

Impairments Due to Injury

United States - 1971

Statistics on the prevalence of impairments due to injury, by characteristics of the person with the impairment, class and type of accident causing the injury, and measures of impact. Based on data collected in household interviews during 1971.

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

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SYMBOLS

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

IMPAIRMENTS DUE TO INJURY

Charles S. Wilder and Alice N. Pearson, *Division of Health Interview Statistics*

INTRODUCTION

During 1971 there were an estimated 12.5 million impairments of various types caused by injury based on data reported in the Health Interview Survey of the civilian population not confined to institutions. An impairment is a chronic or permanent defect, 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. The originating cause, or etiology, is obtained for each impairment reported in the interview.

Based on data collected in 1971 there were an estimated 51.1 million impairments reported in household interviews in response to the list of impairments on the questionnaire or in response to questions about conditions causing disability or medical attention, of which 24.6 percent were reported as having been caused by injury.

The report, "Impairments Due to Injury by Class and Type of Accident, United States, July 1959-June 1961," (Series 10, No. 6) presented data quite similar to that in the present report.

Among the 12.5 million impairments due to injury the most frequently reported type was impairment of back or spine (except paralysis) with an estimated prevalence of 3.1 million cases. The second most frequently reported type was impairment of lower extremity or hip (except paralysis or absence) with an estimate of 2.7 million.

An estimated 29.3 percent of all impairments due to injury caused some degree of limitation of activity. About 25.4 percent of all impairments

due to injury resulted from accidents in the home; 29.3 percent resulted from injury occurring while at work; 17.8 percent resulted from moving motor vehicle accidents; and 20 percent resulted from some type of fall.

SOURCE OF DATA

The information presented in this report is based on data collected in household interviews for the Health Interview Survey. Each week trained personnel of the U.S. Bureau of the Census conduct interviews in a representative sample of households in the civilian non-institutional population to obtain information about the health and other characteristics of each person in the household. During 1971 the sample was composed of some 42,000 households containing about 134,000 persons living at the time of interview.

A further description of the statistical design of the survey, the method of estimation, and the general qualifications of the data obtained from surveys is presented in appendix I. Since all of the data included in this report are estimates based on a sample of the population rather than on the entire population, they are subject to sampling errors. While the sampling errors for most of the estimates are of relatively low magnitude, where an estimated number or the numerator or denominator of a rate or percentage is small, the sampling error may be high. Charts from which approximate sampling errors may be estimated and instructions for their use are contained in the section "Reliability of Estimates" in appendix I.

Another source of error in interview data is response error. Response error occurs when household respondents do not know the requested information or are not willing to talk about the subject. Questionnaire design and interviewer training have been aimed at minimizing the effects of respondent differences in reporting.

The restriction of the survey to the civilian population, exclusive of inmates of institutions, living at the time of the interview affects the estimates of the prevalence of impairments due to injury. The omission of the institutionalized population reduces the estimated prevalence since the proportion of such persons in institutions is substantial.

Definitions of certain terms used in this report are explained in appendix II. It is suggested that the reader familiarize himself with these definitions.

The questionnaire used during 1971 is illustrated in its entirety in the current estimates report for this year (Series 10, No. 79). Appendix III shows the checklist of impairments used to obtain most of the reported conditions and the condition pages on which details of each impairment were reported.

COMPARISON WITH DATA FOR JULY 1959-JUNE 1961

The report, "Impairments Due to Injury, by Class and Type of Accident, United States, July 1959-June 1961" (Series 10, No. 6) presented data most closely comparable to that in the present report. Tables A, B, and C present comparisons of the data for July 1959-June 1961 with that for 1971. The prevalence of various types of impairments due to injury for persons in the civilian noninstitutional population is shown in table A. The increase in number of visual and hearing impairments resulted primarily from change in the checklist of impairments read to respondents in the interview. The prevalence of visual impairments during July 1959-June 1961 was obtained primarily from responses to the checklist item: "Serious trouble with seeing, even when wearing glasses." In 1971 the word "serious" was deleted from the checklist item and respondents were asked: "Does anyone in the family now have"—

Table A. Prevalence of impairments due to injury per 1,000 population, by type of impairment: United States, July 1959-June 1961 and 1971

Type of impairment	1971	July 1959-June 1961
	Number per 1,000 population	
Impairments due to injury-----	62.0	60.5
Visual impairments ¹ -----	4.6	3.2
Hearing impairments ¹ -----	4.7	2.6
Paralysis, complete or partial-----	0.8	0.8
Absence of fingers and toes ² -----	3.7	8.5
Absence of major extremities-----	0.9	1.1
Impairments, ³ back or spine-----	15.4	13.0
Impairments, ³ upper extremity and shoulder---	8.4	9.6
Impairments, ³ lower extremity and hip-----	13.6	17.0
Other and multiple impairments ³ of limbs, back, and trunk-----	3.8	3.1
All other impairments ² -----	6.2	1.7

¹Comparability affected by change in checklist of conditions read to respondent, see text explanation.

²Comparability affected by change in coding practice, see text explanation.

³Except paralysis or absence.

"Blindness in one or both eyes?"

Cataracts?

Glaucoma?

Color blindness?

A detached retina or any other condition of the retina?

Any other trouble seeing with one or both eyes even when wearing glasses?"

The rise in rate in table A for visual impairments due to injury could have resulted solely

from the change in checklist items and not from a real increase in impairments affecting vision caused by injury. This is based on Health Interview Survey experience that condition reporting increases whenever specific conditions are read to respondents.

Parallel changes in the checklist items for hearing impairments also could account for the rise in rate for hearing impairments.

Changes in the rates of absence of fingers and toes and all other impairments result mostly from a change in medical coding practice in 1971 when absence of a finger or toe was coded only if the entire finger or toe was missing. Absence of less than the entire finger or toe was coded to an impairment code X39, which is in-

cluded with all other impairments. In the earlier period absence of fingers and toes included entire or partial absence.

All other items in table A should not have been affected by changes in questionnaires or processing between the two periods. Similarly, tables B and C may be compared directly.

Table B shows no substantial change in 1971 in percent of impairments due to injury according to the class of accident compared with data for July 1959-June 1961. For instance in 1971, 41.0 percent of all visual impairments resulted from injuries in the home compared with 40.5 percent in the earlier period. However, there was a smaller proportion of visual impairments while at work in 1971 than in the earlier

Table B. Percent of impairments due to injury in the home, while at work, or in moving motor vehicles, according to type of impairment: United States, July 1959-June 1961 and 1971

Type of impairment	Due to injury					
	In the home		While at work		In moving motor vehicles	
	1971	July 1959-June 1961	1971	July 1959-June 1961	1971	July 1959-June 1961
Impairments due to injury-----	25.4	28.0	29.3	33.0	17.8	15.4
Visual impairments-----	41.0	40.5	21.5	28.1	7.8	9.6
Hearing impairments-----	24.1	27.4	11.5	16.6	9.1	10.0
Paralysis, complete or partial-	*	20.3	*	23.2	*	26.1
Absence of fingers or toes-----	27.5	26.5	53.7	55.8	*	2.6
Absence of major extremities---	*	14.3	38.5	39.8	*	14.8
Impairments, ¹ back or spine---	19.1	23.2	31.7	35.5	28.7	22.6
Impairments, ¹ upper extremity and shoulder-----	30.1	34.2	30.1	31.6	10.5	11.1
Impairments, ¹ lower extremity and hip-----	25.9	28.6	19.2	24.5	18.9	18.0
Other and multiple impairments ¹ of limbs, back, and trunk-----	20.5	24.1	33.1	31.7	34.0	26.5
All other impairments-----	28.1	27.6	44.9	28.0	10.0	17.4

¹Except paralysis or absence.

NOTE: The information collected during a single year is subject to more sampling variability than data collected over a 2 year period. Thus the insertion of asterisks for the 1971 data should not be interpreted as necessarily a radical change in rate for 1971 contrasted with that for the earlier period.

period. In general, for the other impairments, there were small differences in the percentages and in most instances they could have been caused by sampling variability.

Falls were the leading cause of impairments due to injury in 1971. Falls on stairs, steps, or from a height accounted for 8.7 percent of such impairments, while all other falls caused 11.3 percent for a combined total of 20 percent. During July 1959-June 1961, falls accounted for 27.3 percent of all impairments due to injury. Table C shows a substantial increase in impair-

Table C. Percent distribution of impairments due to injury by type of accident: United States, July 1959-June 1961 and 1971

Type of accident	1971	July 1959-June 1961
	Percent distribution	
Impairments due to injury-----	100.0	100.0
Moving motor vehicle-----	17.8	15.4
Uncontrolled fire or explosion-----	3.1	2.6
Discharge of firearm-----	3.9	5.0
Nonmotor vehicle, in motion-----	2.0	2.9
Machinery, in operation-----	9.2	11.6
Cutting or piercing instrument-----	3.4	3.9
Foreign body in eye or other orifice-----	2.3	1.6
Injury caused by animal or insect-----	0.9	1.5
Fall on stairs, steps, or from a height-----	8.7	14.1
All other falls-----	11.3	13.2
Bumped into object or person-----	5.1	4.3
Struck by moving object-----	5.3	7.3
Handled or stepped on rough objects-----	0.7	1.2
Caught in, pinched, or crushed between two objects-----	2.8	3.0
One-time lifting or exertion-----	5.6	5.7
Twisted or stumbled-----	2.5	2.3
Other and unknown-----	15.5	4.3

ments due to other and unknown types of accidents. Thus it is possible that poorer reporting of the types of accidents in 1971 accounts for some of the differences in levels for these two time periods.

IMPAIRMENTS DUE TO INJURY: PREVALENCE AND DEMOGRAPHIC CHARACTERISTICS

During 1971 an estimated 12,547,000 impairments resulting from injury were reported in the Health Interview Survey (table 1). These impairments were still present at the time of interview and give some measure of the long-range effect of injuries which may have occurred recently or some time in the past. As noted earlier, these impairments due to injury represent about 24.6 percent of all impairments reported in the health interviews conducted during 1971. Table 1 shows that the lowest proportion of impairments resulting from injury was hearing impairments and that the highest proportion was absence of the entire finger or toe. Traumatic amputation of fingers or toes was responsible for about 9 of each 10 such impairments.

The prevalence rate of impairments due to injury was 62.0 per 1,000 persons in the civilian noninstitutional population of the United States. The prevalence per 1,000 persons was highest for impairments of back or spine (except paralysis) with a rate of 15.4. The lowest rate reported was 0.8 per 1,000 for paralysis due to injury.

Estimates of the prevalence of impairments were obtained in health interviews primarily from responses from the reading of a list of 24 items in question 36 (see appendix III).

