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# Vital and Health Statistics

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## Types of Injuries by Selected Characteristics: United States, 1985–87

Series 10:  
Data From the National Health Survey  
No. 175

Estimates of the number of injuries, by type of injury, are presented by age, sex, race, geographic region, place of residence, class of accident, place of accident, and other socioeconomic and health variables. The numbers of days of restricted activity and bed disability due to injuries, by sex and type of injury, are also included.

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### *Cooperation of the U S. Bureau of the Census*

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

In accordance with specifications established by the National Center for Health Statistics, the U S Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

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**Symbols**

---	Data not available
...	Category not applicable
-	Quantity zero
0.0	Quantity more than zero but less than 0.05
Z	Quantity more than zero but less than 500 where numbers are rounded to thousands
*	Figure does not meet standard of reliability or precision (more than 30 percent relative standard error)
#	Figure suppressed to comply with confidentiality requirements

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# Types of Injuries by Selected Characteristics: United States, 1985–87

by John Gary Collins, M.B.A., Division of Health Interview Statistics

## Introduction

National estimates of the average annual incidence of injuries involving either medical attention or restricted activity in the civilian noninstitutionalized population of the United States are presented in this report by type of injury. These estimates are based on data collected by the National Center for Health Statistics (NCHS) by means of the National Health Interview Survey (NHIS) in 1985, 1986, and 1987.

Data on injuries are presented by type of injury, cross-tabulated by age, sex, race, geographic region, place of residence, family income, education of responsible adult family member, living arrangement, marital status, respondent-assessed health status, employment status, quarter of the year, class of accident, and place of accident. In addition, this report provides data on injuries that received medical attention and injuries that resulted in restricted activity and bed disability, as

well as the numbers of days of restricted activity and bed disability caused by injuries, cross-tabulated by age, sex, and type of injury.

The most recent NCHS report of data from NHIS that was devoted to types of injuries was for the 2-year period 1980–81, Series 10, No. 159 (1). However, in 1982 a number of major changes were implemented in NHIS. These changes involved the questionnaire, definitions of some of the health variables measured, and data processing specifications. As a result of these modifications, many of the estimates routinely produced through this survey, including incidence of injuries, that had remained relatively stable over time changed significantly. Thus data in reports focusing on types of injuries from survey years prior to 1982 are not comparable to the data in this report.

# Highlights

Highlights of the data contained in this report for the 3-year period 1985–87 are summarized in the following statements:

- An estimated annual incidence of 64.3 million injuries, or 27.2 injuries per 100 persons per year, requiring medical attention or causing restricted activity for more than a half day occurred among the civilian noninstitutionalized population of the United States.
- Open wounds and lacerations and sprains and strains were the most frequently reported types of injuries, with incidences of 14.2 and 13.8 million injuries, respectively.
- Open wounds and lacerations were the most frequent type of injury reported among persons under 18 years of age, sprains and strains were highest in incidence among persons 18–44 and 45–64 years of age, and contusions were highest in incidence among persons 65 years of age and over.
- The rate of all injuries for persons under 18 years of age and 18–44 years of age was 50 percent higher than the rate for persons 45 years of age and over.
- Males had a higher rate of injuries than females—30.6 compared with 24.0 injuries per 100 persons per year. A large portion of this difference was attributed to injuries classified as open wounds and lacerations, for which the rate for males was more than double that for females: 8.3 compared with 3.8 per 100 persons per year.
- The incidence rate of injuries was higher among white than black persons—28.3 compared with 20.9 per 100 persons per year.
- Persons living in the West Region of the country reported a higher incidence rate from injuries than did persons in the other geographic regions of the country.
- The highest rate of injuries was reported among persons in the lowest family income group, those with incomes of less than \$10,000 per year.
- Persons living alone or with nonrelatives had the highest incidence of injuries and persons living with a spouse had the lowest, 37.7 and 21.9 per 100 persons per year, respectively. Persons living alone or with nonrelatives had more than twice the incidence of contusions that persons living with a spouse reported.
- Married persons reported a much lower rate of injuries than did persons who were divorced or separated or those who were never married.
- Persons with respondent-assessed health status of fair or poor had a higher incidence of injuries than persons with excellent or very good assessed health status or good health status.
- The incidence rate for open wounds and lacerations was 50 percent higher in the warmer months, April–September, than in the colder months, October–March.
- More than one-third of all injuries occurred at home and almost one-half of all open wounds and lacerations occurred at home.
- Nine out of ten injuries were medically attended; almost all fractures and open wounds and lacerations were medically attended.
- About one-half of all injuries caused activity restriction. Fractures of the lower limb and sprains and strains of the back caused activity restriction in almost three-fourths of the cases and bed disability in more than 40 percent of the cases.
- Among persons 45 years of age and over, the incurred injuries caused bed disability in 26.4 percent of the cases, whereas injuries among persons under 18 years of age caused bed disability in only 16.4 percent of the cases.
- The number of restricted-activity days caused by injuries per 100 persons per year is lowest among persons under 18 years of age, 79.2 days, and highest for persons 65 years of age and over, 231.9 days.
- The number of restricted-activity days due to injuries per 100 persons per year is higher among males than females for the age groups under 18 and 18–44 years of age. However, for persons 45 years of age and over, the number of restricted-activity days per 100 persons per year is higher among females.
- The number of bed-disability days due to injuries per 100 persons per year ranged from 20.1 for persons under 18 years of age to 84.5 days for persons 65 years of age and over. The rate of days was greater for each ascending age group when compared with the rate reported in the previous age group.

# Sources and limitations of data

The information from the National Health Interview Survey (NHIS) presented in this report is based on data collected in a continuing nationwide survey by household interview. Each week a probability sample of the civilian noninstitutionalized population of the United States is interviewed by personnel of the U.S. Bureau of the Census. Information is obtained about the health and other characteristics of each member of the household.

