

# **Prevalence of Selected Chronic Respiratory Conditions United States - 1970**

Statistics on prevalence of chronic respiratory conditions by measures of impact of the conditions and selected demographic characteristics. Based on data collected in the Health Interview Survey during 1970.

DHEW Publication No. (HRA) 74-1511

---

**U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE**  
Public Health Service

Health Resources Administration  
National Center for Health Statistics  
Rockville, Md.      September 1973



Vital and Health Statistics—Series 10—No. 84

# NATIONAL CENTER FOR HEALTH STATISTICS

EDWARD B. PERRIN, Ph.D., *Acting Director*

PHILIP S. LAWRENCE, Sc.D., *Associate Director*

GAIL F. FISHER, *Acting Assistant Director for Health Statistics Development*

WALT R. SIMMONS, M.A., *Assistant Director for Research and Scientific Development*

JOHN J. HANLON, M.D., *Medical Advisor*

JAMES E. KELLY, D.D.S., *Dental Advisor*

EDWARD E. MINTY, *Executive Officer*

ALICE HAYWOOD, *Information Officer*

## DIVISION OF HEALTH INTERVIEW STATISTICS

ELIJAH L. WHITE, *Director*

ROBERT R. FUCHSBERG, *Deputy Director*

RONALD W. WILSON, *Chief, Analysis and Reports Branch*

KENNETH W. HAASE, *Chief, Survey Methods Branch*

## COOPERATION OF THE BUREAU OF THE CENSUS

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

In accordance with specifications established by the Health Interview Survey, the Bureau of the Census, under a contractual arrangement, participates in most aspects of survey planning, selects the sample, and collects the data.

Vital and Health Statistics-Series 10-No. 84

---

DHEW Publication No. (HRA) 74-1511

*Library of Congress Catalog Card Number 73-600224*

# CONTENTS

	Page
Introduction -----	1
Source of Data-----	2
Prevalence and Measures of Impact of Conditions-----	2
Prevalence by Selected Demographic Characteristics-----	9
Reporting Chronic Conditions in Interviews-----	11
List of Detailed Tables-----	14
Appendix I. Technical Notes on Methods-----	30
Background of This Report-----	30
Statistical Design of the Health Interview Survey-----	30
General Qualifications-----	32
Reliability of Estimates-----	33
Guide to Use of Relative Standard Error Charts-----	35
Appendix II. Definitions of Certain Terms Used in This Report-----	38
Terms Relating to Conditions-----	38
Terms Relating to Disability-----	39
Terms Relating to Physician Visits-----	41
Demographic Terms-----	41
Appendix III. Probe Questions and Condition Pages Used to Obtain Information About Chronic Respiratory Conditions-----	44

### SYMBOLS

Data not available -----	---
Category not applicable-----	...
Quantity zero -----	-
Quantity more than 0 but less than 0.05-----	0.0
Figure does not meet standards of reliability or precision (more than 30- percent relative standard error)-----	*

# PREVALENCE OF SELECTED CHRONIC RESPIRATORY CONDITIONS

Charles S. Wilder, *Division of Health Interview Statistics*

## INTRODUCTION

During 1970 the prevalence of chronic respiratory diseases among members of the civilian population not confined to institutions was measured in the Health Interview Survey. Prevalence estimates and measures of impact of these conditions on the population covered by the Survey are presented in this report. An earlier report on the prevalence of chronic respiratory conditions based on data collected in health interviews during July 1957-June 1958 was published in the series *Health Statistics From the U.S. National Health Survey* (Series B, Number 12).

Methodological studies have shown that chronic conditions are generally underreported in interview surveys. Respondents in health interviews tend to report conditions of which they are aware and which they are willing to report to the interviewer. Reporting is better for those conditions which have made a significant impact on the affected individual and his family. Conditions that are severe or costly or require treatment tend to be better reported than conditions having lesser impact. For instance a condition which has caused limitation of activity, visits to the doctor, or days in bed is more likely to be reported in the interview than a condition which has little or no impact on the person.

Methodological studies of the completeness of reporting chronic conditions in health interviews have been conducted for the Health Interview Survey. Findings of several of these studies are summarized in the last section of this report.

Because methodological studies show that chronic conditions having greater impact are

better reported, published data on chronic conditions other than physical impairments have been restricted in recent years to those causing limitation of activity or mobility. In Series 10 of *Vital and Health Statistics* detailed information on the causes of limitation have been presented in reports numbered 17, 51, 61, and 80.

Methodological studies have also indicated that inclusion of a check list of descriptive condition titles as part of the interview questionnaire will increase the probability that a respondent will recognize the terms and report those of which he is aware. Of course, the diagnostic accuracy of reported conditions is dependent on the information the respondent remembers that the attending physician has passed on to the family or, in the absence of medical attendance, on the previous experience or education of the family. From 1957-67 data were collected on all chronic conditions. Beginning in 1968 as part of the redesign of the data collection procedure reporting of any chronic condition was limited to those causing disability days, physician visits, or limitation of activity and, in addition, to the measurement of prevalence of a single system of chronic conditions through use of an extended checklist of chronic conditions in that system.<sup>1</sup> During 1970 the system under study was that of respiratory diseases. A list of 16 chronic respiratory conditions was employed in the 1970 questionnaire along with a single residual category.

---

<sup>1</sup>A report on this new design and the results of a study of the previous method and the revised procedure is presented in Series 2, Number 48.

The substantive part of this report is presented in two sections. The first of these presents prevalence estimates for a selected group of chronic respiratory conditions. The effect of the respiratory condition on the individual is measured by a series of measures of impact such as if the condition causes long or short-term disability or requires medical attention and similar impact measures. The second section of the report presents data on the distribution of chronic respiratory conditions for a series of demographic characteristics. The text points out differences in the distribution of these diseases in the population.

### SOURCE OF DATA

The information presented in this report on the prevalence of chronic respiratory conditions is based on data collected in the Health Interview Survey, a continuing nationwide survey conducted by household interview. Each week a probability sample is interviewed by trained personnel of the U.S. Bureau of the Census to obtain information about the health and other characteristics of each household member in the civilian noninstitutionalized population of the United States. However, from January through March 1970 interviews were conducted every other week due to budgetary restrictions. During calendar year 1970 the sample was composed of about 37,000 households containing about 116,000 persons living at the time of the interview.

A description of the design of the survey, the methods used in estimation, and the general qualifications of the data is presented in appendix I. Since estimates shown in this report are based on a sample of the population rather than on the entire population, they are subject to sampling error. Therefore particular attention should be paid to the section entitled "Reliability of Estimates." Since many of the estimates shown in this report are quite small, the sampling error of a number or rate may be substantial. In addition, because of the reduction of the sample to 45 weeks, the estimates are subject to larger sampling errors than those presented in appendix I. Each relative sampling error for 1970 must be multiplied by a factor of 1.08 to reflect the reduced sampling rate for the year.

Appendix II presents definitions of certain terms used in this report. Appendix III illustrates portions of the questionnaire used to obtain information about chronic respiratory conditions. The entire questionnaire used during 1970 is illustrated in appendix III of the Current Estimates report for 1970 (Series 10, Number 72).

In addition to the limitations of the data on the prevalence of chronic conditions reported in health interviews explained in the introduction, it should be pointed out that the restriction of the survey to the civilian population not confined to institutions affects the estimated prevalence. The omission of the institutionalized population reduces the prevalence estimates since the proportion of persons with chronic conditions in institutions is high.<sup>2</sup>

### PREVALENCE AND MEASURES OF IMPACT OF CONDITIONS

The term prevalence means the number of some item existing at a given point of time; this term is usually stated as point-prevalence. Another definition of prevalence in use is the average number of some item existing during a specified interval of time. The latter definition is the one used for the Health Interview Survey. The main source for obtaining a report of chronic respiratory conditions is question 16a on the questionnaire (see appendix III, probe questions). This question asked: "During the past 12 months, did anyone in the family (you, your—, etc.) have any of these conditions." A list of specific chronic respiratory conditions and a residual category followed.

Conditions reported in the interview were counted as chronic if they were on the list of those conditions always considered to be

---

<sup>2</sup>Some indication of the prevalence of respiratory conditions among the institutionalized population may be obtained from the report, "Prevalence of Chronic Conditions and Impairments Among Residents of Nursing and Personal Care Homes, United States, May-June 1964" (Series 12, Number 8). This survey covered an estimated 554,000 persons in the institutional population. An estimated 40.2 persons per 1,000 were reported to have bronchitis and/or emphysema and 19.4 per 1,000 had sinusitis and/or other respiratory conditions.

chronic regardless of onset or those which had their onset more than 3 months prior to the week of interview and lasted more than 3 months. The chronic conditions reported in this manner are all assumed to be present at a given point in time and therefore approximate point-prevalence.

Table A shows the prevalence rate per 1,000 persons in the civilian population not confined to institutions of 15 chronic respiratory conditions reported in health interviews. These condition groups have been coded to categories in the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States (ICDA)*.

If a person reported having both bronchitis and emphysema he was counted under both conditions (an estimated 274,000 persons were reported as having both bronchitis and emphysema). In the ICDA, allergies affecting the respiratory system have been classified under respiratory rather than under a separate section on allergic reactions as formerly in the Seventh Revision of the International Classification of Diseases.

Within each of the 15 conditions groups the prevalence estimate may be considered as a count of persons with each condition. However, the same person may have one or more of these conditions. For instance a person may have chronic bronchitis, a deflected nasal septum, and chronic sinusitis.<sup>3</sup>

The 15 categories shown in the table encompass most of the chronic respiratory diseases reported in health interviews in 1970. In addition there were about 766,000 respiratory diseases, including benign or malignant neoplasms reported in response to checklist items J and O, (appendix III) for which data are not presented here.

The last section of this report discusses the results of a methodological study designed to estimate the underreporting and overreporting of selected chronic conditions in health interviews as compared with medical records. Examination of the column of table A for the percentage who had ever seen a doctor for the condition indicates which conditions would not have been in the medical records. For instance about 69.8 percent of chronic sinusitis cases

were reported as medically attended. Thus 3 out of each 10 would not appear in medical records.

Also shown in table A are indications of the impact of these conditions on the person which are largely self-explanatory. For instance, about 47.1 percent of the persons with chronic bronchitis reported spending at least 1 day in bed in the past year due to this condition, and about 71.5 percent had one or more physician visits in the past year. An even higher proportion when asked whether a doctor had ever been seen reported that medical attention had been obtained for most of these conditions.

It is of interest that the two condition groups with the highest prevalence rates—chronic sinusitis and hay fever, without asthma—have less impact on the individual than do such conditions as emphysema, pneumoconiosis, and tuberculosis. Each of the latter conditions causes substantial proportions of limitation of activity

---

<sup>3</sup>The estimates of the prevalence of the 15 respiratory conditions presented in this report are estimates of the number of cases in each disease category, with no attempt to account for persons who have more than one respiratory condition. A summation of the 15 chronic respiratory condition categories indicates an estimated 53,754,000 conditions among the civilian non-institutionalized population. However, this should not be interpreted as 54 million persons with these conditions since there may be duplication. The following figures show the estimated number of persons with one or more of the 15 respiratory conditions by age:

	Persons
All ages . . . . .	46,884,000
Under 17 years . . . . .	10,809,000
17-44 years . . . . .	19,517,000
45-64 years . . . . .	11,669,000
65 years and over . . . . .	4,889,000

Both the estimate of 54 million selected respiratory conditions and 47 million persons with selected respiratory conditions have a severe shortcoming since they combine conditions with a wide range of diagnostic accuracy, severity, and impact. For example, the estimate of 54 million persons combines together persons with chronic sinusitis, 30 percent of whom have never seen a doctor for their condition, with persons who have emphysema. Because of this shortcoming, further analysis of persons with respiratory diseases will not be presented here. However, researchers who would like estimates of the number of persons with specific combinations of respiratory conditions should contact the Division of Health Interview Statistics directly for further assistance.

and disability days per condition per year. For instance, 44.9 percent of persons with emphysema reported the condition caused some degree of limitation of activity. In 1970 some 590,000 persons reported that emphysema caused limitation of activity. In the report "Limitation of Activity Due to Chronic Conditions" (Series 10, Number 80) covering the 2 years 1969 and 1970, an estimated 566,000 persons reported emphysema to have caused some degree of activity limitation (the difference between these two figures is accounted for by the lower estimate for 1969 of 541,000 conditions).

The average number of restricted-activity days per person with emphysema was 35.8 days. The corresponding figure for bed-disability days was 14.5. These days of bed disability are included in the estimate of restricted-activity days.

The average number of days lost from work was 1.9 days (table 2 indicates that about one-third, 35.6 percent, of the persons with emphysema were usually working). The average number of days per condition per year was computed by dividing the annual volume of short term disability days for the condition (based on a 2-week reference period) by the number of conditions reported.

The next to last column of table A shows the average duration of bed disability for persons who spent at least 1 day in bed during the 12 months prior to the time of interview. For instance, emphysema caused 19,036,000 days spent in bed. An estimated 252,000 persons, 19.2 percent of the total with emphysema, had 1 or more days of bed disability in the year. Dividing 19,036,000 by 252,000 gives a total of

Table A. Prevalence of selected chronic respiratory conditions reported in health interviews, number per 1,000 persons, percent of conditions by measures of impact, and disability days in past year: United States, 1970

Chronic condition and ICDA code		Prevalence	
		Number in thousands	Number per 1,000 persons
1	Chronic bronchitis-----490,491	6,526	32.7
2	Emphysema-----492	1,313	6.6
3	Asthma, with or without hay fever-----493	6,031	30.2
4	Hypertrophy of tonsils and adenoids-----500	4,359	21.8
5	Chronic sinusitis-----503	20,582	103.0
6	Deflected nasal septum-----504	798	4.0
7	Nasal polyp-----505	546	2.7
8	Chronic laryngitis-----506	1,149	5.7
9	Hay fever, without asthma (includes upper respiratory allergy)-----507	10,826	54.2
10	Pleurisy-----511	686	3.4
11	Pneumoconiosis-----515,516	126	0.6
12	Other chronic interstitial pneumonia-----517	403	2.0
13	Bronchiectasis-----518	116	0.6
14	Tuberculosis, active-----010-018	157	0.8
15	Tuberculosis, arrested or inactive-----...	137	0.7

75.5 days in bed per bed-disabling condition. This figure may be compared with that of 14.5 days obtained by dividing the same total number of days by all the 1,313,000 conditions. The figure on duration of bed-disability conditions indicates the severity of emphysema among the persons who experienced bed disability due to respiratory conditions.

The percentage of respiratory conditions requiring hospitalization at any time prior to interview is shown in table B. Again, for emphysema, 25.1 percent had been hospitalized. Also an estimated 43.1 percent of persons with emphysema reported that they take medicine or use some other form of treatment recommended by a doctor.

During the year prior to interview some of the persons with emphysema spent extended

amounts of time in bed; for instance 8.6 percent spent 15 or more days in bed during the year (table C).<sup>4</sup> Also about one-fourth of the persons with emphysema made 5 or more visits to a physician during the year (table D).

Questions were asked about the frequency and amount of bother caused by the condition. Bother was not defined for the respondent. Usually, however, the term refers to the trouble, worry, inconvenience, anxiety, and similar synonyms the condition causes the person. Table E shows the range of frequency of bother. For

<sup>4</sup>The bed-disability days shown in table C are based on a 12-month reference period (see appendix III, condition pages, question 25). However, the disability days shown in the last four columns of table A are based on a 2-week reference period (questions 11-14, condition pages, appendix III).

Table A. Prevalence of selected chronic respiratory conditions reported in health interviews, number per 1,000 persons, percent of conditions by measures of impact, and disability days in past year: United States, 1970—Con.

Percent of conditions—				Disability days				
Causing limitation of activity	With 1 or more bed-days in past year	With doctor ever seen	With 1 or more physician visits in past year	Restricted-activity days per condition per year	Bed-days per condition per year	Bed-days per bed-disabling condition <sup>1</sup>	Work-loss days per condition per year	
4.0	47.1	93.8	71.5	7.5	3.6	7.6	0.4	1
44.9	19.2	97.0	59.8	35.8	14.5	75.5	1.9	2
17.1	31.8	95.8	60.3	15.0	5.8	18.1	0.8	3
1.2	60.6	95.6	76.3	8.2	4.5	7.4	0.7	4
0.7	10.5	69.8	32.6	2.1	0.7	6.8	0.3	5
*	10.3	92.9	30.3	2.3	*	*	*	6
*	10.6	89.4	48.9	*	*	*	*	7
*	18.5	68.5	50.9	3.9	*	*	0.9	8
1.5	6.8	75.3	35.1	2.4	0.6	8.3	0.3	9
*	32.4	83.4	54.4	9.8	3.3	10.2	*	10
51.6	*	88.1	57.1	29.2	*	*	*	11
*	60.8	98.5	67.0	*	*	*	*	12
*	*	96.6	69.0	*	*	*	*	13
47.1	*	100.0	62.4	58.3	29.1	*	6.8	14
52.6	*	100.0	44.5	...	...	...	...	15

<sup>1</sup>Figure is obtained by dividing the annual volume of bed-days (used in computing the previous column) by the number of persons with the condition who reported 1 or more bed-days in the year.