After the impairment was reported in the probe questions of the interview, it was carried to the condition pages to obtain detailed information about the condition. At this time, the etiology (or cause) was obtained. If it was due to an accident or injury it would be so recorded and the etiology code would be selected from the lists of such codes (see appendix II).

Tables 2-11 show demographic characteristics of persons with selected impairments due to injury at the time of interview. The injury which caused the impairment may have occurred

at any time prior to the date of interview, usually 1 or more years earlier. Table 1 shows that 10.5 percent of these impairments occurred in the past year.^a Socioeconomic factors—education and income—are known to be associated with the amount of medical care obtained. Thus the socioeconomic factors at the time of the original injury may have affected the original treatment of the injury resulting in impairment or no residual defect.

The prevalence of visual impairment due to injury (table 2) was highest among persons 65 years and older, among males, among persons with family income less than \$5,000 per year, among persons in families whose head had less than 9 years of education, and among persons who were currently employed or unemployed.

The other impairment groups display much the same pattern of rates as that for visual impairments due to injury. In all instances, the prevalence (per 1,000 population) was higher among persons 45 years of age and over than among younger persons (tables 3-11). Also, males had higher rates than did females for each type of impairment. In each type of impairment the prevalence (per 1,000 population) was larger among persons with low income and less education. With the exception of paralysis, the prevalence of each type of impairment (per 1,000 persons) was higher for persons in the labor force aged 17 years and over (employed and unemployed) than among persons who were not in the labor force.

CLASS AND TYPE OF ACCIDENT CAUSING INJURY

The original accident which resulted in the impairment due to injury was classified according to whether it occurred in a moving motor vehicle, while at work, at home, or some other place. These events are not mutually exclusive since the same impairment may result from an injury in a moving motor vehicle, while

the person was at work, or some other combination of injuries in moving motor vehicle, work, and home. Table 12 shows that 29.3 percent of all impairments due to injury occurred as a result of injury occurring while at work. One in 4 of the impairments resulted from injury occurring in the home.

Falls on stairs, steps, or from a height were responsible for 8.7 percent of all impairments due to injury, and all other falls for 11.3 percent. Thus falls of any type accounted for 1 in 5 of the impairments due to injury (table 13). The second most frequently reported type of accident was moving motor vehicle accidents with 17.8 percent of the total. These same categories of accidents were the leading causes in each of the three age groups of persons with impairments due to injury.

Falls caused 35.9 percent of all impairments due to injury in the home (table 14). Machinery in operation was the leading cause of impairments due to injury while at work, accounting for 23.0 percent of these impairments (table 15). Falls accounted for 16.0 percent of these impairments.

Table 16 shows that most of the impairments due to moving motor vehicle accidents occurred as a result of collisions between motor vehicles—about 53.9 percent of all moving motor vehicle accidents and 58.9 percent of traffic accidents. The second most frequent cause was that of a vehicle running off the roadway resulting in the injury and subsequent impairment.

The leading causes of visual impairment due to injury were foreign body in eye and being struck by a moving object (table 17). These two types of accident accounted for 2 of each 5 such impairments. The most frequent of the specified types of accident causing hearing impairments were uncontrolled fire or explosion and discharge of firearm. Machinery in operation caused more absence of fingers or toes than any other type of accident. Moving motor vehicle accidents were the leading causes of impairment of back or spine. Falls were the leading cause of impairment of upper and lower extremities. Moving motor vehicle accidents were the leading causes of other and multiple impairments of limbs, back, and trunk.

^aThe impairment may have occurred at the same time as the original injury or at some later date as a residual of the injury.

MEASURES OF IMPACT OF IMPAIRMENTS

About 3 of each 10 impairments due to injury currently caused limitation of activity to some degree (table 18). About 3 of each 4 persons with paralysis were limited in activity. About 39.5 percent of paralyzed persons were unable to carry on the major activity for their age-sex group, that is, working, keeping house, or going to school. The lowest proportion of limitation was reported for hearing impairments with 8.1 percent.

An attempt was made in 1971 to measure the impact of the impairment in terms of the degree to which the condition presently bothers the person. Each person was asked: "How often does his . . . bother him—all the time, often, once in a while, or never?" About

25.9 percent of persons with visual impairments due to injury reported that the condition bothered them all the time, and 35.2 percent were never bothered (table 19). Persons with missing parts of extremities were not asked this question. The highest percentage bothered all the time was reported for hearing impairments.

Persons with impairments due to injury were asked about the number of days spent in bed all or most of the day during the year prior to interview and also about the number of visits to a doctor during the same period. Tables 20 and 21 indicate that relatively few bed-days or doctor visits were reported for persons with impairments due to injury. Since many of these persons had the impairment for more than 1 year, it is not surprising to observe that they required little medical attention or bed-disability days.



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Table 1. Prevalence of impairments, and number, percent, and number per 1,000 population of impairments due to injury, by type of impairment: United States, 1971

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

Type of impairment	Prevalence of impairments in thousands	Due to injury			
		Number in thousands	Percent of total impairments	Number per 1,000 population	Percent occurring in past 12 months
All impairments-----	51,086	12,547	24.6	62.0	10.5
Visual impairments-----	9,596	932	9.7	4.6	5.6
Hearing impairments-----	14,491	946	6.5	4.7	*
Paralysis, complete or partial-----	1,392	157	11.3	0.8	*
Absence of entire fingers, or toes-----	858	748	87.2	3.7	*
Absence of major extremities-----	274	179	65.3	0.9	*
Impairments, ¹ back or spine-----	8,018	3,117	38.9	15.4	12.6
Impairments, ¹ upper extremity and shoulder---	2,440	1,699	69.6	8.4	13.5
Impairments, ¹ lower extremity and hip-----	7,387	2,744	37.1	13.6	12.6
Other and multiple impairments ¹ of limbs, back, and trunk-----	1,034	774	74.9	3.8	12.1
All other impairments-----	5,595	1,251	22.4	6.2	8.0

¹Except paralysis or absence.

Table 2. Prevalence of visual impairments due to injury and number per 1,000 population, by age and selected characteristics: United States, 1971

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

Characteristic	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
	Number of impairments in thousands				Number of impairments per 1,000 population			
Total ¹ -----	932	400	299	232	4.6	2.8	7.2	12.0
<u>Sex</u>								
Male-----	697	310	234	153	7.1	4.5	11.8	18.7
Female-----	235	90	65	80	2.2	1.3	3.0	7.2
<u>Family income</u>								
Less than \$5,000-----	338	113	77	148	8.3	5.0	10.1	14.0
\$5,000-\$9,999-----	282	135	99	*	4.4	2.9	7.8	*
\$10,000-\$14,999-----	154	89	50	*	3.2	2.4	5.4	*
\$15,000 or more-----	102	*	51	*	2.9	*	5.8	*
<u>Education of head of family</u>								
Less than 9 years-----	373	131	111	131	8.0	5.4	9.0	13.4
9-11 years-----	163	63	66	*	4.6	2.5	8.7	*
12 years-----	220	125	64	*	3.4	2.5	5.3	*
13 years or more-----	161	80	50	*	3.1	2.0	5.5	*
<u>Current employment status</u>								
Currently employed-----	473	247	196	*	6.1	5.2	7.3	*
Unemployed-----	57	*	*	*	10.1	*	*	*
Not in labor force-----	402	124	80	198	3.4	1.4	5.9	12.4

¹Includes unknown income and education.

Table 3. Prevalence of hearing impairments due to injury and number per 1,000 population, by age and selected characteristics: United States, 1971

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

Characteristic	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
	Number of impairments in thousands				Number of impairments per 1,000 population			
Total ¹ -----	946	387	394	165	4.7	2.7	9.4	8.5
<u>Sex</u>								
Male-----	679	276	305	97	7.0	4.0	15.4	11.8
Female-----	268	111	89	68	2.6	1.5	4.1	6.1
<u>Family income</u>								
Less than \$5,000-----	250	75	69	105	6.1	3.3	9.0	10.0
\$5,000-\$9,999-----	287	139	121	*	4.5	2.9	9.5	*
\$10,000-\$14,999-----	207	94	102	*	4.3	2.5	10.9	*
\$15,000 or more-----	145	58	72	*	4.1	2.3	8.2	*
<u>Education of head of family</u>								
Less than 9 years-----	272	65	125	83	5.9	2.7	10.2	8.5
9-11 years-----	202	89	87	*	5.8	3.6	11.5	*
12 years-----	248	132	100	*	3.8	2.7	8.3	*
13 years or more-----	210	97	77	*	4.0	2.4	8.5	*
<u>Current employment status</u>								
Currently employed-----	541	248	275	*	7.0	5.2	10.2	*
Unemployed-----	51	*	*	*	9.0	*	*	*
Not in labor force-----	354	114	98	142	3.0	1.3	7.3	8.9

¹Includes unknown income and education.

Table 4. Prevalence of paralysis, complete or partial, due to injury and number per 1,000 population, by age and selected characteristics: United States, 1971

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

Characteristic	All ages	Under 45 years	45 years and over	All ages	Under 45 years	45 years and over
	Number of impairments in thousands			Number of impairments per 1,000 population		
Total ¹ -----	157	67	91	0.8	0.5	1.5
<u>Sex</u>						
Male-----	117	53	64	1.2	0.8	2.3
Female-----	*	*	*	*	*	*
<u>Family income</u>						
Less than \$5,000-----	62	*	*	1.5	*	*
\$5,000 or more-----	85	*	*	0.6	*	*
<u>Education of head of family</u>						
Less than 9 years-----	64	*	*	1.4	*	*
9 years or more-----	92	*	*	0.6	*	*
<u>Current employment status</u>						
Currently employed-----	58	*	*	0.7	*	*
Unemployed-----	*	*	*	*	*	*
Not in labor force-----	92	*	56	0.8	*	1.9

¹Includes unknown income and education.

Table 5. Prevalence of absence of entire fingers or toes due to injury and number per 1,000 population, by age and selected characteristics: United States, 1971

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

Characteristic	All ages	Under 45 years	45-64 years	65 years and over	Number of impairments per 1,000 population			
					All ages	Under 45 years	45-64 years	65 years and over
Total ¹ -----	748	256	285	207	3.7	1.8	6.8	10.7
<u>Sex</u>								
Male-----	632	215	249	169	6.5	3.1	12.6	20.6
Female-----	115	*	*	*	1.1	*	*	*
<u>Family income</u>								
Less than \$5,000-----	250	*	66	135	6.1	*	8.7	12.8
\$5,000-\$9,999-----	216	84	99	*	3.4	1.8	7.8	*
\$10,000-\$14,999-----	157	81	62	*	3.2	2.1	6.6	*
\$15,000 or more-----	67	*	*	*	1.9	*	*	*
<u>Education of head of family</u>								
Less than 9 years-----	321	64	131	126	6.9	2.6	10.7	12.9
9-11 years-----	136	60	52	*	3.9	2.4	6.9	*
12 years-----	187	87	73	*	2.9	1.8	6.0	*
13 years or more-----	90	*	*	*	1.7	*	*	*
<u>Current employment status</u>								
Currently employed-----	431	191	206	*	5.6	4.0	7.7	*
Unemployed-----	*	*	*	*	*	*	*	*
Not in labor force-----	288	51	64	174	2.4	0.6	4.7	10.9

¹Includes unknown income and education.