One of the strengths of NHIS is the ability to combine data over multiple years. This is possible because of the sampling design of NHIS and its use of standard questions over several years. It is particularly desirable when making estimates for variables with relatively small sample sizes. The stability of the estimates is increased because increasing the sample size leads to smaller sampling errors. Therefore, for this report, data are based on information obtained by the National Center for Health Statistics (NCHS) in the 1985, 1986, and 1987 NHIS's, and annual averages for these 3 years are presented.

The NHIS sample for the 3 years 1985–87 was composed of about 106,000 eligible households, containing approximately 276,000 persons living at the time of interview. The total noninterview rate for NHIS was about 4.3 percent; 2.7 percent was due to respondent refusal, and the remainder was primarily the result of failure to locate an eligible respondent at home after repeated calls.

In 1985, NHIS adopted several new sample design features although, conceptually, the sampling plan remained the same as the previous design. The major changes included (1) reducing the number of primary sampling locations from 376 to 198 for sampling efficiency, (2) oversampling the black population to improve the precision of the statistics, (3) subdividing the NHIS sample into four separate representative panels to facilitate linkage to other NCHS surveys, and (4) using an all-area frame not based on the decennial census to facilitate NCHS survey linkage and to conduct NHIS followback surveys. Descriptions of the survey design, the methods used in estimation, and general qualifications of the data obtained from the survey are presented in appendix I.

Because the estimates presented in this report are based on a sample of the population, they are subject to sampling errors. Therefore, readers should pay particular attention to the section of appendix I entitled "Reliability of the estimates," which presents formulas for calculating standard errors and instructions for their use. Sampling errors for most of the estimates are relatively low. However, when an estimated number or the

numerator or denominator of a rate or percent is small, the sampling error may be large.

All information collected in the survey results from reports by responsible family members residing in the household. When possible, all adult family members participate in the interview. However, proxy responses are accepted for family members who are not at home and are required for all children and for family members who are physically or mentally incapable of responding for themselves. Although a considerable effort is made to ensure accurate reporting, the information from both proxy and self-respondents may be inaccurate because the respondent is unaware of relevant information, has forgotten it, does not wish to reveal it to an interviewer, or does not understand the intended meaning of a question. Errors may also be introduced by interviewers, coders, and others during the processing and analysis of the data.

Certain terms used in this report are defined in appendix II and have specialized meanings for the purpose of the survey. It is suggested that the reader become familiar with these definitions. For example, the types of injuries discussed in this report are conditions of the type classified according to the nature of injury code numbers 800–999 in the Ninth Revision of the International Classification of Diseases (2) that have lasted less than 3 months. Appendix III contains the probe questions and the recording forms used to obtain information about the number of injury conditions and resulting disability days. The questions for 1985, 1986, and 1987 are presented in their entirety in the "Current estimates" reports for these years, Series 10, Nos. 160, 164, and 166, respectively (3–5). The portions of the questionnaire shown in appendix III for 1987 are the same for 1985 and 1986.

Information about the numbers and types of injuries and the associated disability days was obtained from the responses to the illness recall questions and from the detailed questions pertaining to injuries on the condition pages. Annual estimates of the number of injuries are derived by weighting the count of injuries reported during the 2 weeks prior to the week of interview. This is detailed in appendix I. In accordance with the NHIS definition of "injuries," only injuries that were medically attended or that caused at least one-half day of restricted activity are included in the data shown in this report.

The survey includes data only on persons living in the household at the time of interview. Thus, the injury experience of persons who died during the 2 weeks prior to the time of interview is excluded from the data. Also excluded is the injury experience of persons who were institutionalized or who were



members of the Armed Forces at the time of the household interview.

Estimates of days of disability due to injuries are based on the number of disability days reported during the 2-week reference period, even if the injury causing the disability occurred prior to that time. Disability days due to the present effects of old injuries that were, at the time of interview, considered injury-related impairments are not included.

In this report, terms such as “similar” and “the same” mean that no statistically significant difference exists between the statistics being compared. Terms relating to difference (for example, “greater” or “less”) indicate that differences are statistically significant. The *t*-test, with a critical value of  $\pm 1.96$

(0.05 level of significance), was used to test all comparisons discussed. Lack of comment regarding the difference between any two statistics does not mean that the difference was tested and found to be not significant.

An asterisk is placed beside certain figures to indicate a relative standard error of 30 percent or more. Figures marked with an asterisk are given primarily to allow the reader to combine them with related estimates and thereby, possibly, to produce a more reliable overall estimate for a broader category.

The Division of Health Interview Statistics of NCHS should be contacted for information about coding and editing procedures used to produce the final data file from which the estimates shown in this report are derived.

## Other NCHS programs focusing on injury data

The National Center for Health Statistics sponsors several programs that provide data on accidents and injuries: the National Health Interview Survey, the survey that provides the data for this report; the National Ambulatory Medical Care Survey (NAMCS); the National Hospital Discharge Survey (NHDS); the National Nursing Home Survey (NNHS); and the Vital Statistics program. These programs have major differences in objectives, methodology, and definitions, which preclude making any direct comparisons of data estimates. When these data sets are used to complement one another, however, they provide a comprehensive profile of accidents and injuries in the United States.

NAMCS is a national probability sample of office-based physicians selected from master files maintained by the American Medical Association and American Osteopathic Association. Selected physicians complete patient records for a systematic random sample of office visits occurring during a randomly assigned 1-week reporting period. The target universe of NAMCS includes office visits made within the coterminous United States by ambulatory patients to nonfederally employed physicians who are principally engaged in office practice, but not in the specialties of anesthesiology, pathology, or radiology. Telephone contacts and nonoffice visits are excluded. The strength of these data is in the precision and depth of the medical information that is provided. Reliable data on information such as diagnosis, reason for visit, diagnostic procedures, treatments, and medication therapy are reported by the physicians themselves.

