SERIES B—No. 35

HEALTH STATISTICS

FROM THE U. S. NATIONAL HEALTH SURVEY

Selected Impairments
by etiology and activity limitation

United States
July 1959 - June 1961

Statistics on the average prevalence of impairments involving vision, hearing, speech, absence of major extremities, paralysis, and other impairments of limbs, back, trunk, by sex, age, etiology, and chronic activity limitation. Based on data collected in household interviews during July 1959-June 1961.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Abraham Ribicoff, Secretary
PUBLIC HEALTH SERVICE
Luther L. Terry, Surgeon General

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

CO-OPERATION OF THE BUREAU OF THE CENSUS

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

In accordance with specifications established by the National Health Survey, the Bureau of the Census, under a contractual arrangement, participates in most aspects of survey planning, selects the sample, collects the data, and carries out certain parts of the statistical processing.

Public Health Service Publication No. 584-B35

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Magnitude of the sampling error precludes showing separate estimates----------	(*)

NOTE: Due to rounding detailed figures within tables may not add to totals

SELECTED IMPAIRMENTS

SUMMARY OF FINDINGS

The estimated average prevalence of selected types of impairments among the noninstitutional population is based on data collected in household interviews conducted during July 1959-June 1961 by the U. S. National Health Survey, National Center for Health Statistics.

The leading cause of visual impairments of all types was cataract. Cataract, glaucoma, and other local diseases of the eye, combined, accounted for 50 percent of all cases of severe visual impairments and for 55 percent of such cases among persons 65 years of age and over. About 67 percent of all persons with severe visual impairments were 65 years old or older.

Among persons with severe visual impairments, 32 percent were unable to engage in the usual activity of their population group (work, keep house, or go to school) because of their vision, and 27 percent were partially limited.

The cause of hearing impairment was unknown to the respondent in 35 percent of the cases. It was attributed to "old age" or other and ill-defined conditions in 37 percent. Infection caused about 21 percent of the cases.

About 93 percent of the persons with hearing impairments were reported to have no limitation of any kind in their usual activities because of their hearing.

One half of all reported speech defects were among children under the age of 15, predominantly among boys 5-9 years of age. Three fourths of all persons with speech defects were under the age of 45.

The cause of speech defects was reported as unknown or in ill-defined terms in a large proportion of the cases, particularly among younger persons. Among persons 45 years and older, 43 percent of the cases were due to vascular lesions of the central nervous system.

Speech disorders caused relatively little interference with the person's usual activities except among older persons. About 45 percent of the people 45 years and over were restricted to some degree—probably because of strokes complicated by speech loss.

About 63 percent of the cases of paralysis, complete or partial, occurred among persons over the age of 45. Vascular lesions of the central nervous system were the outstanding cause among

Selected impairments	Average number in thousands	Rate per 1,000 population
All visual impairments	3,494	19.8
Severe visual impairments	988	5.6
Other visual impairments	2,507	14.2
Hearing impairments, all types	6,231	35.3
Speech defects	1,034	5.9
Paralysis, complete or partial	946	5.4
Absence of major extremities	259	1.5
Other impairments of limbs, back, trunk	13,198	74.9

This report was prepared by Louise E. Bollo of the U. S. National Health Survey staff.

older persons, while congenital or birth factors (probably the cerebral palsy cases) caused the largest number among younger people.

Paralysis caused major limitation of activity in 52 percent of the cases at ages 45 and over; and 20 percent among persons under 45 years.

Absence of major extremity was due to injury in 76 percent of all cases. About four fifths of these amputees were males whose losses were caused by injury in 85 percent of the cases. Partial activity limitation was experienced in 36 percent of all cases; major limitation, in 15 percent.

Of other orthopedic defects injury was by far the most important cause known to the respondent. These impairments of the limbs, trunk, and back were limiting to some extent in about 25 percent of the cases.

INTRODUCTION

An earlier report published by the U. S. National Health Survey—Impairments by type, sex, and age: United States, July 1957-June 1958, Series B, No. 9—included data on many broad types of impairments. Medical care status, bed-disability days, the proportion caused by injury, and the major activity of the impaired person were discussed.

The present report will be restricted to impairments involving: (1) vision, (2) hearing, (3) speech, (4) absence of major extremities, (5) paralysis, and (6) other orthopedic defects. Injury and other etiologic factors contributing to these impairments will be considered. In addition, each of the selected types will be reviewed with respect to whether the impaired person is limited in his usual activities because of these conditions.

SOURCE AND LIMITATIONS OF THE DATA

The data presented in this report are derived from household interviews obtained in a continuous probability sample of the civilian, noninstitutional population of the United States during the 24-month period, July 1959-June 1961. Interviews were conducted during that time in approximately 76,000 households comprised of about 250,000 persons living at the time of the interview. The estimated prevalence of the selected impairments is an average prevalence, i.e., the data for these two years have been combined and averaged.

These estimates pertain to impairments among persons able to live at home, and therefore exclude persons receiving care or training in institutions such as schools for the blind or the deaf, or in nursing homes or convalescent homes in which persons may be blind, deaf, paralyzed, or unable to move about freely because of a fractured hip or other bone and joint conditions.

A brief description of the statistical design of the survey, the methods of estimation, and the general qualifications of the data is presented in Appendix I. Particular attention is called to information contained in the section "Reliability of Estimates." The data in all cells in the tables are subject to errors of sampling, i.e., errors resulting from the use of a sample of households instead of all of the households in the United States. In cells where the estimated number or the numerator or denominator of a rate or percentage is small, the sampling error may be high, and such estimates, percentages, and rates must be interpreted with caution.

It is suggested that the reader become familiar also with the material in Appendixes II and III. Definitions of certain terms used in this report and the complete Classification of Impairments (X-Code) by type, site, and etiology are presented in Appendix II.

The sections of the survey questionnaire shown in Appendix III that apply to data presented in this report include the "illness-recall questions" (11-17); the checklists of chronic conditions and impairments (Cards A and B) used with questions 16 and 17; Cards C through F used at column (r) of table I; and columns (d-1) through (d-5) of table I.

Finer details of types and sites of conditions are sought in columns (d-1) through (d-5). At column (d-2) the interviewer asks for the cause of symptoms and impairments. Replies to this question form the basis of data on the etiology of impairments. Particular attention is called to column (d-3) which contains the special question which is used to classify persons with visual impairments according to whether or not they can read newspaper print with glasses.

Columns (r) through (t) supply information concerning limitation of activity due to impairments and other chronic conditions. If one or more chronic conditions have been reported for himself or someone else in the family, the respondent is shown one of the Cards C through F, as appropriate, and is asked which of the statements thereon fits best in terms of health. Card C is used for workers and other persons (including retired persons); Card D, for housewives; Card E, for children from 6 through 16 years old; and Card F, for children under 6 years old. The statements on the cards may be summarized as follows:

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

2. Persons limited in the amount or kind of major activity performed.
3. Persons not limited in major activity but otherwise limited.
4. Persons not limited in activities.

Replies at column (r) are used to characterize persons who have one or more chronic conditions and/or impairments with respect to their over-all capacity to work, keep house, or go to school. If the selected statement is 4 (persons not limited in activities), the interviewer asks no further questions in table I.

If statements 1, 2, or 3 are stated by the respondent to be applicable, the interviewer asks: "Is this because of any of the conditions you have told me about?" If the reply is "yes," the interviewer asks which reported condition is responsible, and places an "X" in column (t) for each condition named. If multiple chronic conditions have been reported the respondent may name one or more according to his opinion of the causes of the limitation.

When a person is asked whether or not activity limitation exists, and if so to what extent and what condition caused it, his attitudes and knowledge influence his replies. The adequacy of these replies may depend also on whether the respondent is reporting for himself or for some other person. This situation holds true when the person is asked to state the cause of an impairment as well as for other items of information.

Data obtained from columns (u), (v), and (w), such as duration of activity limitation and mobility limitation, are not included in this report.

VISUAL IMPAIRMENTS

Definitions.—According to the estimates and classification methods of the Health Interview Survey about 3½ million persons among the civilian, noninstitutional residents of the United States have some chronic or permanent difficulty in seeing. This number excludes persons with refractive errors which have been corrected to an extent that they do not cause trouble in seeing. It includes reported visual defects which are defined by the survey according to severity as follows:

1. Severe visual impairments include: that degree of visual impairment in a person 6 years old or older which, according to the respondent's reply, renders him unable to read ordinary newspaper print with glasses; or, for persons under 6 years of age or who have never learned to read, a report of "blind in both eyes," or in terms indicating no useful vision in either eye. This class of impairment is coded to category X00 of the X-Code (see Appendix II).

2. Other visual impairments include: visual difficulty in a person 6 years old or older which, however, is not severe enough to prevent him from reading ordinary newspaper print with glasses; or for persons under 6 years of age, or who have never learned to read, a report of trouble in seeing (or something equivalent) but not indicating loss of vision in both eyes. Impairments of this degree are coded to X01-X05 of the X-Code (see Appendix II).

In this report the term "severe visual impairments" will be used to denote cases of visual impairment included in class 1, above, whereas in the earlier report (Series B, No. 9) the term "blindness" was applied to these cases. The use of the term "blindness" presented the possibility of confusion with the more specific definition of blind persons, which includes those who are considered legally blind—i.e., their central visual acuity is 20/200 or worse with the best correcting lens, or even if they see better than 20/200 their field of vision has been reduced to 20 degrees or less.

Of the 3½ million people reporting visual defects, 988,000 were classified by the survey as having severe visual impairments. The prevalence rate for this degree of severity is 5.6 persons per 1,000 population, and has been consistent during each of the first four years of the Health Interview Survey.

According to the Public Health Service Publication No. 706—"Facts on Blindness in the United States"[1]—the estimated number of blind persons in this country as of 1957 was 339,000—a rate of 2.0 per 1,000 population. The considerable difference in rates of 5.6 and 2.0 per 1,000 indicates that the survey question "Can you see well enough to read ordinary newspaper print with glasses?" must be producing negative responses from a number of people who may not be blind to the degree of legal blindness, or perhaps, whose visual acuity might be improved if they possessed and used glasses with the necessary correction. It is also true, however, that a certain proportion of these people are blind and have no useful vision in either eye.

Tabulations of visual impairments in this report show totals for severe and other types combined, and for the severe and other types separately. By this means estimates of the extent of visual problems in the United States may be obtained, at least in so far as they are known to the household members reporting them.

The total number of visual impairments shown herein is also a count of persons, since a person is coded only once by degree of visual loss.

Age and sex.—In all tables which present visual impairments in relation to the age of the person, age groups are shown as under 65, and 65 years of age and over, with the exception of table A which shows finer age breaks. It can be seen that totals for the younger ages, particularly for the severe impairments, are small and are therefore subject to high sampling error.

Two thirds of all cases of severe visual impairments occur among persons 65 years of age or older, with 44.4 percent among persons 75 years old or older. All types of visual impairments—even the less serious—increase greatly after the age of 45.

Table B shows the prevalence of visual impairments by age and sex in terms of rate per 1,000 population. At ages 65 and over, 108.4 persons per 1,000 have visual impairments; among males of this age the rate is 101.2; among females, 114.3. The rates are higher for females than for males of these ages, regardless of the severity of the impairment. Among younger persons, 11.4 per 1,000 are impaired visually. However, the difference in the rates for males and females noted among those 65 years and over is not present among younger persons.

Etiology.—The reported causes of visual impairments by age and sex are shown in tables 1 and 2, arranged in 7 etiologic groups. Each of the 7 groups is composed of 1 or more of the 12 etiologic codes applicable to visual impairments as provided for in the Classification of Impairments (X-Code). and listed in Appendix II.

[1]Source: National Society for the Prevention of Blindness.

Table A. Average prevalence and percent distribution of visual impairments by age: United States, July 1959-June 1961

Age	All visual impairments	Severe visual impairments	Other visual impairments	All visual impairments	Severe visual impairments	Other visual impairments
	Average number in thousands			Percent distribution		
All ages						
Total	3,494	988	2,507	100.0	100.0	100.0
Under 65						
Total	1,832	326	1,506	52.4	33.0	60.1
Under 14	211	21	189	6.0	2.1	7.5
15-24	198	21	177	5.7	2.1	7.1
25-34	205	28	177	5.9	2.8	7.1
35-44	259	37	222	7.4	3.7	8.9
45-54	416	88	328	11.9	8.9	13.1
55-64	544	131	413	15.6	13.3	16.5
65+						
Total	1,662	662	1,001	47.6	67.0	39.9
65-74	726	223	504	20.8	22.6	20.1
75+	936	439	497	26.8	44.4	19.8

In cases of multiple causes—a not uncommon finding—arbitrary rules were followed in coding. Only one visual impairment per person was assigned and only one etiologic code, per impairment, was applied. For example, when a case was due to injury and also reported to be due to any other cause, preference was given to injury; or if injury was not implicated, and both cataract and glaucoma had caused the impairment, the etiologic code for cataract was selected; or if injury was not implicated, and cataract and also diabetes were the causes, preference was given to diabetes.

The etiologic groups shown in this report for impairments of vision are defined as follows:

The etiologic group "cataract (with any other local eye disease)" contains any case due to cataract alone or with any other local eye disease; it includes cataract of congenital origin, but excludes cataract due to injury or to general diseases.

"Glaucoma, only" includes cases due to glaucoma, congenital or not, but not due to any other cause, and not coupled with any other local eye disease.

"Other local eye diseases" includes cases due to any eye disease, congenital or not—other than cataract or glaucoma—of the types included in categories 370-379, 380-384, 386, and 388 of the International Classification of Diseases (ICD). Here are classified cases due to retrolental fibroplasia, detached retina, refractive errors, strabismus, corneal conditions, etc., including many cases due to ill-defined eye diseases.

"General diseases (diabetes, stroke, etc.)" includes cases, not involving injury, due to diseases included in ICD categories 140-369, 400-468, and 590-594, such as neoplasms, vascular diseases, diabetes, hypertension, renal diseases.

The group "Injury (with any other cause)" includes cases due to injury alone, or to injury with mention of any other cause.

"Other and ill-defined conditions" includes cases due to trachoma, tuberculosis, poliomyelitis, venereal, or other infective or parasitic diseases, as well as causes not classifiable elsewhere. It is known to include many cases in which the only cause reported was "old age."

