governmental non-Federal---------- | 8.4 | 6.8 | 5.6 | 6.6 | 12.9 | 13.1 |
| Nonprofit church------------------- | 7.7 | 5.8 | 5.1 | 6.4 | 10.3 | 15.0 |
|  | 7.9 | 5.2 | 5.7 | 6.4 | 10.9 | 14.9 |
|  | 6.0 | 3.8 | 6.7 | 5.5 | 7.0 | 7.7 |
|  | 20.2 | 5.4 | 16.7 | 19.5 | 31.5 | 26.3 |
| Male |  |  |  |  |  |  |
| Total------------------------ | 11.0 | 5.3 | 12.0 | 10.9 | 13.7 | 15.8 |
| Govermmental non-Federal---------- | 10.1 | 6.3 | 7.3 | 8.8 | 14.4 | 13.5 |
| Nonprofit church----------------- | 9.2 | 5.9 | 6.0 | 8.1 | 10.8 | 17.2 |
| Nonprofit other--------------------- | 8.7 | 4.7 | 8.6 | 7.7 | 11.0 | 13.8 |
|  | 7.0 | 4.1 | 11.6 | 6.5 | 7.7 | 8.1 |
|  | 31.3 | 6.0 | 36.2 | 34.2 | 37.3 | 32.5 |
| Female |  |  |  |  |  |  |
| Total---------------------- | 7.2 | 5.8 | 5.1 | 6.0 | 10.4 | 13.8 |
| Governmental non-Federal---------- | 7.5 | 7.4 | 5.2 | 6.1 | 11.7 | 12.7 |
| Nonprofit church------------------- | 6.9 | 5.6 | 4.9 | 6.0 | 9.9 | 13.0 |
|  | 7.5 | 5.9 | 5.1 | 6.0 | 10.8 | 15.8 |
| Proprietary------------------------ | 5.2 | 3.3 | 4.6 | 5.0 | 6.4 | 7.3 |
|  | 7.3 | 4.1 | 5.4 | 7.8 | 11.9 | 11.9 |

IInciudes Veterans Administration, Other Federal, Osteopathic, and other.

Table 12. Number of patients discharged, percent distribution, and average length of stay by hospital ownership and family income: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during july l957-June 1958. Datarefer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix 11.]

| Hospital ownership | Family income |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | $\begin{aligned} & \text { Under } \\ & 2,000 \end{aligned}$ | $\begin{aligned} & 2,000- \\ & 3,999 \end{aligned}$ | $\begin{aligned} & 4,000- \\ & 6,999 \end{aligned}$ | 7,000+ | Unknown |
| Total-------2----------------- | Number of discharges in thousands |  |  |  |  |  |
|  | $16,738$ | $2,363$ | $3,731$ | $6,306$ | $3,381$ | 957 |
| Governmental non-Federal-- | 2,811 | 647 | 746 | 788 | 435 | 195 |
| Nonprofit church---- | 4,657 | 469 | 968 | 1,957 | 1,040 | 225 |
| Nonprofit other-a | 7,172 | 897 | 1,515 | 2,797 | 1,529 | 43448 |
| Proprietary------- | 1,081 | 177 | 252 | 398 | 205 |  |
|  | 330353 | 120 | 88 | 70135 | 2266 | 2910 |
|  |  | 29 | 113 |  |  |  |
| Osteopathic | 3332 | 231 | 47 |  | - 84 | 16 |
| Other in index- |  |  | 2 | - | $\checkmark$ - | - |

Percent distribution


Total
Governmental non-Federal--.--------








| 100.0 | 14.1 | 22.3 | 37.7 | 20.2 | 5.7 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 100.0 | 23.0 | 26.5 | 28.0 | 15.5 | 6.9 |
| 100.0 | 10.1 | 20.8 | 42.0 | 22.3 | 4.8 |
| 100.0 | 12.5 | 21.1 | 39.0 | 21.3 | 6.1 |
| 100.0 | 16.4 | 23.3 | 36.8 | 19.0 | 4.4 |
| 100.0 | 36.4 | 26.7 | 21.2 | 6.7 | 8.8 |
| 100.0 | 8.2 | 32.0 | 38.2 | 18.7 | 2.8 |
| 100.0 | 6.9 | 14.1 | 48.6 | 25.2 | 4.8 |
| 100.0 | 50.0 | 100.0 | - | - | - |
| Average length of stay in days |  |  |  |  |  |
| 8.6 | 11.7 | 8.5 | 7.2 | 7.9 | 12.2 |
| 8.4 | 10.9 | 8.1 | 6.8 | 7.4 | 9.9 |
| 7.7 | 10.3 | 8.1 | 6.6 | 8.4 | 7.0 |
| 7.9 | 10.2 | 7.8 | 7.0 | 7.5 | 11.5 |
| 6.0 | 6.5 | 6.8 | 5.5 | 5.2 | 6.6 |
| 38.9 | 39.5 | 39.0 | 22.3 | 24.0 | 89.3 |
| 15.4 | 15.4 | 6.5 | 20.6 | 20.6 | 11.7 |
| 6.8 | 9.7 | 7.9 | 6.3 | 6.7 | 6.2 |
| 5.5 | 2.0 | 4.5 | - | - | - |

Table 13. Number of patients discharged by sex, age, and length-of-stay intervals: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during July l957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are.given Appendix li]


Table 14. Percent distribution of patients discharged by length-of-stay intervals according to sex and age: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during duly 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may, not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix 11]