Relative to NAMCS, the major strengths of NHIS data are in the complete coverage of physician visits for injuries (office-based, hospital outpatient departments, emergency rooms, company clinics, telephone consultations, and so forth) and its provision of important nonmedical data with which the visit data may be related. NHIS includes such relevant variables as family income and family and individual educational attainment levels, which are not collected in NAMCS. In addition, because it is a population-based survey, NHIS also provides information on persons who do not receive care. Thus, both users and nonusers of medical care may be profiled by demographic, socioeconomic, and health status variables. Consequently, each survey has its own strengths and should be used to provide data on injuries relative to its strengths.

Data from NAMCS for March 1985 through February 1986 (6) indicate that an estimated 53 million visits, or 8.3

percent of all visits, were due to injuries. These data can then be analyzed by more specific diagnosis, drug therapy, and so forth, and as such are a valuable data resource.

NHDS provides statistics on the utilization of non-Federal, short-stay hospitals based on data collected from a national sample of the hospital records of discharged patients. Data are summarized for selected demographic characteristics of the patients discharged, characteristics of hospitals where the patients were treated, conditions diagnosed, and surgical and nonsurgical procedures performed. For the year 1986, there were an estimated 3.2 million discharges with the diagnosis "injury and poisoning" in NHDS (7). Of these discharges, more than one-third were diagnosed as fractures. Among persons 65 years of age and over, more than half of the discharges were diagnosed as fractures. NHDS provides a valuable piece of the injury panorama because its data are quite different from the data collected concerning injuries seen in the ambulatory settings.

NNHS is a continuing periodic survey of nursing homes, first conducted by NCHS from August 1973 through April 1974, conducted again May through December 1977, and most recently from August 1985 through January 1986. NNHS is based on a probability sample of all types of nursing homes in the coterminous United States, without regard to the level of care they provide, whether they participate in the Medicaid or Medicare programs, or whether they are licensed. NNHS excludes facilities identified as providing residential care. NNHS is designed to provide comprehensive information about people using this segment of long-term care and about the facilities in which they reside.

The institutionalized population is not included in NHIS, so injuries reported in NNHS can be used to supplement the NHIS estimates. Data estimates from the 1985 NNHS (8) show that 96,300 persons, or 6.5 percent of the total nursing home population, had a primary diagnosis of "injury and poisoning" at admission. As an example of the complementary relationship of the two surveys, NNHS data indicate that 50,800 persons had a primary diagnosis of fracture of neck of femur. In NHIS, there are insufficient cases for a reliable estimate of fractures of neck of femur, but among this NNHS population it is a primary problem. Of the nursing home residents with primary admitting diagnosis of fracture of neck of femur, the majority are females 75 years of age and over. NNHS thus provides some useful data in understanding the entire scope of the problems caused by injuries.

One of the functions of the Vital Statistics program of NCHS is to report the estimated number of deaths in the United States by cause of death. The number of deaths from accidents during 1986 was estimated at 95,000 (9). NHIS does not include these as injuries, because only civilian non-

institutionalized persons who are alive at the time of interview are surveyed. However, it is important to note this source and to be aware of accident-injury mortality so that the entire scope of the accident-injury problem in this country may be understood.

## Other National Health Interview Survey data on injuries

Data on injuries from the National Health Interview Survey (NHIS) have been available for about 30 years. The last NHIS report on types of injuries, Series 10, No. 159 (1), details chronological references to NCHS publications of NHIS injury data. However, as mentioned in the "Introduction," in 1982 a number of major changes were implemented in NHIS, including changes in the questionnaire, definitions of some of the health variables measured, and data processing specifications. These changes are thoroughly detailed in appendix IV of Series 10, No. 150, Current estimates from the National Health Interview Survey: United States, 1982 (10). These were changes in both the physician contact and disability day question set from which data on acute conditions and injuries are derived. In addition, prior to 1982, interviewers recorded all reported "volunteered" conditions, that is, conditions reported on questions not designed to pick up conditions. From 1982 on, no volunteered conditions reported during the interview are recorded

by interviewers. As a result, the incidence rate from injuries that had remained relatively stable over time dropped approximately 18 percent between 1981 and 1982 (10), and this new rate has stayed relatively stable since. Therefore, comparing injury data in this report with those presented in reports prior to 1982 is inadvisable.

Data on injuries and disability days due to injuries, by broad types of injury groups, are available yearly for years subsequent to the survey changes through the annual series of NCHS reports entitled "Current estimates from the National Health Interview Survey." The "Current estimates" series was initiated in fiscal year 1963 to provide estimates on current health data as soon as possible following the data collection. Injury data for the years subsequent to the 1982 survey changes are found in Series 10, Nos. 150 (10), 154 (11), 156 (12), 160 (3), 164 (4), and 166 (5).

# Background information

Annual estimates of the incidence of injuries are based on injuries occurring during the 2-week period prior to the week of interview. Annual estimates of days of disability due to injuries are derived from the number of disability days experienced during the 2-week reference period and include all such days reported, even if the injury causing the disability occurred from 2 weeks to 3 months prior to the interview week.

Because of the changes that took place in the survey in 1982, a comparison of rates by type of injury before and after 1982 is not advisable. However, a comparison of percent distributions of type of injury, as shown in table A for the 1980–81 (1) data and the 1985–87 data, provides some insight into the effects of the changes with regard to type of injury.

As a result of the changes in the survey, fractures and intracranial injuries and superficial injuries account for higher percents of the total number of injuries, whereas sprains and strains and open wounds and lacerations account for lower percents of the total. Thus it appears that the survey changes did not greatly affect reporting of the more serious types of injuries, fractures and head injuries, but did affect reporting of sprains and strains and open wounds and lacerations, which were low-impact injuries, that is, those that did not require medical attention or hospitalization.