Table B. Average prevalence and rate per 1,000 population of visual impairments by sex and age: United States, July 1959-June 1961

Sex and age	All visual impairments	Severe visual impairments	Other visual impairments	All visual impairments	Severe visual impairments	Other visual impairments
	Average number in thousands			Rate per 1,000 population		
Both sexes						
All ages	3,494	988	2,507	19.8	5.6	14.2
Under 65	1,832	326	1,506	11.4	2.0	9.4
65+	1,662	662	1,001	108.4	43.2	65.3
Male						
All ages	1,642	426	1,216	19.1	5.0	14.2
Under 65	943	164	780	12.0	2.1	9.9
65+	698	262	437	101.2	38.0	63.4
Female						
All ages	1,852	562	1,290	20.5	6.2	14.3
Under 65	889	162	726	10.8	2.0	8.8
65+	964	400	564	114.3	47.4	66.9

The final group "Unknown to respondent" includes cases in which the respondent did not or could not supply any cause of any kind. In 15.4 percent of all reported visual defects the cause was unknown to the respondent.

Since the prevalence of severe visual impairments is highest among older persons, often because such impairments are caused by diseases characteristic of this segment of the population, the rates among persons of all ages are heavily weighted by the rates for persons 65 years and over. For this reason, the order of frequency of the reported causes of severe visual impairments was the same for all ages as it was for persons 65 years and older (table C). Cataract was the leading cause of severe visual impairments.

The number of cases of severe impairment said to be due to glaucoma ranks last which is contrary to the general opinion. The survey classification methods may be responsible for the relatively small number of cases of any degree of visual impairment reported to be due to glaucoma. Another possibility is that the specific name of this eye disease may not be well known to household respondents. If the latter is true, some cases due to glaucoma may be attributed to some ill-defined eye condition.

Cataract, glaucoma, and other local eye diseases, combined, accounted for 49.5 percent of all cases of severe visual impairment, for persons of all ages, and 55.0 percent for persons 65 years of age and over.

The general diseases (diabetes, vascular disease, neoplasms, and hypertension) caused 10.5 percent of the severe cases at all ages, and 10.1 percent of such cases at ages 65 and over. Injury (with any other cause), as shown in table C, ranks next to last, as the cause of severe visual impairments at all ages, and also among older persons.

The reported causes of visual impairments are shown in table D, by age, in terms of rates per 1,000 population. Injury is the leading cause among persons under age 65. Of these ages, 2.7 persons per 1,000 have visual impairments due to injury. Table 1 shows that injury accounted for 23.4 percent of the visual impairments included among persons under 65 years of age. Cataract is the outstanding cause in persons over age 65. The

Table C. Average prevalence, percent distribution, and rate per 1,000 population of severe visual impairments by etiology, for all ages, and ages 65+, in relative order: United States, July 1959-June 1961

Etiology	All ages			65+		
	Average number in thousands	Percent distribution	Rate per 1,000 population	Average number in thousands	Percent distribution	Rate per 1,000 population
All causes	988	100.0	5.6	662	100.0	43.2
Cataract (with any other local eye disease)	305	30.9	1.7	255	38.5	16.6
Unknown to respondent	175	17.7	1.0	103	15.6	6.7
Other and ill-defined conditions	137	13.9	0.8	91	13.7	5.9
Local eye diseases except cataract and glaucoma	135	13.7	0.8	76	11.5	5.0
General diseases (diabetes, stroke, etc.)	104	10.5	0.6	67	10.1	4.4
Injury (with any other cause)	85	8.6	0.5	37	5.6	2.4
Glaucoma, only	48	4.9	0.3	33	5.0	2.2

Table D. Average prevalence and rate per 1,000 population of visual impairments by etiology and age: United States, July 1959-June 1961

Etiology	All ages	Under 65	65+	All ages	Under 65	65+
	Average number in thousands			Rate per 1,000 population		
All causes	3,494	1,832	1,662	19.8	11.4	108.4
Cataract (with any other local eye disease)	936	249	687	5.3	1.5	44.8
Glaucoma, only	200	100	99	1.1	0.6	6.5
Other local eye diseases	546	376	170	3.1	2.3	11.1
General diseases (diabetes, stroke, etc.)	232	112	120	1.3	0.7	7.8
Injury (with any other cause)	570	429	142	3.2	2.7	9.3
Other and ill-defined conditions	471	267	203	2.7	1.7	13.2
Unknown to respondent	539	299	240	3.1	1.9	15.7

rate for all causes, all types, is 108.4 per 1,000 among older persons, but only 11.4 for persons under 65 years of age.

The causes of visual impairments without respect to severity are shown in figure 1 by sex, in terms of rates per 1,000 population. Cataract is the leading cause among females, while injury is the leading cause among males. The rate per 1,000 population in each category of causes is higher for females than for males, except for cases due to injury. The rate for all causes, all types, is 19.1 among males, and 20.5 among females, as indicated in table 2.

Activity limitation.—Figure 2 shows, for all visual impairments combined, the extent of activity limitation caused by the person's state of vision. Among all visually impaired persons, under age 65, 78.7 percent were not affected in their ability to work, keep house, or go to school; 5.4 percent were unable to engage in the major activity of their group because of their vision; and 15.9 percent attributed lesser activity restriction to their vision.

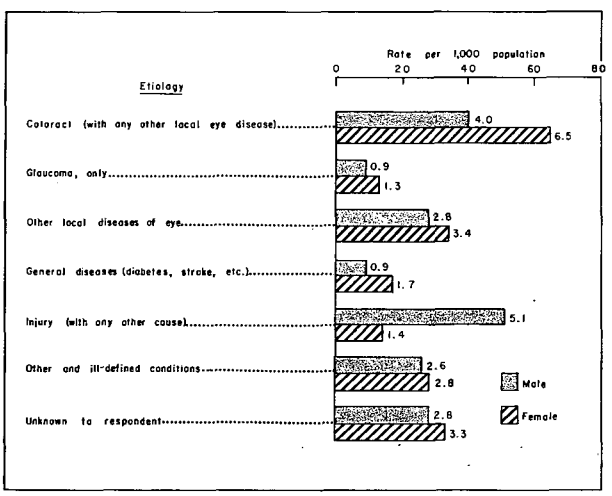


Figure 1. Average prevalence of visual impairments per 1,000 population by sex and etiology.

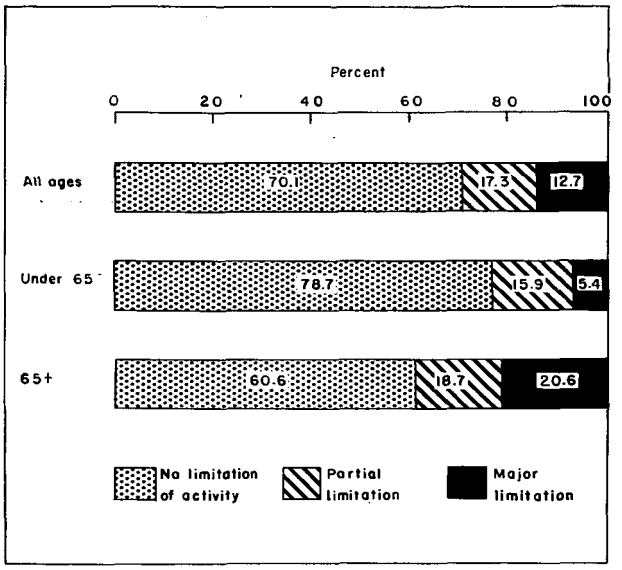


Figure 2. Percent of total visual impairments by activity limitation caused by the impairment according to age.

However, it was found that among the 798,000 males, 17 through 64 years of age, who had visual impairments, 20.9 percent were reported to be either unable to work or limited in the amount or kind of work they could do.

About 20.6 percent of the persons aged 65 years and over were reported as having major limitation, 18.7 percent, partially restricted, and 60.6 percent with no restriction in their usual activities because of their vision. It may be that older persons with visual impairments are attributing activity limitation to causes other than their visual status, or they may consider that they have no regular activity with which their vision interferes.

Among the estimated 4 million persons in the population who are unable to engage in the major activity of their group because of chronic conditions, 442,000, or 11.1 percent, are limited to this degree because of visual impairments. The corresponding figure for persons with partial limitation is 603,000 or 3.9 percent.

Table 1. Average prevalence, percent distribution, and rate per 1,000 population of visual impairments by etiology according to age: United States, July 1959-June 1961

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

Etiology[1]	All visual impairments			Severe visual impairments			Other visual impairments		
	All ages	Under 65	65+	All ages	Under 65	65+	All ages	Under 65	65+
	Average number in thousands								
All causes	3,494	1,832	1,662	988	326	662	2,507	1,506	1,001
Cataract (with any other local eye disease)	936	249	687	305	49	255	631	200	432
Glaucoma, only	200	100	99	48	(*)	33	152	86	66
Other local eye diseases	546	376	170	135	59	76	411	317	95
General diseases (diabetes, stroke, etc.)	232	112	120	104	37	67	129	75	54
Injury (with any other cause)	570	429	142	85	48	37	486	381	105
Other and ill-defined conditions	471	267	203	137	46	91	333	221	112
Unknown to respondent	539	299	240	175	72	103	364	227	138
	Percent distribution								
All causes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cataract (with any other local eye disease)	26.8	13.6	41.3	30.9	15.0	38.5	25.2	13.3	43.2
Glaucoma, only	5.7	5.5	6.0	4.9	(*)	5.0	6.1	5.7	6.6
Other local eye diseases	15.6	20.5	10.2	13.7	18.1	11.5	16.4	21.0	9.5
General diseases (diabetes, stroke, etc.)	6.6	6.1	7.2	10.5	11.3	10.1	5.1	5.0	5.4
Injury (with any other cause)	16.3	23.4	8.5	8.6	14.7	5.6	19.4	25.3	10.5
Other and ill-defined conditions	13.5	14.6	12.2	13.9	14.1	13.7	13.3	14.7	11.2
Unknown to respondent	15.4	16.3	14.4	17.7	22.1	15.6	14.5	15.1	13.8
	Rate per 1,000 population								
All causes	19.8	11.4	108.4	5.6	2.0	43.2	14.2	9.4	65.3
Cataract (with any other local eye disease)	5.3	1.5	44.8	1.7	0.3	16.6	3.6	1.2	28.2
Glaucoma, only	1.1	0.6	6.5	0.3	(*)	2.2	0.9	0.5	4.3
Other local eye diseases	3.1	2.3	11.1	0.8	0.4	5.0	2.3	2.0	6.2
General diseases (diabetes, stroke, etc.)	1.3	0.7	7.8	0.6	0.2	4.4	0.7	0.5	3.5
Injury (with any other cause)	3.2	2.7	9.3	0.5	0.3	2.4	2.8	2.4	6.8
Other and ill-defined conditions	2.7	1.7	13.2	0.8	0.3	5.9	1.9	1.4	7.3
Unknown to respondent	3.1	1.9	15.7	1.0	0.4	6.7	2.1	1.4	9.0

[1]For inclusions in each etiology group, see text, under Hearing Impairments, Etiology.

Table 2. Average prevalence, percent distribution, and rate per 1,000 population of visual impairments by etiology according to sex: United States, July 1959-June 1961

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

Etiology[1]	All visual impairments			Severe visual impairments			Other visual impairments		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Average number in thousands								
All causes	3,494	1,642	1,852	988	426	562	2,507	1,216	1,290
Cataract (with any other local eye disease)	936	345	591	305	104	201	631	241	390
Glaucoma, only	200	79	120	48	18	30	152	61	91
Other local eye diseases	546	239	307	135	58	77	411	181	230
General diseases (diabetes, stroke, etc.)	232	78	155	104	33	71	129	45	84
Injury (with any other cause)	570	440	131	85	62	23	486	378	108
Other and ill-defined conditions	471	220	251	137	71	67	333	149	184
Unknown to respondent	539	242	298	175	81	94	364	161	203
	Percent distribution								
All causes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cataract (with any other local eye disease	26.8	21.0	31.9	30.9	24.4	35.8	25.2	19.8	30.2
Glaucoma, only	5.7	4.8	6.5	4.9	4.2	5.3	6.1	5.0	7.1
Other local eye diseases	15.6	14.6	16.6	13.7	13.6	13.7	16.4	14.9	17.8
General diseases (diabetes, stroke, etc.)	6.6	4.8	8.4	10.5	7.7	12.6	5.1	3.7	6.5
Injury (with any other cause)	16.3	26.8	7.1	8.6	14.6	4.1	19.4	31.1	8.4
Other and ill-defined conditions	13.5	13.4	13.6	13.9	16.7	11.9	13.3	12.3	14.3
Unknown to respondent	15.4	14.7	16.1	17.7	19.0	16.7	14.5	13.2	15.7
	Rate per 1,000 population								
All causes	19.8	19.1	20.5	5.6	5.0	6.2	14.2	14.2	14.3
Cataract (with any other local eye disease)	5.3	4.0	6.5	1.7	1.2	2.2	3.6	2.8	4.3
Glaucoma, only	1.1	0.9	1.3	0.3	0.2	0.3	0.9	0.7	1.0
Other local eye diseases	3.1	2.8	3.4	0.8	0.7	0.9	2.3	2.1	2.5
General diseases (diabetes, stroke, etc.)	1.3	0.9	1.7	0.6	0.4	0.8	0.7	0.5	0.9
Injury (with any other cause)	3.2	5.1	1.4	0.5	0.7	0.3	2.8	4.4	1.2
Other and ill-defined conditions	2.7	2.6	2.8	0.8	0.8	0.7	1.9	1.7	2.0
Unknown to respondent	3.1	2.8	3.3	1.0	0.9	1.0	2.1	1.9	2.2

[1]For inclusions in each etiology group, see text, under Hearing Impairments, Etiology.

Table 3. Average prevalence, percent distribution, and rate per 1,000 population of visual impairments according to age by degree of activity limitation caused by visual impairment: United States, July 1959-June 1961

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

Age and degree of activity limitation	All visual impairments	Severe visual impairments	Other visual impairments	All visual impairments	Severe visual impairments	Other visual impairments	All visual impairments	Severe visual impairments	Other visual impairments
	Average number in thousands			Percent distribution			Rate per 1,000 population		
All ages									
Total	3,494	988	2,507	100.0	100.0	100.0	19.8	5.6	14.2
With major limitation	442	312	130	12.7	31.6	5.2	2.5	1.8	0.7
With partial limitation	603	266	336	17.3	26.9	13.4	3.4	1.5	1.9
With no limitation	2,449	409	2,041	70.1	41.4	81.4	13.9	2.3	11.6
Under 65									
Total	1,832	326	1,506	100.0	100.0	100.0	11.4	2.0	9.4
With major limitation	99	63	37	5.4	19.3	2.5	0.6	0.4	0.2
With partial limitation	291	103	188	15.9	31.6	12.5	1.8	0.6	1.2
With no limitation	1,441	160	1,281	78.7	49.1	85.1	9.0	1.0	8.0
65+									
Total	1,662	662	1,001	100.0	100.0	100.0	108.4	43.2	65.3
With major limitation	343	250	93	20.6	37.8	9.3	22.4	16.3	6.1
With partial limitation	311	163	148	18.7	24.6	14.8	20.3	10.6	9.7
With no limitation	1,008	248	760	60.6	37.5	75.9	65.7	16.2	49.6

HEARING IMPAIRMENTS

The average prevalence of hearing impairments, of all degrees of severity, among the civilian, noninstitutional population of the United States for the years July 1959-June 1961, is estimated to be about 6 1/4 million—a rate of 35.3 per 1,000 population. This is somewhat higher than the 5,822,000 cases (34.6 per 1,000 population) shown in the earlier report for the fiscal year 1958.