Table 6. Prevalence of absence of major extremities due to injury and number per 1,000 population, by age and selected characteristics: United States, 1971

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

Characteristic	All ages	Under 45 years	45 years and over	All ages	Under 45 years	45 years and over
	Number of impairments in thousands			Number of impairments per 1,000 population		
Total ¹ -----	179	50	129	0.9	0.4	2.1
<u>Sex</u>						
Male-----	154	*	110	1.6	*	3.9
Female-----	*	*	*	*	*	*
<u>Family income</u>						
Less than \$5,000-----	75	*	59	1.8	*	3.2
\$5,000 or more-----	93	*	61	0.6	*	1.6
<u>Education of head of family</u>						
Less than 9 years-----	69	*	55	1.5	*	2.5
9 years or more-----	107	*	72	0.7	*	1.9
<u>Current employment status</u>						
Currently employed-----	97	*	69	1.3	*	2.3
Unemployed-----	*	*	*	*	*	*
Not in labor force-----	76	*	57	0.6	*	1.9

¹Includes unknown income and education.

Table 7. Prevalence of impairments (except paralysis) of back or spine due to injury and number per 1,000 population, by age and selected characteristics: United States, 1971

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

Characteristic	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
	Number of impairments in thousands				Number of impairments per 1,000 population			
Total ¹ -----	3,117	1,548	1,157	411	15.4	11.0	27.7	21.2
<u>Sex</u>								
Male-----	1,703	883	655	165	17.4	12.7	33.0	20.1
Female-----	1,414	666	502	246	13.5	9.3	22.9	22.0
<u>Family income</u>								
Less than \$5,000-----	868	300	315	253	21.2	13.2	41.3	24.0
\$5,000-\$9,999-----	1,004	546	365	93	15.6	11.6	28.6	21.1
\$10,000-\$14,999-----	650	394	245	*	13.3	10.4	26.2	*
\$15,000 or more-----	431	242	165	*	12.1	9.5	18.7	*
<u>Education of head of family</u>								
Less than 9 years-----	881	244	420	218	19.0	10.0	34.2	22.3
9-11 years-----	558	297	201	60	15.9	12.0	26.6	21.7
12 years-----	950	570	313	67	14.6	11.5	25.9	20.0
13 years or more-----	704	430	216	59	13.4	10.6	23.8	19.9
<u>Current employment status</u>								
Currently employed-----	1,753	1,024	665	64	22.6	21.6	24.7	20.2
Unemployed-----	142	78	62	*	25.1	18.9	45.5	*
Not in labor force-----	1,222	446	430	346	10.2	5.0	31.9	21.6

¹Includes unknown income and education.

Table 8. Prevalence of impairments (except paralysis or absence) of upper extremity and shoulder due to injury and number per 1,000 population, by age and selected characteristics: United States, 1971

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

Characteristic	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
	Number of impairments in thousands				Number of impairments per 1,000 population			
Total ¹ -----	1,699	808	596	295	8.4	5.7	14.3	15.2
<u>Sex</u>								
Male-----	1,167	602	404	160	12.0	8.7	20.4	19.5
Female-----	533	206	192	134	5.1	2.9	8.8	12.0
<u>Family income</u>								
Less than \$5,000-----	520	177	148	195	12.7	7.8	19.4	18.5
\$5,000-\$9,999-----	528	278	195	56	8.2	5.9	15.3	12.7
\$10,000-\$14,999-----	300	180	110	*	6.2	4.8	11.8	*
\$15,000 or more-----	247	137	97	*	6.9	5.4	11.0	*
<u>Education of head of family</u>								
Less than 9 years-----	547	134	226	187	11.8	5.5	18.4	19.1
9-11 years-----	338	168	135	*	9.6	6.8	17.9	*
12 years-----	412	250	128	*	6.3	5.0	10.6	*
13 years or more-----	367	240	96	*	7.0	5.9	10.6	*
<u>Current employment status</u>								
Currently employed-----	991	544	388	59	12.8	11.5	14.4	18.6
Unemployed-----	76	*	*	*	13.4	*	*	*
Not in labor force-----	632	218	179	235	5.3	2.4	13.3	14.7

¹Includes unknown income and education.

Table 9. Prevalence of impairments (except paralysis or absence) of lower extremity and hip due to injury and number per 1,000 population, by age and selected characteristics: United States, 1971

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

Characteristic	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
	Number of impairments in thousands				Number of impairments per 1,000 population			
Total ¹ -----	2,744	1,208	876	659	13.6	8.6	21.0	34.1
<u>Sex</u>								
Male-----	1,645	875	510	259	16.9	12.6	25.7	31.6
Female-----	1,099	333	366	400	10.5	4.6	16.7	35.8
<u>Family income</u>								
Less than \$5,000-----	905	259	230	416	22.1	11.4	30.2	39.4
\$5,000-\$9,999-----	831	424	281	125	12.9	9.0	22.1	28.3
\$10,000-\$14,999-----	499	287	170	*	10.2	7.6	18.2	*
\$15,000 or more-----	358	186	142	*	10.1	7.3	16.1	*
<u>Education of head of family</u>								
Less than 9 years-----	832	180	310	342	17.9	7.4	25.3	34.9
9-11 years-----	421	177	155	89	12.0	7.1	20.5	32.2
12 years-----	740	411	222	108	11.4	8.3	18.4	32.2
13 years or more-----	704	429	172	103	13.4	10.6	18.9	34.8
<u>Current employment status</u>								
Currently employed-----	1,382	789	535	58	17.9	16.7	19.9	18.3
Unemployed-----	141	92	*	*	24.9	22.3	*	*
Not in labor force-----	1,222	328	296	598	10.2	3.7	22.0	37.4

¹Includes unknown income education.

Table 10. Prevalence of other and multiple impairments (except paralysis or absence) of limbs, back, and trunk due to injury and number per 1,000 population, by age and selected characteristics: United States, 1971

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

Characteristic	All	Under	45-64	65	All	Under	45-64	65
	ages	45	years	years	ages	45	years	years
		years		and		years		and
				over				over
	Number of impairments in thousands				Number of impairments per 1,000 population			
Total ¹ -----	774	326	304	143	3.8	2.3	7.3	7.4
<u>Sex</u>								
Male-----	468	204	198	67	4.8	2.9	10.0	8.2
Female-----	306	122	107	77	2.9	1.7	4.9	6.9
<u>Family income</u>								
Less than \$5,000-----	251	74	80	97	6.1	3.2	10.5	9.2
\$5,000-\$9,999-----	232	115	94	*	3.6	2.4	7.4	*
\$10,000-\$14,999-----	135	72	51	*	2.8	1.9	5.5	*
\$15,000 or more-----	126	53	67	*	3.5	2.1	7.6	*
<u>Education of head of family</u>								
Less than 9 years-----	251	68	91	92	5.4	2.8	7.4	9.4
9-11 years-----	149	67	67	*	4.2	2.7	8.9	*
12 years-----	184	88	83	*	2.8	1.8	6.9	*
13 years or more-----	180	100	59	*	3.4	2.5	6.5	*
<u>Current employment status</u>								
Currently employed-----	407	206	169	*	5.3	4.4	6.3	*
Unemployed-----	*	*	*	*	*	*	*	*
Not in labor force-----	329	98	120	111	2.8	1.1	8.9	6.9

¹Includes unknown income and education.

Table 11. Prevalence of "all other" impairments due to injury and number per 1,000 population, by age and selected characteristics: United States, 1971

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

Characteristic	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
	Number of impairments in thousands				Number of impairments per 1,000 population			
Total ¹ -----	1,251	540	507	204	6.2	3.8	12.1	10.5
<u>Sex</u>								
Male-----	975	422	388	166	10.0	6.1	19.6	20.3
Female-----	276	118	119	*	2.6	1.6	5.4	*
<u>Family income</u>								
Less than \$5,000-----	315	95	110	109	7.7	4.2	14.4	10.3
\$5,000-\$9,999-----	434	207	174	53	6.7	4.4	13.7	12.0
\$10,000-\$14,999-----	263	142	109	*	5.4	3.8	11.7	*
\$15,000 or more-----	165	69	82	*	4.6	2.7	9.3	*
<u>Education of head of family</u>								
Less than 9 years-----	463	134	206	123	10.0	5.5	16.8	12.6
9-11 years-----	235	114	88	*	6.7	4.6	11.7	*
12 years-----	316	178	113	*	4.9	3.6	9.3	*
13 years or more-----	220	110	92	*	4.2	2.7	10.1	*
<u>Current employment status</u>								
Currently employed-----	765	336	372	56	9.9	7.1	13.8	17.6
Unemployed-----	53	*	*	*	9.4	*	*	*
Not in labor force-----	433	180	111	142	3.6	2.0	8.2	8.9

¹Includes unknown income and education.

Table 12. Prevalence of impairments due to injury and number and percent due to injury in the home, while at work, or in moving motor vehicle accidents, by type of impairment: United States, 1971

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

Type of impairment	Total in thousands	Due to injury							
		In the home		While at work		In moving motor vehicles			
						Total		Traffic	
		Number in thousands	Percent of impairments	Number in thousands	Percent of impairments	Number in thousands	Percent of impairments	Number in thousands	Percent of impairments
Impairments due to injury-----	12,547	3,191	25.4	3,672	29.3	2,230	17.8	2,038	16.2
Visual impairments-----	932	382	41.0	200	21.5	73	7.8	65	7.0
Hearing impairments-----	946	228	24.1	109	11.5	86	9.1	82	8.7
Paralysis, complete or partial-----	157	*	*	*	*	*	*	*	*
Absence of entire fingers or toes-----	748	206	27.5	402	53.7	*	*	*	*
Absence of major extremities-----	179	*	*	69	38.5	*	*	*	*
Impairments, ¹ back or spine-----	3,117	596	19.1	988	31.7	895	28.7	839	26.9
Impairments, ¹ upper extremity and shoulder---	1,699	512	30.1	511	30.1	178	10.5	157	9.2
Impairments, ¹ lower extremity and hip-----	2,744	711	25.9	526	19.2	519	18.9	472	17.2
Other and multiple impairments ¹ of limbs, back, and trunk-----	774	159	20.5	256	33.1	263	34.0	241	31.1
All other impairments-----	1,251	351	28.1	562	44.9	125	10.0	107	8.6

¹Except paralysis or absence.