Data on types of injuries that are presented in this report are based on the Ninth Revision of the International Classification of Diseases (2). Eleven types of injury categories, some with subgroups, plus a residual category are presented in this report. A list of these groups with corresponding code numbers from the Ninth Revision of the International Classification of Diseases is as follows:

- All injuries (800–999)
  - Skull fractures and intracranial injuries (800–804, 850–854)
  - Fractures of neck, trunk and upper limb (805–809, 810–819)
    - Fractures of upper limb (810–819)
    - Fractures of lower limb (820–829)
  - Dislocations (830–839)
  - Sprains and strains—total (840–848)
    - Sprains and strains of hip, thigh, knee and leg (843–844)
    - Sprains and strains of ankle and foot (845)
    - Sprains and strains of back (846, 847)

**Table A. Percent distribution of average annual number of injuries by type of injury: United States, 1980–81 and 1985–87**

<i>Type of injury</i>	<i>1980–81</i>	<i>1985–87</i>
	Percent distribution	
All injuries . . . . .	100.0	100.0
Fractures and intracranial injuries . . . . .	11.3	12.7
Dislocations . . . . .	1.7	1.7
Sprains and strains . . . . .	22.9	21.6
Open wounds and lacerations . . . . .	24.2	22.1
Superficial injury . . . . .	4.9	6.7
Contusions . . . . .	15.7	15.3
Burns . . . . .	2.9	2.7
Toxic effects—nonmedicinal . . . . .	2.5	2.1
Other injuries . . . . .	13.9	15.2

- Open wounds and lacerations—total (870–884, 890–894)
  - Open wounds and lacerations of head, neck and trunk (870–879)
  - Open wounds and lacerations of upper limb (880–884)
    - Open wounds and lacerations of shoulder, arm and hand (880, 881, 882, 884)
    - Open wounds and lacerations of fingers (883)
  - Open wounds and lacerations of lower limb (890–894)
    - Open wounds and lacerations of knee, leg and ankle (891)
- Superficial injury (910–919)
- Contusion with intact skin surface (920–924)
  - Contusion of face, neck and scalp (920)
  - Contusion of trunk (922)
- Effects of foreign body through orifice (930–939)
  - Effects of foreign body on external eye (930)
- Burns (940–949)
- Toxic effects—nonmedicinal (980–989)
- All other injuries (860–869, 900–904, 925–929, 950–957, 959, 960–979, 990–999)

It should be noted that several rubrics in the nature of injury code numbers (800–999) are excluded. These are codes assigned to traumatic amputations; late effects of injuries, poisonings, and toxic effects; and complications of trauma. Traumatic amputations and late effects of injuries, poisonings, and toxic effects are designated as impairments in NHIS; the complications of trauma are not coded, but the original injury causing the trauma is included in the NHIS incidence estimates for injuries.

# Types of injuries

For the years 1985–87, the annual average incidence of injuries was estimated at 64.3 million, or 27.2 injuries per 100 persons in the civilian noninstitutionalized population of the United States. The most frequent types of injuries reported were open wounds and lacerations (14.2 million), sprains and strains (13.8 million), and contusions (9.8 million). A graphic presentation of the percent distribution of all injuries, by type of injury, is provided in figure 1.

## Age and sex

The average annual number of injuries and number per 100 persons per year are shown by type of injury and age in tables B and 1. Injury rates were higher among persons in the younger age groups, under 18 years and 18–44 years, than among those in the age group 45 years and over. Approx-

imately 47 percent of all injuries were reported among persons 18–44 years of age. The incidence rate from open wounds and lacerations was very high for persons under 18 years of age, 9.3 per 100 persons per year, accounting for almost 30 percent of all injuries in this age group. Among persons 18–44 and 45–64 years of age, sprains and strains were highest in incidence, whereas contusions were highest in incidence among persons 65 years of age and over.

Table C contains the annual average numbers and rates of injuries by type of injury and sex, and tables 2 and 3 contain the annual average numbers and rates of injuries for males and females, respectively, cross-tabulated by age. Figure 2 shows the percent distribution of injuries by sex and the percent distribution of injuries by age for each sex. The rate of injuries was higher among males than females, 30.6 compared with 24.0 per 100 persons per year, as shown in table C. A major