Table 15. Number of hospital days by sex, age, and length-of-stay intervals: Patients discharged from Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during July 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detalled figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix 11 ]

| Sex and age | Length-of-stay intervals in days |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 1 | 2-7 | 8-14 | 15-30 | $31+$ |
|  | Number of hospital days in thousands |  |  |  |  |  |
| Both sexes |  |  |  |  |  |  |
| All ages--------- | 143,322 | 1,736. | 42,538 | 32,200 | 27,963 | 38,885 |
| Under 15 | 15,530 | 785 | 5,841 | 3,008 | 3,190 | 2,705 |
| 15-24-------------------- | 18,936 | 282 | 8,928 | 2,711 | 1,731 | 5,283 |
| 25-44-------------------- | 42,045 | 396 | 17,945 | 9,652 | 5,853 | 8,198 |
|  | 41,002 25,809 | 205 67 | 6,837 2,987 | 11,140 5,689 | 10,127 7,061 | $\begin{aligned} & 12,694 \\ & 10,005 \end{aligned}$ |
| Male |  |  |  |  |  |  |
| All ages--------- | 66,743 | 832 | 12,600 | 13,862 | 14,968 | 24,481 |
| Under 15---------------- | 8,456 | 452 | 3,404 | 1,481 | 1,679 | 1,440 |
| 15-24------------------- | 7,310 | 91 | 1,412 | 1,023 | 608 | 4,178 |
| 25-44------------------- | 15,291 | 140 | 3,446 | 3,254 | 2,617 | 5,835 |
|  | $\begin{aligned} & 22,877 \\ & 12,808 \end{aligned}$ | 115 34 | 3,116 1,222 | 5,282 2,823 | 6,205 3,859 | 8,159 4,870 |
| All ages--------- | 76,579 | 904 | 29,939 | 18,337. | 12,995 | 14,404 |
| Under 15---------------- | 7,073 | 333 | 2,437 | 1,527 | 1,511 | 1,265 |
| 15-24------------------- | 11,626 | 192 | 7,516 | 1,688 | 1,124 | 1,106 |
| 25-44------------------- | 26,754 | 256 | 14,499 | 6,399 | 3,236 | 2,363 |
| 45-64- | 18,125 | 90 | 3,721 | 5,857 | 3,921 | 4,535 |
|  | 13,001 | 33 | 1,765 | 2,866 | 3,202 | 5,135 |

Table 16. Percent distribution of hospital days by length-of-stay intervals according to sex and age: Patients discharged from' Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during July 1957-June l958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix II.]


Table 17. Number of patients discharged and number per 1,000 persons per year, by hospitalized condition ${ }^{1}$ and whether or not the condition was surgically treated: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during July 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix 1 . Definitions of terms are given in Appendix II.]

| Hospitalized condition | Number of discharges in thousands |  |  | Number per 1,000 persons |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Surgically\| treated | Not surgically treated | Total | Surgically treated | Not surgically treated |
| Al1 conditions------------------- | 16,738 | 10,124 | 6,614 | 99.4 | 60.1 | 39.3 |
| Infective and parasitic diseases------ | 298 | 27 | 271 | 1.8 | 0.2 | 1.6 |
| Malignant neoplasms------------------- | 259 | 187 | 72 | 1.5 | 1.1 | 0.4 |
| Benign and unspecified neoplasms-...-. Allergic, endocrine, and metabolic disorders | 738 445 | 696 64 | 42 381 | 4.4 2.6 | 4.1 0.4 | 0.2 2.3 |
| Mental and personality disorders------ | 306 | 9 | 297 | 1.8 | 0.1 | 1.8 |
| Intracranial lesions------------------ | 93 | 5 | 88 | 0.6 | 0.0 | 0.5 |
| Diseases of nervous system and sense organs <br> Heart diseases $\qquad$ | 538 541 | 283 26 | 254 515 | 3.2 3.2 | 1.7 0.2 | 1.5 1.5 3.1 |
|  | 239 | 227 | 12 | 1.4 | 1.3 | 0.1 |
| Other circulatory diseases------------ | 411 | 134 | 278 | 2.4 | 0.8 | 1.7 |
| Upper respiratory conditions---m-n-e- | 1,231 | 1,033 | 198 | 7.3 | 6.1 | 1.2 |
| Other respiratory conditions---m------ | 976 | 27 | 949 | 5.8 | 0.2 | 5.6 |
| Ulcer of stomach and duodenum-e------ | 282 | 83 | 198 | 1.7 | 0.5 | 1.2 |
|  | 417 | 365 | 51 | 2.5 | 2.2 | 0.3 |
| Hernia------ | 453 | 423 | 30 | 2.7 | 2.5 | 0.2 |
| Diseases of the gallbladder----------- | 421 | 246 | 174 | 2.5 | 1.5 | 1.0 |
| Other digestive system conditions----- | 745 | 309 | 436 | 4.4 | 1.8 | 2.6 |
| Female breast and genital disorders ${ }^{2}$-- | 587 | 493 | 94 | 6.8 | 5.7 | 1.1 |
| Other genitourinary conditions-------- | 720 | 351 | 369 | 4.3 | 2.1 | 2.2 |
|  | 3,507 | 3,507 | -•• | 40.6 | 40.6 | -• |
| Pre- and post-natal conditions ${ }^{2}$------- | 554 | 220 | 334 | 6.4 | 2.5 | 3.9 |
| Diseases of the skin--------------m--- | 202 | 119 | 83 | 1.2 | 0.7 | 0.5 |
| Arthritis- | 159 | 17 | 142 | 0.9 | 0.1 | 0.8 |
| Other musculoskeletal disorders------- | 467 | 231 | 236 | 2.8 | 1.4 | 1.4 |
| Fractures and dislocations----------- | 664 | 611 | 53 | 3.9 | 3.6 | 0.3 |
| Other current injuries---------------- | 710 | 212 | 498 | 4.2 | 1.3 | 3.0 |
| All other conditions------------------ | 642 | 207 | 435 | 3.8 | 1.2 | 2.6 |
| Observation only----------------------- | 133 | 9 | 124 | 0.8 | 0.1 | 0.7 |

[^2]Table 18. Number of days and average length of stay by patients discharged, by hospitalized condition ${ }^{1}$ and whether or not the condition was surgically treated: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during July 1957-June 1958. Datarefer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualificatlons, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix II]


[^3]Table 19. Number of patients discharged, with and without surgery, and percent of patients with surgery by sex and age: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during July 1957-June l958. Data refer to the civilian noninstitutional population of continental United States. Detalled figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix 11 .]