Table B. Prevalence of selected chronic respiratory conditions reported in health interviews, and percent of conditions for which person ever hospitalized or now under treatment: United States, 1970

Chronic condition <sup>1</sup>	Prevalence in thousands	Percent of conditions for which—	
		Ever hospitalized	Takes medicine or treatment recommended by doctor
Chronic bronchitis-----	6,526	14.3	19.9
Emphysema-----	1,313	25.1	43.1
Asthma, with or without hay fever-----	6,031	19.1	51.4
Hypertrophy of tonsils and adenoids-----	4,359	18.0	12.0
Chronic sinusitis-----	20,582	3.4	21.9
Deflected nasal septum-----	798	15.4	15.5
Nasal polyp-----	546	15.2	19.0
Chronic laryngitis-----	1,149	*	11.1
Hay fever, without asthma (includes upper respiratory allergy)-----	10,826	1.9	34.1
Pleurisy-----	686	13.8	12.1
Pneumoconiosis-----	126	*	*
Other chronic interstitial pneumonia-----	403	28.0	*
Bronchiectasis-----	116	*	*
Tuberculosis, active-----	157	*	51.6
Tuberculosis, arrested or inactive-----	137	45.3	*

<sup>1</sup>See table A for ICDA codes.

Table C. Prevalence of selected chronic respiratory conditions reported in health interviews and percent distribution of conditions by frequency of bed disability days in past year for the condition: United States, 1970

Chronic condition <sup>1</sup>	Prevalence in thousands	Bed-disability days in past year						
		Total	None	1-7	8-14	15-30	31 or more	Unknown if any
		Percent distribution						
Chronic bronchitis-----	6,526	100.0	50.3	34.4	6.9	4.1	1.7	2.6
Emphysema-----	1,313	100.0	73.6	6.8	3.8	4.6	4.0	7.2
Asthma, with or without hay fever-----	6,031	100.0	61.8	20.7	5.8	3.6	1.6	6.5
Hypertrophy of tonsils and adenoids-----	4,359	100.0	34.0	44.5	10.6	4.7	*	5.4
Chronic sinusitis-----	20,582	100.0	88.3	8.8	1.1	0.4	*	1.2
Deflected nasal septum-----	798	100.0	85.5	9.1	*	*	*	*
Nasal polyp-----	546	100.0	87.5	9.5	*	*	*	*
Chronic laryngitis-----	1,149	100.0	79.2	14.4	*	*	*	*
Hay fever, without asthma (includes upper respiratory allergy)-----	10,826	100.0	89.9	5.7	0.6	*	*	3.3
Pleurisy-----	686	100.0	65.2	22.0	*	*	*	*
Pneumoconiosis-----	126	100.0	75.4	*	*	*	*	*
Other chronic interstitial pneumonia-----	403	100.0	16.4	27.0	16.6	*	*	22.8
Bronchiectasis-----	116	100.0	62.1	*	*	*	*	*
Tuberculosis, active-----	157	100.0	42.7	*	*	*	*	*
Tuberculosis, arrested or inactive-----	137	100.0	59.9	*	*	*	*	*

<sup>1</sup>See table A for ICDA codes.

Table D. Prevalence of selected chronic respiratory conditions reported in health interviews and percent distribution of conditions by frequency of physician visits in past year for the condition: United States, 1970

Chronic condition <sup>1</sup>	Prevalence in thousands	Physician visits in past year					
		Total	None	1	2-4	5 or more	Unknown if any
		Percent distribution					
Chronic bronchitis-----	6,526	100.0	18.0	30.8	28.1	12.6	10.5
Emphysema-----	1,313	100.0	28.0	14.7	18.7	26.4	12.3
Asthma, with or without hay fever----	6,031	100.0	27.5	19.1	21.7	19.5	12.2
Hypertrophy of tonsils and adenoids---	4,359	100.0	12.0	17.4	43.4	15.5	11.7
Chronic sinusitis-----	20,582	100.0	34.7	17.8	11.2	3.6	32.7
Deflected nasal septum-----	798	100.0	57.3	14.9	10.3	*	12.4
Nasal polyp-----	546	100.0	37.7	21.6	18.1	9.3	13.4
Chronic laryngitis-----	1,149	100.0	15.1	22.5	22.1	6.4	33.9
Hay fever, without asthma (includes upper respiratory allergy)-----	10,826	100.0	36.2	19.0	10.8	5.2	28.7
Pleurisy-----	686	100.0	23.2	25.9	18.1	10.2	22.4
Pneumoconiosis-----	126	100.0	*	*	*	*	*
Other chronic interstitial pneumonia---	403	100.0	*	14.4	34.7	17.9	25.3
Bronchiectasis-----	116	100.0	*	*	*	*	*
Tuberculosis, active-----	157	100.0	*	*	*	*	*
Tuberculosis, arrested or inactive---	137	100.0	*	*	*	*	*

<sup>1</sup>See table A for ICDA codes.

Table E. Prevalence of selected chronic respiratory conditions reported in health interviews and percent distribution of conditions by frequency of bother caused by condition: United States, 1970

Chronic condition <sup>1</sup>	Prevalence in thousands	Total	Frequency of bother				Not bothered	Unknown if bothered
			All the time	Often	Once in a while	Frequency not specified		
			Percent distribution					
Chronic bronchitis-----	6,526	100.0	6.5	11.4	65.6	8.3	5.5	2.6
Emphysema-----	1,313	100.0	43.8	11.3	22.7	4.3	10.4	7.4
Asthma, with or without hay fever-----	6,031	100.0	14.3	20.8	52.2	4.7	1.5	6.4
Hypertrophy of tonsils and adenoids-----	4,359	100.0	2.4	15.2	58.0	3.5	15.7	5.2
Chronic sinusitis-----	20,582	100.0	10.3	16.4	66.9	4.6	0.9	0.9
Deflected nasal septum-----	798	100.0	13.5	13.2	37.2	*	28.9	*
Nasal polyp-----	546	100.0	11.5	13.6	47.8	*	20.1	*
Chronic laryngitis-----	1,149	100.0	*	10.1	74.8	6.7	*	*
Hay fever, without asthma (includes upper respiratory allergy)-----	10,826	100.0	6.7	14.9	61.7	12.6	1.1	3.0
Pleurisy-----	686	100.0	*	*	69.7	*	8.7	*
Pneumoconiosis-----	126	100.0	*	*	*	*	*	*
Other chronic interstitial pneumonia-----	403	100.0	*	*	27.3	15.1	24.3	23.1
Bronchiectasis-----	116	100.0	*	*	*	*	*	*
Tuberculosis, active-----	157	100.0	*	*	*	*	47.1	*
Tuberculosis, arrested or inactive-----	137	100.0	*	*	*	*	53.3	*

<sup>1</sup>See table A for ICDA codes.

Table F. Prevalence of selected chronic respiratory conditions reported in health interviews and percent distribution of conditions by degree person bothered by condition: United States, 1970

Chronic condition <sup>1</sup>	Prevalence in thousands	Degree condition bothers person							
		Total	Bothered					Not bothered	Unknown if bothered
			All both-erations	Great deal	Some	Very little	Other		
Percent distribution									
Chronic bronchitis--	6,526	100.0	91.9	37.6	38.3	13.2	2.7	5.5	2.6
Emphysema-----	1,313	100.0	82.2	32.4	32.1	12.6	5.2	10.4	7.4
Asthma, with or without hay fever--	6,031	100.0	92.1	43.0	35.7	11.0	2.4	1.5	6.4
Hypertrophy of tonsils and adenoids-----	4,359	100.0	79.1	39.3	31.3	6.9	1.6	15.7	5.2
Chronic sinusitis---	20,582	100.0	98.2	22.2	51.5	21.9	2.6	0.9	0.9
Deflected nasal septum-----	798	100.0	66.4	15.9	29.8	18.4	*	28.9	*
Nasal polyp-----	546	100.0	78.2	20.5	34.6	21.1	*	20.1	*
Chronic laryngitis--	1,149	100.0	94.4	29.7	42.0	19.9	*	*	*
Hay fever, without asthma (includes upper respiratory allergy-----	10,826	100.0	95.9	28.3	48.5	16.8	2.2	1.1	3.0
Pleurisy-----	686	100.0	88.3	46.9	28.4	9.2	*	8.7	*
Pneumoconiosis-----	126	100.0	81.0	*	*	*	*	*	*
Other chronic interstitial pneumonia-----	403	100.0	52.6	34.2	13.4	*	*	24.3	23.1
Bronchiectasis-----	116	100.0	90.5	*	*	*	*	*	*
Tuberculosis, active	157	100.0	*	*	*	*	*	47.1	*
Tuberculosis, arrested or inactive-----	137	100.0	*	*	*	*	*	53.3	*

<sup>1</sup> See table A for ICDA codes.

Table G. Number of chronic respiratory conditions reported in health interviews as causing bother and percent distribution of degree person bothered by condition: United States, 1970

Chronic condition <sup>1</sup>	Number bothered in thousands	Degree condition bothers person				
		Total	Great deal	Some	Very little	Other
Percent distribution						
Chronic bronchitis-----	5,998	100.0	40.9	41.7	14.4	2.9
Emphysema-----	1,079	100.0	39.5	39.0	15.3	6.3
Asthma, with or without hay fever-----	5,556	100.0	46.7	38.8	12.0	2.6
Hypertrophy of tonsils and adenoids-----	3,449	100.0	49.7	39.5	8.8	2.0
Chronic sinusitis-----	20,206	100.0	22.6	52.5	22.3	2.6
Deflected nasal septum-----	530	100.0	24.0	44.9	27.7	*
Nasal polyp-----	427	100.0	26.2	44.3	26.9	*
Chronic laryngitis-----	1,085	100.0	31.4	44.5	21.1	*
Hay fever, without asthma (includes upper respiratory allergy-----	10,382	100.0	29.5	50.6	17.5	2.3
Pleurisy-----	606	100.0	53.1	32.2	10.4	*
Pneumoconiosis-----	102	100.0	*	*	*	*
Other chronic interstitial pneumonia-----	212	100.0	65.1	25.5	*	*
Bronchiectasis-----	105	100.0	*	*	*	*
Tuberculosis, active-----	*	100.0	*	*	*	*
Tuberculosis, arrested or inactive-----	*	100.0	*	*	*	*

<sup>1</sup> See table A for ICDA codes.

example 43.8 percent of emphysema cases cause bother all the time, while 10.4 percent do not cause bother at all. The degree of botheration is displayed in tables F and G. The first table shows a percent distribution of the total prevalence, and the other shows only persons who reported botheration distributed by degree.

Table H shows the number of conditions which were reported as having been noticed for the first time during the year prior to interview. Occurrence within a year is used to define the incidence of a chronic condition. The respondent's report of onset may have been the first recognition of symptoms of a condition which started even earlier. Incidence as stated by the respondent may be prior to that of the medical diagnosis of the condition or may occur at a later date if the physician has not told the respondent about the diagnosis.

### PREVALENCE BY SELECTED DEMOGRAPHIC CHARACTERISTICS

The prevalence of each of the chronic respiratory conditions reported by persons has been

distributed by age and selected demographic characteristics in tables 1-14. Since the age distribution of groups of the population may differ, the age-specific prevalence rates per 1,000 persons are shown as well as the crude rate for all ages. Highlights of the distributions in the tables will be discussed for some of these diseases.

*Chronic bronchitis.*—The reported prevalence per 1,000 persons by age suggests that there was a bimodal distribution for this disease. The rate was high for children under 17 years and then declined and rose again after age 45 (figure 1). Table 1 shows that white persons had higher prevalence of bronchitis than did persons of other races. Figure 1 shows that more bronchitis was reported from the South Region than elsewhere.

*Emphysema.*—The highest age-specific rate for emphysema was reported for persons 65 years and over. There was a clear sex difference in prevalence per 1,000 persons, males having much higher rates than did females. The sex ratio was about 3 cases among males to each case among females. As family income rose, the

Table H. Prevalence and incidence in past year of chronic respiratory conditions reported in health interviews and percent incidence is of prevalence: United States, 1970

Chronic condition <sup>1</sup>	Prevalence in thousands	Incidence <sup>2</sup> in thousands	Percent occurring in past 12 months
Chronic bronchitis-----	6,526	1,402	21.5
Emphysema-----	1,313	140	10.7
Asthma, with or without hay fever-----	6,031	445	7.4
Hypertrophy of tonsils and adenoids-----	4,359	890	20.4
Chronic sinusitis-----	20,582	1,237	6.0
Deflected nasal septum-----	798	*	*
Nasal polyp-----	546	76	13.9
Chronic laryngitis-----	1,149	285	24.8
Hay fever, without asthma (includes upper respiratory allergy)-----	10,826	776	7.2
Pleurisy-----	686	177	25.8
Pneumoconiosis-----	126	*	*
Other chronic interstitial pneumonia-----	403	295	73.2
Bronchiectasis-----	116	*	*
Tuberculosis, active-----	157	58	36.9
Tuberculosis, arrested or inactive-----	137	...	...

<sup>1</sup>See table A for ICDA codes.

<sup>2</sup>Onset of the condition within 12 months of the week of interview.

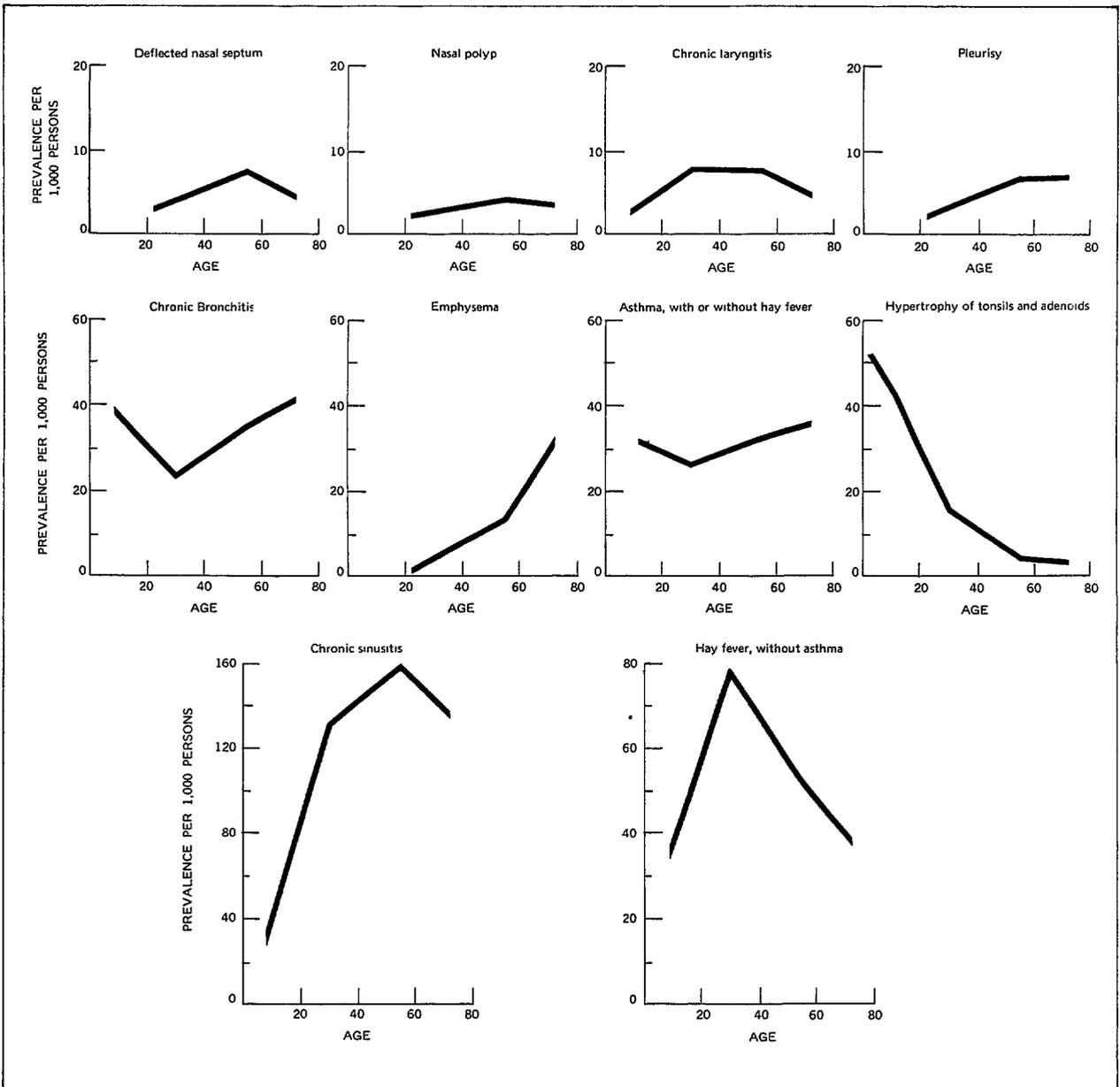


Figure 1. Prevalence of selected chronic respiratory conditions reported in health interviews per 1,000 persons, by age.

prevalence rates declined; the same inverse relationship was noted for education of the head of the family.