The survey definition and general questioning technique in relation to the number of hearing impairments did not change during these years. The interviewer asked for the cause, and whether one or both ears were affected, but there was no special question, as in the case of visual impairment, to obtain the degree of hearing loss. Hearing impairments can be coded in several degrees of severity as shown in the Classification of Impairments (X-Code) in Appendix II, but all degrees, specified or not specified by the respondent, have been combined in this report.

The number of hearing impairments is also the number of persons who have loss or decrease of hearing since only one hearing impairment per person is coded.

Age and sex.—Rates for hearing impairments increase greatly with age, and are appreciably more prevalent among males than among females, as summarized in tables E and F.

The rates of persons with hearing impairments, particularly among children, are less than rates derived from audiometric examinations. The rates shown here more nearly approximate other estimates of the volume of persons who will voluntarily seek professional care when informed of clinical evidence that they have hearing loss. The Health Interview Survey item on Card B concerning "deafness or serious trouble with hearing" elicits reports of hearing loss measurable at a level which the respondent considers serious. It provides an estimate of the number of persons with functional defects relative to the person's age and other characteristics. The survey does not provide an estimate of the number of clinically detectable cases, nor of the number of persons who would benefit from professional help.

Etiology.—The causes of hearing impairments, as reported by household respondents, are coded in the survey by adding the appropriate

Table E. Average prevalence, percent distribution, and rate per 1,000 population of hearing impairments by age: United States, July 1959-June 1961

Age	Average number in thousands	Percent distribution	Rate per 1,000 population
All ages	6,231	100.0	35.3
Under 25	607	9.7	7.6
25-44	1,008	16.2	22.2
45-64	1,843	29.6	51.2
65-74	1,300	20.9	129.6
75+	1,472	23.6	277.4

Table F. Average prevalence, percent distribution, and rate per 1,000 population of hearing impairments by sex: United States, July 1959-June 1961

Sex	Average number in thousands	Percent distribution	Rate per 1,000 population
Both sexes	6,231	100.0	35.3
Male	3,584	57.5	41.8
Female	2,647	42.5	29.2

etiologic code to the type of hearing impairment. The 12 etiologic codes applicable to all impairments, except of vision, are listed in Appendix II, following category X99 of the X-Code. These factors have been combined into 4 etiology groups as shown in tables 4 and 5.

"Infection" includes all cases due to infective and parasitic diseases—as in categories 001-138 of the International Classification of Diseases—or to infection, abscess, or any inflammation of the ear or any part of the body.

"Injury" includes cases due to sudden accidental injury.

"Other and ill-defined conditions" include all cases due to named causes other than infection or injury. It is known to include many cases said to be due to "old age," or described as "hereditary," with no specific disease given. It also includes cases of hearing impairment due to continued exposure to loud noise.

In 35.0 percent of all cases no cause of any kind was reported, and this was true of both sexes. Older people who developed hearing loss in early childhood often do not know the cause of the impairment. Also, persons whose hearing loss has developed gradually are frequently unable to ascribe it to a particular cause.

Infection was reported to be responsible for 20.7 percent of all cases of hearing impairment in larger proportions among persons under 45 years of age. Infection caused a slightly higher number of cases among females than among males.

The considerable difference in the percent due to injury as shown in this report compared with that shown in the earlier report warrants comment (table G).

Effective July 1, 1959, instructions to interviewers and coders emphasized the ruling that conditions due to continued exposure, except to poisonous fumes or substances, should not be counted as accidents, nor as due to accidental injury. It is likely, therefore, that during the early years of the survey some cases of impaired hearing due to working in noisy places or to the effects of war service were charged to injury. Beginning July 1, 1959 such cases were not classified as due to injury. The difference in numbers and percent is seen to be entirely among males whose occupations often involve continued exposure to loud noise of one kind or another. Survey classification methods, to date, do not provide for the precise identification of hearing impairments or any other condition due to occupational hazards of a prolonged nature.

The other and ill-defined conditions, not involving injuries or infection, caused 37.0 percent of all hearing impairments.

Activity limitation.—About 93 percent of the persons with hearing impairments were reported to have no limitation of any kind in their usual activities because of this type of impairment. Because of the low percentage of cases causing activity limitation, detailed figures on this aspect of hearing impairments are not included in this report.

Table G. Average number and percent of hearing impairments due to injury, by sex, during July 1957-June 1958 and July 1959-June 1961

Time interval	Number in thousands			Percent		
	Both sexes	Male	Female	Both sexes	Male	Female
July 1957-June 1958	750	644	106	12.9	19.7	4.2
July 1959-June 1961 (average)	452	345	107	7.3	9.6	4.0

Table 4. Average prevalence, percent distribution, and rate per 1,000 population of hearing impairments by etiology according to age: United States, July 1959-June 1961

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

Etiology[1]	Age					
	All ages	Under 25	25-44	45-64	65-74	75+
	Average number in thousands					
All causes	6,231	607	1,008	1,843	1,300	1,472
Infection	1,291	239	301	422	187	142
Injury	452	55	133	154	62	48
Other and ill-defined conditions	2,308	175	303	614	490	726
Unknown to respondent	2,180	138	271	654	562	555
	Percent distribution					
All causes	100.0	100.0	100.0	100.0	100.0	100.0
Infection	20.7	39.4	29.9	22.9	14.4	9.6
Injury	7.3	9.1	13.2	8.4	4.8	3.3
Other and ill-defined conditions	37.0	28.8	30.1	33.3	37.7	49.3
Unknown to respondent	35.0	22.7	26.9	35.5	43.2	37.7
	Rate per 1,000 population					
All causes	35.3	7.6	22.2	51.2	129.6	277.4
Infection	7.3	3.0	6.6	11.7	18.6	26.8
Injury	2.6	0.7	2.9	4.3	6.2	9.0
Other and ill-defined conditions	13.1	2.2	6.7	17.1	48.9	136.8
Unknown to respondent	12.4	1.7	6.0	18.2	56.0	104.6

Table 5. Average prevalence, percent distribution, and rate per 1,000 population of hearing impairments by etiology according to sex: United States, July 1959-June 1961

(See headnote on table 4)

Etiology[1]	Sex								
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Average number in thousands			Percent distribution			Rate per 1,000 population		
All causes	6,231	3,584	2,647	100.0	100.0	100.0	35.3	41.8	29.2
Infection	1,291	619	672	20.7	17.3	25.4	7.3	7.2	7.4
Injury	452	345	107	7.3	9.6	4.0	2.6	4.0	1.2
Other and ill-defined conditions	2,308	1,353	955	37.0	37.8	36.1	13.1	15.8	10.5
Unknown to respondent	2,180	1,267	913	35.0	35.4	34.5	12.4	14.8	10.1

[1]For inclusions in each etiology group, see text, under Hearing Impairments, Etiology.

SPEECH DEFECTS

The average prevalence of cases of speech defects is estimated to be about 1 million—a rate of 5.9 per 1,000 population. This is consistent with the findings of the earlier report.

Speech defects include stammering, stuttering, persistence of infantile patterns, ill-defined "trouble" with speech, and in older persons particularly, aphasia due to strokes and similar cerebral disorders. They exclude: inability to speak coupled with profound or total hearing loss which is classified with hearing impairments only; and speech defects associated with cleft palate which are classified only with cases of cleft palate. Only one speech defect per person is coded.

Age and sex.—One half of all reported speech defects, as classified by the survey, are among children under the age of 15, predominantly among boys aged 5-9, as shown in table H.

In tables 6 and 8, which incorporate the variables of etiology and activity limitation, the age groups under 45, and 45 years and over only, are shown. Three fourths of all persons with reported speech defects are under 45 years of age.

In table 7, speech defects are seen to be considerably more prevalent among males than among females, the rate among males being 7.7 per 1,000 persons while that for females is 4.1.

Etiology.—The survey findings indicate that among younger people particularly, physical diseases and injuries are seldom the cause. The great bulk of all reported speech disorders are among children and young people, and the causes of their speech defects, if stated, are often emotional or family environmental situations which are assigned to the "other and ill-defined" category of etiologic factors.

In 33.9 percent of all cases the respondent could not, or did not, give any reason; 40.4 percent of all cases under age 45 are seen in table 6 to be of unknown cause. However among older persons 43.3 percent of the cases were due to vascular lesions of the central nervous system, and only 13.9 percent of the cases were reported as of unknown origin.

The few cases assigned to "congenital or birth factors" are probably those associated with cerebral palsy cases. This number is very small and is no doubt greatly underreported.

Activity limitation.—Speech disorders, per se, cause little interference with the person's usual activities. Only 12.3 percent of persons under 45 were limited in their activities, according to table 8. However, 44.8 percent of persons 45 and over were restricted to some degree. A review of reported cases indicated that chronic limitations of activity are caused primarily by residual effects of strokes or by other organic disease rather than by the aphasia in itself.

Table H. Average prevalence and rate per 1,000 population of speech defects among children by age and sex: United States, July 1959-June 1961

Age	Both sexes	Male	Female	Both sexes	Male	Female
	Average number in thousands			Rate per 1,000 population		
Under 15						
All ages under 15 years	513	348	164	9.1	12.1	5.9
Under 4	65	41	24	3.2	4.0	2.4
5-9	313	219	94	16.3	22.4	10.0
10-14	135	89	46	7.9	10.1	5.5

Table 6. Average prevalence, percent distribution, and rate per 1,000 population of speech defects by etiology according to age: United States, July 1959-June 1961

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

Etiology	Age								
	All ages	Under 45	45+	All ages	Under 45	45+	All ages	Under 45	45+
	Average number in thousands			Percent distribution			Rate per 1,000 population		
All causes	1,034	782	252	100.0	100.0	100.0	5.9	6.3	4.9
Vascular lesions, central nervous system	116	(*)	109	11.2	(*)	43.3	0.7	(*)	2.1
Congenital or birth factors	77	70	(*)	7.4	9.0	(*)	0.4	0.6	(*)
Other and ill-defined conditions	489	388	101	47.3	49.6	40.1	2.8	3.1	2.0
Unknown to respondent	351	316	35	33.9	40.4	13.9	2.0	2.5	0.7

Table 7. Average prevalence, percent distribution, and rate per 1,000 population of speech defects by etiology according to sex: United States, July 1959-June 1961

(See headnote on table 6)

Etiology	Sex								
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Average number in thousands			Percent distribution			Rate per 1,000 population		
All causes	1,034	663	371	100.0	100.0	100.0	5.9	7.7	4.1
Vascular lesions, central nervous system	116	68	49	11.2	10.3	13.2	0.7	0.8	0.5
Congenital or birth factors	77	43	34	7.4	6.5	9.2	0.4	0.5	0.4
Other and ill-defined conditions	489	316	174	47.3	47.7	46.9	2.8	3.7	1.9
Unknown to respondent	351	237	114	33.9	35.7	30.7	2.0	2.8	1.3

Table 8. Average prevalence, percent distribution, and rate per 1,000 population of speech defects by associated activity limitation according to age: United States, July 1959-June 1961

(See headnote on table 6)

Activity limitation	Age								
	All ages	Under 45	45+	All ages	Under 45	45+	All ages	Under 45	45+
	Average number in thousands			Percent distribution			Rate per 1,000 population		
Total	1,034	782	252	100.0	100.0	100.0	5.9	6.3	4.9
With activity limitation	209	96	113	20.2	12.3	44.8	1.2	0.8	2.2
With no activity limitation	825	686	139	79.8	87.7	55.2	4.7	5.5	2.7

PARALYSIS, COMPLETE OR PARTIAL

Cases of paralysis are classified by the survey under categories X40-X69 of the Classification of Impairments, according to the parts of the body affected and whether the loss of muscle function is complete (or severe) or partial (or mild). They include persons with cerebral palsy or described as "spastics," and cases of "palsy" not indicated to be paralysis agitans or Parkinson's disease. For the purposes of this report, all types, sites, and degrees of paralysis have been combined, since the subtotals of each are known to be small and are considered unreliable for this reason and also because the respondent's statements about sites and types are sometimes ill-defined.

All figures cited pertain to cases of residual paralysis, of all types and degrees, that have persisted for at least three months after the initial attack. They are exclusive of hemiplegics, paraplegics, and other paralyzed persons who are being cared for in nursing homes or other institutions.

As estimated by this survey, the average prevalence of cases of paralysis in the noninstitutional population of the United States during the 2-year period July 1959-June 1961, is 946,000—a rate of 5.4 per 1,000 population. This approximates the 940,000 cases—5.6 per 1,000—shown in the earlier report (Series B, No. 9).

The number of cases shown may exceed slightly the number of persons with paralysis since it was possible, before July 1, 1961, to classify a person more than once under the categories X40-X69. Beginning July 1, 1961, coding rules were established to ensure that only one of these codes be assigned per person.

Age and sex.—Of the total cases of paralysis, 600,000, or 63.4 percent, occurred among persons over the age of 45. For persons of all ages, 526,000 cases, or 55.6 percent, were among males.

Etiology.—Tables 9 and 10 show that in about 90 percent of the cases of paralysis the respondent was able to tell the cause. Vascular lesions of the central nervous system were seen to be the outstanding causes among older persons, while congenital or birth factors caused the largest number among persons under 45 years.

Activity limitation.—As would be expected, paralysis caused considerable limitation of the person's activities. Cases with no activity limitation no doubt include the milder cases, and cases of paralysis of such sites as facial muscles only. Figure 3 and table 11 show the relative proportions of the several degrees of activity limitation according to age.

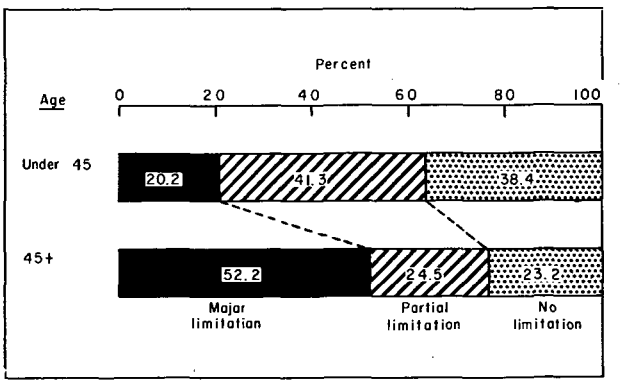


Figure 3. Percent distribution of cases of paralysis by activity limitation by impairment according to age.