| Sex and age | Number of discharges in thousands |  |  | PercentWith <br> surgery |
| :---: | :---: | :---: | :---: | :---: |
|  | Total | $\begin{aligned} & \text { With } \\ & \text { surgery } \end{aligned}$ | Without surgery |  |
| Both sexes <br>  | 16,738 | 10,159 | 6,579 | 60.7 |
| Under 15------------------------------ | 2,801 | 1,539 | 1,262 | 54.9 |
|  | 2,901 5,868 | 2,151 4,182 | 751 1,687 | 74.1 71.3 |
|  | 3,413 1,754 | 1,575 713 | 1,838 1,041 | 46.1 40.6 |
| All ages---------------------- | 6,090 | 2,998 | 3,092 | 49.2 |
| Under 15-------------------------- | 1,591 | 907 | 684 | 57.0 |
|  | 610 1,408 | 323 740 | 287 | 53.0 52.6 |
|  | 1,670 810 | 724 304 | 946 506 | $\begin{aligned} & 43.4 \\ & 37.5 \end{aligned}$ |
| All ages---------------------- | 10,648 | 7,161 | 3,487 | 67.3 |
|  | 1,210 | 632 | 578 | 52.2 |
| $\qquad$ 15-24 $25-44$ | 2,291 4,460 | 1,828 3,442 | 463 1,019 | 79.8 77.2 |
|  | 1,743 944 | 851 409 | 892 535 | $\begin{aligned} & 48.8 \\ & 43.3 \end{aligned}$ |

Table 20. Number and percent distribution of total operations performed on patients discharged by age and sex: Short-Stay Hospitals, United States, July 1957-June 1958
' Data are based on household interviews during July 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix 1. Definitions of terms are given in. Appendix 11.]

| Age | Number of operations in thousands |  |  | Percent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both sexes | Male | Female | Both sexes | Male | Female |
| All ages-------- | 10,499 | 3,130 | 7,369 | 100.0 | 100.0 | 100.0 |
| Under 15---------------- | 1,580 | 933 | 647 | 15.0 | 29.8 | 8.8 |
| 15-24-------------------- | 2,182 | 337 | 1,845 | 20.8 | 10.8 | 25.0 |
| 25-44-------------------- | 4,328 | 767 | 3,561 | 41.2 | 24.5 | 48.3 |
| 45-64------------------ | 1,654 | 765 | 889 | 15.8 | 24.4 | 12.1 |
|  | 514 | 218 | 296 | 4.9 | 7.0 | 4.0 |
| 75+---------------------1 | 242 | 110 | 132 | 2.3 | 3.5 | 1.8 |

Table 21. Number and percent distribution of total operations performed on patients discharged by type of operation and sex: Short-Stay Hospitals, United States, July 1957-June 1958
(See headnote on table 20)

| Type of operation | Number of operations <br> in thousands |  |  | Percent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both sexes | Male | Female | Both sexes | Male | Femiale |
|  | 10,499 | 3,130 | 7,369 | 100.0 | 100.0 | 100.0 |
| Operations on the brain and skull--m---- | 66 | 42 | 24 | 0.6 | 1.3 | 0.3 |
| Eye operations-- | 245 | 125 | 120 | 2.3 | 4.0 | 1.6 |
| Varicose veins------------------------ | 80 | 28 | 52 | 0.8 | 0.9 | 0.7 |
| Tonsillectomy and/or adenoidectomy------- | 1,003 | 513 | 490 | 9.6 | 16.4 | 6.6 |
| Operations for stomach ulcers------------- | 69 | 60 | 10 | 0.7 | 1.9 | 0.1 |
| Other operations on the stomach---------- | 46 | 20 | 26 | 0.4 | 0.6 | 0.4 |
| Appendectomies--------------------------- | 367 | 170 | 197 | 3.5 | 5.4 | 2.7 |
| Repair of hernias-------------------------1- | 461 | 373 | 88 | 4.4 | 11.9 | 1.2 |
| Operations on the intestines------------ | 215 | 88 | 127 | 2.0 | 2.8 | 1.7 |
| Operations for hemorrhoids----------m--- | 242 | 125 | 118 | 2.3 | 4.0 | 1.6 |
| Operations on the gallbladder------2----- | 248 | 94 | 154 | 2.4 | 3.0 | 2.1 |
| Operations on the kidneys---------------- | 95 | 48 | 47 | 0.9 | 1.5 | 0.6 |
| Operations on the bladder----------------- | 122 | 54 | 69 | 1.2 | 1.7 | 0.9 |
| Operations on the male genital system---- | 253 | 253 |  | 2.4 | 8.1 |  |
|  | 269 | . | 269 | 2.6 | ... | 3.7 |
| Other female genital operations---------- | 985 | - | 985 | 9.4 | ... | 13.4 |
| Reduction of fractures and dislocations-- | 575 | 285 | 290 | 5.5 | 9.1 | 3.9 |
| Cesarean deliveries | 107 | . . . | 107 | 1.0 | ... | 1.5 |
| All other deliveries | 3,400 | - | 3,400 | 32.0 | $\cdots$ | 45.6 |
| All other operations---------------------- | 1,651 | 853 | 797 | 16.1 | 27.3 | 11.4 |

Table 22. Number of discharges and average length of stay by type of operation and sex for patients discharged who had only one operation during the hospital episode: Short-Stay Hospitals, United States, July 1957-June 1958
[Data are based on household interviews during july l957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix 1 . Definitions of terms are given in Appendix 11]

| Type of operation | Number of discharges in thousands |  |  | Average length of stay in days |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both sexes | Male | Female | Both sexes | Male | Female |
|  | 9,833 | 2,867 | 6,966 | 7.3 | 9.4 | 6.4 |
| Operations on the brain and skull----2--- | 55 | 32 | 23 | 23.3 | 30.6 | 13.1 |
|  | 243 | 122 | 120 | 8.2 | 9.6 | 6.9 |
| Varicose veins- | 64 | 23 | 41 | 8.3 | 12.3 | 6.0 |
| Tonsillectomy and/or adenoidectomy------- | 987 | 506 | 481 | 1.7 | 1.6 | 1.9 |
| Operations for stomach ulcers------------ | 58 | 50 | 8 | 20.1 | 19.3 | 25.4 |
| Other operations on the stomach---------- | 39 | 18 | 21 | 14.8 | 16.5 | 13.3 |
| Appendectomies | 348 | 170 | 177 | 6.7 | 6.9 | 6.6 |
|  | 415 | 345 | 70 | 9.1 | 9.1 | 9.3 |
| Operations on the intestines------------- | 196 | 84 | 113 | 13.9 | 14.3 | 13.5 |
| Operations for hemorrhoids--------------- | 208 | 110 | 98 | 7.6 | 8.4 | 6.8 |
| Operations on the gallbladder------------ | 231 | 90 | 141 | 14.4 | 14.6 | 14.3 |
|  | 90 | 45 | 45 | 12.5 | 11.0 | 13.8 |
| Operations on the bladder---------------- | 106 | 42 | 64 | 12.8 | 13.9 | 12.0 |
| Operations on the male genital system---- | 216 | 216 | - $\cdot$ | 11.5 | 11.5 | -. |
|  | 245 | ... | 245 | 10.2 | ... | 10.2 |
| Other female genital operations---------- | 877 | -•• | 877 | 5.3 | $\ldots$ | 5.3 |
| Reduction of fractures and dislocations-- | 526 | 247 | 279 | 16.4 | 12.6 | 19.7 |
| Cesarean deliveries | 96 | ... | 96 | 7.8 | ... | 7.8 |
| All other deliveries | 3,329 | 7 | 3,329 | 4.4 | - | 4.4 |
| All other operations---------------------- | 1,503 | 767 | 737 | 9.4 | 10.6 | 8.2 |