Table 13. Prevalence and percent distribution of impairments due to injury by type of accident, according to age: United States, 1971

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

Type of accident	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
	Number of impairments in thousands				Percent distribution			
Impairments due to injury-----	12,547	5,591	4,580	2,376	100.0	100.0	100.0	100.0
Moving motor vehicle-----	2,230	1,233	724	273	17.8	22.1	15.8	11.5
Uncontrolled fire or explosion-----	392	172	182	*	3.1	3.1	4.0	*
Discharge of firearm-----	493	197	233	63	3.9	3.5	5.1	2.7
Nonmotor vehicle, in motion-----	246	102	83	60	2.0	1.8	1.8	2.5
Machinery, in operation---	1,157	365	506	286	9.2	6.5	11.0	12.0
Cutting or piercing instrument-----	428	172	159	97	3.4	3.1	3.5	4.1
Foreign body in eye or other orifice-----	283	124	94	65	2.3	2.2	2.1	2.7
Injury caused by animal or insect-----	108	54	*	*	0.9	1.0	*	*
Fall on stairs, steps, or from a height-----	1,097	401	428	268	8.7	7.2	9.3	11.3
All other falls-----	1,413	497	485	431	11.3	8.9	10.6	18.1
Bumped into object or person-----	639	419	158	62	5.1	7.5	3.4	2.6
Struck by moving object---	664	274	253	137	5.3	4.9	5.5	5.8
Handled or stepped on rough objects-----	94	56	*	*	0.7	1.0	*	*
Caught in, pinched, or crushed between two objects-----	355	137	137	80	2.8	2.5	3.0	3.4
One-time lifting or exertion-----	698	329	275	94	5.6	5.9	6.0	4.0
Twisted or stumbled-----	312	164	91	56	2.5	2.9	2.0	2.4
Other and unknown-----	1,940	896	715	329	15.5	16.0	15.6	13.8

Table 14. Prevalence and percent distribution of impairments due to injury in the home, by type of accident, according to age: United States, 1971

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

Type of accident	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
	Number of impairments in thousands				Percent distribution			
Impairments due to injury-----	3,191	1,274	1,036	881	100.0	100.0	100.0	100.0
Uncontrolled fire or explosion-----	113	61	*	*	3.5	4.8	*	*
Discharge of firearm-----	64	*	*	*	2.0	*	*	*
Machinery, in operation----	236	83	92	61	7.4	6.5	8.9	6.9
Cutting or piercing instrument-----	251	117	76	57	7.9	9.2	7.3	6.5
Foreign body in eye or other orifice-----	139	78	*	*	4.4	6.1	*	*
Fall on stairs, steps, or from a height-----	547	180	199	168	17.1	14.1	19.2	19.1
All other falls-----	600	131	184	284	18.8	10.3	17.8	32.2
Bumped into object or person-----	149	71	55	*	4.7	5.6	5.3	*
Struck by moving object----	200	92	58	50	6.3	7.2	5.6	5.7
Came in contact with hot object or open flame-----	63	*	*	*	2.0	*	*	*
Caught in, pinched, or crushed between two objects-----	105	50	*	*	3.3	3.9	*	*
One-time lifting or exertion-----	173	80	50	*	5.4	6.3	4.8	*
Twisted or stumbled-----	74	*	*	*	2.3	*	*	*
Other and unknown-----	479	237	162	79	15.0	18.6	15.6	9.0

Table 15. Prevalence and percent distribution of impairments due to injury while at work by type of accident, according to age: United States, 1971

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

Type of accident	All ages	Under 45 years	45-64 years	65 years and over	All ages	Under 45 years	45-64 years	65 years and over
	Number of impairments in thousands				Percent distribution			
Impairments due to injury-----	3,672	1,280	1,606	786	100.0	100.0	100.0	100.0
Moving motor vehicle-----	260	122	103	*	7.1	9.5	6.4	*
Uncontrolled fire or explosion-----	67	*	*	*	1.8	*	*	*
Nonmotor vehicle, in motion-----	76	*	*	*	2.1	*	*	*
Machinery, in operation----	843	237	392	215	23.0	18.5	24.4	27.4
Cutting or piercing instrument-----	103	*	*	*	2.8	*	*	*
Foreign body in eye or other orifice-----	75	*	*	*	2.0	*	*	*
Fall on stairs, steps, or from a height-----	325	106	157	62	8.9	8.3	9.8	7.9
All other falls-----	261	87	127	*	7.1	6.8	7.9	*
Bumped into object or person-----	78	*	*	*	2.1	*	*	*
Struck by moving object----	285	98	126	62	7.8	7.7	7.8	7.9
Caught in, pinched, or crushed between two objects-----	179	55	73	51	4.9	4.3	4.5	6.5
One-time lifting or exertion-----	464	215	202	*	12.6	16.8	12.6	*
Twisted or stumbled-----	85	*	*	*	2.3	*	*	*
Other and unknown-----	570	223	215	132	15.5	17.4	13.4	16.8

Table 16. Prevalence and percent distribution of impairments due to injury from moving motor vehicles by location of injured person in relation to the motor vehicle and type of accident: United States, 1971

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

Type of accident	Moving motor vehicle		Moving motor vehicle	
	Total	Traffic	Total	Traffic
	Number of impairments in thousands		Percent distribution	
Impairments due to injury-----	2,230	2,038	100.0	100.0
Injured person outside motor vehicle-----	354	266	15.9	13.1
Pedestrian-----	249	189	11.2	9.3
Other and unknown-----	104	77	4.7	3.8
Injured person inside motor vehicle-----	1,862	1,761	83.5	86.4
Collision between motor vehicles-----	1,201	1,201	53.9	58.9
Ran off roadway-----	276	276	12.4	13.5
Collision with object on roadway-----	69	69	3.1	3.4
Other and unknown-----	215	215	9.6	10.5
Nontraffic accident-----	101	...	4.5	...
Location of injured person unknown-----	*	*	*	*

Table 17. Prevalence and percent distribution of impairments due to injury by type of accident, according to type of impairment: United States, 1971

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

Type of accident	Visual impairment	Hearing impairment	Absence of entire fingers or toes	Impairments ¹ of back or spine	Impairments, ¹ upper extremity and shoulder	Impairments, ¹ lower extremity and hip	Other and multiple impairments ¹ of limb, back, and trunk
Number of impairments in thousands							
Impairments due to injury-----	932	946	748	3,117	1,699	2,744	774
Moving motor vehicle-----	73	86	*	895	178	519	263
Uncontrolled fire or explosion-----	53	125	*	*	*	*	*
Discharge of firearm-----	64	155	*	*	61	81	*
Nonmotor vehicle, in motion---	*	*	*	*	*	63	*
Machinery, in operation-----	*	*	363	*	252	*	*
Cutting or piercing instrument-	80	*	76	*	115	*	*
Foreign body in eye or other orifice-----	224	54	*	*	*	*	*
Injury caused by animal or insect-----	*	*	*	*	*	*	*
Fall on stairs, steps, or from a height-----	*	*	*	396	130	365	88
All other falls-----	*	*	*	382	211	615	102
Bumped into object or person--	*	82	*	140	111	194	*
Struck by moving object-----	161	57	*	74	118	116	*
Handled or stepped on rough objects-----	*	*	*	*	*	*	*
Caught in, pinched, or crushed between two objects-----	*	*	79	*	82	*	*
One-time lifting or exertion--	*	*	*	563	*	*	51
Twisted or stumbled-----	*	*	*	94	*	176	*
Other and unknown-----	154	264	91	434	253	408	87
Percent distribution							
Impairments due to injury-----	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Moving motor vehicle-----	7.8	9.1	*	28.7	10.5	18.9	34.0
Uncontrolled fire or explosion-----	5.7	13.2	*	*	*	*	*
Discharge of firearm-----	6.9	16.4	*	*	3.6	3.0	*
Nonmotor vehicle, in motion---	*	*	*	*	*	2.3	*
Machinery, in operation-----	*	*	48.5	*	14.8	*	*
Cutting or piercing instrument-	8.6	*	10.2	*	6.8	*	*
Foreign body in eye or other orifice-----	24.0	5.7	*	*	*	*	*
Injury caused by animal or insect-----	*	*	*	*	*	*	*
Fall on stairs, steps, or from a height-----	*	*	*	12.7	7.7	13.3	11.4
All other falls-----	*	*	*	12.3	12.4	22.4	13.2
Bumped into object or person--	*	8.7	*	4.5	6.5	7.1	*
Struck by moving object-----	17.3	6.0	*	2.4	6.9	4.2	*
Handled or stepped on rough objects-----	*	*	*	*	*	*	*
Caught in, pinched, or crushed between two objects-----	*	*	10.6	*	4.8	*	*
One-time lifting or exertion--	*	*	*	18.1	*	*	6.6
Twisted or stumbled-----	*	*	*	3.0	*	6.4	*
Other and unknown-----	16.5	27.9	12.2	13.9	14.9	14.9	11.2

¹Except paralysis or absence.

Table 18. Prevalence of impairments due to injury, and number and percent of impairments resulting in limitation of activity by degree of limitation, according to type of impairment: United States, 1971

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

Type of impairment	Total	Impairments due to injury									
		Causing activity limitation	Causing limitation in major activity	Causing inability to carry on major activity	Causing no activity limitation	Total	Causing activity limitation	Causing limitation in major activity	Causing inability to carry on major activity	Causing no activity limitation	
		Number of impairments in thousands					Percent distribution				
Impairments due to injury-----	12,547	3,670	2,586	735	8,877	100.0	29.3	20.6	5.9	70.7	
Visual impairments----	932	184	123	*	748	100.0	19.7	13.2	*	80.3	
Hearing impairments---	946	77	*	*	869	100.0	8.1	*	*	91.9	
Paralysis, complete or partial-----	157	119	99	62	*	100.0	75.8	63.1	39.5	*	
Absence of entire fingers or toes-----	748	*	*	*	714	100.0	*	*	*	95.5	
Absence of major extremities-----	179	113	74	*	66	100.0	63.1	41.3	*	36.9	
Impairments, ¹ back or spine-----	3,117	1,086	849	172	2,031	100.0	34.8	27.2	5.5	65.2	
Impairments, ¹ upper extremity and shoulder-----	1,699	346	202	57	1,353	100.0	20.4	11.9	3.4	79.6	
Impairments, ¹ lower extremity and hip----	2,744	1,117	734	231	1,627	100.0	40.7	26.7	8.4	59.3	
Other and multiple impairments, ¹ of limbs, back, and trunk-----	774	433	319	84	340	100.0	55.9	41.2	10.9	43.9	
All other impairments-	1,251	161	130	*	1,090	100.0	12.9	10.4	*	87.1	

¹Except paralysis or absence.