Table 9. Average prevalence, percent distribution, and rate per 1,000 population of cases of paralysis, complete or partial, by etiology according to age: United States, July 1959-June 1961

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

Etiology	Age								
	All ages	Under 45	45+	All ages	Under 45	45+	All ages	Under 45	45+
	Average number in thousands			Percent distribution			Rate per 1,000 population		
All causes	946	346	600	100.0	100.0	100.0	5.4	2.8	11.7
Poliomyelitis	120	82	38	12.7	23.7	6.3	0.7	0.7	0.7
Vascular lesions, central nervous system	364	18	346	38.5	5.2	57.7	2.1	0.1	6.7
Injury	138	68	70	14.6	19.7	11.7	0.8	0.5	1.4
Congenital or birth factors	122	112	11	12.9	32.4	1.8	0.7	0.9	0.2
Other and ill-defined conditions	116	41	75	12.3	11.8	12.5	0.7	0.3	1.5
Unknown to respondent	86	26	59	9.1	7.5	9.8	0.5	0.2	1.1

Table 10. Average prevalence, percent distribution, and rate per 1,000 population of cases of paralysis, complete or partial, by etiology according to sex: United States, July 1959-June 1961

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

Etiology	Sex								
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Average number in thousands			Percent distribution			Rate per 1,000 population		
All causes	946	526	420	100.0	100.0	100.0	5.4	6.1	4.6
Poliomyelitis	120	60	60	12.7	11.4	14.3	0.7	0.7	0.7
Vascular lesions, central nervous system	364	202	162	38.5	38.4	38.6	2.1	2.4	1.8
Injury	138	96	42	14.6	18.3	10.0	0.8	1.1	0.5
Congenital or birth factors	122	71	51	12.9	13.5	12.1	0.7	0.8	0.6
Other and ill-defined conditions	116	53	63	12.3	10.1	15.0	0.7	0.6	0.7
Unknown to respondent	86	44	41	9.1	8.4	9.8	0.5	0.5	0.5

Table 11. Average prevalence, percent distribution, and rate per 1,000 population of cases of paralysis, complete or partial, by degree of activity limitation caused by the paralysis, according to age: United States, July 1959-June 1961

(See headnote on table 10)

Activity limitation	Age								
	All ages	Under 45	45+	All ages	Under 45	45+	All ages	Under 45	45+
	Average number in thousands			Percent distribution			Rate per 1,000 population		
Total	946	346	600	100.0	100.0	100.0	5.4	2.8	11.7
With major limitation	383	70	313	40.5	20.2	52.2	2.2	0.6	6.1
With partial limitation	290	143	147	30.7	41.3	24.5	1.6	1.1	2.9
With no limitation	273	133	139	28.9	38.4	23.2	1.5	1.1	2.7

ABSENCE OF MAJOR EXTREMITIES

According to the survey estimate, the average prevalence of cases of loss of leg, foot, arm, or hand, for the period July 1959-June 1961, was 259,000, or 1.5 per 1,000 population (tables 12, 13, and 14). This figure is slightly less than the 282,000 (1.7 per 1,000 population) shown in the earlier report.

Figures in the accompanying tables for nontraumatic cases, and cases of any origin among females are very small, and, hence, should be interpreted with caution.

Of the cases included in this report 75.7 were caused by injury. The remaining 24.7 percent were caused by miscellaneous conditions including infection, gangrene, and neoplasm.

About four fifths of these amputees were males whose losses were caused by injury in 84.4 percent of the cases. Among females, injury was a factor in only 37.5 percent of the cases.

Two thirds of all cases were among persons 45 years of age or older.

Tables I and 14 show the degree of activity limitation attributed to this type of impairment. Almost one half of the persons so impaired were reported to be in no way limited in their usual activities by this condition. Many may work in jobs with which their condition does not drastically interfere, or they may have had the condition a long time and have learned to adjust to it to the extent that they do not consider it limiting. In some cases a properly fitted and functioning prosthetic device may make it possible for a person to carry on his usual pursuits with no limitation of activity.

Table I. Average prevalence, percent distribution, and rate per 1,000 population of cases of absence of major extremity by degree of activity limitation: United States, July 1959-June 1961

Activity limitation	Average number in thousands	Percent distribution	Rate per 1,000 population
Total	259	100.0	1.5
With major activity limitation	40	15.4	0.2
With partial activity limitation	93	35.9	0.5
With no activity limitation	126	48.6	0.7

Table 12. Average prevalence, percent distribution, and rate per 1,000 population of cases of absence of major extremity[1] by etiology according to age: United States, July 1959-June 1961

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

Etiology	Age								
	All ages	Under 45	45+	All ages	Under 45	45+	All ages	Under 45	45+
	Average number in thousands			Percent distribution			Rate per 1,000 population		
All causes	259	87	172	100.0	100.0	100.0	1.5	0.7	3.4
Injury	196	68	127	75.7	78.2	73.8	1.1	0.5	2.5
All other causes	64	19	45	24.7	21.8	26.2	0.4	0.2	0.9

Table 13. Average prevalence, percent distribution, and rate per 1,000 population of cases of absence of major extremity[1] by etiology according to sex: United States, July 1959-June 1961

(See headnote on table 12)

Etiology	Sex								
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Average number in thousands			Percent distribution			Rate per 1,000 population		
All causes	259	211	48	100.0	100.0	100.0	1.5	2.5	0.5
Injury	196	178	18	75.7	84.4	37.5	1.1	2.1	0.2
All other causes	64	33	30	24.7	15.6	62.5	0.4	0.4	0.3

Table 14. Average prevalence, percent distribution, and rate per 1,000 population of cases of absence of major extremity[1] by activity limitation caused by this impairment according to age: United States, July 1959-June 1961

(See headnote on table 12)

Activity limitation	Age								
	All ages	Under 45	45+	All ages	Under 45	45+	All ages	Under 45	45+
	Average number in thousands			Percent distribution			Rate per 1,000 population		
Total	259	87	172	100.0	100.0	100.0	1.5	0.7	3.4
With activity limitation	133	42	92	51.4	48.3	53.5	0.8	0.3	1.8
With no activity limitation	126	46	80	48.6	52.9	46.5	0.7	0.4	1.6

[1]Exclusive of fingers or toes only.

IMPAIRMENTS (EXCEPT PARALYSIS AND ABSENCE) OF LIMBS, BACK, TRUNK

Inclusions.—This large group of residual defects (to be referred to in the text, as "orthopedic defects") includes clubfoot, curvature of the spine, and other specific deformities of limbs, back, trunk, and also the more ill-defined "stiffness," "weakness," and "trouble" of these sites, as classified in categories X70-X89 of the Classification of Impairments (see Appendix II). Since July 1, 1958, these categories have included reports of old strains, sprains, and dislocations of these sites whether or not a specific present effect was mentioned by the respondent. During the first survey year, old strains, sprains, and dislocations with no effect specified were coded to the original nature of the injury only—and not to the X-Code.

Excluded are all conditions pertaining to displacement of intervertebral disc ("slipped disc"), and all reports of ill-defined pain or "trouble" in limbs, back, trunk if these are due to arthritis, rheumatism, or other presently active chronic diseases. Excluded also are all cases of pain reported in terms such as sciatica, neuritis, neuralgia, compression. Thus, pain and all other symptoms and "troubles" due to currently active diseases are coded to those diseases only, and not as impairments in the X-code.

With the exception of the change cited above in reference to old sprains, strains, and dislocations, the survey instructions for classifying orthopedic defects in X70-X89 remained essentially the same during the first four years of the survey. It is to be expected that there would be an increase in the totals for these categories because of the addition of unspecified residuals of sprains and dislocations. However, it is unlikely that this change, alone, has been responsible for the very substantial increase in cases of orthopedic defects. For the fiscal year 1958 the estimated prevalence was 9,862,000 cases. For the average of fiscal years 1960 and 1961, the prevalence is 13,198,000—an increase of 3,336,000 over the earlier estimate.

As in the earlier report, totals for impairments (except paralysis and absence) of limbs, back, trunk, are counts of conditions rather than of people because it is possible for a person to be classified more than once under categories X70-X89.

Sites.—Tables 15-17 show orthopedic defects arranged in totals for all sites combined, and in subtotals for those affecting:

a. back or spine only
b. upper extremity, one or both, any part(s), only, or with shoulder(s) but no other site
c. lower extremity, one or both, any part(s) only, or with hip(s) or hip(s) combined with any other site of limbs, back, trunk
d. sites not classifiable to a, b, or c—such as chest or ribs—and multiple sites in X70-X79 not involving the hip, and not elsewhere classified (NEC).

The number, percent distribution, and rate per 1,000 population of these defects are summarized, by site, in table J.

Age and sex.—The rates for orthopedic defects increase considerably with age as seen in tables 15, 17, and figure 4. These defects are more prevalent among males than among females although sex differences are not extremely marked (table 16 and fig. 5). Among young people under 25, and among persons 65 years of age and over, the lower extremity and hip are the sites most frequently involved, while among persons between these age limits back or spine defects are most prevalent. At the ages 45-64 years, conditions of the lower extremity and hip are almost as frequent as those of the back or spine. Impairments of the upper extremity and shoulder—with no

Table J. Average prevalence, percent distribution, and rate per 1,000 population of impairments[1] of limbs, back, trunk, by site: United States, July 1959-June 1961

Site	Average number in thousands	Percent distribution	Rate per 1,000 population
All sites	13,198	100.0	74.9
Back or spine	4,758	36.1	27.0
Upper extremity and shoulder	2,269	17.2	12.9
Lower extremity and hip	5,089	38.6	28.9
Other and multiple, NEC	1,082	8.2	6.1

[1]Except paralysis and absence.

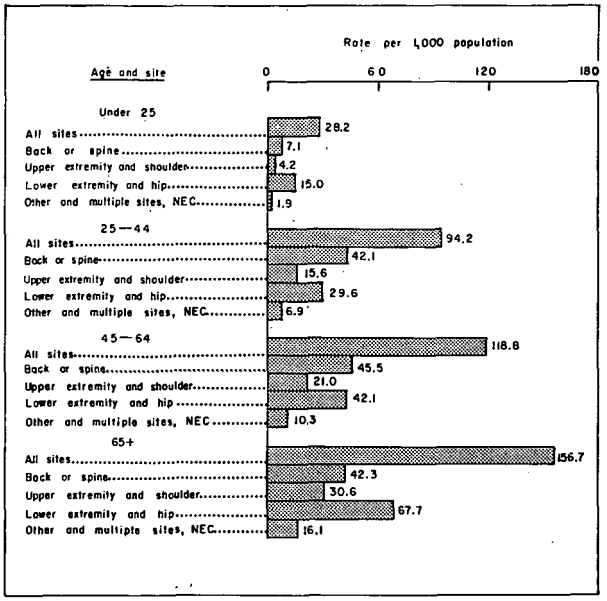


Figure 4. Average prevalence of impairments (except paralysis and absence) of limbs, back, trunk per 1,000 population by age and site.

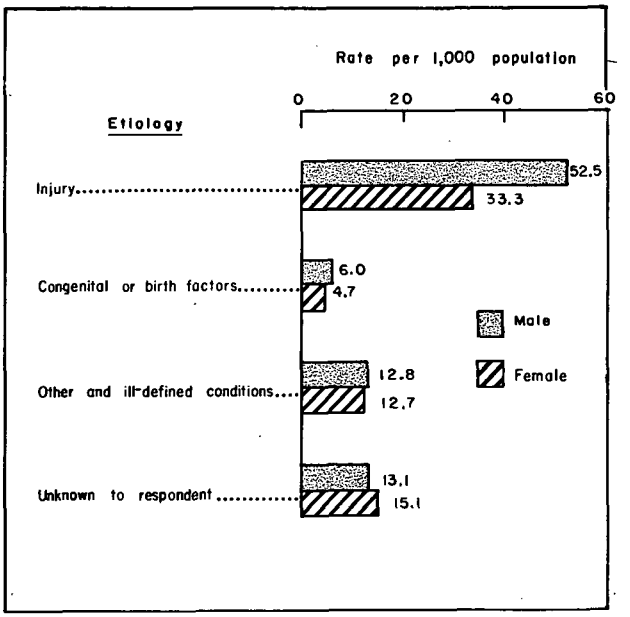


Figure 6. Average prevalence of impairments (except paralysis and absence) of limbs, back, trunk per 1,000 population by etiology and sex.

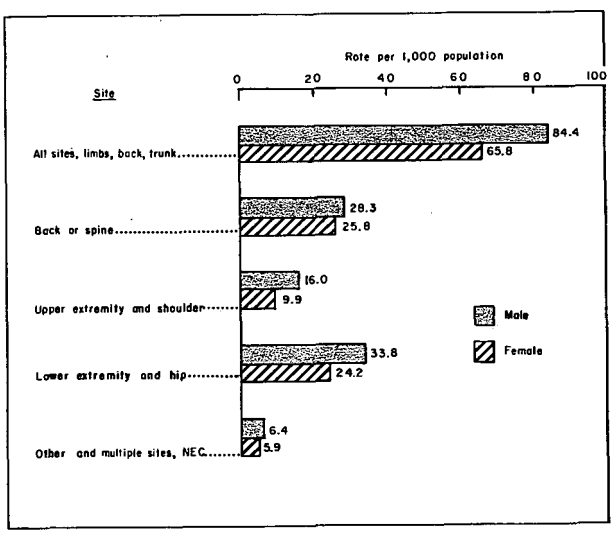


Figure 5. Average prevalence of impairments (except paralysis and absence) of limbs, back, trunk per 1,000 population by site and sex.

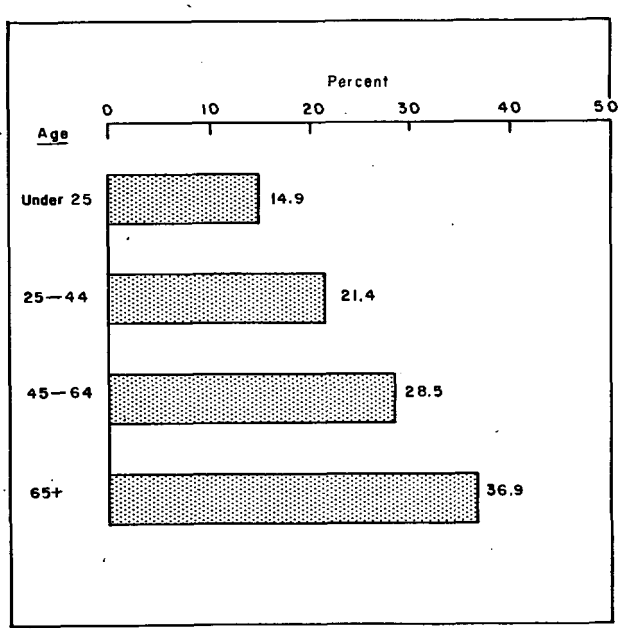


Figure 7. Percent of impairments (except paralysis and absence) of limbs, back, trunk causing activity limitation according to age.

other site involved—are less frequently reported in all age groups than impairments of the back or legs.