## POPULATION

The following tables contain estimates of the civilian noninstitutional population of the United States based on interviews conducted by the U. S. National Health Survey during the period, July 1957-June 1958. These estimates have been used as a base for the rates shown in this report. They are not official population estimates and are included here solely toenable the reader to compute rates
for different combination of categories of data, A more complete discussion of this subject is contained in Appendix I.

For official population estimates, see $\mathrm{Bu}-$ reau of the Census reports on the civilian population of the United States, in Current Population Reports: Series P-20.

Table 23. Population used in obtaining rates shown in this publication by age and sex: United States, July 1957-June 1958
[Data are based on household interviews during July 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix 1 . Definitions of terms are given in Appendix ll.]

| Age | Both sexes | Male | Female |
| :---: | :---: | :---: | :---: |
| All ages | Population in thousands |  |  |
|  | 168,369 | 81,906 | 86,463 |
| Under 15--- | 52,637 | 26,839 | 25,798 |
| 15-24- | 21,093 | 9,801 | 11,292 |
| 25-44- | 45,656 | 21,885 | 23,772 |
| 45-64- | 34,470 | 16,739 | 17,731 |
| 65-74- | 9,627 | 4,511 | 5,116 |
| 75+- | 4,886 | 2,131 | 2,755 |

Table 24. Population used in obtaining rates shown in this publication by sex, age, race, and marital status: United States, July 1957-June 1958
[Data are based on household interviews during july 1957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix 1 . Definitions of terms are given in Appendix II]

|  | Race |  |  | Marital' status |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Sex and age | Total | White | Nonwite | Never married | Married | Widowed, divorced, or <br> separated |



Table 25. Population used in obtaining rates shown in this publication by sex, age, and residence: United States, July 1957-June 1958

Data are based on household interviews during July 1957-June 1958. Data refer to the civilian noninstitutional population of continental united States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix 4 . Definitions of terms are given in Appendix 11.]

| Sex and age | Residence |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { All } \\ \text { areas } \end{gathered}$ | Urban | Rural nonfarm | Rural farm |
|  | Population in thousands |  |  |  |
| Both sexes <br> All ages $\qquad$ | 168,369 | $102,985$ | 44,334 | 21,049 |
|  |  |  |  |  |
| Under 15------------------------------ | 52,637 | 29,640 | 15,817 | 7,180 |
|  | 21,093 | 12,967 | 5,122 | 3,004 |
| 25-44--------------------------------- | 45,656 | 28,347 | 12,532 | 4,777 |
|  | 34,470 | 22,729 | 7,499 | 4,242 |
|  | 14,512 | 9,303 | 3,364 | 1,846 |
| Male |  |  |  |  |
| All ages---------------------- | 81,906 | 49,098 | 21,905 | 10,903 |
| Under 15------------------------------ | 26,839 | 14,928 | 8,170 | 3,741 |
| 15-24------------------------------ | 9,801 | 5,897 | 2,324 | 1,581 |
|  | 21,885 | 13,453 | 6,087 | 2,344 |
|  | 16,739 | 10,774 | 3,700 1,625 | 2,265 971 |
| 65+----------------------------------- | 6,641 | 4,045 | 1,625 | 971 |
| - Female |  |  |  |  |
| All ages | 86,463 | 53,888 | 22,429 | 10,146 |
| Under 15------------------------------ | 25,798 | 14,712 | 7,647 | 3,439 |
|  | 11,292 | 7,070 | 2,798 | 1,424 |
|  | 23,772 | 14,893 | 6,445 | 2,433 |
|  | 17,731 | 11,955 | 3,799 | 1,977 |
| 65+---------------------------------1-2- | 7,871 | 5,257 | 1,740 | 874 |

Table 26. Population used in obtaining rates shown in this publication by sex, age, and region: United States, July 1957-June 1958
[Data are based on household interviews during July 1957-june 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix 11.$]$

| Sex and age | Region |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { A11 } \\ \text { areas } \end{gathered}$ | Northeast | North Central | South | West |
|  | Population in thousands |  |  |  |  |
| Both sexes |  |  |  |  |  |
|  | 168,369 | 42,125 | 50,340 | 51,903 | 24,001 |
| Under 15------------------------------- | 52,637 | 11,716 | 15,867 | 17,201 | 7,852 |
|  | 21,093 | 4,779 | 6,104 | 7,395 | 2,815 |
|  | 45,656 | 11,870 | 13,583 | 13,379 | 6,824 |
|  | 34,470 14,512 | 9,978 3,781 | 10,128 | 9,851 | 4,513 |
| Ma1e |  |  |  |  |  |
| All ages------------------------ | 81,906 | 20,487 | 24,722 | 25,120 | 11,577 |
| Under 15----------------------------- | 26,839 | 5,991 | 8,144 | 8,759 | 3,945 |
|  | 9,801 | 2,367 | 2,823 | 3,408 | 1,202 |
| 25-44-------------------------------- | 21,885 | 5,680 | 6,573 | 6,362 | 3,270 |
|  | $16,739$ | 4,825 | 4,997 | 4,712 | 2,205 |
| 65+-------------------------------- | $6,641$ | 1,623 | 2,184 | 1,879 | 955 |
| Female |  |  |  |  |  |
| A11 ages--------------------- | 86;463 | 21,637 | 25,618 | 26,783 | 12,425 |
| Under 15--------------------------- | 25,798 | 5,725 | 7,723 | 8,442 | 3,907 |
|  | 11,292 | 2,412 | 3,281 | 3,987 | 1,612 |
| 25-44------------------------------ | 23,772 | 6,190 | 7,010 | 7,016 | 3,555 |
|  | 17,731 | 5,153 | 5,131 | 5,139 | 2,308 |
|  | 7,871 | 2,157 | 2,473 | 2,198 | 1,042 |