Table 19. Prevalence of impairments due to injury and percent distribution by frequency bothered by the impairment, according to type of impairment: United States, 1971

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

Type of impairment	Impairments		Frequency of bother					Unknown if bothered
	Number in thousands	Percent	All the time	Often	Once in a while	Frequency not specified	Never	
			Percent distribution					
Visual impairments-----	932	100.0	25.9	*	15.8	*	35.2	18.0
Hearing impairments-----	946	100.0	40.8	*	24.2	*	18.9	9.1
Paralysis, complete or partial-----	157	100.0	31.8	*	*	*	*	43.3
Absence of entire fingers or toes-----	748	100.0	...	...	...	...	...	...
Absence of major extremities-----	179	100.0	...	...	...	...	...	...
Impairments, ¹ back or spine-----	3,117	100.0	15.2	16.3	47.6	2.3	2.1	16.5
Impairments, ¹ upper extremity and shoulder--	1,699	100.0	13.5	6.8	28.5	2.9	30.0	18.4
Impairments, ¹ lower extremity and hip-----	2,744	100.0	16.8	10.5	36.5	3.2	5.0	28.0
Other and multiple impairments ¹ of limbs, back, and trunk-----	774	100.0	25.2	18.1	27.5	*	*	26.1
All other impairments----	1,251	100.0	6.3	*	7.8	*	12.5	68.7

¹Except paralysis or absence.

Table 20. Prevalence of impairments due to injury and percent distribution of impairments by number of bed-days in past year, according to type of impairment: United States, 1971

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

Type of impairment	Impairments		Number of bed-days in past year			
	Number in thousands	Percent	None	1-7 days	8 days or more	Unknown
Visual impairments-----	932	100.0	79.5	*	*	18.2
Hearing impairments-----	946	100.0	89.4	*	*	9.2
Paralysis, complete or partial----	157	100.0	42.0	*	*	40.8
Absence of entire fingers or toes--	748	100.0	...	...	...	...
Absence of major extremities-----	179	100.0	...	...	...	...
Impairments, ¹ back or spine-----	3,117	100.0	66.3	8.6	8.4	16.7
Impairments, ¹ upper extremity and shoulder-----	1,699	100.0	76.3	*	*	19.0
Impairments, ¹ lower extremity and hip-----	2,744	100.0	63.0	3.2	5.3	28.5
Other and multiple impairments ¹ of limbs, back, and trunk-----	774	100.0	54.9	11.0	8.0	26.1
All other impairments-----	1,251	100.0	29.2	*	*	68.3

¹Except paralysis or absence.

Table 21. Prevalence of impairments due to injury and percent distribution of impairments by number of physician visits in past year, according to type of impairment: United States, 1971

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

Type of impairment	Impairments		Number of visits in past year			
	Number in thousands	Percent	None	1-4	5 or more	Unknown
			Percent distribution			
Visual impairments-----	932	100.0	51.1	24.7	*	20.8
Hearing impairments-----	946	100.0	59.0	14.7	*	22.7
Paralysis, complete or partial----	157	100.0	*	*	*	46.5
Absence of entire fingers or toes--	748	100.0	...	...	...	...
Absence of major extremities-----	179	100.0	...	...	...	...
Impairments, ¹ back or spine-----	3,117	100.0	43.3	22.9	10.8	23.1
Impairments, ¹ upper extremity and shoulder-----	1,699	100.0	55.5	11.5	6.1	26.9
Impairments, ¹ lower extremity and hip-----	2,744	100.0	42.6	16.2	6.9	34.3
Other and multiple impairment ¹ of limbs, back, and trunk-----	774	100.0	33.7	18.9	16.1	31.3
All other impairments-----	1,251	100.0	22.0	5.4	*	69.9

¹Except paralysis or absence.

Table 22. Population used in obtaining rates shown in this publication, by age and selected characteristics: United States, 1971

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

Characteristic	All ages	Under 45 years	45 years and over		
			Total	45-64 years	65 years and over
Number of persons in thousands					
All persons ¹ -----	202,360	141,247	61,113	41,764	19,349
<u>Sex</u>					
Male-----	97,603	69,580	28,023	19,832	8,191
Female-----	104,757	71,667	33,090	21,932	11,158
<u>Family income</u>					
Less than \$5,000-----	40,966	22,794	18,172	7,628	10,545
\$5,000 or more-----	148,676	110,537	38,139	30,921	7,218
\$5,000-\$9,999-----	64,395	47,234	17,161	12,743	4,418
\$10,000-\$14,999-----	48,694	37,849	10,846	9,345	1,500
\$15,000 or more-----	35,587	25,455	10,132	8,833	1,300
<u>Education of head of family</u>					
Less than 9 years-----	46,490	24,432	22,058	12,266	9,791
9 years or more-----	152,685	114,887	37,798	28,726	9,072
9-11 years-----	35,087	24,778	10,308	7,544	2,764
12 years-----	65,132	49,691	15,441	12,092	3,349
13 years or more-----	52,466	40,418	12,048	9,090	2,959
<u>Current employment status</u>					
Currently employed-----	77,407	47,313	30,094	26,920	3,174
Unemployed-----	5,665	4,119	1,546	1,363	183
Not in labor force-----	119,288	89,816	29,473	13,480	15,992

¹Includes unknown income and education.

APPENDIX I

TECHNICAL NOTES ON METHODS

Background of This Report

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

The Health Interview Survey utilizes a questionnaire which obtains information on personal and demographic characteristics, illnesses, injuries, impairments, chronic conditions, and other health topics. As data relating to each of these various broad topics are tabulated and analyzed, separate reports are issued which cover one or more of the specific topics. The present report is based on data collected in household interviews during 1971.

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

Statistical Design of the Health Interview Survey

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

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

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

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

Area segments which are defined geographically.

List segments, using 1960 census registers as the frame.

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

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

The usual HIS sample consists of approximately 8,000 segments containing 57,000 assigned households, of which 11,000 were vacant, demolished, or occupied by persons not in the scope of the survey. The 46,000 eligible occupied households yield a probability sample of about 134,000 persons in 44,000 interviewed households in a year.

Descriptive material on data collection, field procedures, and questionnaire development in the HIS has been published¹ as well as a detailed description of the sample design² and a report on the estimation procedure and the method used to calculate sampling errors of estimates derived from the survey.³

Collection of data.—Field operations for the survey are performed by the U.S. Bureau of the Census under specifications established by the National Center for Health Statistics. In accordance with these specifications the Bureau of the Census participates in survey planning, se-

lects the sample, and conducts the field interviewing as an agent of NCHS. The data are coded, edited, and tabulated by NCHS.

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

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

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

As noted, each week's sample represents the population living during that week and characteristics of the population. Consolidation of samples over a time period, e.g., a calendar

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

²U.S. National Health Survey: The statistical design of the health household interview survey. *Health Statistics*. PHS Pub. No. 584-A2. Public Health Service. Washington, D.C., July 1958.

³National Center for Health Statistics: Estimation and sampling variance in the Health Interview Survey. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 38. Public Health Service. Washington. U.S. Government Printing Office, June 1970.

quarter, produces estimates of average characteristics of the U.S. population for the calendar quarter. Similarly, population data for a year are averages of the four quarterly figures.

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

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

General Qualifications

Nonresponse.—Data were adjusted for nonresponse by a procedure which imputes to persons in a household which was not interviewed the characteristics of persons in households in the same segment which were interviewed. The total noninterview rate, the ratio of the total noninterviewed eligible households to the total eligible households, was 3.6 percent, including a 1.1-percent refusal rate with the remainder primarily due to the failure to find an eligible respondent at home after repeated calls.

The interview process.—The statistics presented in this report are based on replies obtained in interviews with persons in the sample

households. Each person 19 years of age and over present at the time of interview was interviewed individually. For children and for adults not present in the home at the time of the interview, the information was obtained from a related household member such as a spouse or the mother of a child.

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

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

Population figures.—Some of the published tables include population figures for specified categories. Except for certain overall totals by age, sex, and color, which are adjusted to independent estimates, these figures are based on the sample of households in the HIS. These are given primarily to provide denominators for rate computation, and for this purpose are more appropriate for use with the accompanying measures of health characteristics than other population data that may be available. With the exception of the overall totals by age, sex, and color mentioned above, the population figures differ from figures (which are derived from different sources) published in reports of the Bureau of the Census. Official population estimates are presented in Bureau of the Census reports in Series P-20, P-25, and P-60.

Reliability of Estimates

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

As in any survey, the results are also subject to reporting and processing errors and errors due to nonresponse. To the extent possible, these types of errors were kept to a minimum by methods built into survey procedures. Although it is very difficult to measure the extent of bias in the Health Interview Survey, a number of studies have been conducted to study this problem. The results have been published in several reports.⁴⁻⁸

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

⁴National Center for Health Statistics: Reporting of hospitalization in the Health Interview Survey. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No.6. Public Health Service. Washington. U.S. Government Printing Office, July 1965.

⁵National Center for Health Statistics: Health interview responses compared with medical records. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 7. Public Health Service. Washington. U.S. Government Printing Office, July 1965.

⁶National Center for Health Statistics: Comparison of hospitalization reporting in three survey procedures. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 8. Public Health Service. Washington. U.S. Government Printing Office, July 1965.

⁷National Center for Health Statistics: Interview data on chronic conditions compared with information derived from medical records. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 23. Public Health Service. Washington. U.S. Government Printing Office, May 1967.

⁸National Center for Health Statistics: The influence of interviewer and respondent psychological and behavioral variables on the reporting in household interviews. *Vital and Health Statistics*. PHS Pub. No. 1000-Series 2-No. 26. Public Health Service. Washington. U.S. Government Printing Office, Mar. 1968.

The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error and about 99 out of 100 that it would be less than 2½ times as large.

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

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

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

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

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

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

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

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

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

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

General rules for determining relative sampling errors.—The “guide” on page 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 for 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-color class of the total population is adjusted to official Bureau of the Census figures and is not subject to sampling error.

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

cludes all persons in the population. Such rates if converted to rates per 100 may be treated as though they were percentages and the relative standard errors obtained from the chart P4AN-M. Rates per 1,000, or on any other base, must first be converted to rates per 100; then the percentage chart will provide the relative standard error per 100.

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

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

(b) In other cases the relative standard error of the numerator and of the denominator can be obtained from the appropriate curve. Square each of these relative errors, add the resulting values, and extract the square root of the sum. This procedure will result in an upper bound on the standard error and often will overstate the error.

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

$$d = X_1 - X_2$$

is

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

where X_1 is the estimate for class 1, X_2 is the estimate for class 2, and V_{x1} and V_{x2} are the relative errors of X_1 and

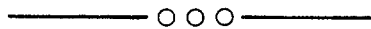
X_2 respectively. This formula will represent the actual standard error quite accurately for the difference between separate and uncorrelated characteristics although it is only a rough approximation in most other cases. The relative standard error of each estimate involved in such a difference can be determined by one of the four rules above, whichever is appropriate.