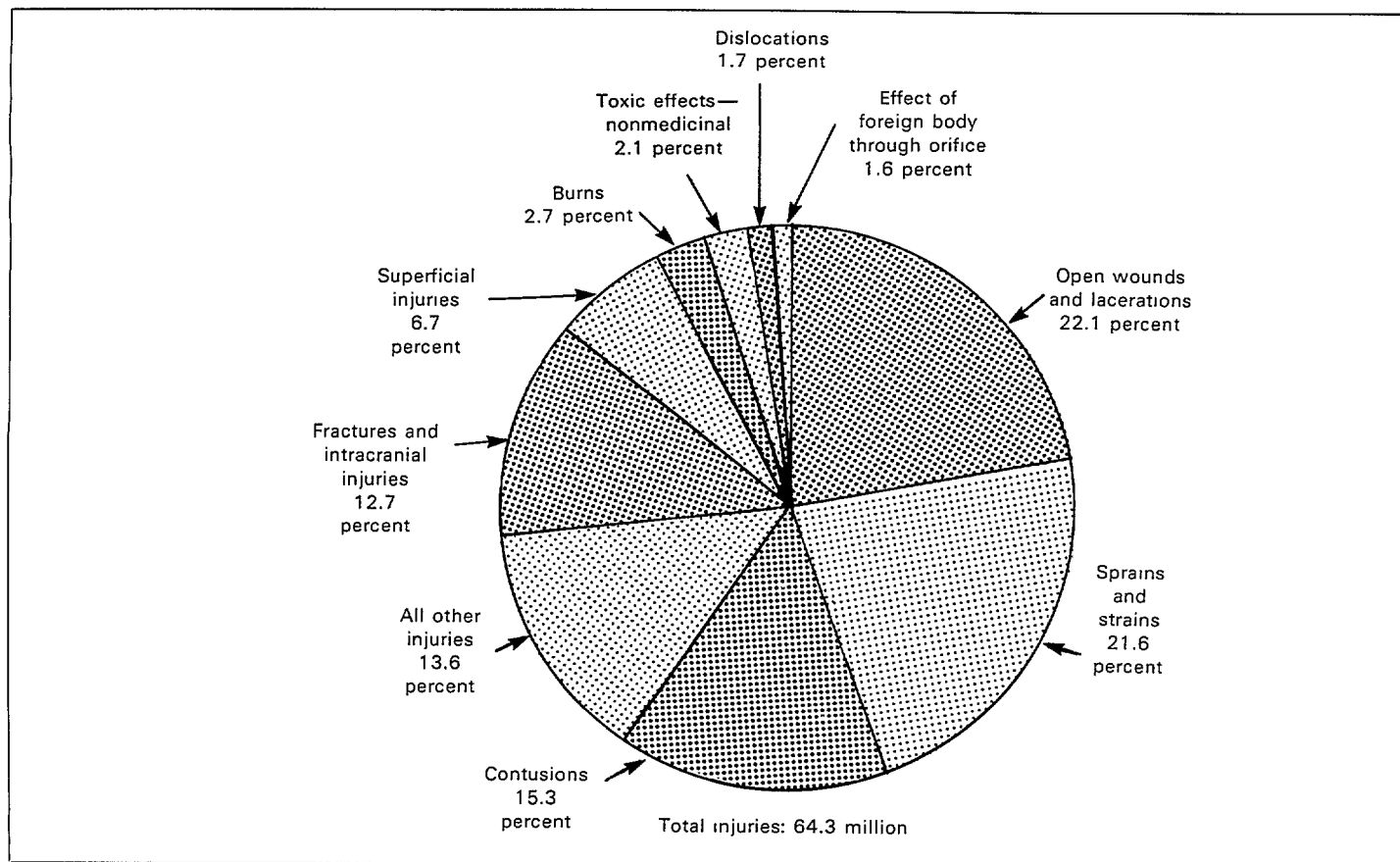


Figure 1. Percent distribution of injuries by type of injury: United States, 1985–87

Table B. Average annual number of injuries and number of injuries per 100 persons per year, by age group and type of injury: United States, 1985-87

Type of injury	Age group							
	All ages	Under 18 years	18-44 years	45 years and over	All ages	Under 18 years	18-44 years	45 years and over
	Average number of injuries in thousands				Number of injuries per 100 persons per year			
All injuries	64,258	20,116	30,159	13,982	27.2	31.9	29.9	19.3
Skull fractures and intracranial injuries	1,931	685	881	364	0.8	1.1	0.9	0.5
Fractures of neck, trunk and upper limb	4,184	1,643	1,540	1,001	1.8	2.6	1.5	1.4
Fractures of upper limb	3,169	1,575	1,073	521	1.3	2.5	1.1	0.7
Fractures of lower limb	2,046	490	880	677	0.9	0.8	0.9	0.9
Dislocations	1,079	*324	603	*152	0.5	*0.5	0.6	*0.2
Sprains and strains—total	13,848	2,956	7,917	2,975	5.9	4.7	7.9	4.1
Sprains and strains of hip, thigh, knee and leg	2,210	469	1,286	455	0.9	0.7	1.3	0.6
Sprains and strains of ankle and foot	3,389	1,010	1,713	665	1.4	1.6	1.7	0.9
Sprains and strains of back	4,758	*312	3,340	1,106	2.0	*0.5	3.3	1.5
Open wounds and lacerations—total	14,202	5,834	6,138	2,229	6.0	9.3	6.1	3.1
Open wounds and lacerations of head, neck and trunk	4,593	2,609	1,310	674	1.9	4.1	1.3	0.9
Open wounds and lacerations of upper limb	5,868	1,513	3,449	906	2.5	2.4	3.4	1.3
Open wounds and lacerations of shoulder, arm and hand	2,656	770	1,443	443	1.1	1.2	1.4	0.6
Open wounds and lacerations of fingers	3,212	743	2,006	463	1.4	1.2	2.0	0.6
Open wounds and lacerations of lower limb	3,740	1,712	1,380	649	1.6	2.7	1.4	0.9
Open wounds and lacerations of knee, leg and ankle	1,878	972	555	351	0.8	1.5	0.6	0.5
Superficial injury	4,279	1,505	2,099	675	1.8	2.4	2.1	0.9
Contusion with intact skin surface	9,823	3,258	4,402	2,163	4.2	5.2	4.4	3.0
Contusion of face, neck and scalp	1,328	753	407	*169	0.6	1.2	0.4	*0.2
Contusion of trunk	1,906	560	745	602	0.8	0.9	0.7	0.8
Effects of foreign body through orifice	1,055	*205	590	*259	0.4	*0.3	0.6	*0.4
Effects of foreign body on external eye	837	*92	570	*176	0.4	*0.1	0.6	*0.2
Burns	1,753	385	1,068	*300	0.7	0.6	1.1	*0.4
Toxic effects—nonmedicinal	1,323	399	542	381	0.6	0.6	0.5	0.5
All other injuries	8,735	2,432	3,499	2,805	3.7	3.9	3.5	3.9

portion of this difference is due to the difference in rates between the sexes for open wounds and lacerations. The incidence rate among males from open wounds and lacerations was 8.3 per 100 persons per year, whereas the rate for females was only 3.8 per 100 persons per year. Open wounds and lacerations were the most frequent type of injury reported among males, but sprains and strains were the most frequently reported type of injury among females.