Table 27. Population used in obtaining rates shown in this publication by sex, age, and family income: United States, July 1957-June 1958
[Data are based on household interviews during July l957-June 1958. Data refer to the civilian noninstitutional population of continental United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix l. Definitions of terms are given in Appendix I!.]


## APPENDIX I TECHNICAL NOTES ON METHODS

## Background of This Report

This report on Hospitalization is one of a series of statistical reports which cover separate health-related topics prepared by the U. S. National Health Survey. The report is based on information collected in the nationwide continuing sample household-interview survey which is a main aspect of the program.

The household-interview survey uses a questionnaire which, in addition to personal and demographic characteristics, requests 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. In the interest of prompt publication, some of these reports are provisional or abbreviated. However, the continuous character of the household survey permits the collection of data for different periods of the year and the gradual accumulation of data sufficient for progressively more detailed classification and tabulation. For this reason preliminary or initial reports may be superseded when a larger volume of data and a need for more detailed information warrant amplification.

## Data for Present Report

The present report is based on the consolidated sample for 52 weeks of interviewing ending June 28, 1958.

The population covered by the sample for the house-hold-interview survey is the civilian population of the continental United States living at the time of interview. Although the sample collection covers persons living as inmates of resident-type institutions, data for these persons are not included in the figures given in these reports pending special study of the applicability of an interview-type questionnaire to these persons. The sample does not include members of the Armed Forces, United States nationals living in foreign countries, and crews of vessels. It should also be noted that the estimates shown do not represent a complete inventory of medical conditions existing or services received for any specified calendar period since no adjustment has been made for persons who experienced the condition or service during the reference period of the specific question and who were not living at the time of inter-view-for most questions, a time lapse of two weeks.

## Statistical Design of the

Household-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. The first stage of this design consists of an area sample of 372 from among approximately 1,900 geographically defined Primary Sampling Units (PSU's)
into which the continental United States has been divided. A PSU is a county, a group of contiguous counties, or a Standard Metropolitan Area.

With no loss in general understanding, the remaining stages 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 in the sample. Each week a random sample of about 120 segments is drawn. In the approximately 700 households in those: segments persons areinterviewed 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, or a year. 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 over a $12-$ month period includes approximately 115,000 persons from 36,000 households in 6,000 segments, with representation from every State. The over-all sample was designed in such a fashion that tabulations from the annual sample 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 acting as collecting agent for the Public Health Service, 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-for example, the number of persons with one or more days of restricted activity -is the result of two stages of ratio estimation. In the first of these, the ratio factor is 1950 decennial population count to estimated population for 1950 for the U. S. National Health Survey first-stage sample of PSU's. These factors are applied for 132 color-residence classes.

Later, ratios of sample-produced estimates of the population to official Bureau of the Census figures for current population in 76 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, say a calendar quarter, produces estimates of average characteristics of the United States population for that calendar quarter.

For prevalence statistics, such as number of persons with impairments or number of persons classified by interval since last medical visit, figures presented for a designated calendar quarter are averages of estimates for all weeks of interviewing in that quarter. Similarly, prevalence data for a year are averages of the four quarterly figures.

For certain other types of statistics-namely those measuring the number of occurrences during a specified time period-such as number of discharges from hospitals or number of person bed-days over a year-a similar computational procedure is used, but the statistics have a different interpretation. For several of these items, the questionnaire asks for the respondent's experience over the year prior to the week of the interview. Thus consolidation of, say, samples in 52 successive weeks provides an estimate of one year's experience for all persons in the population; the specific year differs chronologically among persons in samples in the different weeks, the experience for each such person being that in the 52 weeks prior to his week of interview.

In some reports, rates for a quarter or six months are converted to an annual basis, in accordance with usual convention, in order to facilitate comparison of rates for time periods of different lengths, it must be remembered that any attempt to interpret such a converted figure as a true annual rate is subject to potential seasonal bias.

The interviewing and estimation procedure, as noted earlier, are designed to reproduce the experience in the reference period of the questionnaire for the population living at the time of interview.

## General Qualifications

Nonresponse.-Data were adjusted for nonresponse by a procedure which imputed to persons in a household not interviewed the characteristics of interviewed persons in the same segment. The total noninterview rate was 6 percent; 1 percent was refusal, and the remainder was accounted for by all 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 in interviews of persons in the sampled households. Each person 18 years and over, available at the time of interview, was interviewed individually. Proxy respondents within the household were accepted for children and for adults not available at the time of the interview provided the respondent was closely related to the person about whom information was 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 those concerning the circumstances and consequences of illness or injury and the resulting action taken or sought by the individual can be obtained more accurately from household members than from any other source, since only the per-
sons concerned are in a position to report all of this type of 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 they are not necessarily accurate to that detail. Derived statistics such as rates, percent distributions, and average length of stay are computed after the estimates on which they are based have been rounded to the nearest thousand.

Population figures.-Some of the published tables include population figures for specified categories. These figures are based on the sample of households in the U. S. National Health Survey, are given solely for the purpose of providing denominators for rate computation, and are more appropriate for use with the accompanying measures of health characteristics than any other data that may be available. In some instances they will permit users to recombine published data into classes more suitable to their specific needs. The population figures are not official estimates, in some cases being themselves subject to considerable variability, and as such should be used only for computation of rates in connection with data given in this report. For fuller details on population estimates see Bureau of the Census reports in the $\mathrm{P}-20$ Series.