Guide to Use of Relative Standard Error Charts

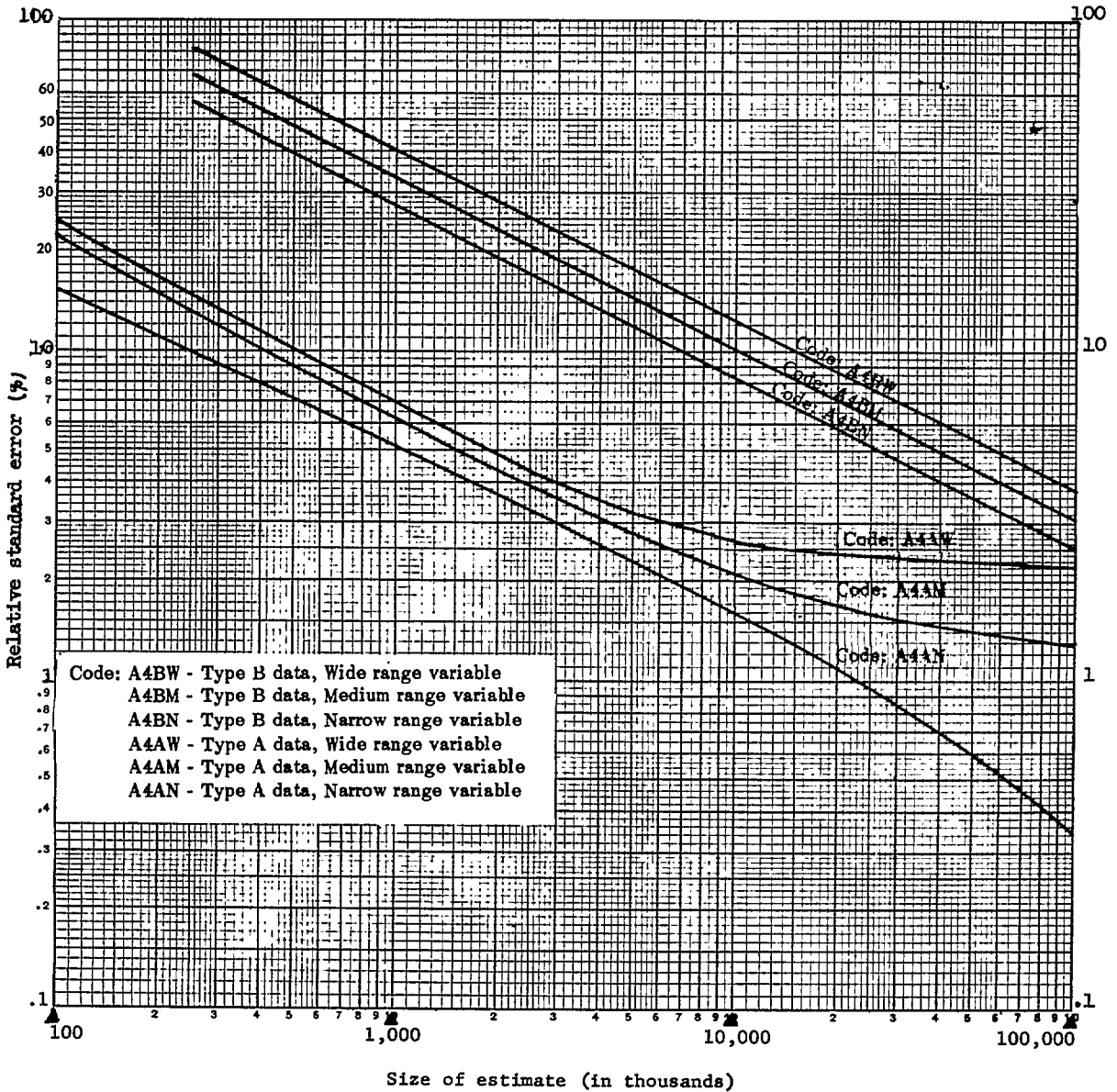
The code shown below identifies the appropriate curve to be used in estimating the relative standard error of the statistic described. The four components of each code describe the statistic as follows:

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

Statistic	Use		
	Rule	Code on	Page
Number of:			
Persons in the U.S. population, or any age-sex category thereof . . .		Not subject to sampling error	
Persons in any other population group	1	A4AN	37
Impairments, by type	1	A4AN	37
Percentage distribution of:			
Impairments by characteristics	2	P4AN-M	38
Prevalence rates of impairments:			
Per 1,000 persons in any population group	3	P4AN-M	38



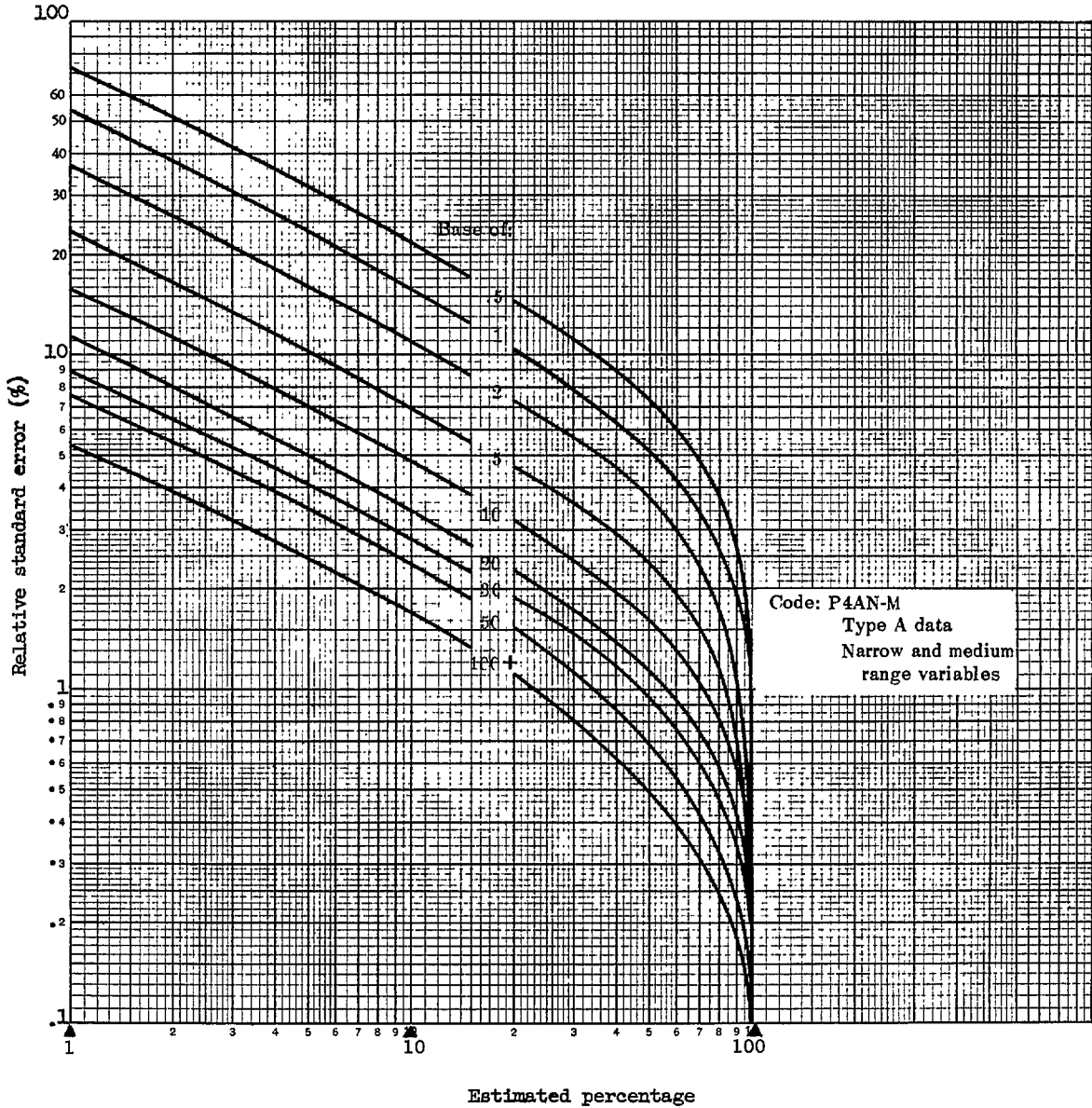
Relative standard errors for aggregates based on four quarters of data collection
for data of all types and ranges



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

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

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



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

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

APPENDIX II

DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

Terms Relating to Conditions

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

Conditions except impairments are classified by type according to the *Eighth Revision International Classification of Diseases, Adapted for Use in the United States*,⁹ with certain modifications adopted to make the code more suitable for a household interview survey.

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

which are always considered chronic regardless of the date of onset.

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

⁹National Center for Health Statistics: *Eighth Revision International Classification of Diseases, Adapted for Use in the United States*. PHS Pub. No. 1693. Public Health Service. Washington. U.S. Government Printing Office, 1967.

Tuberculosis

Tumor, cyst, or growth

Varicose veins, trouble with

Impairment.—Impairments are chronic or permanent defects, usually static in nature, resulting from disease, injury, or congenital malformation. They represent decrease or loss of ability to perform various functions, particularly those of the musculoskeletal system and the sense organs. All impairments are classified by means of a special supplementary code for impairments. Hence code numbers for impairments in the International Classification of Diseases are not used. In the Supplementary Code, impairments are grouped according to type of functional impairment and etiology. The impairment classification is shown on pages 44 through 49.

The categories of impairments shown in this report, with their X-Code inclusion numbers, are:

- Visual impairments (X00-X05)
- Hearing impairments (X06-X09)
- Paralysis, complete or partial (X40-X69)
- Absence of fingers and toes (X25, X31, X34)
- Absence of major extremities (X20-X24, X26-X30, X32, X33)
- Impairments,^b back or spine (X70-X72, X80, X81)
- Impairments,^b upper extremity and shoulder (X73, X74, X86-X88)
- Impairments,^b lower extremity and hip (X75-X77, X82-X85)
- Other and multiple impairments^b of limbs, back, and trunk (X78, X79, X89)
- All other impairments (X10-X19, X36-X39, X90-X99)

Injury as an etiology of impairment.—The etiology of an impairment is its cause in terms of what the respondent considers as the cause. Injury as an etiology (coded 9 in the fourth digit of the X-Code) is defined as a condition sustained in an accident or in nonaccidental violence that at time of occurrence would have been codable to ICD N800-N999. Excluded from the category are birth injuries and damage

^bExcept paralysis or absence.

to any part of the body because of continuous stresses and strains, e.g., continued exposure to loud noise or constant heavy lifting.