Etiology.—Tables 15 and 16 show that injury was by far the most important cause known to the respondent, and this was true of both sexes, all ages, and for all sites combined or separately. Cases said to be due to congenital or birth factors constituted only 7.1 percent of the total; however these were quite significant among persons under age 25. Of the 1,194,000 defects of the lower extremity and hip among persons of this age, 34.5 percent were due to congenital or birth factors.

The cause was unknown in 18.8 percent of all orthopedic impairments. Other and ill-defined conditions were responsible for 17.1 percent. Figure 6 shows the causes of orthopedic defects, all sites and ages combined, in terms of rates, among males and females.

Activity limitation.—Preliminary study of the data indicated that relatively few persons were totally unable to engage in the major activity of their group because of orthopedic defects of this kind. However, as seen in table 17, these impairments were limiting to some extent in 25.4 percent of all cases. The proportion of cases causing limitation increased consistently with age (fig. 7).

As shown in table 17, among persons 65 years of age or older, orthopedic defects involving the lower extremity and hip caused limitation in 41.3 percent of the cases; and those involving multiple sites, such as arms and legs, or back and legs, were limiting in almost half of the cases among persons of these ages.

Table 15. Average prevalence, percent distribution, and rate per 1,000 population of im-
July 1959-

[Data are based on household interviews and refer to the living, civilian, noninstitutional population. The survey design

Etiology and age	All sites	Back or spine	Upper extremity and shoulder	Lower extremity and hip	Other and multiple NEC
	Average number in thousands				
All ages					
All causes	13,198	4,758	2,269	5,089	1,082
Injury	7,519	2,287	1,700	2,991	540
Congenital or birth factors	939	102	149	602	86
Other and ill-defined conditions	2,254	953	261	813	228
Unknown to respondent	2,486	1,415	161	682	228
Under 25					
All causes	2,242	561	337	1,194	149
Injury	975	258	228	439	51
Congenital or birth factors	545	35	66	412	31
Other and ill-defined conditions	381	131	23	197	30
Unknown to respondent	341	137	21	146	37
25-44					
All causes	4,278	1,912	708	1,343	315
Injury	2,504	916	549	872	167
Congenital or birth factors	212	42	47	96	27
Other and ill-defined conditions	764	425	69	214	57
Unknown to respondent	798	529	44	161	64
45-64					
All causes	4,276	1,636	755	1,514	370
Injury	2,593	805	580	1,005	204
Congenital or birth factors	127	(*)	(*)	64	(*)
Other and ill-defined conditions	690	289	94	248	60
Unknown to respondent	866	525	60	198	82
65+					
All causes	2,403	649	469	1,038	247
Injury	1,447	308	344	677	118
Congenital or birth factors	56	(*)	(*)	(*)	(*)
Other and ill-defined conditions	419	109	76	154	80
Unknown to respondent	482	224	35	177	45

[1]Except paralysis and absence.

pairments[1] of limbs, back, and trunk, by etiology according to age and site: United States, June 1961

and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

All sites	Back or spine	Upper extremity and shoulder	Lower extremity and hip	Other and multiple NEC	All sites	Back or spine	Upper extremity and shoulder	Lower extremity and hip	Other and multiple NEC
Percent distribution					Rate per 1,000 population				
100.0	100.0	100.0	100.0	100.0	74.9	27.0	12.9	28.9	6.1
57.0	48.1	74.9	58.8	49.9	42.6	13.0	9.6	17.0	3.1
7.1	2.1	6.6	11.8	7.9	5.3	0.6	0.8	3.4	0.5
17.1	20.0	11.5	16.0	21.1	12.8	5.4	1.5	4.6	1.3
18.8	29.7	7.1	13.4	21.1	14.1	8.0	0.9	3.9	1.3
100.0	100.0	100.0	100.0	100.0	28.2	7.1	4.2	15.0	1.9
43.5	46.0	67.7	36.8	34.2	12.3	3.2	2.9	5.5	0.6
24.3	6.2	19.6	34.5	20.8	6.9	0.4	0.8	5.2	0.4
17.0	23.4	6.8	16.5	20.1	4.8	1.6	0.3	2.5	0.4
15.2	24.4	6.2	12.2	24.8	4.3	1.7	0.3	1.8	0.5
100.0	100.0	100.0	100.0	100.0	94.2	42.1	15.6	29.6	6.9
58.5	47.9	77.5	64.9	53.0	55.1	20.2	12.1	19.2	3.7
5.0	2.2	6.6	7.1	8.6	4.7	0.9	1.0	2.1	0.6
17.9	22.2	9.7	15.9	18.1	16.8	9.4	1.5	4.7	1.3
18.7	27.7	6.2	12.0	20.3	17.6	11.6	1.0	3.5	1.4
100.0	100.0	100.0	100.0	100.0	118.8	45.5	21.0	42.1	10.3
60.6	49.2	76.8	66.4	55.1	72.0	22.4	16.1	27.9	5.7
3.0	(*)	(*)	4.2	(*)	3.5	(*)	(*)	1.8	(*)
16.1	17.7	12.5	16.4	16.2	19.2	8.0	2.6	6.9	1.7
20.3	32.1	7.9	13.1	22.2	24.1	14.6	1.7	5.5	2.3
100.0	100.0	100.0	100.0	100.0	156.7	42.3	30.6	67.7	16.1
60.2	47.5	73.3	65.2	47.8	94.4	20.1	22.4	44.2	7.7
2.3	(*)	(*)	(*)	(*)	3.7	(*)	(*)	(*)	(*)
17.4	16.8	16.2	14.8	32.4	27.3	7.1	5.0	10.0	5.2
20.1	34.5	7.5	17.1	18.2	31.4	14.6	2.3	11.5	2.9

Table 16. Average prevalence, percent distribution, and rate per 1,000 population of impairments[1] of

[Data are based on household interviews and refer to the living, civilian, noninstitutional population. The survey design

Sex and etiology	All sites	Back or spine	Upper extremity and shoulder	Lower extremity and hip	Other and multiple NEC
	Average number in thousands				
Both sexes					
All causes	13,198	4,758	2,269	5,089	1,082
Injury	7,519	2,287	1,700	2,991	540
Congenital or birth factors	939	102	149	602	86
Other and ill-defined conditions	2,254	953	261	813	228
Unknown to respondent	2,486	1,415	161	682	228
Male					
All causes	7,243	2,425	1,373	2,895	550
Injury	4,506	1,329	1,070	1,780	327
Congenital or birth factors	514	38	92	342	42
Other and ill-defined conditions	1,102	432	130	432	109
Unknown to respondent	1,121	626	81	341	73
Female					
All causes	5,955	2,333	897	2,194	531
Injury	3,013	958	630	1,211	214
Congenital or birth factors	425	64	56	261	44
Other and ill-defined conditions	1,152	521	131	381	119
Unknown to respondent	1,364	790	80	341	154

[1]Except paralysis and absence.

limbs, back, and trunk by etiology, according to sex and site: United States, July 1959-June 1961

and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

All sites	Back or spine	Upper extremity and shoulder	Lower extremity and hip	Other and multiple NEC	All sites	Back or spine	Upper extremity and shoulder	Lower extremity and hip	Other and multiple NEC
Percent distribution					Rate per 1,000 population				
100.0	100.0	100.0	100.0	100.0	74.9	27.0	12.9	28.9	6.1
57.0	48.1	74.9	58.8	49.9	42.6	13.0	9.6	17.0	3.1
7.1	2.1	6.6	11.8	7.9	5.3	0.6	0.8	3.4	0.5
17.1	20.0	11.5	16.0	21.1	12.8	5.4	1.5	4.6	1.3
18.8	29.7	7.1	13.4	21.1	14.1	8.0	0.9	3.9	1.3
100.0	100.0	100.0	100.0	100.0	84.4	28.3	16.0	33.8	6.4
62.2	54.8	77.9	61.5	59.5	52.5	15.5	12.5	20.8	3.8
7.1	1.6	6.7	11.8	7.6	6.0	0.4	1.1	4.0	0.5
15.2	17.8	9.5	14.9	19.8	12.8	5.0	1.5	5.0	1.3
15.5	25.8	5.9	11.8	13.3	13.1	7.3	0.9	4.0	0.9
100.0	100.0	100.0	100.0	100.0	65.8	25.8	9.9	24.2	5.9
50.6	41.1	70.2	55.2	40.3	33.3	10.6	7.0	13.4	2.4
7.1	2.7	6.2	11.9	8.3	4.7	0.7	0.6	2.9	0.5
19.3	22.3	14.6	17.4	22.4	12.7	5.8	1.4	4.2	1.3
22.9	33.9	8.9	15.5	29.0	15.1	8.7	0.9	3.8	1.7

Table 17. Average number, percent distribution, and rate per 1,000 population of impairments[1] of ment: United States,

[Data are based on household interviews and refer to the living, civilian, noninstitutional population. The survey design

Age and activity limitation	All sites	Back or spine	Upper extremity and shoulder	Lower extremity and hip	Other and multiple NEC
	Average number in thousands				
All ages					
Total	13,198	4,758	2,269	5,089	1,082
With activity limitation	3,353	1,271	383	1,307	393
With no activity limitation	9,845	3,487	1,887	3,782	688
Under 25					
Total	2,242	561	337	1,194	149
With activity limitation	334	94	42	160	37
With no activity limitation	1,908	467	295	1,033	112
25-44					
Total	4,278	1,912	708	1,343	315
With activity limitation	914	452	99	277	87
With no activity limitation	3,363	1,460	609	1,066	228
45-64					
Total	4,276	1,636	755	1,514	370
With activity limitation	1,219	488	142	440	149
With no activity limitation	3,057	1,148	614	1,074	221
65+					
Total	2,403	649	469	1,038	247
With activity limitation	887	237	100	429	120
With no activity limitation	1,516	412	368	608	127

[1]Except paralysis and absence.

limbs, back, and trunk, according to site and age, by activity limitation caused by the impair- July 1959-June 1961

and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

All sites	Back or spine	Upper extremity and shoulder	Lower extremity and hip	Other and multiple NEC	All sites	Back or spine	Upper extremity and shoulder	Lower extremity and hip	Other and multiple NEC
Percent distribution					Rate per 1,000 population				
100.0	100.0	100.0	100.0	100.0	74.9	27.0	12.9	28.9	6.1
25.4	26.7	16.9	25.7	36.3	19.0	7.2	2.2	7.4	2.2
74.6	73.3	83.2	74.3	63.6	55.8	19.8	10.7	21.5	3.9
100.0	100.0	100.0	100.0	100.0	28.2	7.1	4.2	15.0	1.9
14.9	16.8	12.5	13.4	24.8	4.2	1.2	0.5	2.0	0.5
85.1	83.2	87.5	86.5	75.2	24.0	5.9	3.7	13.0	1.4
100.0	100.0	100.0	100.0	100.0	94.2	42.1	15.6	29.6	6.9
21.4	23.6	14.0	20.6	27.6	20.1	10.0	2.2	6.1	1.9
78.6	76.4	86.0	79.4	72.4	74.0	32.1	13.4	23.5	5.0
100.0	100.0	100.0	100.0	100.0	118.8	45.5	21.0	42.1	10.3
28.5	29.8	18.8	29.1	40.3	33.9	13.6	3.9	12.2	4.1
71.5	70.2	81.3	70.9	59.7	84.9	31.9	17.1	29.8	6.1
100.0	100.0	100.0	100.0	100.0	156.7	42.3	30.6	67.7	16.1
36.9	36.5	21.3	41.3	48.6	57.8	15.5	6.5	28.0	7.8
63.1	63.5	78.5	58.6	51.4	98.9	26.9	24.0	39.7	8.3

Table 18. Population used in obtaining rates shown in this publication by sex and age: United States, July 1959-June 1961

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

Age	Sex		
	Both sexes	Male	Female
	Population in thousands		
All ages	176,302	85,776	90,526
Under 25	79,556	39,770	39,787
25-44	45,423	21,747	23,676
45-64	35,989	17,361	18,628
65-74	10,028	4,629	5,399
75+	5,306	2,270	3,037

NOTE: For official population estimates for more general use, see 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 on Selected Impairments is one of a series of statistical reports prepared by the U. S. National Health Survey. It is based on information collected in a continuing nationwide sample of households in the Health Interview Survey, which is one of the major parts of the program.

The Health Interview Survey utilizes a questionnaire which, in addition to personal and demographic characteristics, obtains information on illnesses, injuries, chronic conditions and impairments, health insurance coverage, 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 the consolidated sample for 104 weeks of interviewing during the period July 1959-June 1961.

The population covered by the sample for the Health Interview Survey is the civilian, noninstitutional population of the United States living at the time of the interview. The sample does not include members of the Armed Forces, U. S. nationals living in foreign countries, or crews of vessels.

Statistical Design of the Health Interview Survey

General plan.—The sampling plan of the survey follows a multistage probability design which permits a continuous sampling of the civilian, noninstitutional population of the United States. The first stage of this design consists of drawing a sample of 500 from the 1,900 geographically defined Primary Sampling Units (PSU's) into which the United States has been divided. A PSU is a county, a group of contiguous counties, or a Standard Metropolitan Statistical Area.

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

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

Sample size and geographic detail.—Over the 24-month period ending June 1961, the sample included approximately 250,000 persons from 76,000 households in 12,800 segments. The over-all sample was designed in such a fashion that tabulations can be provided for each of the major geographic regions and for urban and rural sectors of the United States.

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

Estimating methods.—Each statistic produced by the survey—for example, the number of persons who have a hearing impairment—is the result of two stages of ratio estimation. In the first of these, the factor is the ratio of the 1950 decennial population count to the 1950 estimated population in the U. S. National Health Survey's first-stage sample of PSU's. These factors are applied for some 50 color-residence classes.

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

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

As noted, each week's sample represents the population living during that week as well as characteristics of the population. Consolidation of samples over a time period, say a calendar quarter, produces estimates of average characteristics of the U. S. population for that calendar quarter.

For prevalence statistics, such as number of persons with hearing impairments, figures are first calculated for each calendar quarter by averaging estimates for all weeks of interviewing in that quarter. Prevalence data for a year are then obtained by averaging the four quarterly figures.

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 in-

terviewed. The total noninterview rate was 5 percent; 1 percent was refusal, and the remainder was primarily due to the failure to find any eligible household respondent after repeated trials.

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

There are limitations to the accuracy of diagnostic and other information collected in household interviews. For diagnostic information, the household respondent can, at best, pass on to the interviewer only the information the physician has given to the family. For conditions not medically attended, diagnostic information is often no more than a description of symptoms. However, other types of facts such as those concerning the circumstances and consequences of illness or injury and the resulting action taken or sought by the individual can be obtained more accurately from household members than from any other source, since only the persons concerned are in a position to report all of this type of information.