*Asthma, with or without hay fever.*—The prevalence rate per 1,000 persons for asthma was higher for males than for females. The rate tended to be lower for white persons than for

persons of other races. The prevalence per 1,000 persons declined slightly with rise in family income. The most pronounced difference displayed by this condition was the regional differences. The prevalence rate was substantially higher in the South and West Regions than elsewhere.

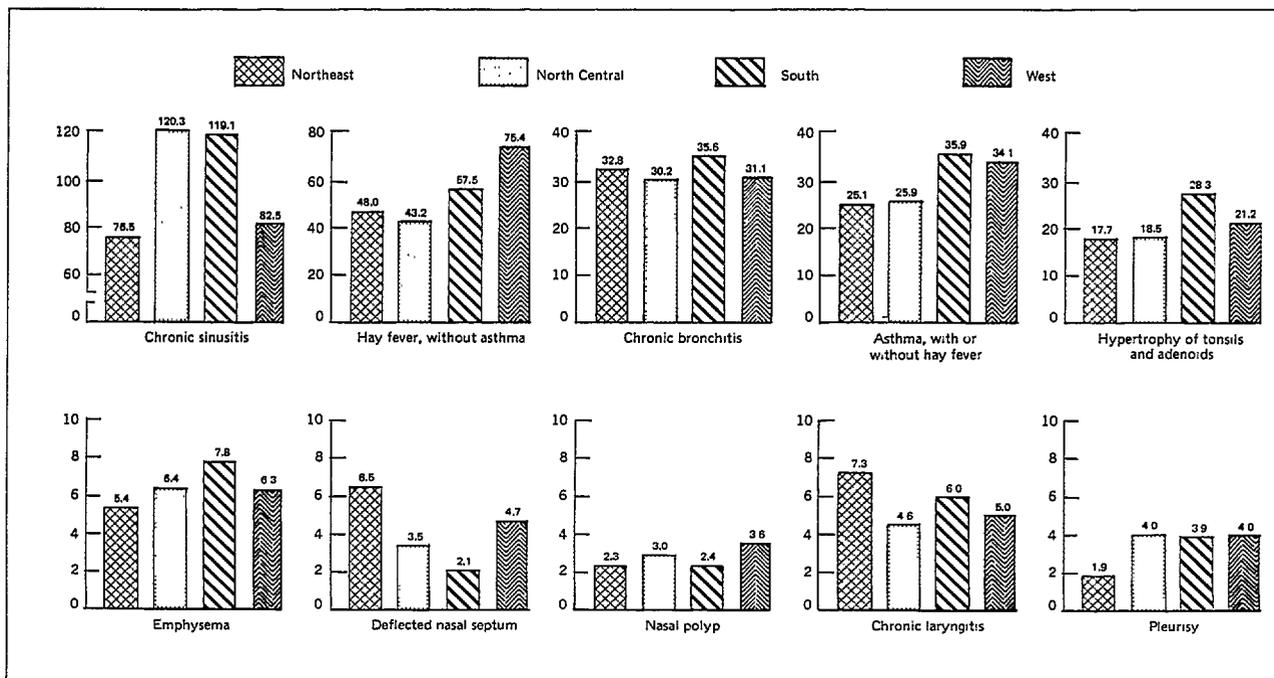


Figure 2. Prevalence of selected chronic respiratory conditions reported in health interviews per 1,000 persons, by geographic region.

*Hypertrophy of tonsils and adenoids.*—As would be expected, this condition was most prevalent among children. As age rose the rate declined sharply after correction of the condition by tonsillectomy and adenoidectomy. The prevalence per 1,000 persons was clearly higher in the South Region than in other regions.

*Chronic sinusitis.*—The prevalence per 1,000 persons for sinusitis was highest in the age group 45-64 years and was higher for females than for males. There was also a large difference in rate by color; the rate for white persons was double that for other races. The rates in the North Central and South Regions were clearly larger than those in other regions.

*Hay fever, without asthma.*—This condition group includes hay fever and allergies affecting the upper respiratory tract. The prevalence rate was higher for white persons than for persons of other races. In contrast with the inverse relationship with income of the prevalence of asthma, there is a direct relationship with income for the prevalence of hay fever in that the rates rose with rise in family income. The prevalence rate was highest in the West Region.

### Reporting Chronic Conditions in Interviews

Throughout the existence of the Health Interview Survey efforts have been made to determine the reliability of data produced by the Survey and to implement improved methods of data collection. Because of problems in the collection of data on prevalence of chronic conditions, methodological studies have been undertaken to determine the extent of underreporting. One of these studies was a record-check study conducted in 1961-62 by the Stanford Research Institute to determine how well chronic conditions reported in health interviews compare with those noted in medical records prepared during each visit to a physician during a year. This particular record-check study was conducted among a sample of members of the Kaiser Foundation Health Plan, Southern California Region, a large prepayment medical plan providing medical services through the Southern California Permanente Medical Group (SCPMG). In this study, records were made of each patient encounter at SCPMG during the study year. Following the end of the

year these sample persons were interviewed by trained interviewers. The results of this prospective study have been reported in two methodological reports from the National Center for Health Statistics, Series 2, Numbers 23 and 57.

The second of these reports shows the number of conditions in the medical record compared to the number of conditions reported in the interview for persons who stated that they used no medical services other than those of SCPMG. Table J summarizes these findings for chronic respiratory conditions. The prevalence of conditions noted in the patient encounter forms is presented in the column entitled "Conditions Reported in Medical Record" and the prevalence of conditions reported in the health interviews is presented in the column labeled "Conditions Reported in Interview." Other columns show matches and nonmatches for these conditions. Column F shows the percent of con-

ditions in the medical record that were reported in the interview. These percentages indicate that reporting of various respiratory conditions was quite good. However, column B presents figures similar to the prevalence estimates from the regular Health Interview Survey. It is quite possible that examining *all* medical records at SCPMG for the sample persons would show additional chronic respiratory conditions to be added to column A. It is also quite possible that a person did not mention a specific respiratory condition at any time in a patient encounter during the study year. It is conceivable that a person could have a chronic respiratory condition present in the year prior to interview and have it under control so as not to require a physician visit during the year.

An earlier record-check study conducted at the Health Insurance Plan of Greater New York, reported in Series 2, Number 7, showed the fol-

Table J. Chronic respiratory conditions reported in medical records of the Southern California Permanente Medical Group during 1961 and 1962 and whether or not reported in a household interview

Chronic condition	(A) Con- ditions re- ported in medical record	(B) Con- ditions re- ported in inter- view	(C) Con- ditions re- ported in inter- view and record	(D) Con- ditions re- ported in record but not in in- terview	(E) Con- ditions re- ported in in- terview but not in record	(F) Percent of con- ditions in record re- ported in in- terview  <u>col. C</u> <u>col. A</u>
Tuberculosis-----	1	6	1	-	5	100.0
Hay fever, without asthma-----	164	228	120	44	108	73.2
Asthma, with or without hay fever-----	39	55	27	12	28	69.2
Sinusitis-----	19	91	19	-	72	100.0
Bronchitis-----	24	61	19	5	42	79.2
Other respiratory diseases----	151	128	66	85	62	43.7

SOURCE: Extracted from table 4 of *Vital and Health Statistics*, Series 2, Number 57.

lowing percentages of conditions in the medical records that were reported in interviews:

	Percent
Asthma, with or without hay fever . .	71.1
Hay fever, without asthma . . . . .	79.1
Sinusitis . . . . .	48.4
Bronchitis . . . . .	65.0
Other diseases of respiratory system .	25.0

Comparison of these findings suggests some improvement in reporting in the later record-check study over that of the first one. Since the early study, refinements have been made in questionnaire design and interviewer training to stimulate memory recall so as to enable the respondent to report more information. Other methodological reports discussing some of these points are Numbers 26, 41, 45, and 48 in Series 2.



## LIST OF DETAILED TABLES

	Page
Table 1. Prevalence of chronic bronchitis reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	15
2. Prevalence of emphysema reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	16
3. Prevalence of asthma, with or without hay fever, reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	17
4. Prevalence of hypertrophy of tonsils and adenoids reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	18
5. Prevalence of chronic sinusitis reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	19
6. Prevalence of deflected nasal septum reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	20
7. Prevalence of nasal polyp reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	21
8. Prevalence of chronic laryngitis reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	22
9. Prevalence of hay fever, without asthma (including upper respiratory allergy), reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	23
10. Prevalence of pleurisy reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	24
11. Prevalence of pneumoconiosis reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	25
12. Prevalence of other chronic interstitial pneumonia reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	26
13. Prevalence of bronchiectasis reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	27
14. Prevalence of tuberculosis reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970-----	28
15. Population used in obtaining rates shown in this publication, by age and selected characteristics: United States, 1970-----	29

Table 1. Prevalence of chronic bronchitis reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 17 years	17-44 years	45-64 years	65 years and over	All ages	Under 17 years	17-44 years	45-64 years	65 years and over
	Prevalence of conditions in thousands					Number per 1,000 persons				
Total <sup>1</sup> -----	6,526	2,592	1,691	1,461	782	32.7	38.9	23.2	35.4	41.2
<u>Sex</u>										
Male -----	2,999	1,479	577	560	383	31.2	43.6	16.7	28.5	47.3
Female -----	3,527	1,113	1,114	902	399	34.0	34.0	29.1	41.6	36.6
<u>Color</u>										
White -----	6,031	2,356	1,565	1,368	742	34.4	41.8	24.5	36.6	42.5
All other -----	495	236	126	93	*	20.0	22.7	14.2	23.5	*
<u>Family income</u>										
Less than \$3,000 -----	825	139	157	218	310	39.5	30.0	28.3	54.6	46.3
\$3,000-\$4,999 -----	741	240	180	143	178	35.0	36.2	28.4	34.3	43.8
\$5,000-\$6,999 -----	847	342	179	241	86	31.0	36.4	17.6	43.4	39.0
\$7,000-\$9,999 -----	1,282	559	394	268	61	32.3	37.9	25.3	35.3	34.8
\$10,000-\$14,999 -----	1,531	809	419	264	*	32.6	46.9	21.8	29.0	*
\$15,000 or more -----	932	379	283	224	*	30.8	38.8	23.7	30.3	*
<u>Education of head of family</u>										
Less than 9 years -----	1,634	412	261	548	413	33.2	30.4	20.8	41.4	42.0
9-11 years -----	1,150	473	303	267	107	31.8	36.4	23.8	35.0	37.9
12 years -----	1,969	895	583	363	128	31.9	40.1	23.5	32.0	40.2
13 years or more -----	1,685	775	534	267	109	33.7	45.8	24.3	31.9	40.6
<u>Usual activity status</u>										
Preschool (under 6 years) -----	1,193	1,193	...	...	...	55.0	55.0	...	...	...
School-age (6-16 years) -----	1,399	1,399	...	...	...	31.1	31.1	...	...	...
Usually working (17 years and over) -----	1,771	...	880	777	113	24.4	...	20.7	28.6	38.9
Usually keeping house (female, 17 years and over) -----	1,365	...	519	518	328	35.9	...	29.2	45.0	37.7
Retired (45 years and over) -----	413	...	...	101	313	50.4	...	...	62.7	47.6
Other (17 years and over) -----	385	...	292	65	*	27.0	...	23.4	66.0	*
<u>Place of residence</u>										
All SMSA -----	4,283	1,703	1,162	926	493	33.0	39.8	24.0	34.3	42.0
Central city -----	1,866	647	520	421	278	31.9	35.4	24.0	33.9	45.5
Not central city -----	2,417	1,055	642	504	215	33.8	43.1	24.0	34.5	38.2
Outside SMSA -----	2,043	821	490	475	257	33.0	38.5	22.2	39.0	40.8
Nonfarm -----	200	68	*	60	*	24.9	26.0	*	28.2	*
Farm -----										
<u>Geographic region</u>										
Northeast -----	1,596	634	403	363	196	32.8	40.6	23.0	34.2	39.6
North Central -----	1,677	705	420	350	202	30.2	37.1	21.2	30.8	37.8
South -----	2,223	868	569	520	266	35.6	41.0	24.7	41.7	45.5
West -----	1,030	384	300	229	118	31.1	35.1	24.1	33.4	41.2

<sup>1</sup>Includes unknown income and education.

Table 2. Prevalence of emphysema reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
	Prevalence of conditions in thousands				Number per 1,000 persons			
Total <sup>1</sup> -----	1,313	136	575	602	6.6	1.0	13.9	31.7
<u>Sex</u>								
Male-----	990	79	435	476	10.3	1.2	22.1	58.8
Female-----	323	57	140	126	3.1	0.8	6.5	11.6
<u>Color</u>								
White-----	1,290	134	558	598	7.4	1.1	14.9	34.3
All other-----	*	*	*	*	*	*	*	*
<u>Family income</u>								
Less than \$3,000-----	302	*	112	181	14.5	*	28.0	27.0
\$3,000-\$4,999-----	255	*	79	164	12.0	*	18.9	40.4
\$5,000-\$6,999-----	205	*	95	95	7.5	*	17.1	43.1
\$7,000-\$9,999-----	202	*	98	67	5.1	*	12.9	38.3
\$10,000-\$14,999-----	159	*	96	*	3.4	*	10.6	*
\$15,000 or more-----	103	*	63	*	3.4	*	8.5	*
<u>Education of head of family</u>								
Less than 9 years-----	626	*	224	352	12.7	*	16.9	35.8
9-11 years-----	242	*	132	82	6.7	*	17.3	29.0
12 years-----	247	*	130	80	4.0	*	11.5	25.1
13 years or more-----	173	*	83	71	3.5	*	9.9	26.5
<u>Usual activity status</u>								
Usually working (17 years and over)----	468	78	311	79	6.4	1.8	11.4	27.2
Usually keeping house (female, 17 years and over)-----	201	*	80	90	5.3	*	6.9	10.3
Retired (45 years and over)-----	543	...	140	402	66.3	...	86.9	61.1
<u>Place of residence</u>								
All SMSA-----	703	66	309	328	5.4	0.7	11.4	28.0
Central city-----	354	*	159	162	6.1	*	12.8	26.5
Not central city-----	349	*	151	165	4.9	*	10.3	29.3
Outside SMSA-----	547	67	236	244	8.8	1.5	19.4	38.7
Nonfarm-----	547	67	236	244	8.8	1.5	19.4	38.7
Farm-----	62	*	*	*	7.7	*	*	*
<u>Geographic region</u>								
Northeast-----	261	*	95	141	5.4	*	8.9	28.5
North Central-----	357	*	158	173	6.4	*	13.9	32.4
South-----	487	67	226	194	7.8	1.5	18.1	33.2
West-----	208	*	96	94	6.3	*	14.0	32.8

<sup>1</sup>Includes unknown income and education.