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

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

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

Terms Relating to Class of Accident

Class of accident.—Injuries, injured persons, and resulting days of disability may be grouped according to class of accident. This is a broad classification of the types of events which resulted in personal injuries. Most of these events are accidents in the usual sense of the word, but some are other kinds of mishap, such as overexposure to the sun or adverse reactions to medical procedures, and others are nonaccidental violence, such as attempted suicide. The classes of accident are (1) moving motor vehicle accidents, (2) accidents occurring while at work, (3)

home accidents, and (4) other accidents. These categories are not mutually exclusive. For example, a person may be injured in a moving motor vehicle accident which occurred while the person was at home or at work. The accident class "moving motor vehicle" includes "home-moving motor vehicle" and "while at work-moving motor vehicle." Similarly, the classes "while at work" and "home" include duplicated counts, e.g., "moving motor vehicle-while at work" is included under "while at work."

Motor vehicle—A motor vehicle is any mechanically or electrically powered device, not operated on rails, upon which or by which any person or property may be transported or drawn upon a land highway. Any object, such as a trailer, coaster, sled, or wagon, being towed by a motor vehicle is considered a part of the motor vehicle. Devices used solely for moving persons or materials within the confines of a building and its premises are not counted as motor vehicles.

Moving motor vehicle accident.—The accident is classified as "moving motor vehicle" if at least one of the motor vehicles involved in the accident was moving at the time of the accident. This category is subdivided into "traffic" and "nontraffic" accidents.

Traffic moving motor vehicle accident.—The accident is in the "traffic" category if it occurred on a public highway. It is considered to have occurred on the highway if it occurred wholly on the highway, if it originated on the highway, if it terminated on the highway, or if it involved a vehicle partially on the highway. A public highway is the entire width between boundary lines of every way or place of which any part is open to the use of the public for the purposes of vehicular traffic as a matter of right or custom.

Nontraffic moving motor vehicle accident.—The accident is in the "nontraffic" category if it occurred entirely in any place other than a public highway.

Nonmoving motor vehicle accident.—If the motor vehicle was not moving at the time of the accident, the accident is considered a "non-moving motor vehicle" accident and is classified in the "other accident" category.

Accident while at work.—The class of accident is "while at work" if the injured person was

17 years of age or over and was at work at a job or a business at the time the accident happened.

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

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

Type of accident.—Type of accident was recorded for all accidents involving injury in order to classify injuries according to the circumstances relating to the accident. Accidents have been grouped by type according to the following concepts:

- (A) Accidents in which specific factors were involved, but which may or may not have caused the injury. Included in this group are moving motor vehicle, uncontrolled fire, explosion, fire-arms, and nonmotor vehicle such as train or bicycle. The definition of moving motor vehicle in this instance is identical to that for moving motor vehicle as a class of accident. However, an accident in which a nonmoving motor vehicle was involved is classified under the detailed type of accident listed below that best describes the circumstances relating to the accident.
- (B) Accidents where injury was caused directly by an agent, such as machinery, in operation, a knife, scissors, nail,

animal or insect, foreign body in eye or other orifice, or a poisonous substance swallowed by the person involved.

- (C) Accidents described in terms of the events leading to the occurrence of the injury, such as falling, bumping into a person or object, being struck by a moving object, handling or stepping on sharp or rough objects, being caught in, pinched, or crushed, coming in contact with hot object or flame, lifting, twisting, or stumbling.
- (D) Accidents resulting in injury that could not be classified in groups (A), (B), or (C) were classified as "other." Accidents of unknown type are also included in this group.

A complete listing of the types of accidents is shown in appendix III within the format of Cards Y and Z. In order that no injury would be described as resulting from more than one detailed type of accident, an injury which could have been assigned to two or more detailed types was classified in the first type designated in Cards Y and Z that adequately described the circumstances of the accident.

Terms Relating to Disability

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

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

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

Preschool children:

Inability to take part in ordinary play with other children.

School-age children:

Inability to go to school.

Housewives:

Inability to do any housework.

Workers and all other persons:

Inability to work at a job or business.

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

Preschool children:

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

School-age children:

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

Housewives:

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

Workers and all other persons:

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

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

Preschool children:

Not classified in this category.

School-age children:

Not limited in going to school but limited in participation in athletics or other extra-curricular activities.

Housewives:

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

Workers and all other persons:

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

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

Demographic Terms

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

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

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

Education.—The categories of education status show the years of school completed. Only years completed in regular schools, where persons are given a formal education, are included. A "regular" school is one which advances a person toward an elementary or high school diploma or a college, university, or professional school degree. Thus education in vocational, trade, or business schools outside the regular school system is not counted in determining the highest grade of school completed.

Education of head of family or of unrelated individuals.—Each member of a family is classified according to the education of the head of the family of which he is a member. Within the household all persons related to each other by blood, marriage, or adoption constitute a family.

Unrelated individuals are classified according to their own education.

In labor force.—All persons 17 years and older who worked at or had a job or business or were looking for work or on layoff from work during the 2-week period prior to the week of interview are in the labor force. The labor force consists of persons currently employed and those not employed as defined below.

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

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

Excluded from the currently employed population are persons who have no definite employment schedule but work only when their services are needed. Also excluded from the currently employed population are (1) persons receiving revenue from an enterprise but not participating in its operation, (2) persons doing housework or charity work for which they receive no pay, (3)

seasonal workers during the portion of the year they were not working, and (4) persons who were not working, even though having a job or business, but were on layoff or looking for work.

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

sample taken for the survey week which includes the 12th of the month.

Currently unemployed.—Persons 17 years and over who during the 2-week period prior to interview did not work or had no job or business but were looking for work and those who had a job but were on layoff or looking for work are considered currently unemployed.

Not in labor force.—Persons not in the labor force are all persons under 17 years of age and other persons who did not at any time during the 2-week period covered by the interview have a job or business, were not looking for work, and were not on layoff from a job. In general, persons excluded from the labor force are children under 17, retired persons, physically handicapped persons unable to work, and housewives or charity workers who receive no pay.

CLASSIFICATION OF IMPAIRMENTS (X-Code)

History and Purpose

The X-Code for special impairments by type, site, and etiology was developed in 1955-1956 by the, at that time, Division of Public Health Methods of the Public Health Service. This classification provides—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 Health Interview Survey has used this X-Code, making very few changes in it, since the beginning of the Survey and will use it instead of the present ICDA for the coding of impairments.

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 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.

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

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

X00-X05 Impairment of Vision

- X00 Visual impairment: Inability to read ordinary newspaper print with glasses, and impairment indicating no useful vision in either eye
- X01 Blind in one eye, other eye defective, but not blind
- X02 Blind in one eye, other eye good or not mentioned
- X03 Visual impairment NEC, in both eyes
- X05 Impaired vision except as in X00-X03

X06-X09 Impairment of Hearing

- X06 Deafness, *total, both ears*, including deaf-mutism
Includes persons, with or without speech, who are completely deaf.
- X07 Hearing loss or impairment involving *both ears* not codable to X06
- X08 All hearing loss or impairment involving *only one ear*
- X09 Hearing loss, complete or partial, or impairment for which it is impossible to determine whether one or both ears are involved

X10-X19 IMPAIRMENT OF SPEECH, INTELLIGENCE, SPECIAL SENSE

X10, X11 Impairment of Speech

- X10 Stammering, stuttering
- X11 Other speech defect
Includes absence of larynx, and chronic speech and voice defects due to removal of larynx (voice box) and other structures involved in speech and talking.
Excludes deaf-mutism (X06); and cleft palate speech (X91.X)

X12, X13 Impairment of Special Sense, Except Vision or Hearing

- X12 Loss or impairment of sense of smell and/or taste
- X13 Loss or disturbance of sensation NEC

X14-X19 Special Learning Disability and Mental Retardation

- X14 Special learning disability (reading) (mathematics) (“mirror” writing or reading) (“mixed dominance”) (affecting school progress)
- X15 Mongolism (Down’s disease or syndrome) (any I.Q.)
- X16 Severe or profound mental retardation NEC (I.Q. under 36)
- X17 Moderate mental retardation (I.Q. 36-51)
- X18 Borderline or mild mental retardation (I.Q. 52-85)
Includes: backwardness; feeble-mindedness; moron.
- X19 Unspecified mental retardation
Includes: mental retardation or deficiency, degree or type not specified.

X20-X39 ABSENCE, LOSS, EXTREMITIES, AND CERTAIN OTHER SITES

Note: Absence or loss of one or both eyes is to be coded as for blindness, one or both eyes, in X00-X02. Absence or impairment of other senses, speech, intelligence is coded to X06-X19. *See also* X90, X92.

X20-X25 Absence, Loss, 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, *one or both hands*

X26-X31 Absence, Loss, 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, *one or both feet*

X32-X34 Absence, Loss, 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* toes(s)

X36-X39 Absence, Loss, Certain Other Sites

- X36 Absence, lung
- X37 Absence, kidney
- X38 Absence, breast
- X39 Absence, rib, or bone, joint, muscle, or trunk or extremity, without loss of extremity

X40-X69 PARALYSIS, COMPLETE OR PARTIAL

X40-X49 Paralysis NOS (Complete) or Extremities and Trunk, as Follows:

- 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)

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

Includes: paresis; palsy; paralytic “weakness” or tremor.”

- 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) (“drags foot”)
- X53 Partial paralysis, one side of body (hemiparesis)
- X54 Partial paralysis, other sites of extremities or trunk
- X59 Partial paralysis, palsy, paresis—NOS

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

- X60 Paralysis, complete or partial, *face* (Bell’s palsy or paralysis)
- 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

X70-X79 NONPARALYTIC ORTHOPEDIC IMPAIRMENT (CHRONIC) NEC

Excludes: paralysis (X40-X69) and specified deformities in X80-X89.

Includes: limitation of motion NEC; stiffness (complete or partial); “flail joint”; instability of joint; frankly ill-defined, symptomatic, but *chronic* difficulty, weakness, “trouble,” pain, swelling, “limping,” involving muscles, joints, limbs, back or trunk, of *unknown cause, or due to healed injuries 3 mos+ or to past and now inactive diseases*; old (3 mos+) sprains, strains, or dislocations with effect not elsewhere classifiable, or not stated.

Excludes: all “disc” conditions (ICDA 725)

NOTE: Orthopedic impairment NEC, as in X70-X79, is not coded as a separate diagnosis if due to specified active chronic disease; chronic disease only is coded.