Reliability of estimates. -Since the estimates 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 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 standarderror 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 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 estimates of standard errors shown in the following tables are approximations for the 372-area sample. Table A shows the average estimates of standard errors for three selected statistics from this report. The figures presented in tables $B$ through $D$ may be used by the reader to determine standard errors for other statistics. Not every report published by the Health Survey will include all classes of estimates treated in tables B through D. In order to derive standard errors which would be applicable to a wide variety of health statistics and which could be prepared at a moderate cost, a number of approximations were required. As a result, the tables should be interpreted as providing an estimate of approximate standard error rather than as the precise standard error for any specific aggregate or percentage.

The following paragraphs describe the classes of statistics for which each of tables B through D are appropriate, and how the tables can be used in determining standard errors. The "guide" which is shown on page 36 designates which of tables $B$ through $D$ should be used in obtaining standard errors for most of the estimates

Table A. Standard error of estimates of selected statistics
$\left.\begin{array}{c|c|c}\hline \hline \text { The statistic } \\ \text { (a) }\end{array} \begin{array}{c}\text { Sample } \\ \text { estimate } \\ \text { (b) }\end{array} \quad \begin{array}{c}\text { Standard } \\ \text { error } \\ \text { (c) }\end{array}\right]$.

NOTE: For the statistic named in column $a$, the chances are 68 out of 100 that the difference between the sample estimate shown in column $b$ and the figure that would have been obtained from a complete census is less than the number shown in column $c$.

Table B. Standard errors of estimates of population characteristics
(All numbers shown in thousands)

| Size of estimate | Standard error |  |  |
| :---: | :---: | :---: | :---: |
|  | Narrowrange statistics | Mediumrange statistics | Widerange statistics |
| 100------ | 22 | 50 | 70 |
| 500------ | 50 | 80 | 100 |
| 1,000--.- | 70 | 100 | 140 |
| 2,000---- | 100 | 140 | 180 |
| 3,000---- | 120 | 180 | 240 |
| 5,000---- | 160 | 260 | 370 |
| 10,000--- | 220 | 410 | 600 |
| 20,000 $\ldots$ | 300 | 570 | 840 |
| 30,000--- | 330 | 810 | 1,300 |
| 50,000-.- | 350 | 1,300 | 2,400 |
| 100,000-- | 400 | 2,500 | 4,600 |
| 200,000 | $\cdots$ | . . | 11,000 |

Table C. Standard error of estimated percentage for narrow- and medium-range statistics (body of table expressed in percentage points)

| Estimated percentage | Base of percentage (base is shown in thousands) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 100 | 500 | 1,000 | 2,000 | 3,000 | 5,000 | 10,000 | 20,000 | 30,000 | 50,000 | 100,000 |
| 2 or 98-- | 3.6 | 1.6 | 1.1 | 0.8 | 0.7 | 0.5 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 |
| 5 or 95-- | 5.6 | 2.5 | 1.8 | 1.3 | 1.0 | 0.8 | 0.6 | 0.4 | 0.3 | 0.3 | 0.2 |
| 10 or 90 | 6.8 | 3.0 | 2.1 | 1.5 | 1.2 | 1.0 | 0.7 | 0.5 | 0.4 | 0.3 | 0.2 |
| 25 or 75 | 9.8 | 4.4 | 3.1 | 2.2 | 1.8 | 1.4 | 1.0 | 0.7 | 0.6 | 0.4 | 0.3 |
| 50-2 | 12.9 | 5.8 | 4.1 | 2.9 | 2.4 | 1.8 | 1.3 | 0.9 | 0.7 | 0.6 | 0.4 |

Table D. Standard error of estimated percentage for wide-range statistics (body of table expressed in percentage points)

| Estimated percentage | Base of percentage (base is shown in thousands) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 100 | 500 | 1,000 | 2,000 | 3,000 | 5,000 | 10,000 | 20,000 | 30,000 | 50,000 | 100,000 |
| 2 or 98----- | 4.2 | 1.9 | 1.3 | 0.9 | 0.8 | 0.6 | 0.4 | 0.3 | 0.2 | 0.2 | 0.1 |
| 5 or 95 | 6.5 | 2.9 | 2.1 | 1.5 | 1.2 | 0.9 | 0.7 | 0.5 | 0.4 | 0.3 | 0.2 |
| 10 or 90 | 9.0 | 4.0 | 2.8 | 2.0 | 1.6 | 1.3 | 0.9 | 0.6 | 0.5 | 0.4 | 0.3 |
| 25 or 75 | 13.0 | 5.8 | 4.1 | 2.9 | 2.4 | 1.8 | 1.3 | 0.9 | 0.8 | 0.6 | 0.4 |
| 50------ | 15.0 | 6.7 | 4.7 | 3.4 | 2.7 | 2.1 | 1.5 | 1.1 | 0.8 | 0.7 | 0.5 |


| Variable | Use sampling error table indicated below |
| :---: | :---: |
| Number of discharges classified by any characteristic------ | Table B (Narrow range) |
| Percent distributions of discharges according to any characteristic | Table C |
| Rates based on discharges for age and sex or age, sex, and race | Table C |
| Rates based on discharges for marital status, family income, urban rural and region, by age and sex; hospitalized conditions | See text |
| Number of hospital days, classified by any characteristic-- | Table B (Wide range) |
| Percent distributions of days according to any characteristic | Table D |
|  | Table D |
|  | See text |

from the numbered tables of statistics in the present report.

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-i.e., number of persons with a specified characteristic; example: number of persons with one or more days of restricted activity (in previous two weeks); and (2) statistics for which the measure for a single individual for the period of reference in the questionnaire is usually either the value 0 or 1 , but on occasion may take on the value 2 , or very rarely, 3 ; example: incidence of automobile accidents (in previous two weeks):

Wide range.-This class consists of (1) statistics which are expressed in person-days or analogous terms such as bed-days; and (2) other statistics for which the measure for a single individual for the period of reference in the questionnaire will range from 0 to a number frequently in excess of 5 ; example: number of hospital days (in previous year).

Medium range. -This class consists of other statistics for which the measure for a single individual for the period of reference in the questionnaire will rarely lie outside the range 0 to 5 ; example: number of physician visits (in previous two weeks).