Table 3. Prevalence of asthma, with or without hay fever, reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over
	Prevalence of conditions in thousands						Number per 1,000 persons					
Total <sup>1</sup> -----	6,031	636	1,439	1,906	1,369	681	30.2	29.3	32.0	26.2	33.1	35.8
<u>Sex</u>												
Male-----	3,047	408	870	852	576	342	31.7	36.8	38.1	24.6	29.3	42.3
Female-----	2,984	228	569	1,054	794	339	28.8	21.5	25.7	27.6	36.7	31.1
<u>Color</u>												
White-----	5,167	501	1,176	1,683	1,193	615	29.5	27.9	30.7	26.3	31.9	35.2
All other-----	864	135	263	223	176	66	34.9	36.4	39.2	25.2	44.5	42.9
<u>Family income</u>												
Less than \$3,000-----	912	55	114	185	255	303	43.7	32.9	38.4	33.3	63.8	45.3
\$3,000-\$4,999-----	739	68	127	220	182	142	34.9	28.6	29.9	34.8	43.7	34.9
\$5,000-\$6,999-----	789	109	184	235	192	69	28.9	31.1	31.2	23.1	34.6	31.3
\$7,000-\$9,999-----	1,164	159	324	373	248	60	29.4	30.8	33.8	24.0	32.7	34.3
\$10,000-\$14,999-----	1,203	154	335	468	216	*	25.6	29.1	28.0	24.4	23.7	*
\$15,000 or more-----	830	61	251	321	168	*	27.4	25.3	34.1	26.8	22.7	*
<u>Education of head of family</u>												
Less than 9 years-----	1,699	104	300	289	592	414	34.6	27.5	30.7	23.1	44.7	42.1
9-11 years-----	1,055	147	248	349	212	100	29.2	35.6	28.0	27.4	27.8	35.4
12 years-----	1,742	243	485	611	312	90	28.3	31.9	33.0	24.7	27.5	28.3
13 years or more-----	1,470	140	382	644	233	71	29.4	23.7	34.7	29.3	27.9	26.5
<u>Usual activity status</u>												
Usually working (17 years and over)-----	1,780	...	...	978	711	91	24.5	...	...	23.0	26.2	31.4
Usually keeping house (female, 17 years and over)-----	1,284	...	...	545	469	270	33.8	...	...	30.7	40.7	31.0
Retired (45 years and over)-----	411	...	...	...	128	283	50.2	...	...	...	79.5	43.0
<u>Place of residence</u>												
All SMSA-----	3,818	424	953	1,261	826	355	29.4	30.3	33.2	26.0	30.6	30.3
Central city-----	1,839	220	422	608	399	189	31.4	34.2	35.6	28.0	32.2	31.0
Not central city---	1,979	203	532	652	427	165	27.7	26.8	31.5	24.4	29.2	29.3
Outside SMSA												
Nonfarm-----	1,992	193	442	590	474	293	32.2	27.5	30.8	26.7	38.9	46.5
Farm-----	221	*	*	56	70	*	27.5	*	*	24.2	32.9	*
<u>Geographic region</u>												
Northeast-----	1,221	113	314	394	268	131	25.1	22.1	29.9	22.4	25.2	26.5
North Central-----	1,439	163	307	451	334	183	25.9	26.3	24.0	22.7	29.4	34.3
South-----	2,244	252	526	678	533	256	35.9	36.8	36.7	29.5	42.8	43.8
West-----	1,127	107	291	383	234	112	34.1	30.4	39.3	30.8	34.1	39.1

<sup>1</sup>Includes unknown income and education.

Table 4. Prevalence of hypertrophy of tonsils and adenoids reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over	All ages	Under 6 years	6-16 years	17-44 years	45-64 years	65 years and over
	Prevalence of conditions in thousands						Number per 1,000 persons					
Total <sup>1</sup> -----	4,359	1,107	1,887	1,140	164	61	21.8	51.1	41.9	15.7	4.0	3.2
<u>Sex</u>												
Male-----	1,913	604	868	371	*	*	19.9	54.5	38.0	10.7	*	*
Female-----	2,447	503	1,019	769	114	*	23.6	47.5	46.0	20.1	5.3	*
<u>Color</u>												
White-----	3,855	1,047	1,687	955	121	*	22.0	58.2	44.0	14.9	3.2	*
All other-----	504	60	200	185	*	*	20.4	16.2	29.8	20.9	*	*
<u>Family income</u>												
Less than \$3,000-----	432	54	113	170	56	*	20.7	32.3	38.1	30.6	14.0	*
\$3,000-\$4,999-----	490	96	216	135	*	*	23.1	40.4	50.9	21.3	*	*
\$5,000-\$6,999-----	639	142	296	191	*	*	23.4	40.5	50.2	18.8	*	*
\$7,000-\$9,999-----	930	284	388	224	*	*	23.5	55.0	40.5	14.4	*	*
\$10,000-\$14,999-----	1,075	332	488	232	*	*	22.9	62.8	40.8	12.1	*	*
\$15,000 or more-----	571	133	294	133	*	*	18.9	55.2	39.9	11.1	*	*
<u>Education of head of family</u>												
Less than 9 years-----	924	113	435	239	88	*	18.8	29.9	44.6	19.1	6.7	*
9-11 years-----	814	202	366	201	*	*	22.5	48.9	41.3	15.8	*	*
12 years-----	1,444	444	587	393	*	*	23.4	58.4	39.9	15.9	*	*
13 years or more-----	1,119	334	468	295	*	*	22.4	56.5	42.5	13.4	*	*
<u>Usual activity status</u>												
Usually working (17 years and over)-----	642	...	...	566	74	*	8.8	...	...	13.3	2.7	*
Usually keeping house (female, 17 years and over)-----	357	...	...	255	68	*	9.4	...	...	14.3	5.9	*
Retired (45 years and over)-----	*	...	...	...	*	*	*	...	...	...	*	*
<u>Place of residence</u>												
All SMSA-----	2,726	744	1,158	709	91	*	21.0	53.1	40.3	14.6	3.4	*
Central city-----	1,251	306	501	385	*	*	21.4	47.5	42.3	17.8	*	*
Not central city---	1,475	439	656	324	*	*	20.6	58.0	38.8	12.1	*	*
Outside SMSA												
Nonfarm-----	1,495	335	661	405	64	*	24.1	47.8	46.1	18.3	5.3	*
Farm-----	139	*	68	*	*	*	17.3	*	34.8	*	*	*
<u>Geographic region</u>												
Northeast-----	863	225	381	213	*	*	17.7	44.0	36.3	12.1	*	*
North Central-----	1,025	293	442	256	*	*	18.5	47.3	34.5	12.9	*	*
South-----	1,768	390	766	494	87	*	28.3	57.0	53.5	21.5	7.0	*
West-----	703	200	298	178	*	*	21.2	56.7	40.2	14.3	*	*

<sup>1</sup>Includes unknown income and education.

Table 5. Prevalence of chronic sinusitis reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 17 years	17-44 years	45-64 years	65 years and over	Number per 1,000 persons				
						All ages	Under 17 years	17-44 years	45-64 years	65 years and over
	Prevalence of conditions in thousands					Number per 1,000 persons				
Total <sup>1</sup> -----	20,582	1,917	9,515	6,564	2,586	103.0	28.7	130.6	158.9	136.1
<u>Sex</u>										
Male-----	8,913	1,007	3,973	2,951	983	92.6	29.7	114.9	150.2	121.5
Female-----	11,668	910	5,542	3,613	1,604	112.6	27.8	144.9	166.8	147.1
<u>Color</u>										
White-----	19,266	1,786	8,884	6,132	2,464	110.0	31.7	138.8	164.2	141.1
All other-----	1,316	131	630	432	122	53.2	12.6	71.2	109.1	79.2
<u>Family income</u>										
Less than \$3,000-----	2,478	93	573	731	1,081	118.7	20.1	103.1	182.9	161.5
\$3,000-\$4,999-----	2,279	155	771	764	590	107.6	23.4	121.8	183.3	145.2
\$5,000-\$6,999-----	2,729	186	1,324	923	296	99.9	19.8	130.4	166.2	134.4
\$7,000-\$9,999-----	3,914	425	2,122	1,167	199	98.7	28.8	136.3	153.7	113.6
\$10,000-\$14,999-----	5,008	599	2,765	1,491	154	106.6	34.8	144.0	163.9	108.3
\$15,000 or more-----	2,968	324	1,567	993	83	98.1	33.2	131.0	134.2	73.5
<u>Education of head of family</u>										
Less than 9 years-----	4,996	256	1,354	2,028	1,358	101.7	18.9	108.1	153.3	138.0
9-11 years-----	3,510	299	1,491	1,317	403	97.0	23.0	117.0	172.5	142.7
12 years-----	6,571	749	3,553	1,874	396	106.6	33.5	143.4	165.2	124.4
13 years or more-----	5,279	585	3,048	1,279	367	105.7	34.5	138.7	152.9	136.8
<u>Usual activity status</u>										
Preschool (under 6 years)----	256	256	...	...	...	11.8	11.8	...	...	...
School-age (6-16 years)-----	1,661	1,661	...	...	...	36.9	36.9	...	...	...
Usually working (17 years and over,)	10,350	...	5,800	4,169	381	142.4	...	136.2	153.4	131.3
Usually keeping house (female, 17 years and over)-	6,104	...	2,781	1,986	1,337	160.6	...	156.4	172.4	153.5
Retired (45 years and over)--	1,059	...	...	271	788	129.3	...	...	168.2	119.8
Other (17 years and over)----	1,152	...	933	137	81	80.8	...	74.8	139.1	100.0
<u>Place of residence</u>										
All SMSA-----	12,517	1,166	5,991	3,978	1,382	96.3	27.3	123.7	147.3	117.8
Central city-----	5,119	370	2,314	1,718	718	87.5	20.2	106.7	138.5	117.6
Not central city-----	7,398	796	3,678	2,260	664	103.6	32.5	137.5	154.8	118.1
Outside SMSA										
Nonfarm-----	7,135	674	3,215	2,204	1,041	115.3	31.6	145.5	181.1	165.1
Farm-----	930	77	308	381	164	115.9	29.5	133.0	179.0	170.1
<u>Geographic region</u>										
Northeast-----	3,729	284	1,738	1,261	445	76.5	18.2	99.0	118.7	90.0
North Central-----	6,680	631	3,102	2,148	798	120.3	33.2	156.5	189.1	149.4
South-----	7,442	764	3,463	2,236	979	119.1	36.1	150.5	179.5	167.5
West-----	2,731	238	1,211	919	364	82.5	21.8	97.4	133.9	127.0

<sup>1</sup>Includes unknown income and education.

Table 6. Prevalence of deflected nasal septum reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
	Prevalence of conditions in thousands				Number per 1,000 persons			
Total <sup>1</sup> -----	798	410	307	81	4.0	2.9	7.4	4.3
<u>Sex</u>								
Male-----	497	255	204	*	5.2	3.7	10.4	*
Female-----	301	155	103	*	2.9	2.2	4.8	*
<u>Color</u>								
White-----	774	398	298	77	4.4	3.3	8.0	4.4
All other-----	*	*	*	*	*	*	*	*
<u>Family income</u>								
Less than \$5,000-----	89	*	*	*	2.1	*	*	*
\$5,000-\$9,999-----	182	96	71	*	2.7	1.9	5.4	*
\$10,000-\$14,999-----	219	121	89	*	4.7	3.3	9.8	*
\$15,000 or more-----	257	129	109	*	8.5	5.9	14.7	*
<u>Education of head of family</u>								
Less than 9 years-----	66	*	*	*	1.3	*	*	*
9-11 years-----	124	57	*	*	3.4	2.2	*	*
12 years-----	216	117	80	*	3.5	2.5	7.1	*
13 years or more-----	389	219	138	*	7.8	5.6	16.5	*
<u>Usual activity status</u>								
Usually working (17 years and over)-----	460	220	223	*	6.3	5.2	8.2	*
Usually keeping house (female, 17 years and over)-----	189	85	68	*	5.0	4.8	5.9	*
<u>Place of residence</u>								
All SMSA-----	670	334	265	70	5.2	3.7	9.8	6.0
Central city-----	272	122	116	*	4.7	3.1	9.4	*
Not central city-----	398	212	149	*	5.6	4.1	10.2	*
Outside SMSA-----	128	75	*	*	1.8	1.6	*	*
<u>Geographic region</u>								
Northeast-----	316	160	128	*	6.5	4.8	12.1	*
North Central-----	194	98	75	*	3.5	2.5	6.6	*
South-----	131	76	*	*	2.1	1.7	*	*
West-----	156	75	62	*	4.7	3.2	9.0	*

<sup>1</sup> Includes unknown income and education.

Table 7. Prevalence of nasal polyp reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	Prevalence of conditions in thousands				Number per 1,000 persons			
	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
Total <sup>1</sup> -----	546	307	174	65	2.7	2.2	4.2	3.4
<u>Sex</u>								
Male-----	295	158	102	*	3.1	2.3	5.2	*
Female-----	251	149	73	*	2.4	2.1	3.4	*
<u>Color</u>								
White-----	517	289	170	58	3.0	2.4	4.6	3.3
All other-----	*	*	*	*	*	*	*	*
<u>Family income</u>								
Less than \$5,000-----	145	54	*	*	3.4	2.3	*	*
\$5,000-\$9,999-----	171	112	*	*	2.6	2.2	*	*
\$10,000 or more-----	208	130	77	*	2.7	2.2	4.7	*
<u>Education of head of family</u>								
Less than 9 years-----	108	*	*	*	2.2	*	*	*
9-11 years-----	88	*	*	*	2.4	*	*	*
12 years-----	186	122	*	*	3.0	2.6	*	*
13 years or more-----	161	104	*	*	3.2	2.7	*	*
<u>Usual activity status</u>								
School-age (6-16 years)-----	67	67	...	...	1.5	1.5	...	...
Usually working (17 years and over)-----	266	147	115	*	3.7	3.5	4.2	*
Usually keeping house (female, 17 years and over)-----	131	57	*	*	3.4	3.2	*	*
<u>Place of residence</u>								
All SMSA-----	367	205	113	*	2.8	2.2	4.2	*
Central city-----	169	92	*	*	2.9	2.3	*	*
Not central city-----	198	113	64	*	2.8	2.2	4.4	*
Outside SMSA-----	179	101	61	*	2.6	2.1	4.3	*
<u>Geographic region</u>								
Northeast-----	113	61	*	*	2.3	1.8	*	*
North Central-----	166	87	63	*	3.0	2.2	5.5	*
South-----	147	96	*	*	2.4	2.2	*	*
West-----	120	64	*	*	3.6	2.7	*	*

<sup>1</sup>Includes unknown income and education.

Table 8. Prevalence of chronic laryngitis reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 17 years	17-44 years	45-64 years	65 years and over	Number per 1,000 persons				
						All ages	Under 17 years	17-44 years	45-64 years	65 years and over
	Prevalence of conditions in thousands					Number per 1,000 persons				
Total <sup>1</sup> -----	1,149	173	570	316	89	5.7	2.6	7.8	7.7	4.7
<u>Sex</u>										
Male-----	287	86	114	68	*	3.0	2.5	3.3	3.5	*
Female-----	862	87	456	248	71	8.3	2.7	11.9	11.5	6.5
<u>Color</u>										
White-----	1,055	162	515	292	86	6.0	2.9	8.0	7.8	4.9
All other-----	94	*	55	*	*	3.8	*	6.2	*	*
<u>Family income</u>										
Less than \$3,000-----	141	*	*	*	*	6.8	*	*	*	*
\$3,000-\$4,999-----	127	*	60	*	*	6.0	*	9.5	*	*
\$5,000-\$6,999-----	134	*	65	*	*	4.9	*	6.4	*	*
\$7,000-\$9,999-----	214	*	104	60	*	5.4	*	6.7	7.9	*
\$10,000-\$14,999-----	292	56	160	71	*	6.2	3.2	8.3	7.8	*
\$15,000 or over-----	194	*	114	*	*	6.4	*	9.5	*	*
<u>Education of head of family</u>										
Less than 9 years-----	225	*	66	88	*	4.6	*	5.3	6.7	*
9-11 years-----	185	*	80	71	*	5.1	*	6.3	9.3	*
12 years-----	357	59	190	88	*	5.8	2.6	7.7	7.8	*
13 years or more-----	366	66	226	68	*	7.3	3.9	10.3	8.1	*
<u>Usual activity status</u>										
Usually working (17 years and over)-----	486	...	284	191	*	6.7	...	6.7	7.0	*
Usually keeping house (female, 17 years and over)---	383	...	212	114	56	10.1	...	11.9	9.9	6.4
<u>Place of residence</u>										
All SMSA-----	812	113	421	228	*	6.3	2.6	8.7	8.4	*
Central city-----	407	58	213	108	*	7.0	3.2	9.8	8.7	*
Not central city-----	405	56	208	120	*	5.7	2.3	7.8	8.2	*
Outside SMSA-----	336	60	150	88	*	4.8	2.5	6.1	6.2	*
<u>Geographic region</u>										
Northeast-----	355	56	179	102	*	7.3	3.6	10.2	9.6	*
North Central-----	254	*	132	74	*	4.6	*	6.7	6.5	*
South-----	376	59	182	86	*	6.0	2.8	7.9	6.9	*
West-----	164	*	77	54	*	5.0	*	6.2	7.9	*

<sup>1</sup>Includes unknown income and education.