Orthopedic Impairment NEC (Chronic) Involving:

- X70 Back NOS, spine NOS, vertebra NOS (low) (lumbosacral) (sacroiliac) (entire)
- X71 Cervical or thoracic region of back, spine, vertebrae
- X72 Coccygeal region of back, spine, vertebrae (last bone of spine)
- X73 Shoulder, upper arm, forearm above wrist; arm NOS
- X74 Wrist, hand, finger, thumb—sites in X73 not involved
- 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
Excludes impairments involving arches of foot, feet (X82).
- 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,” NOS; limping, staggering, stumbling, trouble in walking, NOS.
Excludes: jaw (X92); and ataxic gait, which if chronic, is coded as for paralysis, partial.

X80-X89 SPECIFIED DEFORMITY OF LIMBS, TRUNK, BACK

Includes: specified structural deformities of limbs, trunk, back, described as: contracture; atrophy; accessory (“extra”); short or shortness; crippled; shrivelled; “drawn up;” “twisted;” “withered;” and scarring (with contracture) involving limbs, neck, back, trunk.

Excludes: dwarfism and other deviations from normal size, weight, height (X94-X97); paralysis, all sites (X40-X69); scarring and disfigurement of face, nose, lips, ears (X90).

- X80 Curvature and other structural deformities of spine or back, except as in X81.X
Includes: all structural deformities of spine or back except spina bifida (X81.X).
Excludes: chronic back conditions NEC in X70-X72, and disc conditions as in ICDA 725, amended. (See 725 in Appendix III).
- X81.X Spina bifida (with meningocele) (always congenital)
- X82 Flatfoot (including weak or fallen arches and other difficulty with arches)
- X83 Clubfoot (congenital)
- X84 Deformity, other and multiple, *lower extremity*, NEC
Includes: genu valgum (knock knee); genu varum (bow leg); tibial torsion; hammer toe; hallux valgus or varus; any deformity of *toe*; deformity *leg* NOS, *foot* NEC, *knee*.
Excludes: X82, X83.
- X85 Dislocation, congenital, and other deformity *hip* and/or *pelvis*
- X86 Deformity, neck or shoulder region
Includes: torticollis; Sprengel’s deformity; deformity of neck and/or shoulder.
- X87 Deformity *finger(s)*, thumb(s), only
- X88 Deformity, upper extremity, except as in X86, X87
Includes deformity of: arm(s); hand(s) and finger(s), but *excludes* deformity involving fingers, thumbs, *only*.
- X89 Deformity, trunk bones, NEC
Includes: pigeon breast; cervical rib; postural defect NEC.

X90-X99 DEFECT, ABNORMALITY, SPECIAL IMPAIRMENT, NEC

- X90 Disfigurement, scarring, face, nose, lips, ears
Includes: absence of nose, lips, ears; accessory auricle; other abnormality NEC of face, nose, ears, mouth, teeth, jaws if *stated* to be disfiguring. If speech defect is also present, code it also.
Excludes: cleft palate and harelip whether or not disfiguring (X91.X).
- X91.X Cleft palate and harelip (with speech defect) (disfiguring)
Includes: cleft palate and cleft lip (as in ICDA 749) with or without speech defect and whether or not stated to be disfiguring.
- X92 Other dentofacial handicap
Includes: acquired absence of teeth, onset 3 months plus; and abnormalities of teeth, malocclusion, and other jaw and dentofacial anomalies as in ICDA 520.0, 520.1, 520.2, 520.5, 521.6, and 524. If speech defect is also present, code it also.
Excludes: cleft palate and harelip (X91.X); and other dentofacial handicaps if *stated* to be disfiguring (X90).
- X93 Deformity of skull (hydrocephaly) (microcephaly)
If mental retardation is also present, code it also under X15-X19. If hydrocephaly is due to a specified *active* chronic disease of brain or meninges, code the disease only—not X93.
- X94 Dwarfism; midget; excessively underheight
Includes: “stunted growth” NOS, or late effect (old); if due to some currently active disease, code the disease only.

- X95 Gigantism (excessively overheight)
- X96 Obesity, chronic, cause unknown (familial) (hereditary)
See also category 277, appendix III.
- X97 Underweight, chronic, cause unknown
See also categories 268 and 269.9, appendix III.
- X98 Artificial orifice (opening) or valve (surgical) any site (colostomy)
- X99 Special impairment, ill-defined
Includes: deformed NOS; cripple NOS; "birth injury" or "brain damage" NOS, at ages 3 months or over without specification as to type of impairment; ill-defined "after-effects" of tuberculosis, encephalitis, poliomyelitis, trachoma, toxoplasmosis, rickets, intracranial abscess.
See also item D, appendix I.
Excludes: stroke, or ill-defined "after-effects" of stroke; code the stroke—not X99.

LIST OF 1-DIGIT ETIOLOGY CODES

For Impairment of Vision, Only (X00-X03, X05)

- .0 Unknown or unspecified origin
- .1 Cataract, any origin except as in .5-.9, below (with any condition in .4)
- .2 Cataract with glaucoma, any origin except as in .5-.9, below
- .3 Glaucoma, any origin except as in .5-.9, *without cataract* (with any in .4)
- .4 Other eye diseases (as in ICDA 360-369, 370-373, 376-378) (any infection of eye)
- .5 Diabetes (with cataract or glaucoma)
- .6 Diseases of the arteries NEC (as in ICDA 440-447)
- .7 Cerebrovascular disease (stroke) (with arteriosclerosis) (with hypertension)
- .8 Neoplasm
- .9 Accident or injury except at birth
- .X Congenital origin NEC or birth injury
- .Y Conditions not in .0-.9, or .X (noncongenital) (nontraumatic) (hereditary) (old age) ("age" NOS)

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 (scarlet fever) (meningitis) (encephalitis) (arthritis) (osteomyelitis) (neuritis) (etc.)
- .4 Neoplasm
- .5 Diabetes (with gangrene)
- .6 Diseases of arteries NEC (gangrene) (general arteriosclerosis)
- .7 Cerebrovascular disease (stroke) (with arteriosclerosis) (with hypertension)
- .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, .X (noncongenital) (nontraumatic) (noninflammatory) (hereditary) (old age) (age NOS)



APPENDIX III

CHECK LIST OF SELECTED IMPAIRMENTS AND CONDITION PAGES

<p>36a. Does anyone in the family (you, your --, etc.) NOW have -- If "Yes," ask b and c</p> <p style="margin-left: 40px;">b. Who is this? -- Enter name of condition and letter of line where reported in appropriate person's column(s) in item C.</p> <p style="margin-left: 40px;">c. Does anyone else have . . . ?</p>						<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">A. Deafness in one or both ears?</td> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="padding: 2px;">B. Any other trouble hearing with one or both ears?</td> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="padding: 2px;">C. Tinnitus or ringing in the ears?</td> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="padding: 2px;">D. Blindness in one or both eyes?</td> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="padding: 2px;">E. Cataracts?</td> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> <tr> <td style="padding: 2px;">F. Glaucoma?</td> <td style="text-align: center;">Y</td> <td style="text-align: center;">N</td> </tr> </table>		A. Deafness in one or both ears?	Y	N	B. Any other trouble hearing with one or both ears?	Y	N	C. Tinnitus or ringing in the ears?	Y	N	D. Blindness in one or both eyes?	Y	N	E. Cataracts?	Y	N	F. Glaucoma?	Y	N
A. Deafness in one or both ears?	Y	N																							
B. Any other trouble hearing with one or both ears?	Y	N																							
C. Tinnitus or ringing in the ears?	Y	N																							
D. Blindness in one or both eyes?	Y	N																							
E. Cataracts?	Y	N																							
F. Glaucoma?	Y	N																							
Does anyone in the family NOW have . . . ? If "Yes," ask b and c																									
G. Color blindness?	Y	N	M. A missing finger, hand, or arm, toe, foot, or leg?	Y	N	S. Any TROUBLE with fallen arches or flatfeet?	Y	N																	
H. A detached retina or any other condition of the retina?	Y	N	N. A missing (breast), kidney, or lung?	Y	N	T. A clubfoot?	Y	N																	
I. Any other trouble seeing with one or both eyes even when wearing glasses?	Y	N	O. Palsy or cerebral palsy?	Y	N	U. Permanent stiffness or any deformity of the back, foot, or leg?	Y	N																	
J. A cleft palate or harelip?	Y	N	P. Paralysis of any kind?	Y	N	V. Permanent stiffness or any deformity of the fingers, hand, or arm?	Y	N																	
K. Stammering or stuttering?	Y	N	Q. Curvature of the spine?	Y	N	W. Mental retardation?	Y	N																	
L. Any other speech defect?	Y	N	R. REPEATED trouble with back or spine?	Y	N	X. Any condition caused by an old accident or injury? If "Yes," ask: What is the condition?	Y	N																	

CARD Y

MOTOR VEHICLE ACCIDENTS

How did the accident happen?

Outside motor vehicle

- 1. Accident between motor vehicle and person riding on bicycle, in streetcar, on railroad train, on horsedrawn vehicle
- 2. Accident between motor vehicle and person who was walking, running, or standing
- 3. Other way *(Specify how)*

Inside motor vehicle or getting in or out

- 4. Accident between two or more motor vehicles on roadway
- 5. Motor vehicle came to sudden stop on roadway
- 6. Motor vehicle ran off roadway
- 7. Accident between motor vehicle and some other object on roadway *(Specify object)*
- 8. Other way *(Specify how)*

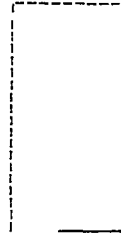
CARD Z

NONMOTOR VEHICLE ACCIDENTS

How did the accident happen?

- 11. Any injury involving an uncontrolled fire or explosion
- 12. Any injury involving the discharge of a firearm
- 13. Any injury from an accident involving a nonmotor vehicle in motion (streetcar, railroad train, airplane, boat, bicycle, horse-drawn vehicle)
- 14. Any injury inflicted by machinery (belt or motor driven) while in operation *(Specify machinery)*
- 15. Any injury inflicted by edge or point of knife, scissors, nail or other cutting or piercing implement
- 16. Any injury inflicted by foreign body in eye, windpipe, or other orifices
- 17. Any injury inflicted by animal or insect
- 18. Any injury inflicted by poisonous substance swallowed *(Specify substance)*
- 19. Fell on stairs or steps or from a height
- 20. All other falls
- 21. Bumped into object or person (covers all collisions between persons including striking, punching, kicking, etc.)
- 22. Struck by moving object (include objects held in own hand or hand of other person, also falling, flying or thrown objects)
- 23. Handling or stepping on sharp or rough object (include wounds from splinters, broken glass, etc.)
- 24. Caught in, pinched or crushed (i.e., between two moving objects or between a moving and a stationary object)
- 25. Came in contact with hot object or substance or open flame
- 26. Lifting or other exertion
- 27. Twisting or stumbling
- 28. Other *(Specify how accident happened)*

Y & Z



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