Standard errors for estimates of aggregates of each of these classes are shown in table B. The columns for Narrow and Wide range statistics were read from curves which have been fitted to computed standards errors for a number of appropriate items for four quarters of sampling. The figures for the Medium-range statistics are midpoint interpolations between the other two columns, and thus possess a further element of approximation.

1llustration of use of table B. -Persons aged 45-64 accounted for $3,413,000$ hospital discharges over a 12 month period. Since it is rare for a person in the gen-
eral civilian population to be discharged from a hospital more than twice in a year, this is a Narrow-range statistic. Reading the proper column of table B it is found that a statistic of $3,000,000$ has a standard error. of 120,000 while a statistic of $5,000,000$ has a standard error of 160,000 . Interpolating between these values the approximate standard error of the estimated $3,413,000$ discharges of persons age $45-64$ is 128,000 which should be rounded to 130,000 .

For one class of statistics, table B overstates the sampling error by a significant amount. This class consists of estimates of number of personswith a specified characteristic in an age or sex category of the population for which the number of such persons is a large part of the total population in the age or sex category. Such a statistic has the same relative standard error as does the estimated number expressed as a percent of the total population in the category. Table $C$ may be utilized in computing standard errors for this group of estimates for statistics in the Narrow and Medium range, and table $D$ for statistics in the Wide range. The relative standard error for any statistic is the standard error divided by the statistic itself.

The standard errors shown in table B are not directly applicable to differences between two sample estimates. The standard error of a difference is approximately the square root of the sum of the squares of each standard error considered separately. 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 reliability of an estimated rate or percentage, computed by using sample data for both numerator and denominator, depends upon both the size of the rate and the size of the total upon which the rate is based. Generally, estimated rates are relatively more reliable than the corresponding absolute estimates of the nu-
merator of the rate, particularly if the rate is high. Tables C and D show approximate standard errors of estimated rates or percentages. Use table C for Narrow and Medium rangesi and table D for Wide-range figures whenever the characteristic used to form the numerator of the percentage or rate is a subclass of the base or denominator.

Ilustration. -Of the $2,800,000$ children under 15 years of age who were discharged from hospitals in the period studied, 54.7 percent had been in the hospital between 2 and 7 days. The estimate is a Narrow-range statistic, since this is a dichotomous classification of the children. In table C, for a base of $2,000,000$ persons, a statistic of 50 percent has a standard error of 2.9 percentage points, and a statistic of 75 percent has a standard error of 2.2 percentage points. Interpolating between those values gives a standard error of 2.3 percentage points for a statistic of 54.7 percent. Corre-
sponding calculations for a base of $3,000,000$ persons produce a standard error of 1.9 percentage points for a statistic of 54.7 percent. A final interpolation between these two results yields an estimate of 2.2 percentage points as the standard error of the statistic which have a base of $2,800,000$. (Interpolation has been carried out in two dimensions in this example. For most purposes, a simple scanning of table $C$ will reveal an approximate answer which is sufficiently precise.)

For ratios or "rates" for which the numerator is not a subclass of the denominator, a rough approximation may be obtained from the following rule. The relative standard error of such a ratio is equal to the square root of the sum of the squares of the relative standard errors of the numerator and of the denominator. This rule results normally in an overstatement of the true standard error.

## APPENDIX II

## DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

The following are definitions of certain terms used in this report which have a specialized meaning in the U. S. National Health Survey.

## Terms Relating to Hospitalization

Hospital episode.-A hospital episode is any continuous period of stay of one or more nights in a hospital as an inpatient, except the period of stay of a well, newborn infant. In statistics from the survey for the year ending June 30, 1958, a hospital is defined as any institution meeting one of the following criteria: (1) named in the listing of hospitals in the 1956 or 1957 Guide Issue of Hospitals, the Journal of the American Hospital Association; (2) named in the listing of hospitals in the 1957 or 1958 Directory of the American Osteopathic Hospital Association; or (3) name of the institution unknown but believed by the respondent to be a hospital.

Hospital discharge. - A hospital discharge is a hospital episode that ended during a specified period of time. (See definition of "Hospital episode.")

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 pexiod prior to the interview week.

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

Estimates of the total number of hospital days are derived by summing the days for all hospital episodes of a particular type. (See definition of "Hospital episode。") For example, the number of hospital days may be summed for all hospital discharges'. (See definition of 'Hospital discharge.")

Length of hospital stay. -The length of hospital stay is the duration in days, exclusive of the day of discharge, of a hospital discharge. (See definition of "Hospital discharge.")

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

Hospitalized condition.-A hospitalized condition is a condition responsible for a hospital episode. (See definition of "Hospital episode.") If there is more than one hospital condition for any one episode, only that one believed to be chiefly responsible for the stay in the hospital is tabulated. If a person enters a hospital for diagnostic tests, or for an operation, the condition that made the tests or operation necessary is considered to be the hospitalized condition.

Normal delivery in a hospital is included as a hospital condition but care of the well, newborn infant is not.

Conditions, except impairments, are coded by type according to the International Statistical Classification
of Diseases, Injuries, and Causes of Death, with certain modifications adopted to make the code more suitable for a household-interview type survey. For survey results for the year ending June 30, 1958, the 1948 Revision of the lnternational Classification was used, impairments are coded according to a special supplementary classification.

The following list shows the code numbers of the International Statistical Classification and special supplementary classification of impairments included in the condition groups used in this report.

Surgical operation, - A surgical operation includes any cutting or piercing of the skin or other tissue, stitching of cuts or wounds, and setting of fractures and dislocations. 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.

Operations are classified by type according to a condensed version of "Classification Codes for Surgical Operations and Procedures," published by the Bu-. reau of Medical Services, Public Health Service, Department of Health, Education, and Welfare, September 1954.

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.

Type of hospital service. - Type of hospital service is a classification of hospitals according to the predominant type of cases for which they provide care. The category to which an individual hospital is assigned and the definition of these categories follows the usage of the American Hospital Association.

Short-stay hospital.-A short-stay hospital is one for which the type of service is: general; maternity; eye, ear, nose, and throat; osteopathic hospital; or hospital department of institution.

## Demographic, Social, and Economic 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 upon the purpose of the table.

Race.-Race is recorded as "White," "Negro," or "Other." "Other" includes American Indian; Chinese, Japanese, and so forth. Mexican persons are included with "White" unless definitely known to be Indian or other nonwhite race.