Table 9. Prevalence of hay fever, without asthma (includes upper respiratory allergy), reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 17 years	17-44 years	45-64 years	65 years and over	All ages	Under 17 years	17-44 years	45-64 years	65 years and over
	Prevalence of conditions in thousands					Number per 1,000 persons				
Total <sup>1</sup> -----	10,826	2,291	5,683	2,146	706	54.2	34.3	78.0	52.0	37.2
<u>Sex</u>										
Male-----	4,936	1,273	2,552	823	287	51.3	37.5	73.8	41.9	35.5
Female-----	5,890	1,017	3,131	1,323	419	56.9	31.0	81.8	61.1	38.4
<u>Color</u>										
White-----	9,845	2,095	5,169	1,934	646	56.2	37.2	80.8	51.8	37.0
All other-----	981	196	514	212	60	39.6	18.8	58.1	53.6	39.0
<u>Family income</u>										
Less than \$3,000-----	967	88	397	200	282	46.3	19.0	71.4	50.1	42.1
\$3,000-\$4,999-----	869	137	341	234	157	41.0	20.7	53.9	56.1	38.6
\$5,000-\$6,999-----	1,222	251	669	231	71	44.7	26.7	65.9	41.6	32.2
\$7,000-\$9,999-----	1,994	410	1,134	405	*	50.3	27.8	72.8	53.3	*
\$10,000-\$14,999-----	2,997	741	1,722	468	66	63.8	43.0	89.7	51.4	46.4
\$15,000 or more-----	2,253	556	1,171	488	*	74.5	56.9	97.9	65.9	*
<u>Education of head of family</u>										
Less than 9 years-----	1,775	230	584	599	362	36.1	17.0	46.6	45.3	36.8
9-11 years-----	1,522	310	728	389	95	42.1	23.9	57.1	51.0	33.6
12 years-----	3,406	813	1,889	587	116	55.3	36.4	76.2	51.7	36.4
13 years or more-----	4,004	888	2,436	557	123	80.1	52.4	110.9	66.6	45.8
<u>Usual activity status</u>										
Preschool (under 6 years)-----	307	307	...	...	...	14.2	14.2	...	...	...
School-age (6-16 years)-----	1,984	1,984	...	...	...	44.1	44.1	...	...	...
Usually working (17 years and over)-----	4,558	...	3,116	1,334	108	62.7	...	73.2	49.1	37.2
Usually keeping house (female, 17 years and over)-----	2,541	...	1,477	713	350	66.9	...	83.1	61.9	40.2
Retired (45 years and over)-----	298	...	...	67	231	36.4	...	...	41.6	35.1
Other (17 years and over)-----	1,139	...	1,089	*	*	79.9	...	87.3	*	*
<u>Place of residence</u>										
All SMSA-----	7,402	1,589	4,020	1,377	416	57.0	37.2	83.0	51.0	35.5
Central city-----	3,442	654	1,886	667	234	58.9	35.8	87.0	53.8	38.3
Not central city-----	3,960	934	2,134	710	182	55.4	38.2	79.8	48.6	32.4
Outside SMSA-----	3,054	648	1,519	642	245	49.3	30.4	68.8	52.8	38.9
Nonfarm-----	370	54	144	127	*	46.1	20.7	62.2	59.7	*
Farm-----										
<u>Geographic region</u>										
Northeast-----	2,337	485	1,328	395	129	48.0	31.1	75.7	37.2	26.1
North Central-----	2,401	530	1,330	408	133	43.2	27.9	67.1	35.9	24.9
South-----	3,594	706	1,757	822	309	57.5	33.4	76.3	66.0	52.9
West-----	2,494	570	1,268	522	135	75.4	52.1	102.0	76.0	47.1

<sup>1</sup>Includes unknown income and education.

Table 10. Prevalence of pleurisy reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
	Prevalence of conditions in thousands				Number per 1,000 persons			
Total <sup>1</sup> -----	686	284	273	128	3.4	2.0	6.6	6.7
<u>Sex</u>								
Male-----	249	104	104	*	2.6	1.5	5.3	*
Female-----	437	181	169	87	4.2	2.5	7.8	8.0
<u>Color</u>								
White-----	660	274	261	124	3.8	2.3	7.0	7.1
All other-----	*	*	*	*	*	*	*	*
<u>Family income</u>								
Less than \$3,000-----	155	*	59	76	7.4	*	14.8	11.4
\$3,000-\$4,999-----	82	*	*	*	3.9	*	*	*
\$5,000-\$6,999-----	95	*	*	*	3.5	*	*	*
\$7,000-\$9,999-----	130	71	*	*	3.3	2.3	*	*
\$10,000-\$14,999-----	116	61	*	*	2.5	1.7	*	*
\$15,000 or more-----	72	*	*	*	2.4	*	*	*
<u>Education of head of family</u>								
Less than 9 years-----	252	54	111	86	5.1	2.1	8.4	8.7
9-11 years-----	141	61	67	*	3.9	2.4	8.8	*
12 years-----	161	87	59	*	2.6	1.8	5.2	*
13 years or more-----	128	81	*	*	2.6	2.1	*	*
<u>Usual activity status</u>								
Usually working (17 years and over)-----	301	150	139	*	4.1	3.5	5.1	*
Usually keeping house (female, 17 years and over)-----	267	96	101	70	7.0	5.4	8.8	8.0
Retired (45 years and over)-----	57	...	*	*	7.0	...	*	*
<u>Place of residence</u>								
All SMSA-----	372	169	156	*	2.9	1.9	5.8	*
Central city-----	160	61	66	*	2.7	1.5	5.3	*
Not central city-----	213	108	90	*	3.0	2.1	6.2	*
Outside SMSA-----	313	116	117	81	4.5	2.4	8.2	11.1
<u>Geographic region</u>								
Northeast-----	91	*	*	*	1.9	*	*	*
North Central-----	220	103	73	*	4.0	2.7	6.4	*
South-----	243	91	97	55	3.9	2.1	7.8	9.4
West-----	131	*	67	*	4.0	*	9.8	*

<sup>1</sup>Includes unknown income and education.

Table 11. Prevalence of pneumoconiosis reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 45 years	45 years and over	All ages	Under 45 years	45 years and over
	Prevalence of conditions in thousands			Number per 1,000 persons		
Total <sup>1</sup> -----	126	*	100	0.6	*	1.7
<u>Sex</u>						
Male-----	126	*	100	1.3	*	3.6
Female-----	*	*	*	*	*	*
<u>Color</u>						
White-----	112	*	89	0.6	*	1.6
All other-----	*	*	*	*	*	*
<u>Family income</u>						
Less than \$5,000-----	63	*	57	1.5	*	3.0
\$5,000 or more-----	56	*	*	0.4	*	*
<u>Education of head of family</u>						
Less than 9 years-----	86	*	78	1.7	*	3.4
<u>Usual activity status</u>						
Usually working (17 years and over)-----	59	*	*	0.8	*	*
Retired (45 years and over)-----	56	...	56	6.8	...	6.8
<u>Place of residence</u>						
All SMSA-----	60	*	*	0.5	*	*
Outside SMSA-----	66	*	56	0.9	*	2.6

<sup>1</sup>Includes unknown income and education.

Table 12. Prevalence of other chronic interstitial pneumonia reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 17 years	17-44 years	45 years and over	All ages	Under 17 years	17-44 years	45 years and over
	Prevalence of conditions in thousands				Number per 1,000 persons			
Total <sup>1</sup> -----	403	130	120	153	2.0	1.9	1.6	2.5
<u>Sex</u>								
Male -----	177	61	*	67	1.8	1.8	*	2.4
Female -----	226	69	71	86	2.2	2.1	1.9	2.6
<u>Color</u>								
White -----	373	116	117	140	2.1	2.1	1.8	2.6
All other -----	*	*	*	*	*	*	*	*
<u>Family Income</u>								
Less than \$5,000 -----	85	*	*	*	2.0	*	*	*
\$5,000-\$9,999 -----	136	*	*	*	2.0	*	*	*
\$10,000 or more -----	150	62	55	*	1.9	2.3	1.8	*
<u>Education of head of family</u>								
Less than 12 years -----	171	*	*	86	2.0	*	*	2.6
12 years or more -----	225	82	78	65	2.0	2.1	1.7	2.5
<u>Usual Activity Status</u>								
Usually working (17 years and over) -----	124	...	63	61	1.7	...	1.5	2.0
Usually keeping house (female, 17 years and over) -----	87	...	*	*	2.3	...	*	*
<u>Place of residence</u>								
All SMSA -----	265	83	92	91	2.0	1.9	1.9	2.3
Central city -----	106	*	*	*	1.8	*	*	*
Not central city -----	159	*	58	*	2.2	*	2.2	*
Outside SMSA -----	137	*	*	62	2.0	*	*	2.9
<u>Geographic region</u>								
Northeast -----	72	*	*	*	1.5	*	*	*
North Central -----	115	*	*	*	2.1	*	*	*
South -----	123	*	*	*	2.0	*	*	*
West -----	93	*	*	*	2.8	*	*	*

<sup>1</sup>Includes unknown income and education.

Table 13. Prevalence of bronchiectasis reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 45 years	45 years and over	All ages	Under 45 years	45 years and over
	Prevalence of conditions in thousands			Number per 1,000 persons		
Total <sup>1</sup> -----	116	*	76	0.6	*	1.3
<u>Sex</u>						
Male-----	*	*	*	*	*	*
Female-----	67	*	*	0.6	*	*
<u>Color</u>						
White-----	116	*	76	0.7	*	1.4
All other-----	*	*	*	*	*	*
<u>Family income</u>						
Less than \$5,000-----	*	*	*	*	*	*
\$5,000 or more-----	61	*	*	0.4	*	*
<u>Education of head of family</u>						
Less than 12 years-----	68	*	*	0.8	*	*
12 years or more-----	*	*	*	*	*	*
<u>Place of residence</u>						
All SMSA-----	65	*	*	0.5	*	*

<sup>1</sup>Includes unknown income and education.

Table 14. Prevalence of tuberculosis reported in health interviews and number of conditions per 1,000 persons, by age and selected characteristics: United States, 1970

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

Characteristic	Active tuberculosis						Arrested tuberculosis					
	All ages	Under 45 years	45 years and over	All ages	Under 45 years	45 years and over	All ages	Under 45 years	45 years and over	All ages	Under 45 years	45 years and over
	Prevalence of conditions in thousands			Number per 1,000 persons			Prevalence of conditions in thousands			Number per 1,000 persons		
Total <sup>1</sup> -----	157	89	68	0.8	0.6	1.1	137	*	90	0.7	*	1.5
<u>Sex</u>												
Male-----	95	*	*	1.0	*	*	76	*	62	0.8	*	2.2
Female-----	63	*	*	0.6	*	*	61	*	*	0.6	*	*
<u>Color</u>												
White-----	132	73	59	0.8	0.6	1.1	131	*	85	0.7	*	1.6
All other-----	*	*	*	*	*	*	*	*	*	*	*	*
<u>Family income</u>												
Less than \$5,000-----	59	*	*	1.4	*	*	*	*	*	*	*	*
\$5,000 or more-----	97	60	*	0.7	0.6	*	86	*	*	0.6	*	*
<u>Education of head of family</u>												
Less than 12 years-----	104	57	*	1.2	1.1	*	76	*	51	0.9	*	1.5
12 years or more-----	52	*	*	0.5	*	*	60	*	*	0.5	*	*
<u>Place of residence</u>												
All SMSA-----	111	66	*	0.9	0.7	*	79	*	58	0.6	*	1.5
Outside SMSA-----	*	*	*	*	*	*	58	*	*	0.8	*	*
<u>Geographic region</u>												
South-----	90	*	*	1.4	*	*	52	*	*	0.8	*	*

<sup>1</sup>Includes unknown income and education.

Table 15. Population used in obtaining rates shown in this publication, by age and selected characteristics: United States, 1970

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

Characteristic	All ages	Under 17 years	17-44 years	45-64 years	65 years and over	Under 45 years	45 years and over	Under 6 years	6-16 years
Number of persons in thousands									
Total <sup>1</sup> -----	199,843	66,711	72,833	41,302	18,997	139,544	60,299	21,682	45,028
<u>Sex</u>									
Male-----	96,258	33,948	34,576	19,644	8,090	68,523	27,734	11,087	22,860
Female-----	103,585	32,763	38,257	21,658	10,907	71,020	32,565	10,595	22,168
<u>Color</u>									
White-----	175,084	56,299	63,985	37,343	17,457	120,283	54,801	17,977	38,322
All other-----	24,759	10,412	8,848	3,958	1,540	19,260	5,498	3,706	6,706
<u>Family income</u>									
Less than \$5,000-----	42,065	11,259	11,885	8,165	10,756	23,144	18,921	4,050	7,208
Less than \$3,000-----	20,882	4,637	5,557	3,996	6,692	10,194	10,688	1,671	2,966
\$3,000-\$4,999-----	21,184	6,622	6,328	4,169	4,064	12,950	8,233	2,379	4,242
\$5,000 or more-----	144,187	51,143	56,894	29,645	6,505	108,037	36,151	16,356	34,787
\$5,000-\$9,999-----	66,969	24,139	25,729	13,147	3,954	49,868	17,102	8,661	15,478
\$5,000-\$6,999-----	27,315	9,400	10,157	5,555	2,203	19,557	7,758	3,502	5,898
\$7,000-\$9,999-----	39,655	14,739	15,572	7,593	1,751	30,311	9,344	5,159	9,580
\$10,000 or more-----	77,218	27,004	31,164	16,498	2,551	58,169	19,049	7,695	19,310
\$10,000-\$14,999-----	46,959	17,233	19,207	9,097	1,422	36,440	10,520	5,284	11,949
\$15,000 or more-----	30,259	9,772	11,958	7,401	1,129	21,729	8,530	2,411	7,360
<u>Education of head of family</u>									
Less than 12 years-----	85,332	26,530	25,269	20,865	12,667	51,799	33,533	7,914	18,616
Less than 9 years-----	49,146	13,547	12,524	13,231	9,844	26,071	23,075	3,783	9,763
9-11 years-----	36,186	12,983	12,745	7,634	2,824	25,728	10,458	4,131	8,852
12 years or more-----	111,596	39,263	46,756	19,711	5,866	86,019	25,577	13,522	25,741
12 years-----	61,636	22,326	24,781	11,346	3,183	47,107	14,529	7,606	14,719
13 years or more-----	49,960	16,937	21,975	8,365	2,683	38,912	11,048	5,916	11,021
<u>Usual activity status</u>									
Preschool (Under 6 years)--	21,682	21,682	...	...	...	21,682	...	21,682	...
School-age (6-16 years)----	45,028	45,028	...	...	...	45,028	...	...	45,028
Usually working (17 years and over)-----	72,673	...	42,588	27,183	2,902	42,588	30,085	...	...
Usually keeping house (female, 17 years and over)-----	38,008	...	17,777	11,522	8,709	17,777	20,232	...	...
Retired (45 years and over)-----	8,188	...	...	1,611	6,576	...	8,188	...	...
Other (17 years and over)--	14,263	...	12,468	985	810	12,468	1,795	...	...
<u>Place of residence</u>									
All SMSA-----	129,914	42,759	48,426	27,002	11,727	91,185	38,730	14,014	28,745
Central city-----	58,474	18,283	21,685	12,402	6,104	39,968	18,505	6,442	11,841
Not central city-----	71,441	24,476	26,740	14,600	5,624	51,216	20,224	7,571	16,905
Outside SMSA-----	69,928	23,952	24,407	14,299	7,270	48,359	21,569	7,669	16,283
Nonfarm-----	61,906	21,337	22,092	12,170	6,306	43,430	18,476	7,007	14,330
Farm-----	8,022	2,614	2,315	2,129	964	4,929	3,093	662	1,953
<u>Geographic region</u>									
Northeast-----	48,727	15,607	17,554	10,620	4,946	33,161	15,566	5,114	10,493
North Central-----	55,530	19,003	19,827	11,360	5,340	38,830	16,700	6,197	12,806
South-----	62,487	21,169	23,016	12,457	5,845	44,185	18,302	6,846	14,323
West-----	33,098	10,932	12,436	6,865	2,866	23,367	9,731	3,525	7,407

<sup>1</sup>Includes unknown income and education.