Of the estimated average annual 64.3 million injuries reported, 54.4 percent were among males and 45.6 percent among females. The highest percent of injuries for each sex occurred in the age group 18-44 years (figure 2).

The incidence rates for injuries among males were higher than the rates for females among persons in the age groups under 18 and 18-44 years. However, the incidence rate was higher for females in the group 45 years of age and over. Of particular interest is that the incidence rate from fractures was about twice as high for females in the age group 45 years and over, whereas it was higher among males in the two younger age groups (tables 2 and 3).

## Race

Table 4 contains the estimated average annual number of injuries and rates per 100 persons per year by type of injury

and race. Injury rates were higher among white persons than among black persons—28.3 compared with 20.9 per 100 persons per year. The difference was not in any specific type of injury category but rather across all types of injuries. Among both white and black persons, the highest incidence rates were for open wounds and lacerations and sprains and strains, 6.3 and 6.0 per 100 persons per year, respectively, among white persons and 4.5 and 4.8 per 100 persons per year, respectively, among black persons.

## Geographic region

The estimated average annual number of injuries and rates per 100 persons per year by type of injury are shown by geographic region in table 5. Among the regions, injury rates were highest for persons living in the West and lowest for persons living in the Northeast. The injury rate from sprains and strains for persons in the West was more than 40 percent higher than the rate for persons in the Northeast, and the rate from open wounds and lacerations was 25 percent higher in the West than in the Northeast. The rates of injuries among persons in the South and the Midwest were almost parallel by type of injury category.

**Table C. Average annual number of injuries and number of injuries per 100 persons per year, by sex and type of injury: United States, 1985-87**

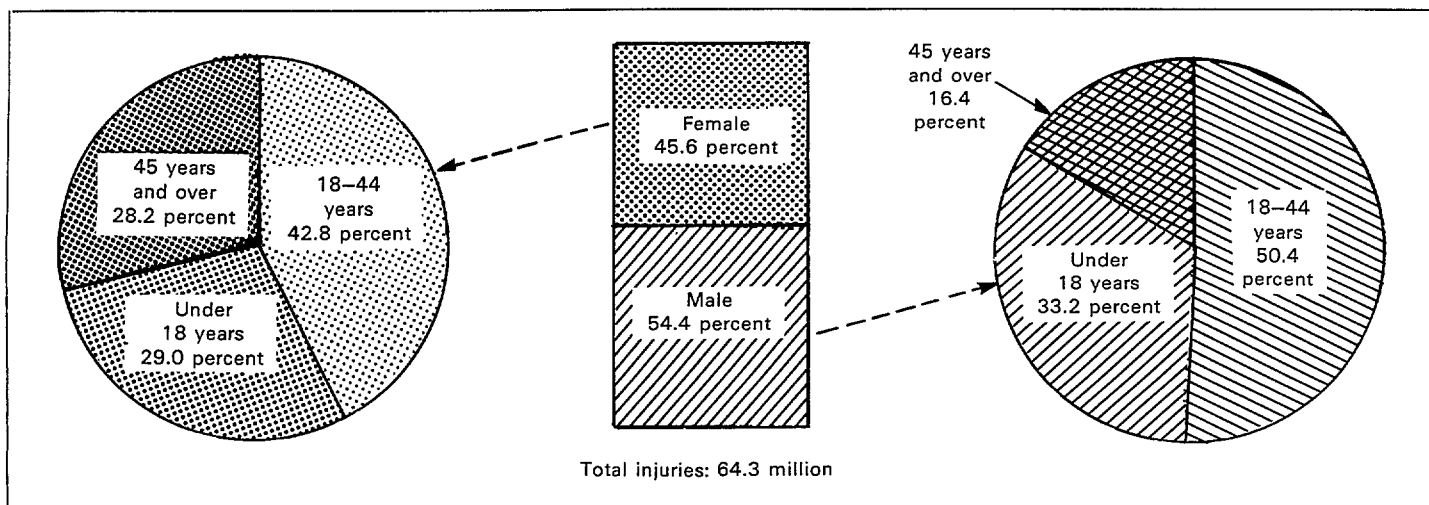
Type of injury	Both sexes			Both sexes		
	Average number of injuries in thousands	Male	Female	Number of injuries per 100 persons per year	Male	Female
All injuries	64,258	34,988	29,270	27.2	30.6	24.0
Skull fractures and intracranial injuries	1,931	1,058	872	0.8	0.9	0.7
Fractures of neck, trunk and upper limb	4,184	2,446	1,737	1.8	2.1	1.4
Fractures of upper limb	3,169	1,869	1,301	1.3	1.6	1.1
Fractures of lower limb	2,046	939	1,107	0.9	0.8	0.9
Dislocations	1,079	559	520	0.5	0.5	0.4
Sprains and strains—total	13,848	7,495	6,352	5.9	6.6	5.2
Sprains and strains of hip, thigh, knee and leg	2,210	1,500	710	0.9	1.3	0.6
Sprains and strains of ankle and foot	3,389	1,658	1,731	1.4	1.5	1.4
Sprains and strains of back	4,758	2,628	2,131	2.0	2.3	1.7
Open wounds and lacerations—total	14,202	9,529	4,673	6.0	8.3	3.8
Open wounds and lacerations of head, neck and trunk	4,593	3,269	1,324	1.9	2.9	1.1
Open wounds and lacerations of upper limb	5,868	3,965	1,903	2.5	3.5	1.6
Open wounds and lacerations of shoulder, arm and hand	2,656	1,861	794	1.1	1.6	0.7
Open wounds and lacerations of fingers	3,212	2,104	1,109	1.4	1.8	0.9
Open wounds and lacerations of lower limb	3,740	2,294	1,446	1.6	2.0	1.2
Open wounds and lacerations of knee, leg and ankle	1,878	1,308	570	0.8	1.1	0.5
Superficial injury	4,279	2,194	2,085	1.8	1.9	1.7
Contusion with intact skin surface	9,823	5,012	4,811	4.2	4.4	3.9
Contusion of face, neck and scalp	1,328	570	758	0.6	0.5	0.6
Contusion of trunk	1,906	1,126	780	0.8	1.0	0.6
Effects of foreign body through orifice	1,055	845	*210	0.4	0.7	*0.2
Effects of foreign body on external eye	837	699	*138	0.4	0.6	*0.1
Burns	1,753	981	772	0.7	0.9	0.6
Toxic effects—nonmedicinal	1,323	538	784	0.6	0.5	0.6
All other injuries	8,735	3,391	5,346	3.7	3.0	4.4