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

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

Reliability of Estimates

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

The standard error is primarily a measure of sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the standard error also reflects part of the variation which arises in the measurement process. It does not include estimates of any biases which might lie in the data. The chances are about 68 out of 100 that an estimate from the sample 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. 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.

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 with visual impairments, and (2) statistics for which the measure for a single individual for the period of reference is usually either 0 or 1, on occasion may take on the value 2, and very rarely, 3.

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

Wide range.—This class consists of statistics for which the measure for a single individual for the period of reference frequently will range from 0 to a number in excess of 5, e.g., the number of days of work loss experienced during the year.

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 data 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 two weeks.

Only the charts on sampling error applicable to data contained in this report are presented. Those shown are charts for aggregates and percentages based on eight calendar quarters of data collection.

General rules for determining relative sampling errors.—The "guide" on page 36, 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 of estimates of aggregates, such as the number of persons with a given characteristic, are obtained from appropriate curves on page 37. The number of persons in the total U. S. population or in an age-sex class of the total population is ad-

justed 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 of percentages in a percent distribution of a total are obtained from appropriate curves on page 38. For values which do not fall on one of the curves presented in the chart, visual interpolation will provide a satisfactory approximation.

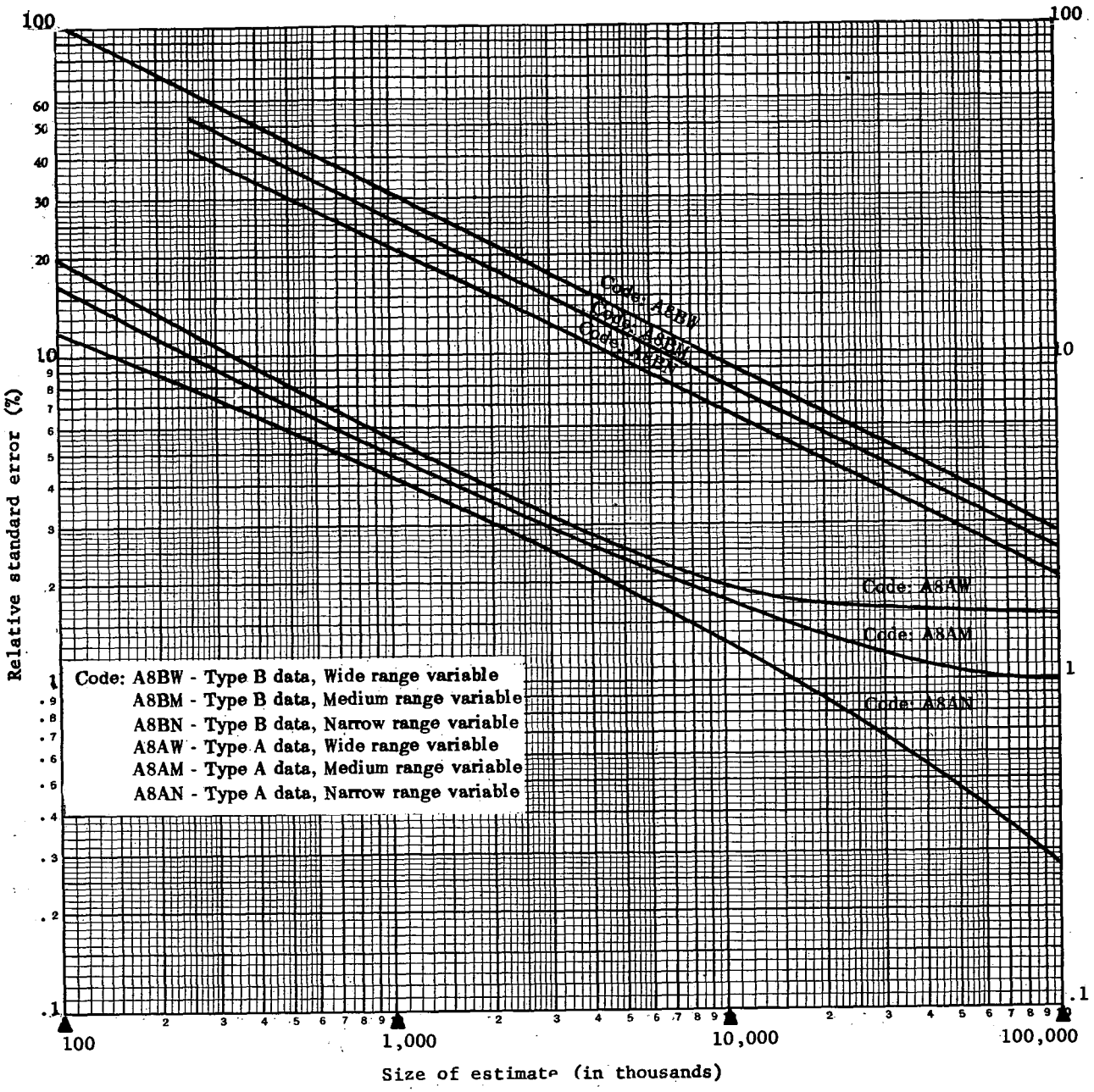
Rule 3. Estimates of rates where the numerator is a subclass of the denominator: This rule applies for prevalence rates or where a unit of the numerator occurs, with few exceptions, only once in the year for any one unit in the denominator. For example, in computing the rate of visual impairments per 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 on page 38. 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.

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 the statistic as described on page 34; and (4) the range of the statistic as described on page 34.

Statistic	Use:		
	Rule	Code	on page
Number of:			
Impairments, by type	1	A8AN	37
Persons in the U. S. population, or total number of persons in any age-sex category	Not subject to sampling error		
Percentage distribution of:			
Impairments, by characteristic	2	P8AN-M	38
Prevalence rates of impairments:			
Per 1,000 total population or per 1,000 persons in any subgroup of the total U. S. population	3	P8AN-M	38

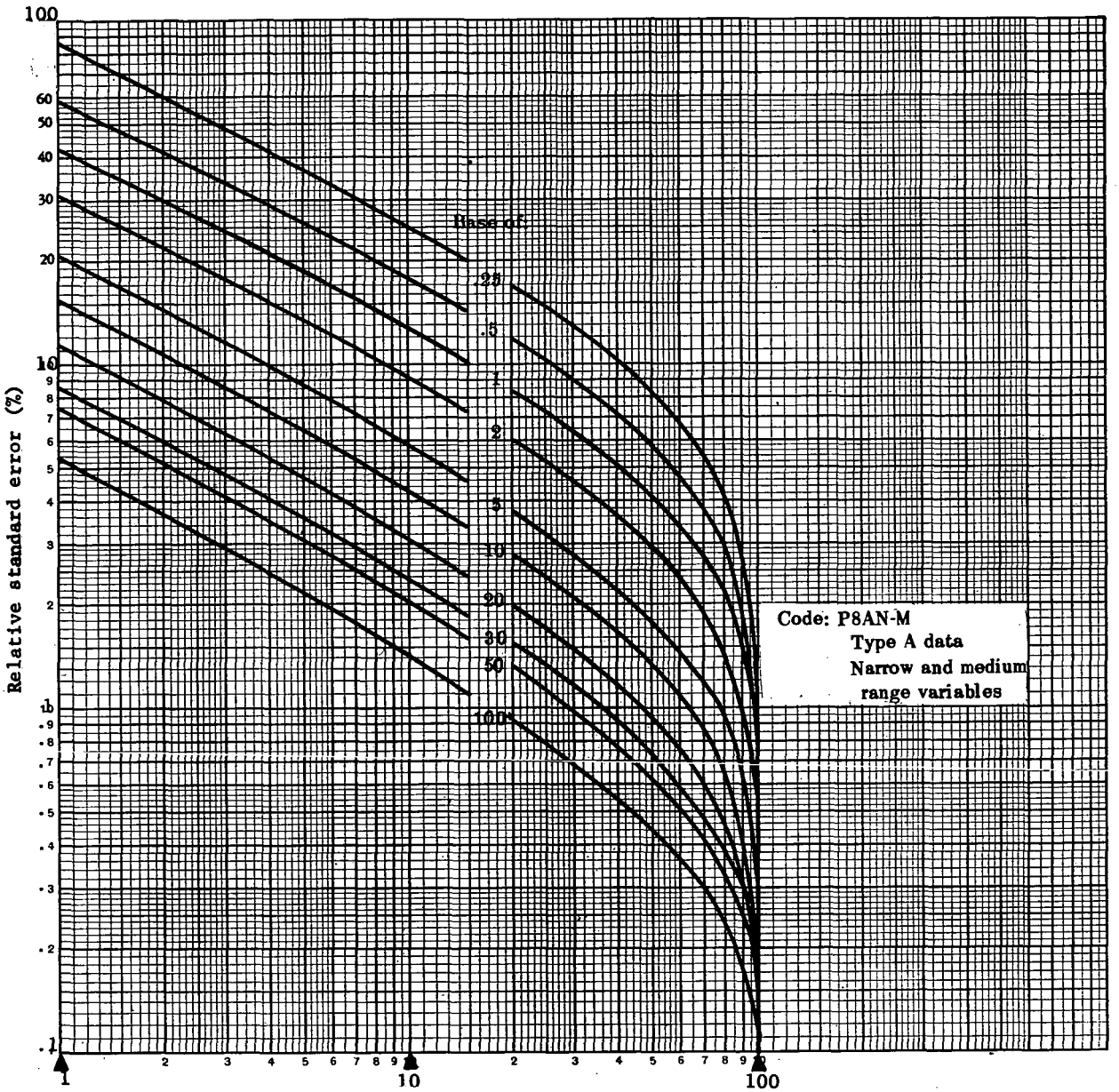
Relative standard errors for aggregates based on eight quarters of data collection for data of all types and ranges



Example of use of chart: An aggregate of 5,000,000 (on scale at bottom of chart) for a Narrow range type A statistic (code: A8AN) has a relative standard error of 1.9 percent, read from scale at left side of chart, or a standard error of 95,000 (1.9 percent of 5,000,000). For a Wide range type B statistic (code: A8BW), an aggregate of 10,000,000 has a relative error of 9.3 percent or a standard error of 930,000 (9.3 percent of 10,000,000).

Relative standard errors for percentages based on eight 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 2.8 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 2.8 percent or 0.56 percentage points.

APPENDIX II

DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT, AND CLASSIFICATION OF IMPAIRMENTS (X-Code)

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

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 "illness-recall" questions. Hence, an impairment is one type of morbidity condition. 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; 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 coded according to the International Classification of Diseases with certain modifications adopted to make the code more suitable for a household-interview-type survey. Impairments are coded according to the Classification of Impairments (X-Code), shown later in this Appendix.

Chronic condition.—A condition is considered to be chronic if (1) it is described by the respondent in terms of one of the chronic diseases on the "Check List of Chronic Conditions" or in terms of one of the types of impairments on the "Check List of Impairments," or (2) the condition is described by the respondent as having been first noticed more than three months before the week of the interview. All impairments are chronic conditions.

Impairments—general definition and method of coding.—The term "impairment," as used in the National Health Survey, refers to certain chronic or permanent defects, disabling or not, representing, for the most part, decrease or loss of ability to perform certain functions, particularly those of the musculoskeletal system and special senses. Impairments are restricted to conditions included in the Classification of Impairments (referred to as the X-Code) and are coded by type, site, and etiology according to that classification. Type and site are expressed by the numbers X00-X99, and etiology is indicated by adding to each type the appropriate 1-digit code from one of the two lists of etiologic factors.

Impairments are usually residuals of old injuries or past, inactive diseases or influences, but they may be due to continuing active chronic diseases. If the originating cause is now inactive or cured, or unknown, the impairment only is coded with its 1-digit etiologic code. If the cause is an active chronic disease, the cause is usually coded also, in terms of the code numbers of the International Classification of Diseases (referred to as the ICD); however, if the impairment is one of the types in X70-X79, and is due to a specified active chronic disease, the disease only is coded. Thus, the types of less structurally specific orthopedic difficulties in X70-X79 are excluded from the total count of impairments if they are due to, and more or less inherent in, the current underlying disease causing them.

Examples:

Paraplegia due to old war injury	X44.9
Trouble with spine, cause unknown	X70.0
Hard of hearing, hereditary	X09.Y
Missing foot due to diabetes	X29.5 and 260
Trouble in seeing due to glaucoma	X05.4 and 387
Poor eyesight, not blind, due to cataract and glaucoma	X05.3, 385, and 387
Foot trouble due to arthritis	725

The selected types of impairments included in this report, with their X-Code inclusion numbers, are:

1. Visual impairments (X00-X05)
   Severe visual impairments (X00)
   Other visual impairments (X01, X02, X05)
2. Hearing impairments (X06-X09)
3. Speech defects (X10, X11)
4. Absence of major extremity - i.e. arm, leg, foot, hand, exclusive of fingers or toes only (X20-X24, X26-X30, X32, X33)
5. Paralysis, complete or partial (X40-X69)
6. Impairments (except paralysis or absence) of limbs, back, trunk (X70-X79, X80-X89)

Etiology of impairments.—The etiology of an impairment, for the purposes of this report, is its cause in terms of what the respondent considers as the cause. The interviewer asks for the cause of each impairment reported. See the lists of etiologic codes in the Classification of Impairments.

Chronic activity limitation.—Persons with impairments and/or chronic conditions are classified into four categories according to the extent to which their activities are limited at present as a result of these conditions. Since the major 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 descriptions of the four categories below:

1. Persons unable to carry on major activity for their group
   - Preschool children: inability to take part in ordinary play with other children.
   - School-age children: inability to go to school.
   - Housewives: inability to do any housework.
   - Workers and all other persons: inability to work at a job or business.
2. Persons limited in the amount or kind of major activity performed
   - Preschool children: limited in the amount or kind of play with other children, e.g., need special rest periods, cannot play strenuous games, 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, cannot go to school full time or for long periods at a time.
   - Housewives: limited in amount or kind of housework, i.e., 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, cannot do strenuous work.
3. Persons not limited in major activity but otherwise limited
   - 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 with chronic conditions of any kind whose activities are not limited in any of the ways described above.

For the purposes of this report, persons unable to carry on the major activity for their group are designated as having major activity limitation. Persons limited to the degree stated in categories 2 and 3, above, are designated as having partial activity limitation. Persons not limited in any of these ways are designated as having no activity limitation.

CLASSIFICATION OF IMPAIRMENTS (X-Code)

History and Purpose

This classification of impairments was developed by the Division of Public Health Methods in the years 1955-1956 in order to provide—in the relatively simple detail required for household-health surveys—a method of coding certain residuals of diseases and injuries so that both the present effect and the underlying cause could be reflected within one diagnostic code.