NOTE: For official population estimates for more general use, see U.S. Bureau of the Census reports on the civilian population of the United States in Current Population Reports, Series P-20, P-25, and P-60.

## APPENDIX I

### TECHNICAL NOTES ON METHODS

#### Background of This Report

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

The Health Interview Survey utilizes a questionnaire which obtains information on personal and demographic characteristics, illnesses, injuries, impairments, chronic conditions, and other health topics. As data relating to each of these various broad topics are tabulated and analyzed, separate reports are issued which cover one or more of the specific topics. The present report is based on data collected in household interviews during 1970.

The population covered by the sample for the Health Interview Survey is the civilian, non-institutionalized population of the United States living at the time of the interview. The sample does not include members of the Armed Forces or U.S. nationals living in foreign countries. It should also be noted that the estimates shown do not represent a complete measure of any given topic during the specified calendar period since data are not collected in the interview for persons who died during the reference period. For many types of statistics collected in the survey, the reference period covers the 2 weeks prior to the interview week. For such a short period, the contribution by decedents to a total inventory of conditions or services should be very small. However, the contribution by decedents during a long reference period (e.g., 1 year) might be sizable, especially for older persons.

#### Statistical Design of the Health Interview Survey

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

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

The first stage of the sample design consists of drawing a sample of 357 primary sampling units (PSU's) from approximately 1,900 geographically defined PSU's. A PSU consists of a county, a small group of contiguous counties, or a standard metropolitan statistical area. The PSU's collectively cover the 50 States and the District of Columbia.

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

Area segments which are defined geographically.

List segments, using 1960 census registers as the frame.

Permit segments, using updated lists of building permits issued in sample PSU's since 1960.

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

The usual HIS sample consists of approximately 8,000 segments which yield a probability sample of about 134,000 persons in 42,000 interviewed households in a year. However, the first quarter of 1970 contained a sample reduction of 7 full weeks of interviewing due to budgetary restrictions, whereas the remaining quarters each contained the full 13 weeks. During the 45 weeks in 1970 the sample was composed of approximately 37,000 households containing about 116,000 persons living at the time of the interview. Comparability with previous annual estimates is not affected by the reduced sample since the weighting procedure employed by the Health Interview Survey adjusts for the missing weeks although the sampling errors are somewhat higher for 1970 estimates (see statement on adjustment of relative sampling error on page 34).

Descriptive material on data collection, field procedures, and questionnaire development in the HIS has been published<sup>5</sup> as well as a detailed description of the sample design<sup>6</sup> and a report on the estimation procedure and the

method used to calculate sampling errors of estimates derived from the survey.<sup>7</sup>

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

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

1. *Inflation by the reciprocal of the probability of selection.*—The probability of selection is the product of the probabilities of selection from each step of selection in the design (PSU, segment, and household).
2. *Nonresponse adjustment.*—The estimates are inflated by a multiplication factor which has as its numerator the number of sample households in a given segment and as its denominator the number of households interviewed in that segment.
3. *First-stage ratio adjustment.*—Sampling theory indicates that the use of auxiliary information which is highly correlated with the variables being estimated improves the reliability of the estimates. To reduce the variability between PSU's within a region, the estimates are ratio adjusted to the 1960 populations within six color-residence classes.
4. *Poststratification by age-sex-color.*—The estimates are ratio adjusted within each of 60 age-sex-color cells to an independent estimate of the population of each cell for the survey period. These independent estimates are prepared by the Bureau of the Census. Both the first-stage and poststratified ratio adjustments take the form of multiplication factors applied to the weight of each elementary unit

---

<sup>5</sup> National Center for Health Statistics: Health survey procedure: concepts, questionnaire development, and definitions in the Health Interview Survey. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 1-No. 2. Public Health Service. Washington. U.S. Government Printing Office, May 1964.

<sup>6</sup> U.S. National Health Survey: The statistical design of the health household interview survey. *Health Statistics*. PHS Pub. No. 584-A2. Public Health Service. Washington, D.C., July 1958.

---

<sup>7</sup> National Center for Health Statistics: Estimation and sampling variance in the Health Interview Survey. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 38. Public Health Service. Washington. U.S. Government Printing Office, June 1970.

(person, household, condition, and hospitalization).

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

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

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

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

### General Qualifications

*Nonresponse.*—Data were adjusted for nonresponse by a procedure which imputes to persons in a household which was not interviewed the characteristics of persons in households in

the same segment which were interviewed. The total noninterview rate was about 5 percent—1 percent was refusal, and the remainder was primarily due to the failure to find an eligible respondent at home after repeated calls.

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

There are limitations to the accuracy of diagnostic and other information collected in household interviews. For diagnostic information, the household respondent can usually pass on to the interviewer only the information the physician has given to the family. For conditions not medically attended, diagnostic information is often no more than a description of symptoms. However, other facts, such as the number of disability days caused by the condition, can be obtained more accurately from household members than from any other source since only the persons concerned are in a position to report this information.

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

*Population figures.*—Some of the published tables include population figures for specified categories. Except for certain overall totals by age, sex, and color, which are adjusted to independent estimates, these figures are based on the sample of households in the HIS. These are given primarily to provide denominators for rate computation, and for this purpose are more appropriate for use with the accompanying meas-

ures of health characteristics than other population data that may be available. With the exception of the overall totals by age, sex, and color mentioned above, the population figures differ from figures (which are derived from different sources) published in reports of the Bureau of the Census. Official population estimates are presented in Bureau of the Census reports in Series P-20, P-25, and P-60.

### Reliability of Estimates

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

As in any survey, the results are also subject to reporting and processing errors and errors due to nonresponse. To the extent possible, these types of errors were kept to a minimum by methods built into survey procedures. Although it is very difficult to measure the extent of bias in the Health Interview Survey, a number of studies have been conducted to study this problem. The results have been published in several reports.<sup>8-11</sup>

---

<sup>8</sup> National Center for Health Statistics: Health interview responses compared with medical records. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 7. Public Health Service. Washington. U.S. Government Printing Office, July 1965.

<sup>9</sup> National Center for Health Statistics: Comparison of hospitalization reporting in three survey procedures. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 8. Public Health Service. Washington. U.S. Government Printing Office, July 1965.

<sup>10</sup> National Center for Health Statistics: Interview data on chronic conditions compared with information derived from medical records. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 23. Public Health Service. Washington. U.S. Government Printing Office, May 1967.

<sup>11</sup> National Center for Health Statistics: The influence of interviewer and respondent psychological and behavioral variables on the reporting in household interviews. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 26. Public Health Service. Washington. U.S. Government Printing Office, Mar. 1968.

The standard error is primarily a measure of sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the standard error also reflects part of the variation which arises in the measurement process. It does not include estimates of any biases which might be in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error and about 99 out of 100 that it would be less than 2½ times as large.

The relative standard error of an estimate is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percentage of the estimate. For this report, asterisks are shown for any cell with more than a 30-percent relative standard error. Included in this appendix are charts from which the relative standard errors can be determined for estimates shown in the report. In order to derive relative errors which would be applicable to a wide variety of health statistics and which could be prepared at a moderate cost, a number of approximations were required. As a result, the charts provide an estimate of the approximate relative standard error rather than the precise error for any specific aggregate or percentage. Since the sampling error charts are based on the full HIS design, the sampling errors derived from the charts for 1970 estimates must be adjusted to reflect the sample reduction made during the first quarter of 1970. For annual statistics the adjustment factor is 1.08, and for first-quarter estimates it is 1.5.

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

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

*Medium range.*—This class consists of other statistics for which the measure for a single individual during the reference period used in data collection will rarely lie outside the range 0 to 5.

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

In addition to classifying variables according to whether they are narrow-, medium-, or wide-range, statistics in the survey are further defined as:

*Type A.* Statistics on prevalence and incidence for which the period of reference in the questionnaire is 12 months.

*Type B.* Incidence-type statistics for which the period of reference in the questionnaire is 2 weeks.

*Type C.* Statistics for which the reference period is 6 months.

Only the charts on sampling error applicable to data contained in this report are presented.

*General rules for determining relative sampling errors.*—The “guide” on page 35, together with the following rules, will enable the reader to determine approximate relative standard errors from the charts for estimates presented in this report.

Rule 1. *Estimates of aggregates:* Approximate relative standard errors for estimates of aggregates such as the number of persons with a given characteristic are obtained from appropriate curves on page 36. The number of persons in the total U.S. population or in an age-sex-color class of the total population is adjusted to official Bureau of the Census figures and is not subject to sampling error.

Rule 2. *Estimates of percentages in a percent distribution:* Relative standard errors for percentages in a percent distribution of a total are obtained from appropriate curves on page 37. For values which

do not fall on one of the curves presented in the chart, visual interpolation will provide a satisfactory approximation.

Rule 3. *Estimates of rates where the numerator is a subclass of the denominator:* This rule applies for prevalence rates or where a unit of the numerator occurs, with few exceptions, only once in the year for any one unit in the denominator. For example, in computing the rate of visual impairments per 1,000 population, the numerator consisting of persons with the impairment is a subclass of the denominator, which includes all persons in the population. Such rates if converted to rates per 100 may be treated as though they were percentages and the relative standard errors obtained from the chart P4AN-M. Rates per 1,000, or on any other base, must first be converted to rates per 100; then the percentage chart will provide the relative standard error per 100.

Rule 4. *Estimates of rates where the numerator is not a subclass of the denominator:* This rule applies where a unit of the numerator often occurs more than once for any one unit in the denominator. For example, in the computation of the number of persons injured per 100 currently employed persons per year, it is possible that a person in the denominator could have sustained more than one of the injuries included in the numerator. Approximate relative standard errors for rates of this kind may be computed as follows:

(a) Where the denominator is the total U.S. population or includes all persons in one or more of the age-sex-color groups of the total population, the relative error of the rate is equivalent to the relative error of the numerator, which can be obtained directly from the appropriate chart.

(b) In other cases the relative standard error of the numerator and of the denominator can be obtained from the appropriate curve. Square each

of these relative errors, add the resulting values, and extract the square root of the sum. This procedure will result in an upper bound on the standard error and often will overstate the error.

Rule 5. *Estimates of difference between two statistics (mean, rate, total, etc.):* The standard error of a difference is approximately the square root of the sum of the squares of each standard error considered separately. A formula for the standard error of a difference,

$$d = X_1 - X_2$$

is

$$\sigma_d = \sqrt{(X_1 V_{x1})^2 + (X_2 V_{x2})^2}$$

where  $X_1$  is the estimate for class 1,  $X_2$  is the estimate for class 2, and  $V_{x1}$  and  $V_{x2}$  are the relative errors of  $X_1$  and  $X_2$  respectively. This formula will represent the actual standard error quite accurately for the difference between separate and uncorrelated characteristics although it is only a rough approximation in most other cases. The relative standard error of each estimate involved in such a difference can be determined by one of the four rules above, whichever is appropriate.

### Guide to Use of Relative Standard Error Charts

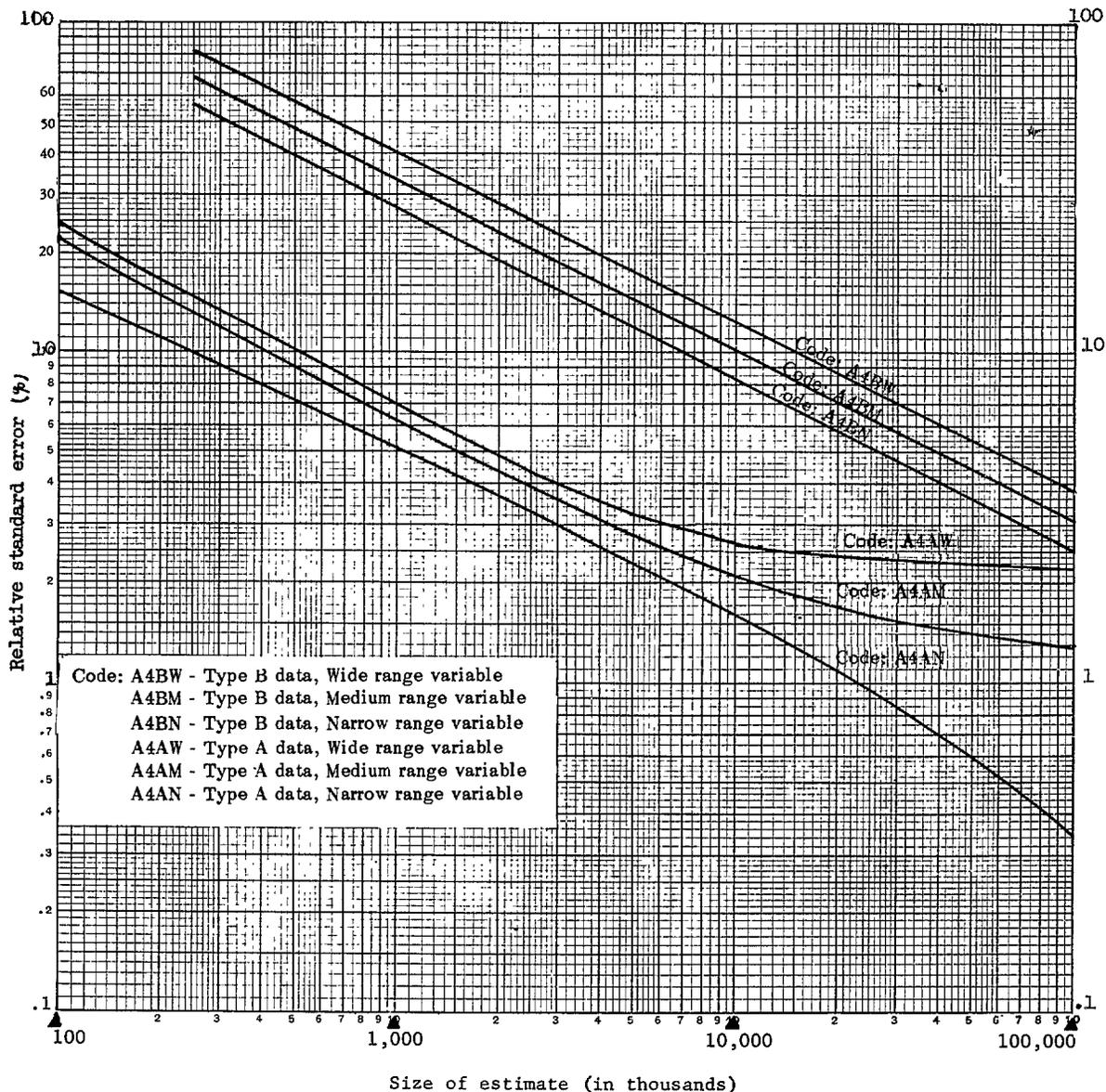
The code shown below identifies the appropriate curve to be used in estimating the relative standard error of the statistic described. The four components of each code describe the statistic as follows:

- (1) A = aggregate, P = percentage; (2) the number of calendar quarters of data collection; (3) the type of statistic as described on page 33; and (4) the range of the statistic as described on pages 33 and 34.