**Place of residence**

Table 6 contains the estimated annual average number of injuries and rates per 100 persons per year by type of injury and place of residence. The average incidence rate for all injuries was very consistent among the places of residence, 27.0, 27.3, and 27.4 per 100 persons per year for those residing in metropolitan statistical areas—central city; in metropolitan statistical areas—not central city; and not in metropolitan statistical areas, respectively. Incidence by type of injury was also consistent across all three places of residence.

**Family income**

Data presented in table 7 show the estimated average annual number of injuries and the rates per 100 persons per year by type of injury and family income. The highest incidence rate for all injuries was reported among persons in the lowest income families, less than \$10,000 per year. Persons in this income group had an incidence rate from contusions that was 50 percent higher than the rate for all persons and an incidence rate for burns that was more than double the incidence rate for all persons. There was not much variation in



**Figure 2. Percent distribution of injuries by sex and age: United States, 1985-87**



the incidence rates from injuries among the other three income groups.

### **Education of responsible adult family member**

Table 8 contains the estimated average annual number of injuries and rates per 100 persons per year by type of injury and education of responsible adult family member. The incidence rate of injuries was slightly lower among persons for whom the education level of the responsible adult family member was lowest, less than 12 years. The incidence rate from sprains and strains was also lower among this group and accounted for much of the overall difference. There was little variation in the incidence rates of type of injury between those in the other two education groups, 12–15 years and 16 years or more.

### **Living arrangement**

The estimated average annual number of injuries and rates per 100 persons per year by type of injury and type of living arrangement are presented in table 9. The incidence rate for all injuries was highest for persons living alone or with non-relatives, 37.7 per 100 persons per year, and lowest among persons living with a spouse, 21.9 per 100 persons per year. Persons living alone or with nonrelatives had higher incidence rates for almost all types of injuries except open wounds and lacerations. In this instance persons living with relatives other than a spouse had the highest incidence. This reflects the high rate of open wounds and lacerations among children, as shown in table 1.

### **Marital status**

Data presented in table 10 show the estimated average annual number of injuries and rates per 100 persons per year by type of injury and marital status for persons 14 years of age and over. Persons who were never married and those divorced or separated had high incidence rates from all injuries, 35.8 and 33.7 per 100 persons per year, respectively. Married persons and widowed persons had low incidence rates, 22.1 and 24.6 per 100 persons per year. Persons never married had incidence rates from sprains and strains and from open wounds and lacerations that were about 40 percent higher than the rates for all persons 14 years of age and over. Married persons had a lower incidence rate from contusions than persons in the other three marital groups.

### **Respondent-assessed health status**

Table 11 contains the estimated average annual number of injuries and rates per 100 persons per year by type of injury and respondent-assessed health status. Persons with assessed health status of fair or poor had a much higher incidence rate from all injuries (34.5 per 100 persons per year) than did persons with assessed health status of excellent or very good (26.5) or good (26.2). Among persons with assessed health status of fair or poor, the incidence rates from sprains and

strains, contusions, and fractures were all higher than the rates for persons of all health statuses.

### **Employment status**

The estimated average annual number of injuries and rates per 100 persons per year, by type of injury and employment status, are shown for persons 18 years of age and over in table 12. Among persons currently employed, the incidence rate from all injuries was 27.2 per 100 persons per year, whereas the rate for persons currently unemployed was 26.7 and the rate for persons not in the labor force was 22.1 per 100 persons per year. Persons currently employed had incidence rates from sprains and strains and from open wounds and lacerations that were 50 percent higher than the rates for persons not in the labor force.

### **Quarter of the year**

Data presented in table 13 show the estimated average number of injuries per quarter and rates per 100 persons per quarter, by type of injury and quarter of the year in which the injury occurred. The incidence rates from all injuries ranged from 6.0 in the January–March quarter to 7.5 in the April–June quarter. The rates from open wounds and lacerations were 50 percent higher in the April–June and July–September quarters than in the January–March and October–December quarters.

### **Class of accident**

For purposes of the National Health Interview Survey, injuries are grouped into four classes: (1) injuries in moving motor-vehicle accidents, with traffic accidents as a subclass; (2) accidents occurring while at work; (3) accidents occurring at home; and (4) other accidents. The term “accidents” is used broadly to include many kinds of mishaps, such as effects of exposure, poisonings, complications of medical-surgical procedures, or nonaccidental violence (for instance, attempted suicide).

The classes of accidents are not mutually exclusive; for example, an injury may occur in a moving motor-vehicle accident while at work, or an injury may occur while at work in the home.

Table 14 contains the estimated average annual number of injuries and rates per 100 persons per year by type of injury and class of accident. When injuries occurring in “other” accidents were excluded, injuries at home, almost 22 million, or 9.2 per 100 persons per year, was the highest incidence class-of-injury category. Approximately 50 percent of open wounds and lacerations occurred at home—6.9 million, or 2.9 per 100 persons per year.