Marital status.-Marital status is recorded only for persons 14 years of age or older. The categories of marital status are: married, widowed, divorced, separated, and never married. Persons whose only marriage was annulled are counted as "never married." Persons with common-law marriages are considered

Hospitalized Condition
Groups
Infective and parasitic diseases
Malignant neoplasms
Benign and unspecified neoplasms
Allergic, endocrine, and metabolic disorders
Mental and personality disorders
Intracranial lesions
Diseases of nervous system and sense organs
Heart diseases
Hemorrhoids
Other circulatory diseases
Upper respiratory conditions
Other respiratory conditions
Ulicer of stomach and duodenum
Appendicitis
Hernia
Diseases of the gallbladder
Other digestive system conditions
Female breast and genital disorders
Other genitourinary conditions
Deliveries
Pre- and post-natal conditions
Diseases of the skin

## Arthritis

Other musculoskeletal disorders
Fractures and dislocations
Other current injuries
Observation only
All other conditions

International Statistical Classification. Code numbers ${ }^{-1}$

001-138, except 083.1, 083.2
140-205
210-239
240-289
083.1, 083.2, 300-326,790, X14-X19

330-334
340-396, 780, 781, X00-X13
410-443
461
400-402, 444-460, 462-468, 782
470-475, 510-517
480-502, 518-527, 783, X36
540-542
550-553
560, 561
584-586
530-539, 543-545, 570-583, 587, 784, 785, X35
620-637
590-617 (620, 621 males), 786, 789, X37, X38
660, 670-678
640-652, 680-689
690-716
720-725
726-744, 787 (N800-N839) ${ }^{2}$, X20-X34, X70-X89
N800-N839 ${ }^{3}$
N840-N999 ${ }^{3}$
793
All other ISC and "X-Code" numbers

[^4]to be married. "Separated" refers to married persons who have a legal separation or who have parted because of marital discord.

Income of family or of unrelated individuals. - Each member of a family is classiffed according to the total income of the family of which he is a member. Within the household all persons related to each other by blood, marriage, or adoption constitute a family. Unrelated individuals are classified according to their own income.

The income recorded is the total of all income received by members of the family (or by an unrelated individual) in the 12 -month period ending with the week of interview. Income from all sources is included, e.g., wages, salaries, rents from property, pensions, help from relatives, and so forth.

## Location of Residence Terms:

Urban and rural residence. -The definition of urban and rural areas used in the U. S. National Health Survey is the same as that used in the 1950 Census. According to this definition, the urban population comprises all persons living in (a) places of 2,500 inhabitants or more incorporated as cities, boroughs, and villages; (b) incorporated towns of $2 ; 500$ inhabitants or more except in New England, New York, and Wisconsin, where "Towns" are simply minor civil divisions of counties; (c) the densely settled urban fringe, including both incorporated and unincorporated areas, around cities of 50,000 or more; and (d) unincorporated places of 2,500 inhabitants or more outside any urban fringe. The remaining population is classified as rural.

Farm and nonfarm residence. - The rural population may be subdivided into the rural-farm population, which comprises all rural residents living on farms, and the rural-nonfarm population, which comprises the remaining rural population.

In deciding whether the members of a household reside on a farm or a ranch, the statement of the household respondent that the house is on a farm or ranch is accepted, with the following exception. A house occupied by persons who pay cash rent for house and yard only is not counted as a farm or ranch even if the surrounding area is farm land. This special case does not cover: (1) the living quarters of a tenant farmer who rents farm land as well as house and yard; (2) the quarters of a hired hand who receives living quarters on a farm as part of his compensation; or (3) separate living quarters inside a structure which is classified as on a farm. In all these cases the living quarters are counted as on a farm.

Geographic division.-For the purpose of classifying the population by geographic area of residence, the

Health Household-Interview Survey uses the same grouping of states used by the Bureau of the Census and many other agencies. These groups are called "divisions." Two of these divisions are further subdivided, as will be seen below.

## Division States Included

| New England | Maine, New Hampshire, Vermont, Massachusetts, Rhode lsland, Connecticut |
| :---: | :---: |
| Middle Atlantic | New York, New Jersey, Pennsylvania |
| East North Central, |  |
| Eastern Part | Michigan, Ohio |
| East North Central, Western Part | inois, Indiana, Wis |
| West North Central | Minnesōta, lowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas |
| South Atlantic, |  |
| Northern Part | Delaware, Maryland, District of Columbia, Virginia, West Virginia |
| South Atlantic, |  |
| Southern Part | North Carolina, South Carolina, Georgia, Florida |
| East South Central | Kentucky, Tennessee, Alabama, Mississippi |
| West South Central | Arkansas, Louisiana, Oklahoma, Texas |
| Mountain | Montana, Idaho, Wyoming, Colorado, New. Mexico, Arizona, Utah, Nevada |
| Pacific | Washington, Oregon, California |

Region.-The least detailed classification of the population by geographic area of residence is provided by the grouping of states intofour major regions. These regions correspond to those used by the Bureau of the Census. They are as follows:

Region
Geographic Divisions Included
Northeast
North Central
South
West

New England, Middle Atlantic East North Central, West North Central
South Atlantic, East South Central, West South Central Mountain, Pacific


[^0]:    This report was prepared by Augustine Gentile, of the U. S. National Health Survey staff.

[^1]:    ${ }^{1}$ includes Veterans Administration, Other Federal, Osteopathic, and other.

[^2]:    ${ }^{1}$ See Appendix 11 for a list of conditions included in each category.
    ${ }^{2}$ Rates for these conditions based on total female population.

[^3]:    ${ }^{1}$ See Appendix 11 for a list of conditions included in each category.

[^4]:    ${ }^{1}$ Conditions except impairments, are coded according to the International Statistical Classification with certain modifications, and impairments are coded according to a special supplementary ciassification referred to as the "X-Code." Numbers preceded by the letter "X" refer to this special supplementary classification. Copies of this code are available upon request. If the conditions included in an "ISC" number are equivalent to those included in an "X-Code" category, the ISC number is not used.
    ${ }^{2}$ With . 9 in the 4 th digit.
    ${ }^{3}$ Other than .9 in the 4 th digit.