The X-Code is essentially a rearrangement and expansion of the Supplementary Y-Codes, Y50-Y88, of ICD, Volume I.

Abbreviations and Special Use of Parentheses

NOS = not otherwise specified
NEC = not elsewhere classified

In addition to the usual purpose, parentheses are used to enclose words or phrases that may or may not be specified but, if used with a given diagnosis, do not change the code assignment of that diagnosis. For example, "paralysis (complete) both legs X44" means that the code number is X44 whether or not the modifier "complete" is specified; "glaucoma (congenital)" means that congenital glaucoma is coded in the same manner as glaucoma not specified as congenital.

LIST OF IMPAIRMENTS, BY TYPE AND SITE (X00-X99)

(The lists of 1-digit etiology codes are shown following X99)

Impairment of Vision (X00-X05)

X00 Blindness, both eyes; blindness NOS. For the full description of cases codable to this category, according to the National Health Survey methods, see text, under Visual Impairments, definitions.
X01 Blind in one eye, other eye defective but not blind
X02 Blind in one eye, other eye good or not mentioned
X05 Impaired vision except as in X00-X02, one or both eyes

Impairment of Hearing (X06-X09)

X06 Deafness, total, both ears; deaf-mutism
X07 Impaired hearing, severe (both ears)
X09 Impaired hearing except as in X06, X07

Impairment of Speech, Intelligence, Special Sense (X10-X19)

X10 Stammering, stuttering
X11 Other speech defect
Excludes deaf-mutism (X06) and cleft palate speech (X91)
X12 Loss or impairment of sense of smell and/or taste
X13 Loss or disturbance of sensation NEC
X14 Special learning disability (reading)
X15 Mental deficiency, mongolism
X16 Mental deficiency, severe except in mongolism
X17 Mental deficiency, moderate
X18 Mental deficiency, mild
X19 Mental deficiency, degree not specified

Absence, Loss, All Sites Except as in X00-X19, X92 (X20-X39)

Upper Extremity

X20 Arm, at or above elbow, and arm NOS
X21 Arm, below elbow and above wrist
X22 Arms, both
X23 Hand, except fingers or thumbs only
X24 Hands, both, except fingers or thumbs only
X25 Fingers and/or thumbs, only, of one or both hands

Absence, Loss—Continued

Lower Extremity

X26 Leg, at or above knee, and leg NOS
X27 Leg, below knee and above ankle
X28 Legs, both
X29 Foot, except toe(s) only
X30 Feet, both, except toes only
X31 Toe(s) only, of one or both feet

Upper and Lower Extremities

X32 One upper (arm or hand) with one lower (leg or foot), except digits only
X33 Three or more (arm, hand, leg, foot) except digits only
X34 Fingers and/or thumb(s) and toe(s)

Other Sites

X35 Digestive organ
X36 Respiratory organ
X37 Urinary organ
X38 Genital organ, breast
X39 Site or organ NEC

Paralysis, Complete or Partial, All Sites, Except as in X00-X19 (X40-X69)

Paralysis NOS (Complete) of Extremities and Trunk (X40-X49)

X40 Upper extremity, one, except fingers only
X41 Upper extremities, both
X42 Finger(s) only
X43 Lower extremity, one, any part except toes only
X44 Lower extremities, both (paraplegia)
X45 Toes only
X46 Paraplegia with bladder or anal sphincter involvement
X47 One side of body, one upper and one lower, same side (hemiplegia)
X48 Three or more major members, or entire body (quadriplegia)
X49 Paralysis NOS, or of other sites of extremities or trunk (complete)

Cerebral Palsy; Paralysis, Partial, of Extremities and Trunk (X50-X59)

X50 Cerebral palsy (and synonyms)
Includes "spastic" if present since birth (congenital)
X51 Partial paralysis, arm(s) or finger(s)
X52 Partial paralysis, leg(s) any part(s)
X53 Partial paralysis, one side of body (hemiparesis)
X54 Partial paralysis, other sites of extremities or trunk
X59 Partial paralysis, palsy, paresis - NOS

Paralysis, Complete or Partial, Sites Except Extremities or Trunk (X60-X69)

X60 Paralysis, complete or partial, face
X61 Paralysis, complete or partial, bladder or anal sphincter, without mention of paralysis of extremities
X69 Paralysis, complete or partial, sites not of extremities, trunk, nor affecting special senses or speech

Non-Paralytic Orthopedic Impairment, NEC (X70-X79)

Excludes conditions in X20-X69, X80-X99 and "disc" conditions in ICD 735

Orthopedic Impairment NEC Involving

X70 Back NOS, spine NOS, vertebra NOS (low) (lumbosacral) (sacro-iliac)
X71 Cervical or thoracic region of back, spine, vertebrae
X72 Coccygeal region of back, spine, vertebrae
X73 Shoulder, upper arm, forearm above wrist; arm NOS
X74 Wrist, hand, finger, thumb
X75 Hip and/or pelvis, alone, or with any other site in X70-X79
Excludes congenital dislocation of hip (X85.X)
X76 Knee, leg NOS, - hip not involved
X77 Ankle, foot, toe, - sites in X76 not involved
X78 Multiple sites NEC (back and legs) (fingers and toes) (legs and arms) (arms and back)
X79 Other and ill-defined sites
Includes: rib; trunk NOS; "side"; limping NOS; "trouble in walking," NOS.
Excludes jaw (X92).

Specified Deformity of Limbs, Back, Trunk (X80-X89)

X80 Curvature of spine
X81 Spina bifida (with meningocele)
X82 Flatfoot; weak or fallen arches
X83 Clubfoot
X84 Deformity, other and multiple, lower extremity, NEC
X85 Dislocation, congenital, and other deformity hip and/or pelvis
X86 Deformity, neck or shoulder region
X87 Deformity finger(s), thumb(s), only
X88 Deformity, upper extremity, except as in X86, X87
X89 Deformity, back, spine, trunk, NEC
Includes: pigeon breast; cervical rib; postural defect NEC; deformed back NEC; deformed spine NEC

Defect, Abnormality, Impairment, NEC (X90-X99)

X90 Disfigurement, scarring, face, nose, lips, ears
X91 Cleft palate and harelip (with speech defect)
X92 Other dentofacial handicap
Includes: malocclusion; congenital anomalies of teeth; deformity of jaw; absence, or deficient number of teeth; deformities of palate and of other oral structures NEC
X93 Deformity of skull (hydrocephaly) (microcephaly)
X94 Dwarfism
X95 Gigantism (excessively overheight)
X96 Obesity (excessively overweight)
X97 Excessively underweight
X98 Artificial orifice (opening) or valve (surgical), any site (colostomy)
X99 Impairment, ill-defined site
Includes: "birth injury" or "brain injury," at ages three months or over, without statement about type of residual; deformed NEC, site or type not indicated. Includes also ill-defined "after effects," type not specified, of tuberculosis of bones and joints, gonococcal infection, poliomyelitis, encephalitis, rickets

LISTS OF 1-DIGIT ETIOLOGY CODES

For Visual Impairments Only (X00-X05)

.0 Unknown or unspecified origin
.1 Refractive errors (congenital)
.2 Strabismus; other disorders of ocular movement (congenital)
.3 Cataract (congenital) (with any other cause in 1-6)
.4 Glaucoma (congenital)
.5 Affections of the retina (congenital) (with any other local disease of eye except cataract)
.6 Optic atrophy NEC and other local diseases of eye NEC
.7 General infectious diseases (as in ICD 001-138)
.8 General acquired noninfectious diseases (as in ICD 140-369, 400-468, 590-594)
.9 Accident or injury except at birth
.X Congenital origin NEC or birth injury
.Y Diseases and conditions not in 0-9 or X (noncongenital) (nontraumatic) (noninfectious) (not localized to eye) (hereditary) (old age)

For All Impairments Except of Vision (X06-X99)

.0 Unknown or unspecified origin
.1 Tuberculosis, any site
.2 Poliomyelitis
.3 Other infection or inflammation; ulcer; any site (general) (local) (scarlet fever) (meningitis) (arthritis) (etc.)
.4 Neoplasm
.5 Diabetes (with gangrene)
.6 Diseases of arteries (with gangrene) (as in ICD 450-456)
.7 Vascular lesions, central nervous system (as in ICD 330-334)
.8 Rickets and osteomalacia
.9 Accident or injury except at birth
.X Congenital origin or birth injury
.Y Diseases and conditions except as in 0-9 or X (noncongenital) (nontraumatic) (noninflammatory) (hereditary) (old age)

ICD CATEGORIES REPLACED BY X-CODE CATEGORIES

The following categories of ICD which are specific for types of impairments in the X-Code or for late effects of certain diseases are not used in the coding for the National Health Survey; they have been replaced by the categories in X00-X99 or have been incorporated into the lists of etiologic factors used in conjunction with the X-Code:

013	Late effects of tuberculosis of bones and joints
035	Late effects of gonococcal infection
081	Late effects of acute poliomyelitis
083.3	Postencephalitic conditions except Parkinsonism (083.0) and psychiatric conditions (083.1, 083.2)
284	Late effects of rickets
287	Obesity
325	Mental deficiency
326.0	Specific learning defects
326.1	Stammering and stuttering of nonorganic origin
326.2	Other speech impediments of nonorganic origin
344	Late effects of intracranial abscess or pyogenic infection
351	Cerebral spastic infantile paralysis
352	Other cerebral paralysis
389	Blindness
397	Deaf-mutism
398	Other deafness
533.0	Malocclusion
533.5	Congenital anomalies of teeth
533.7	Other disorders of tooth development
726.2	Torticollis
734	Internal derangement of knee joint
736	Affection of sacro-iliac joint
737	Ankylosis of joint
745	Curvature of spine
746	Flat foot
747	Hallux valgus and varus
748	Clubfoot
749	Other deformities
751	Spina bifida and meningocele
752	Congenital hydrocephalus
755	Cleft palate and harelip
758.0	Congenital dislocation of hip
758.2	Congenital malformations of skull
758.4	Cervical rib
758.5	Congenital abnormalities of lumbosacral region
N871	Enucleation of eye
N886-N888	Traumatic amputation of upper extremities
N896-N898	Traumatic amputation of lower extremities

The ICD has no categories within its numbers 001-999 exclusively for such conditions as: absence of part, all sites; paralysis, all sites; defective vision not blindness; limitation of motion not paralysis; facial disfigurement; artificial orifice or valve; dwarfism; underweight; and certain other impairments included in the X-Code.

APPENDIX III

QUESTIONNAIRE

The items below show the exact content and wording of the basic questionnaire used in the nationwide household survey of the U. S. National Health Survey. The actual questionnaire is designed for a household as a unit and includes additional spaces for reports on more than one person, condition, accident or hospitalization. Such repetitive spaces are omitted in this illustration.

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

FORM NHS-3 (4-17-59)

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

NATIONAL HEALTH SURVEY

1. Questionnaire ____ of ____ Questionnaires

2. (a) Address or description of location

(b) Mailing address if not shown in (a)

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

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

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

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

11. In case I've overlooked anything, what is the best time to call?

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

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

Ask at all units except apartment houses

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

INSTRUCTIONS

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

15. RECORD OF CALLS AT HOUSEHOLDS

Item		1	Com.	2	Com.	3	Com.	4	Com.	5	Com.
Entire household	Date										
	Time										
Callbacks for individual respondents	Col. No. ____ Date										
	Time										

16. REASON FOR NON-INTERVIEW

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

Comments on non-interview

17. Signature of Interviewer

18. Code

Special instructions or notes

1. (a) What is the name of the head of this household? (Enter name in first column) (b) What are the names of all other persons who live here? (List all persons who usually live here, and all persons staying here who have no usual place of residence elsewhere. List these persons in the prescribed order.) (c) Do any (other) lodgers or roomers live here? ☐ No ☐ Yes (List) → (d) Is there anyone else who lives here who is now away on business? On a visit? Temporarily in a hospital? ☐ No ☐ Yes (List) → (e) Is there anyone else staying here now? ☐ No ☐ Yes (List) → (f) Do any of the people in this household have a home elsewhere? ☐ No (leave on questionnaire) ☐ Yes (If not a household member, delete)	Last name (1) First name and initial
2. How are you related to the head of the household? (Enter relationship to head, for example: head, wife, daughter, grandson, mother-in-law, partner, lodger, lodger's wife, etc.)	Relationship Head
3. How old were you on your last birthday?	Age ☐ Under 1 year
4. Race (Check one box for each person)	☐ White ☐ Negro ☐ Other
5. Sex (Check one box for each person)	☐ Male ☐ Female
If 17 years old or over, ask: 6. Are you now married, widowed, divorced, separated or never married? (Check one box for each person)	☐ Under 17 years ☐ Married ☐ Divorced ☐ Widowed ☐ Separated ☐ Never married
If 17 years old or over, ask: 7. What is the highest grade you completed in school? (Circle highest grade completed or check "None")	☐ Under 17 years Elem: 1 2 3 4 5 6 7 8 High: 1 2 3 4 College: 1 2 3 4 5+ ☐ None
If Male and 17 years old or over, ask: 8. (a) Did you ever serve in the Armed Forces of the United States?	☐ Fem. or und. 17 yrs. ☐ Yes ☐ No
If "Yes," ask: (b) Are you now in the Armed Forces, not counting the reserves? (If "Yes," delete this person from questionnaire) →	☐ Yes ☐ No
(c) Was any of your service during a war or was it peace-time only?	☐ War ☐ Peace-time only
If "War," ask: (d) During which war did you serve?	☐ WW II ☐ Korean ☐ Other
If "Peace-time" only, ask: (e) Was any of your service between June 27, 1950 and January 31, 1955?	☐ Yes ☐ No
If 17 years old or over, ask: 9. (a) What were you doing most of the past 12 months-- (For males): working, or doing something else? (For females): working, keeping house, or doing something else?	☐ Under 17 years ☐ Working ☐ Keeping house ☐ Something else
If "Something else" checked, and person is 45 years old or over, ask: (b) Are you retired?	☐ Yes ☐ No
If "Working," in q. 9(a), ask: 10 (a) Were you working last week or the week before?	☐ Yes ☐ No
If any entry in q. 9 (a) besides "Working," ask: (b) Did you work at a job or business at any time last week or the week before?	
If "No" in q. 10 (a) or 10 (b), ask: (c) Even though you did not work last week or the week before, do you have a job or business?	☐ Yes ☐ No

NOTE: Beginning with question 11 you are to interview for himself or herself, each adult person who is at home.