Statistic	Use:		
	Rule	Code	On page
Number of:			
Persons in the U.S. population or any age-sex category thereof . . . . .		Not subject to sampling error	
Persons in any other population group . . . . .	1	A4AN	36
Chronic conditions, by type . . . . .	1	A4AN	36
Prevalence per 1,000 persons . . . . .	3	P4AN-M	37
Percentage of conditions by measures of impact . . . . .	2	P4AN-M	37
Percentage distribution of conditions by:			
Frequency of bed disability days or physician visits in past year . . . . .	2	P4AN-M	37
Frequency or degree of botheration . . . . .	2	P4AN-M	37
Rates per condition per year:			
Restricted activity or bed disability days . . . . .	4(b)	Numer.: A4BW Demon.: A4AN	36 36



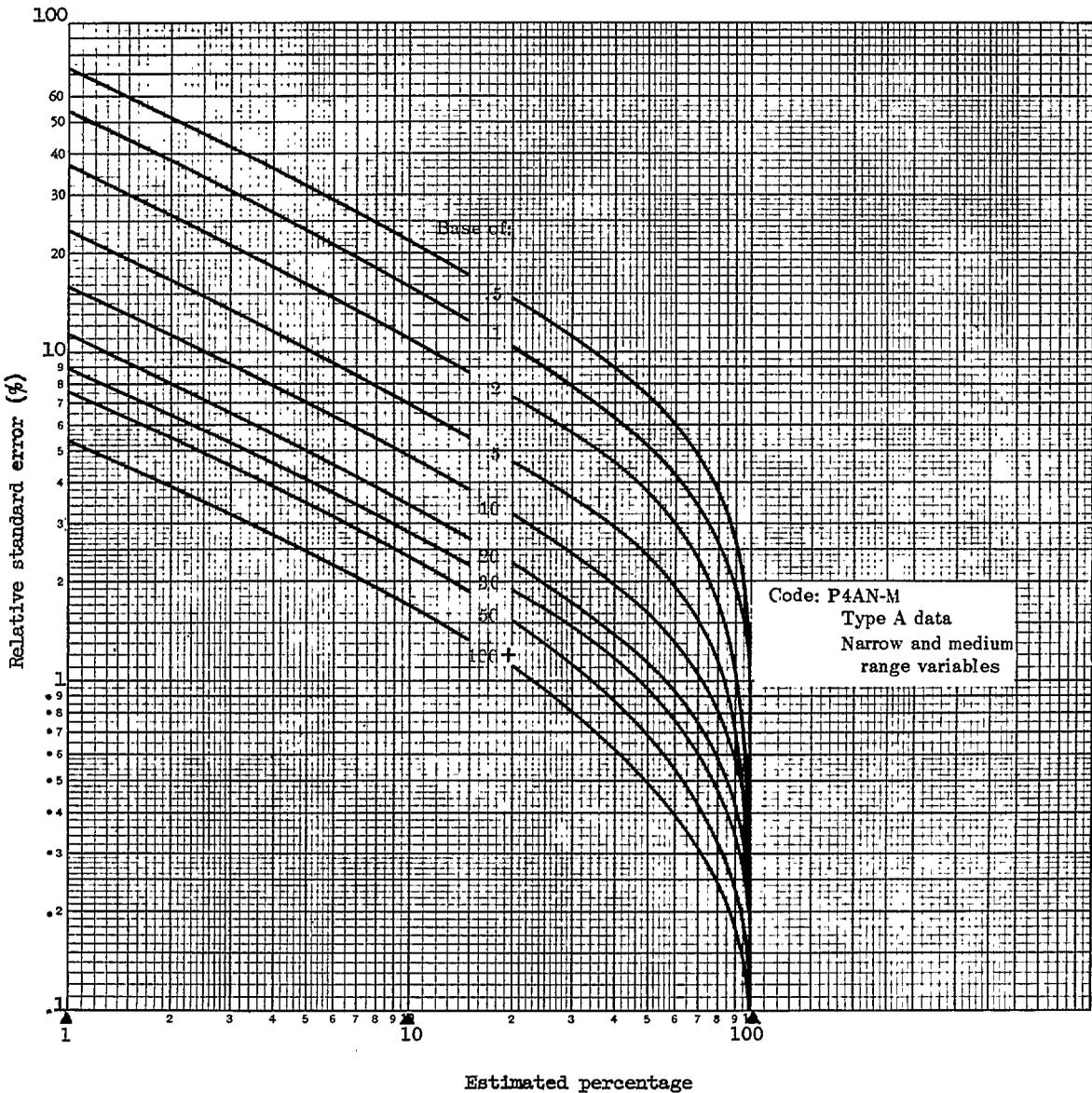
Relative standard errors for aggregates based on four quarters of data collection  
for data of all types and ranges



Example of use of chart: An aggregate of 2,000,000 (on scale at bottom of chart) for a Narrow range Type A statistic (code: A4AN) has a relative standard error of 3.6 percent, (read from scale at left side of chart), or a standard error of 72,000 (3.6 percent of 2,000,000). For a Wide range Type B statistic (code: A4BW), an aggregate of 6,000,000 has a relative error of 16.0 percent or a standard error of 960,000 (16 percent of 6,000,000).

NOTE: As a result of a sample reduction during January-March 1970, the sampling error for annual estimates should be adjusted by a factor of 1.08.

Relative standard errors for percentages based on four quarters of data collection  
 for type A data, Narrow and Medium range  
 (Base of percentage shown on curves in millions)



Example of use of chart: An estimate of 20 percent (on scale at bottom of chart) based on an estimate of 10,000,000 has a relative standard error of 3.2 percent (read from the scale at the left side of the chart), the point at which the curve for a base of 10,000,000 intersects the vertical line for 20 percent. The standard error in percentage points is equal to 20 percent X 3.2 percent or 0.64 percentage points.

NOTE: As a result of a sample reduction during January-March 1970, the sampling error for annual estimates should be adjusted by a factor of 1.08.

## APPENDIX II

### DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

#### Terms Relating to Conditions

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

Conditions except impairments are classified by type according to the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States*,<sup>12</sup> with certain modifications adopted to make the code more suitable for a household interview survey.

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

Allergy, any  
Arthritis or rheumatism  
Asthma  
Cancer  
Cleft palate  
Club foot  
Condition present since birth  
Deafness or serious trouble with hearing  
Diabetes  
Epilepsy  
Hardening of the arteries  
Hay fever  
Heart trouble  
Hemorrhoids or piles  
Hernia or rupture  
High blood pressure  
Kidney stones  
Mental illness  
Missing fingers, hand, or arm—toes, foot, or leg  
Palsy  
Paralysis of any kind  
Permanent stiffness or deformity of the foot, leg, fingers, arm, or back  
Prostate trouble  
Repeated trouble with back or spine  
Rheumatic fever  
Serious trouble with seeing, even when wearing glasses  
Sinus trouble, repeated attacks of  
Speech defect, any  
Stomach ulcer  
Stroke  
Thyroid trouble or goiter  
Tuberculosis  
Tumor, cyst, or growth  
Varicose veins, trouble with

---

<sup>12</sup> National Center for Health Statistics: *Eighth Revision International Classification of Diseases, Adapted for Use in the United States*. PHS Pub. No. 1693. Public Health Service. Washington. U.S. Government Printing Office, 1967.

*Prevalence of conditions.*—In general, prevalence of conditions is the estimated number of conditions of a specified type existing at a speci-

fied time or the average number existing during a specified interval of time. The prevalence of chronic conditions is defined as the number of chronic cases reported to be present or assumed to be present at the time of the interview. Those assumed to be present at the time of the interview are cases described by the respondent in terms of one of the diseases on the list of conditions always considered chronic (see definition of chronic condition above) and reported to have been present at some time during the 12-month period prior to the interview.

*Incidence of conditions.*—The incidence of conditions is the estimated number of conditions having their onset in a specified time period. As previously mentioned, minor acute conditions involving neither restricted activity nor medical attention are excluded from the statistics. The incidence data shown in some reports are further limited to various subclasses of conditions, such as “incidence of conditions involving bed disability.”

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

*Persons with chronic conditions.*—The estimated number of persons with chronic conditions is based on the number of persons who at the time of the interview were reported to have one or more chronic conditions.

*Bed-disabling condition.*—A condition with onset in the past 2 weeks involving at least 1 day of bed disability is called a bed-disabling condition. (See “Bed-disability day” under “Terms Relating to Disability.”)

## Terms Relating to Disability

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

*Disability day.*—Short-term disability days are classified according to whether they are days of restricted activity, bed days, hospital days, work-loss days, or school-loss days. All hospital

days are, by definition, days of bed disability; all days of bed disability are, by definition, days of restricted activity. The converse form of these statements is, of course, not true. Days lost from work and days lost from school are special terms which apply to the working and school-age populations only, but these too are days of restricted activity. Hence “days of restricted activity” is the most inclusive term used to describe disability days.

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

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

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

*Bed-disability day.*—A day of bed disability is one on which a person stays in bed for all or

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

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

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

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

Preschool children:

Inability to take part in ordinary play with other children.

School-age children:

Inability to go to school.

Housewives:

Inability to do any housework.

Workers and all other persons:

Inability to work at a job or business.

2. *Persons limited in amount or kind of major activity performed* (major activity refers to ability to work, keep house, or engage in school or preschool activities)

Preschool children:

Limited in amount or kind of play with other children, e.g., need special rest periods, cannot play strenuous games, or cannot play for long periods at a time.

School-age children:

Limited to certain types of schools or in school attendance, e.g., need special schools or special teaching or cannot go to school full time or for long periods at a time.

Housewives:

Limited in amount or kind of housework, e.g., cannot lift children, wash or iron, or do housework for long periods at a time.

Workers and all other persons:

Limited in amount or kind of work, e.g., need special working aids or special rest periods at work, cannot work full time or for long periods at a time, or cannot do strenuous work.

3. *Persons not limited in major activity but otherwise limited* (major activity refers to ability to work, keep house, or engage in school or preschool activities)

Preschool children:

Not classified in this category.

School-age children:

Not limited in going to school but limited in participation in athletics or other extracurricular activities.

Housewives:

Not limited in housework but limited in other activities such as church, clubs, hobbies, civic projects, or shopping.

Workers and all other persons:

Not limited in regular work activities but limited in other activities such as church, clubs, hobbies, civic projects, sports, or games.

4. *Persons not limited in activities* (includes persons whose activities are not limited in any of the ways described above)

## Terms Relating to Physician Visits

*Physician visit.*—A physician visit is defined as consultation with a physician, in person or by telephone, for examination, diagnosis, treatment, or advice. The visit is considered to be a physician visit if the service is provided directly by the physician or by a nurse or other person acting under a physician's supervision. For the purpose of this definition "physician" includes doctors of medicine and osteopathic physicians. The term "doctor" is used in the interview rather than "physician" because of popular usage. However, the concept toward which all instructions are directed is that which is described here.

## Demographic Terms

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

*Color.*—The population is divided into two color groups, "white" and "all other." "All other" includes Negro, American Indian, Chinese, Japanese, and any other race. Mexican persons are included with "white" unless definitely known to be Indian or of another race.

*Income of family or of unrelated individuals.*—Each member of a family is classified 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 preceding the week of interview. Income from all sources is included, e.g., wages, salaries, rents from property, pensions, and help from relatives.

*Education.*—The categories of education status show the years of school completed. Only years completed in regular schools, where persons are given a formal education, are included. A "regular" school is one which advances a person toward an elementary or high school diploma or a college, university, or professional

school degree. Thus education in vocational, trade, or business schools outside the regular school system is not counted in determining the highest grade of school completed.

*Education of head of family or of unrelated individuals.*—Each member of a family is classified according to the education of the head 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 education.

*Usual activity.*—All persons in the population are classified according to their usual activity during the 12-month period prior to the week of interview. The "usual" activity, in case more than one is reported, is the one at which the person spent the most time during the 12-month period. Children under 6 years of age are classified as "preschool." All persons aged 6-16 years are classified as "school age."

The categories of usual activity used in this report for persons aged 17 years and over are *usually working, usually going to school, usually keeping house, retired, and other activity*. For several reasons these categories are not comparable with somewhat similarly named categories in official Federal labor force statistics. First, the responses concerning usual activity are accepted without detailed questioning since the objective of the question is not to estimate the numbers of persons in labor force categories but to identify crudely certain population groups which may have differing health problems. Second, the figures represent the usual activity status over the period of an entire year, whereas official labor force statistics relate to a much shorter period, usually 1 week. Third, the minimum age for usually working persons is 17 in the Health Interview Survey, and the official labor force categories include all persons aged 14 or older. Finally, in the definitions of specific categories which follow, certain marginal groups are classified differently to simplify procedures.

*Usually working* includes persons 17 years of age or older who are paid employees; self-employed in their own business, profession, or in farming; or unpaid employees in a family business or

farm. Work around the house or volunteer or unpaid work such as for a church is not counted as working.

*Usually going to school* includes persons 17 years of age or older whose major activity is going to school.

*Usually keeping house* includes female persons 17 years of age or older whose major activity is described as "keeping house" and who cannot be classified as "working."

*Retired* includes persons 45 years old and over who consider themselves to be retired. In case of doubt, a person 45 years of age or older is counted as retired if he or she has either voluntarily or involuntarily stopped working, is not looking for work, and is not described as "keeping house." A retired person may or may not be able to work.

*Other activity* includes all persons 17 years of age or older not classified as "working," "retired," or "going to school," and females 17 years of age or older not classified as "keeping house."

*Geographic region.*—For the purpose of classifying the population by geographic area, the States are grouped into four regions. These regions, which correspond to those used by the U.S. Bureau of the Census, are shown in figure I.

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

*Standard metropolitan statistical areas.*—The definitions and titles of SMSA's are established by the U.S. Office of Management and Budget with the advice of the Federal Committee on Standard Metropolitan Statistical Areas. There were 212 SMSA's defined for the 1960 decennial census.

The definition of an individual SMSA involves two considerations: first, a city or cities of specified population which constitute the central city

Figure I.

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

and identify the county in which it is located as the central county; second, economic and social relationships with contiguous counties (except in New England) which are metropolitan in character so that the periphery of the specific metropolitan area may be determined. SMSA's are not limited by State boundaries. In New England SMSA's consist of towns and cities, rather than counties. The metropolitan population in this report is based on SMSA's as defined in the 1960 census and does not include any subsequent additions or changes.

*Central cities.*—Each SMSA must include at least one central city. The complete title of an SMSA identifies the central city or cities. If only one central city is designated, then it must have

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

*Farm and nonfarm residence.*—The population residing outside SMSA's is subdivided into the farm population, which comprises all non-SMSA residents living on farms, and the nonfarm population, which comprises the remaining outside

SMSA population. The farm population includes persons living on places of 10 acres or more from which sales of farm products amounted to \$50 or more during the previous 12 months or on places of less than 10 acres from which sales of farm products amounted to \$250 or more during the preceding 12 months. Other persons living outside an SMSA were classified as non-farm if their household paid rent for the house but their rent did not include any land used for farming.

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



APPENDIX III

PROBE QUESTIONS AND CONDITION PAGES USED TO OBTAIN INFORMATION ABOUT CHRONIC RESPIRATORY CONDITIONS

<p>This survey is being conducted to collect information on the Nation's health. I will ask about visits to doctors and dentists, illness in the family, and other health related items. (HAND CALENDAR)</p> <p>The next few questions refer to the past 2 weeks, the 2 weeks outlined in red on that calendar, beginning Monday, _____ (date), and ending this past Sunday, _____ (date).</p>		
5a. During those 2 weeks, did --- stay in bed because of any illness or injury?		5a. 00 N } Y (5b) If age: 17+ (5c) 6-16 (5d) Under 6 (5f)
b. During that 2-week period, how many days did --- stay in bed all or most of the day?		b. ___ Days
c. During those 2 weeks, how many days did illness or injury keep --- from work? (For females): not counting work around the house.		c. ___ WL days (5e) 00 <input type="checkbox"/> None (5f)
d. During those 2 weeks, how many days did illness or injury keep --- from school?		d. ___ SL days (5e) 00 <input type="checkbox"/> None (5f)
<p>If BOTH bed days AND work or school loss days, ask:</p>		
e. On how many of these --- days lost from { work school } did --- stay in bed all or most of the day?		e. ___ Days } (5f) 00 <input type="checkbox"/> None
f. (NOT COUNTING the day(s) { in bed lost from work lost from school } ) Were there any (other) days during the past 2 weeks that --- cut down on the things he usually does because of illness or injury?		f. 1 Y (5g) 2 N (6)
g. (Again, not counting the day(s) { in bed lost from work lost from school } ) During that period, how many days did he cut down for as much as a day?		g. ___ Days (6a) 00 <input type="checkbox"/> None (6)
<p>If 1+ days in Q. 5, ask 6; otherwise go to next person.</p>		
6a. What condition caused --- to { stay in bed miss work miss school cut down } during the past 2 weeks?		6a. Enter condition in item C Ask 6b
b. Did any other condition cause him to { stay in bed miss work miss school cut down } during that period?		b. Y (6c) N (NP)
c. What condition?		c. Enter conditions in item C Resak 6b

PROBE QUESTIONS

10. During the past 2 weeks (the 2 weeks outlined in red on that calendar) how many times did --- see a medical doctor? (Besides those visits)		10.	<input type="checkbox"/> None ____ Number of visits (NP)
11a. During that 2-week period did anyone in the family go to a doctor's office or clinic for shots, X-rays, tests, or examinations?	Y (11b and c) N (12)		
b. Who was this? - Mark "Doctor visit" box in person's column.		11b.	<input type="checkbox"/> Doctor visit
c. Anyone else? If "Doctor visit," ask: d. How many times did --- visit the doctor during that period?	Y (11b and c) N (12d)		
12a. During that period, did anyone in the family get any medical advice from a doctor over the telephone?	Y (12b and c) N (13)		
b. Who was the phone call about? - Mark "Phone call" box in person's column.		12b.	<input type="checkbox"/> Phone call
c. Any calls about anyone else? If "Phone call," ask: d. How many telephone calls were made to get medical advice about --- ?	Y (12b and c) N (12d)		
13a. For what condition did --- see or talk to a doctor during the past 2 weeks? Fill item C. (DR. VISITS), from Q.'s 10-12 for all persons. Ask Q. 13a for each person with visits in DR. VISIT box.		13a.	<input type="checkbox"/> Condition (item C THEN 13d) <input type="checkbox"/> Pregnancy (13e) <input type="checkbox"/> No condition
b. Did --- see or talk to a doctor about any specific condition?		b.	Y      N (NP)
c. What condition?		c.	Enter condition in item C and ask 13d
d. During that period, did --- see or talk to a doctor about any other condition?		d.	Y (13c)    N (NP)
e. During the past 2 weeks was --- sick because of her pregnancy?		e.	Y      N (NP)
f. What was the matter? - Anything else?		f.	Enter condition in item C (NP)

PROBE QUESTIONS

**16a. Now I'm going to read a list of conditions;**

During the past 12 months, did anyone in the family (you, your --, etc.) have any of these conditions --

If "Yes," ask b and c

b. Who was this? -- Enter name of condition and letter of line where reported in appropriate persons column(s) in item C.

c. During the past 12 months did anyone else have . . . ?

A. Bronchitis?	Y	N
B. Bronchiectasis?	Y	N
C. Asthma?	Y	N
D. Hay fever?	Y	N
E. Nasal polyp?	Y	N

Do not circle "Y" and make no entry in item C for cold; flu; red, sore, or strep throat; or "virus" reported in answer to question 16.

			During the past 12 months did anyone in the family have . . . ? If "Yes," ask b and c					
F. Sinus trouble?	Y	N	J. Tumor, cyst, or growth of the bronchial tube or lung?	Y	N	O. Tumor, cyst, or growth of the throat, larynx, or trachea?	Y	N
G. Deflected or deviated nasal septum?	Y	N	K. Emphysema?	Y	N	P. Any work-related respiratory condition such as dust on the lungs, silicosis or pneumoconiosis?	Y	N
H. *Tonsillitis or enlargement of the tonsils or adenoids?	Y	N	L. Pleurisy?	Y	N	Q. During the past 12 months did anyone in the family have any other respiratory, lung, or pulmonary condition? If "Yes," ask: Who was this? -- What was the condition? (Enter in item C)	Y	N
			M. Tuberculosis?	Y	N			
I. *Laryngitis?	Y	N	N. Abscess of the lung?	Y	N			

\*If reported in question 16 only, ask:

1. How many times did -- have . . . in the past 12 months? -- If 2+, enter in item C.

If only 1 time, ask:

2. How long did it last? -- If 1 month or longer, enter in item C. If less than 1 month, do not record.

If tonsils or adenoids removed during the past 12 months, enter in item C.

Do not circle "Y" and make no entry in item C for cold; flu; red, sore, or strep throat; or "virus" reported in answer to question 16.

**PROBE QUESTIONS**

Ages 17+	<p>17a. What was --- doing most of the past 12 months -- (For males): <b>working or doing something else?</b> If "something else," ask: (For females): <b>keeping house, working or doing something else?</b></p> <p>b. What was --- doing? If 45+ years and was not "working," "keeping house," or "going to school," ask: c. Is --- retired? d. If "Retired," ask: <b>Did he retire because of his health?</b></p>	17. and 18. 1 <input type="checkbox"/> Working (22a) 2 <input type="checkbox"/> Keeping house (22b) 3 <input type="checkbox"/> Retired, health (21) 4 <input type="checkbox"/> Retired, other (21) 5 <input type="checkbox"/> Going to school (24) 6 <input type="checkbox"/> 17+ something else (21) 7 <input type="checkbox"/> 6-16 something else (23)				
Ages 6 - 16	<p>18a. What was --- doing most of the past 12 months -- going to school or doing something else? If "something else," ask: b. What was --- doing?</p>					
Ages under 6		0 <input type="checkbox"/> 1-5 yrs. (19) 0 <input type="checkbox"/> Under 1 (20)				
19a. Is --- able to take part at all in ordinary play with other children?	19a.	Y 1 N (26)				
b. Is he limited in the kind of play he can do because of his health?	b.	2 Y (26) N				
c. Is he limited in the amount of play because of his health?	c.	2 Y (26) N (25)				
20a. Is --- limited in any way because of his health?	20a.	Y 5 N (NP)				
b. In what way is he limited?	b.	_____ (26)				
21a. Does --- health now keep him from working?	21a.	1 Y (26) N				
b. Is he limited in the kind of work he could do because of his health?	b.	2 Y (26) N				
c. Is he limited in the amount of work he could do because of his health?	c.	2 Y (26) N				
d. Is he limited in the kind or amount of other activities because of his health?	d.	3 Y (26) N (25)				
22a. Does --- now have a job?	22a.	Y (22c) N				
b. In terms of health, is --- able to (work - keep house) at all?	b.	Y 1 N (26)				
c. Is he limited in the kind of (work - housework) he can do because of his health?	c.	2 Y (26) N				
d. Is he limited in the amount of (work - housework) he can do because of his health?	d.	2 Y (26) N				
e. Is he limited in the kind or amount of other activities because of his health?	e.	3 Y (26) N (25)				
23. In terms of health would --- be able to go to school?	23.	Y 1 N (26)				
24a. Does (would) --- have to go to a certain type of school because of his health?	24a.	2 Y (26) N				
b. Is he (would he be) limited in school attendance because of his health?	b.	2 Y (26) N				
c. Is he limited in the kind or amount of other activities because of his health?	c.	3 Y (26) N (25)				
25a. Is --- limited in ANY WAY because of a disability or health?	25a.	4 Y 5 N (NP)				
b. In what way is he limited? Record limitation, not condition	b.					
26. About how long has he <table border="0" style="display: inline-table; vertical-align: middle;"><tr><td rowspan="3" style="font-size: 2em; vertical-align: middle;">{</td><td>been limited in ---</td></tr><tr><td>been unable to ---</td></tr><tr><td>had to go to a certain type of school? }</td></tr></table>	{	been limited in ---	been unable to ---	had to go to a certain type of school? }	26.	000 <input type="checkbox"/> Less than 1 month 1 ___ Mos. 2 ___ Yrs.
{		been limited in ---				
		been unable to ---				
	had to go to a certain type of school? }					
27a. What (other) condition causes this limitation? If "old age" only, ask: Is this limitation caused by any specific condition?	27a.	Enter condition in item C and ask b <input type="checkbox"/> Old age only (NP)				
b. Is this limitation caused by any other condition?	b.	Y (Reask a and b) N				
If 2+ conditions reported in Q. 27a, ask: c. Which of these conditions would you say is the MAIN cause of his limitation?	c.	<input type="checkbox"/> Only 1 condition _____ Enter main condition				

PROBE QUESTIONS

CONDITION 1		FILL QUESTIONS 4-9 FOR ALL ACCIDENTS OR INJURIES																													
<b>1. Person number</b>	Name of condition	<b>4a. Did the accident happen during the past 2 years or before that time?</b> <input type="checkbox"/> During the past 2 years (4b) <input type="checkbox"/> Before 2 years (5a)																													
<b>2. When did -- last see or talk to a doctor about his . . . ?</b> 1 <input type="checkbox"/> In interview week (Reask 2),    1 <input type="checkbox"/> Past 2 wks. (Item C)    5 <input type="checkbox"/> 2-4 yrs. 2 <input type="checkbox"/> 2 wks. - 6 mos.    6 <input type="checkbox"/> 5+ yrs. 3 <input type="checkbox"/> Over 6-12 mos.    7 <input type="checkbox"/> Never 4 <input type="checkbox"/> 1 yr.		<b>b. When did the accident happen?</b> <input type="checkbox"/> Last week <input type="checkbox"/> 3-12 months <input type="checkbox"/> Week before <input type="checkbox"/> 1-2 years <input type="checkbox"/> 2 weeks-3 months																													
Examine "Name of condition" entry and mark <input type="checkbox"/> Accident or injury (4) <input type="checkbox"/> On Card C (Check item) <input type="checkbox"/> Neither (3a)		Ask for all accidents or injuries: <b>5a. At the time of the accident what part of the body was hurt? What kind of injury was it? Anything else?</b> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 50%;">Part(s) of body</th> <th style="width: 50%;">Kind of injury</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>		Part(s) of body	Kind of injury																										
Part(s) of body	Kind of injury																														
If "Doctor not talked to," record adequate description of condition. If "Doctor talked to," ask: <b>3a. What did the doctor say it was? - Did he give it a medical name?</b>		If accident happened more than 3 months ago, ask: <b>b. What part of the body is affected now? How is his -- affected? Is he affected in any other way?</b> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 5px;"> <thead> <tr> <th style="width: 50%;">Part(s) of body</th> <th style="width: 50%;">Present effects</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>		Part(s) of body	Present effects																										
Part(s) of body	Present effects																														
Do not ask for Cancer <b>b. What was the cause of . . . ?</b> <input type="checkbox"/> Accident or injury (4) If the entry in 3a or 3b includes the words: <table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td>Ailment</td> <td>Cyst</td> <td>Growth</td> <td>Tumor</td> <td rowspan="6" style="font-size: 2em; vertical-align: middle;">} Ask c:</td> </tr> <tr> <td>Asthma</td> <td>Defect</td> <td>Measles</td> <td>Ulcer</td> </tr> <tr> <td>Attack</td> <td>Disease</td> <td>Rupture</td> <td></td> </tr> <tr> <td>Condition</td> <td>Disorder</td> <td>Trouble</td> <td></td> </tr> </table>		Ailment	Cyst	Growth	Tumor	} Ask c:	Asthma	Defect	Measles	Ulcer	Attack	Disease	Rupture		Condition	Disorder	Trouble		<b>6a. Was a car, truck, bus, or other motor vehicle involved in the accident in any way?</b> 1 Y    2 N (7) <b>b. Was more than one vehicle involved?</b> Y    N <b>c. Was it (either one) moving at the time?</b> 1 Y    2 N												
Ailment	Cyst	Growth	Tumor	} Ask c:																											
Asthma	Defect	Measles	Ulcer																												
Attack	Disease	Rupture																													
Condition	Disorder	Trouble																													
<b>c. What kind of . . . is it?</b>  For allergy or stroke, ask: <b>d. How does the allergy (stroke) affect him?</b>		<b>7. Where did the accident happen?</b> 1 <input type="checkbox"/> At home (inside house) 2 <input type="checkbox"/> At home (adjacent premises) 3 <input type="checkbox"/> Street and highway (includes roadway and public sidewalk) 4 <input type="checkbox"/> Farm 5 <input type="checkbox"/> Industrial place (includes premises) 6 <input type="checkbox"/> School (includes premises) 7 <input type="checkbox"/> Place of recreation and sports, except at school 8 <input type="checkbox"/> Other (Specify) →																													
For an impairment or any of the following entries <table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td>Abscess</td> <td>Damage</td> <td>Paralysis</td> <td rowspan="12" style="font-size: 2em; vertical-align: middle;">} Ask e:</td> </tr> <tr> <td>Ache (except headache)</td> <td>Growth</td> <td>Rupture</td> </tr> <tr> <td>Bleeding</td> <td>Hemorrhage</td> <td>Sore</td> </tr> <tr> <td>Blood clot</td> <td>Infection</td> <td>Soreness</td> </tr> <tr> <td>Boil</td> <td>Inflammation</td> <td>Tumor</td> </tr> <tr> <td>Cancer</td> <td>Neuralgia</td> <td>Ulcer</td> </tr> <tr> <td>Cramps (except menstrual)</td> <td>Neuritis</td> <td>Varicose veins</td> </tr> <tr> <td>Cyst</td> <td>Pain</td> <td>Weak</td> </tr> <tr> <td></td> <td>Palsy</td> <td>Weakness</td> </tr> </table>		Abscess	Damage		Paralysis	} Ask e:	Ache (except headache)	Growth	Rupture	Bleeding	Hemorrhage	Sore	Blood clot	Infection	Soreness	Boil	Inflammation	Tumor	Cancer	Neuralgia	Ulcer	Cramps (except menstrual)	Neuritis	Varicose veins	Cyst	Pain	Weak		Palsy	Weakness	<b>8. Was -- at work at his job or business when the accident happened?</b> 1 Y    3 <input type="checkbox"/> While in Armed Services 2 N    4 <input type="checkbox"/> Under 17 at time of accident
Abscess	Damage	Paralysis	} Ask e:																												
Ache (except headache)	Growth	Rupture																													
Bleeding	Hemorrhage	Sore																													
Blood clot	Infection	Soreness																													
Boil	Inflammation	Tumor																													
Cancer	Neuralgia	Ulcer																													
Cramps (except menstrual)	Neuritis	Varicose veins																													
Cyst	Pain	Weak																													
	Palsy	Weakness																													
<b>e. What part of the body is affected?</b>  Show the following detail: Head . . . . . skull, scalp, face Back/spine/vertebra. . . . . upper, middle, lower Ear or eye . . . . . one or both Arm. . . . . one or both; shoulder, upper, elbow, lower, wrist, hand Leg . . . . . one or both; hip, upper, knee, lower, ankle, foot		Ask for all accidents that happened during the past 2 weeks except those involving moving motor vehicles. <b>9. We are interested in the objects that caused both the accident and the injury. How did the accident happen?</b> Cause of accident _____ Cause of injury _____																													

CONDITION PAGE



## VITAL AND HEALTH STATISTICS PUBLICATION SERIES

*Originally Public Health Service Publication No. 1000*

- Series 1. Programs and collection procedures.*—Reports which describe the general programs of the National Center for Health Statistics and its offices and divisions, data collection methods used, definitions, and other material necessary for understanding the data.
- Series 2. Data evaluation and methods research.*—Studies of new statistical methodology including: experimental tests of new survey methods, studies of vital statistics collection methods, new analytical techniques, objective evaluations of reliability of collected data, contributions to statistical theory.
- Series 3. Analytical studies.*—Reports presenting analytical or interpretive studies based on vital and health statistics, carrying the analysis further than the expository types of reports in the other series.
- Series 4. Documents and committee reports.*—Final reports of major committees concerned with vital and health statistics, and documents such as recommended model vital registration laws and revised birth and death certificates.
- Series 10. Data from the Health Interview Survey.*—Statistics on illness, accidental injuries, disability, use of hospital, medical, dental, and other services, and other health-related topics, based on data collected in a continuing national household interview survey.
- Series 11. Data from the Health Examination Survey.*—Data from direct examination, testing, and measurement of national samples of the civilian, noninstitutional population provide the basis for two types of reports: (1) estimates of the medically defined prevalence of specific diseases in the United States and the distributions of the population with respect to physical, physiological, and psychological characteristics; and (2) analysis of relationships among the various measurements without reference to an explicit finite universe of persons.
- Series 12. Data from the Institutional Population Surveys* —Statistics relating to the health characteristics of persons in institutions, and their medical, nursing, and personal care received, based on national samples of establishments providing these services and samples of the residents or patients.
- Series 13. Data from the Hospital Discharge Survey.*—Statistics relating to discharged patients in short-stay hospitals, based on a sample of patient records in a national sample of hospitals.
- Series 14. Data on health resources: manpower and facilities.*—Statistics on the numbers, geographic distribution, and characteristics of health resources including physicians, dentists, nurses, other health occupations, hospitals, nursing homes, and outpatient facilities.
- Series 20. Data on mortality.*—Various statistics on mortality other than as included in regular annual or monthly reports—special analyses by cause of death, age, and other demographic variables, also geographic and time series analyses.
- Series 21. Data on natality, marriage, and divorce.*—Various statistics on natality, marriage, and divorce other than as included in regular annual or monthly reports—special analyses by demographic variables, also geographic and time series analyses, studies of fertility.
- Series 22. Data from the National Natality and Mortality Surveys.*—Statistics on characteristics of births and deaths not available from the vital records, based on sample surveys stemming from these records, including such topics as mortality by socioeconomic class, hospital experience in the last year of life, medical care during pregnancy, health insurance coverage, etc.

For a list of titles of reports published in these series, write to:

Office of Information  
National Center for Health Statistics  
Public Health Service, HRA  
Rockville, Md. 20852

**DHEW Publication No. (HRA) 74 - 1511  
Series 10 - No. 84**

**U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE  
Health Resources Administration  
5600 Fishers Lane  
Rockville, Maryland 20852**

**OFFICIAL BUSINESS  
Penalty for Private Use \$300**

**POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF HEW**

HEW 396



**THIRD CLASS  
BLK. RT.**