11. Were you sick at any time LAST WEEK OR THE WEEK BEFORE? (That is, the 2-week period which ended last Sunday)? (a) What was the matter? (b) Anything else?		☐ Yes ☐ No
12. Last week or the week before did you take any medicine or treatment for any condition (besides . . . which you told me about)? (a) For what conditions? (b) Anything else?		☐ Yes ☐ No
13. Last week or the week before did you have any accidents or injuries? (a) What were they? (b) Anything else?		☐ Yes ☐ No
14. Did you ever have an (any other) accident or injury that was still bothering you last week or the week before? (a) How did it bother you? (b) Anything else?		☐ Yes ☐ No
15. AT THE PRESENT TIME do you have any ailments or conditions that have lasted for a long time? (If "No") Even though they don't bother you all the time? (a) What are they? (b) Anything else?		☐ Yes ☐ No
16. Has anyone in the family - you, your--, etc. - had any of these conditions DURING THE PAST 12 MONTHS? (Read Card A, condition by condition; record any conditions mentioned in the column for the person)		☐ Yes ☐ No
17. Does anyone in the family have any of these conditions? (Read Card B, condition by condition; record any conditions mentioned in the column for the person)		☐ Yes ☐ No
R	Show in each person's column who responded for questions 11-17-If person responded for self, show whether entirely or partly.	☐ Responded for self-entirely ☐ Responded for self-partly Col. No.____ was respondent

Table I - ILLNESSES, IMPAIRMENTS AND INJURIES

Line number	Col. No. of Person	Question number	Did you EVER at any time talk to a doctor about . . .?	What did the doctor say it was? - - did he give it a medical name ? For an injury occurring during past 2 weeks, ask: What part of the body was hurt? What kind of injury was it? Anything else? (Also, fill Table A) (Record present effects of earlier injuries in Table I and the accident itself in Table A) (If doctor not talked to record respondent's description)	What was the cause of . . .? (This column to be asked if entry in Col. (d-1) is an Impairment or a Symptom or If entry in Col.(d-1) is from q. 14 or q. 17) (If "Cause" is an injury, also fill Table A)	If eye trouble of any kind and 6 years old or over, ask: Can you see well enough to read ordinary newspaper print with glasses?	What kind of . . . trouble is it? Ask only for: Any entry in Col. (d-1) or (d-2) that includes the words: "Trouble" "Condition" "Disease" and, also for any entry of: "Allergy" "Anemia" "Arthritis" "Asthma" "Mental" (any mention of) "Rheumatism" "Stroke" "Tumor"(or cysts, growths)	What part of the body is affected? Ask only for: Impairments Injuries Abscesses, boils infections, inflammation, sores, ulcers Aches, pains, soreness, weakness Bleeding or blood clots Cancer, tumor cysts or growths Neuralgia or neuritis Head - (Skull, scalp or face) Spine - (Upper, middle or lower) or back Arm - (Shoulder, upper, elbow, lower, wrist, hand) Leg - (Hip, upper, knee, lower, ankle, foot)	LAST WEEK OR THE WEEK BEFORE did . . . cause you to cut down on your usual activities for as much as a day? Check one No (Go to Col. (g)) / Yes	How many days, including the Saturdays and Sundays?	How many of these - - days were you in bed all or most of the day?	If 6-16 years old ask: How many days did . . . keep you from school last week or the week before?
	(a)	(b)	(c)	(d-1)	(d-2)	(d-3)	(d-4)	(d-5)	(e)	(f)	(g)	(h)	(i)
1			☐ Yes ☐ No		x	☐ Yes ☐ No	x	x			Days	___Days or ☐ None	___Days or ☐ None

Table II - HOSPITALIZATION DURING PAST 12 MONTHS

Line number	Col. No. of person	Question No.	When did you enter the hospital? (Month, year)	How many days were you in the hospital, not counting the day you left?	To Interviewer: How many of these - - days were in the past 12 months?	To Interviewer: Will you need to ask cols. (f) and (g)?	To Interviewer: How many of these - - days were later week or the week before?	To Interviewer: Was this person still in the hospital on last Sunday night?	What did they say at the hospital the condition was - - did they give it a medical name? (If "they" didn't say, ask): What did the last doctor you talked to say it was? (Show same detail as in cols. (d-1)-(d-5) of T.I) (If condition from accident or injury, also fill Table A)	Were any operations performed on you during this stay at the hospital? If "Yes," (a) What was the name of the operation? (b) Any other operations?
	(a)	(b)	(c)	(d)	(e)	(z)	(f)	(g)	(h)	(i)
1			Mo: ____ Yr: ____	Days	☐ All or Days	☐ Yes ☐ No	Days ☐ None	☐ Yes ☐ No		☐ Yes ☐ No

Table A - (Accidents and Injuries)

Line No. from Table I: ☐

1. When did it happen? Year _____ (If the year is 1959 or 1960, also enter the month)
Month _____
☐ Accident happened last week or the week before

2. At the time of the accident, what part of the body was hurt? What kind of injury was it? Anything else?
☐ Accident happened last week or the week before

3.(a) Was a car, truck, bus or other motor vehicle involved in the accident in any way? ☐ Yes ☐ No (Go to q. 7)
(b) Was more than one motor vehicle involved? ☐ Yes (more than one) ☐ No
(c) Was it (either one) moving at the time? ☐ Yes ☐ No (Go to q. 7).

4. Were you outside the vehicle, getting in or out of it, a passenger or were you the driver?
1. ☐ Outside 2. ☐ Getting in or out 3. ☐ Passenger 4. ☐ Driver

If "Outside"

5. (a) How did the accident happen?
1. ☐ Collision between motor vehicle and person riding on bicycle, in streetcar, on railroad train, on horse-drawn vehicle
2. ☐ Collision between motor vehicle and person who was walking, running, or standing
3. ☐ Other (Specify) _____
(b) What kind of motor vehicle was involved?
1. ☐ Car 2. ☐ Taxi 3. ☐ Bus 4. ☐ Truck 5. ☐ Motorcycle 6. ☐ Other (Specify) _____
(Go to question 8)

If "Getting in or out," "Passenger" or "Driver"

6. (a) How did the accident happen?
1. ☐ Collision with another motor vehicle on roadway
2. ☐ Collision with some other object on roadway (Specify object) _____
3. ☐ Came to sudden stop on roadway
4. ☐ Ran off roadway
5. ☐ Other (Specify) _____
(b) What kind of motor vehicle were you in (getting in) (getting out of) when the accident happened?
1. ☐ Car 2. ☐ Taxi 3. ☐ Bus 4. ☐ Truck 5. ☐ Motorcycle 6. ☐ Other (Specify) _____
(Go to question 8)

18. (a) I have some questions about health insurance. We don't want to include insurance that pays ONLY for accidents, but we are interested in all other kinds... Do you, your---, have insurance that pays all or part of the bills when you go to the hospital? ☐ Yes ☐ No ☐ DK

If "Yes,"

(b) What is the name of the plan (or plans)? Any other plans? Name(s)

(c) Who is covered by this plan (each plan)?

(Check "Yes," in 18(a) for each person covered)

(d) Does the plan (either plan) pay any part of the surgeon's bill for an operation? ☐ Yes ☐ No ☐ DK

19. (a) Again excluding insurance that pays ONLY for accidents, do you, your--- have insurance that pays all or part of the bill for doctors' visits at home or at his office? If "Yes," ☐ Yes ☐ No ☐ DK

(b) What is the name of the plan (or plans)? Any other plans? Name(s)

(c) Who is covered by this plan (each plan)?
(Check "Yes," in 19(a) for each person covered)

R: Enter in each person's column whether or not he responded for himself for questions 18 and 19 and if he did not, (1) show the column number of the person who responded for him or (2) the fact that a Form NHS-3(a) which covered him was left.
q. 18, 19

☐ Responded for self
Col. No. ____ was respondent
☐ Form NHS-3 (a) left

20.(a) DURING THE PAST 12 MONTHS has anyone in the family been a patient in a hospital overnight or longer? ☐ Yes (Table II) ☐ No

If "Yes,"

(b) How many times were you in the hospital? _____ No. of times

21. (a) During the past 12 months has anyone in the family been a patient in a nursing home or sanitarium? ☐ Yes (Table II) ☐ No

If "Yes,"

(b) How many times were you in a nursing home or sanitarium? _____ No. of times

22. During the past 12 months in which group did the total income of your family fall, that is, your's, your--'s, etc.? (Show Card H) Include income from all sources, such as wages, salaries, rents from property, pensions, help from relatives, etc. Group No.

Table I - ILLNESSES, IMPAIRMENTS AND INJURIES

If "Yes," in q. 10(a), 10(b) or 10(c), ask:	Did you first notice... (did it happen) DURING THE PAST 3 MONTHS or before that time?		To interviewer:	Did you first notice... (did it happen) DURING THE PAST 12 MONTHS or before that time?	How long since you last talked to a doctor about...?	Do you still take any medicine or treatment that the doctor prescribed for...?	About how many days during the past 12 months has... kept you in bed for all or most of the day?	If 1 or more in Col. (q-1) and "No" in Col. (e), ask:	Ask after completing last condition for each person:			If "1," "2" or "3" in col. (r) ask:			Line number
How many days did ... keep you from work last week or the week before?	Check one: Before 3 mos. / During 3 mos.	Did... start during the past 2 weeks or before that time? (If during past 2 weeks, ask): Which week, last week or the week before?	If col. (k) is checked, or the condition is on either one of Cards A or B, continue; otherwise STOP	If during past 12 months, ask): Which month?	(If less than one month, enter "Und. 1" for "Mo.")	Or, follow any advice he gave?		How many of these days were during last week or the week before?	Please look at this card and read each statement. Then tell me which statement fits you best in terms of health. (Show Cards C-F, as appropriate)	If "1," "2" or "3" in col. (r): Is this because of any of the conditions you have told me about?	If "Yes" in col. (s) Which? (Enter X on line for each condition named)	If "1" or "2" in col. (r) ask: How long have you been ---? (Insert the words of the statement selected)	If 17 years old or over, ask: Were you working at a job or business up to that time?	Please look at this card and read each statement. Then tell me which statement fits you best. (Show Card G)	
(j)	(k) (l)	(m)	(aa)	(n)	(o)	(p)	(q-1)	(q-2)	(r)	(s)	(t)	(u)	(v)	(w)	
___Days or ☐ None		☐ Last week ☐ Week before ☐ Before 2 wks.		Mo. ___ Yr. ___ ☐ Before ☐ Birth	___Mos. ___Yrs. ☐ No. Dr.	☐ Yes ☐ No ☐ No Dr.	___Days or ☐ None	___Days or ☐ None		☐ Yes ☐ No		___Mos. ___Yrs.	☐ Yes ☐ No		1

Table II - HOSPITALIZATION DURING PAST 12 MONTHS

What is the name and address of the hospital you were in? (Enter name, city and State; if city not known, enter County)	For completed hospitalizations only ("No" in Col. (g)): Was any of the hospital bill paid for by any kind of insurance?	If "No" to col. (k), ask: Or, by any kind of plan that pays for hospital costs?	If "No" to both cols. (k) and (l), ask: Do you expect any of the hospital bill to be paid for by insurance or any plan of this kind?	What part of the hospital bill was (will be) taken care of by insurance?	Who carries the cost of this insurance--that is, who pays the premium?
(j)	(k)	(l)	(m)	(n)	(o)
	☐ Yes (Skip to col. n) ☐ No	☐ Yes (Skip to col. n) ☐ No	☐ Yes ☐ No (Stop)	☐ Under ½ ☐ ½ up to ¾ ☐ ¾ or more	☐ Family member(s) ☐ Employer ☐ Union, clubs, etc. ☐ Other (Specify)

7. How did the accident happen?

A. 1. ☐ Any injury involving a uncontrolled fire or explosion
2. ☐ Any injury involving the discharge of a firearm
3. ☐ Any injury from an accident involving a non-motor vehicle in motion (streetcar, railroad train, airplane, boat, bicycle, horse-drawn vehicle)
B. 4. ☐ Any injury inflicted by machinery (belt or motor driven) while in operation (Specify type) _____
5. ☐ Any injury inflicted by edge or point of knife, scissors, nail or other cutting or piercing instrument
6. ☐ Any injury inflicted by foreign body in eye, windpipe, or other orifices
7. ☐ Any injury inflicted by animal or insect
8. ☐ Any injury inflicted by poisonous substance swallowed (Specify substance) _____
C. 9. ☐ Fall on stairs or steps or from a height
10. ☐ All other falls
11. ☐ Bumped into object or person (covers all collisions between persons including striking, punching, kicking, etc.)
12. ☐ Struck by moving object (include objects held in own hand or hand of other person, also falling, flying or thrown objects)
13. ☐ Handling or stepping on sharp or rough object (include wounds from splinters, broken glass, etc.)
14. ☐ Caught in, pinched or crushed (i.e., between two moving objects or between a moving and a stationary object)
15. ☐ Come in contact with hot object or substance or open flame
16. ☐ Lifting or other exertion
17. ☐ Twisting, stumbling, etc.
D. 18. ☐ Other (Specify how accident happened) _____

8.(a) Where did the accident happen--at home or some other place?

1. ☐ At home (inside home) 2. ☐ At home (adjacent premises) ☐ Some other place

If "Some other place," ask:

(b) What kind of place was it?

3. ☐ Street and highway 6. ☐ School, (including school premises)
4. ☐ Farm 7. ☐ Place of recreation and sports, except at school
5. ☐ Industrial place and premises 8. ☐ Other (Specify) _____

9. Were you at work at your job or business when the accident happened?

1. ☐ Yes 2. ☐ No 3. ☐ While in Armed Services 4. ☐ Under 17 at time of accident

FOOTNOTES AND COMMENTS

Card A

NATIONAL HEALTH SURVEY

Check List of Chronic Conditions

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

Card B

NATIONAL HEALTH SURVEY

Check List of Selected Impairments

1. Deafness or serious trouble with hearing
2. Serious trouble with seeing, even when wearing glasses
3. Cleft palate
4. Any speech defect
5. Missing fingers, hand, or arm --- toes, foot, or leg
6. Cerebral palsy
7. Paralysis of any kind
8. Repeated trouble with back or spine
9. Club foot
10. Any permanent stiffness or deformity of the foot, leg, fingers, arm or back
11. Condition present since birth

Card C

NATIONAL HEALTH SURVEY

For:

Workers and other persons except Housewives and Children

1. Not able to work at all at present.
2. Able to work but limited in amount of work or kind of work.
3. Able to work but limited in kind or amount of other activities.
4. Not limited in any of these ways.

Card D

NATIONAL HEALTH SURVEY

For: Housewife

1. Not able to keep house at all at present.
2. Able to keep house but limited in amount or kind of housework.
3. Able to keep house but limited in kind or amount of other activities.
4. Not limited in any of these ways.

Card E

NATIONAL HEALTH SURVEY

For:

Children from 6 through 16 years old

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

Card F

NATIONAL HEALTH SURVEY

For: Children under 6 years old

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

Card G

NATIONAL HEALTH SURVEY

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

Card H

NATIONAL HEALTH SURVEY

Family income during past 12 months

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

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