### **Place of accident**

In addition to questions on class of accident, persons were also asked where the accident occurred. Primary responses to the “place of accident” are home (inside and outside), street

and highway, industrial place, school, place of recreation, and other or unknown.

The estimated average annual number of injuries and rates per 100 persons per year, by type of injury and place of accident, are presented in tables 15 and 16, respectively, and the percent distribution of injuries by type of injury and place of accident is shown in table D. Approximately 21.8 million injuries occurred at home, 8.6 million on streets and highways, 7.7 million in industrial places, 5.5 million at school, and 4.6 million at places of recreation. The corresponding rates per 100 persons per year were 9.2, 3.6, 3.2, 2.3, and 1.9, respectively (tables 15 and 16).

There were large variations in the percents of types of injuries with regard to the place where the accident occurred (table D). Almost 34 percent of all injuries occurred at home. However, 56.8 percent of burns, 48.5 percent of open wounds and lacerations, and 45.7 percent of fractures of the lower limb occurred at home.

Accidents occurring on the street and highway were responsible for 13.4 percent of all injuries, whereas 33.1 percent of skull fractures and intracranial injuries, 22.2 percent of sprains and strains of the back, and 20.5 percent of contusions occurred on the street and highway.

Although accidents occurring in the industrial place accounted for only 11.9 percent of all injuries, 24.2 percent of open wounds and lacerations of the upper limb and 19.7 percent of sprains and strains of the back occurred in the industrial place.

Accidents occurring at school were responsible for 18.0 percent of sprains and strains of the ankle and foot and 14.7

percent of fractures of the upper limb, but only 8.5 percent of all injuries.

Whereas only 7.2 percent of injuries occurred in accidents at places of recreation, 22.7 percent of sprains and strains of the hip, thigh, knee and leg occurred there (table D).

### Medical attention and resulting restrictions

All of the estimated 64.3 million injuries reported either necessitated medical attention or caused activity restriction for at least one-half day. This is true because injuries not requiring either of these actions are not included in the data from the National Health Interview Survey. Data presented in table 17 show the estimated average annual number of injuries and the percents of these injuries that resulted in medical attention, activity restriction, and bed disability, by type of injury.

Tables 18–22 contain the average annual estimated numbers of injuries and accompanying medical attention and disability day data for males, females, persons under 18 years of age, persons 18–44 years of age, and persons 45 years of age and over, respectively. Figure 3 graphically presents the percents of types of injuries that required medical attention and that caused activity restriction. It should be noted that medically attended injuries and activity-restricting injuries are not mutually exclusive. However, bed-disabling injuries, by definition, must be activity restricting.

Of the estimated 64.3 million injuries reported, 89.5 percent were medically attended, 50.6 percent resulted in activity restriction, and 22.3 percent resulted in bed disability

Table D. Percent distribution of injuries by place of accident, according to type of injury: United States, 1985–87

Type of injury	Place of accident						
	All places	Home	Street and highway	Industrial place	School	Place of recreation	Other
	Percent distribution						
All injuries.....	100.0	33.9	13.4	11.9	8.5	7.2	25.0
Skull fractures and intracranial injuries.....	100.0	26.3	33.1	*3.8	*13.4	*9.1	*14.3
Fractures of neck, trunk and upper limb.....	100.0	39.6	10.8	11.4	12.7	11.6	14.1
Fractures of upper limb.....	100.0	42.7	*8.6	*10.5	14.7	12.0	11.5
Fractures of lower limb.....	100.0	45.7	*16.3	*10.5	*8.9	*6.4	*12.1
Dislocations.....	100.0	*30.9	*8.2	*10.7	*23.1	*15.9	*11.2
Sprains and strains—total.....	100.0	27.9	14.7	14.4	12.1	11.5	19.4
Sprains and strains of hip, thigh, knee and leg.....	100.0	21.4	*13.8	*7.7	14.0	22.7	20.5
Sprains and strains of ankle and foot.....	100.0	30.7	*5.9	11.6	18.0	12.7	21.1
Sprains and strains of back.....	100.0	26.1	22.2	19.7	*4.4	*6.9	20.8
Open wounds and lacerations—total.....	100.0	48.5	10.2	14.4	5.5	6.3	15.1
Open wounds and lacerations of head, neck and trunk.....	100.0	49.8	15.8	7.9	*6.1	*6.7	13.8
Open wounds and lacerations of upper limb.....	100.0	46.6	*5.8	24.2	*4.2	*3.6	15.6
Open wounds and lacerations of shoulder, arm and hand.....	100.0	44.1	*8.9	22.7	*4.8	*4.3	15.2
Open wounds and lacerations of fingers.....	100.0	48.7	*3.2	25.4	*3.7	*3.1	15.8
Open wounds and lacerations of lower limb.....	100.0	49.8	10.2	*7.1	*6.7	10.2	16.0
Open wounds and lacerations of knee, leg and ankle.....	100.0	40.3	*14.2	*9.5	*6.9	*7.2	21.8
Superficial injury.....	100.0	35.5	16.3	8.8	10.6	*4.7	24.2
Contusion with intact skin surface.....	100.0	35.0	20.5	11.4	10.9	6.9	15.3
Contusion of face, neck and scalp.....	100.0	34.0	*12.8	*4.4	*17.0	*16.0	*15.8
Contusion of trunk.....	100.0	39.3	20.1	*10.8	*11.1	*4.4	*14.2
Effects of foreign body through orifice.....	100.0	*31.8	*4.0	*31.2	—	*4.9	*28.1
Effects of foreign body on external eye.....	100.0	*22.5	*5.0	*36.8	—	*6.2	*29.5
Burns.....	100.0	56.8	*8.6	*15.2	—	*1.3	*18.1
Toxic effects—nonmedicinal.....	100.0	—	—	—	—	—	100.0
All other injuries.....	100.0	15.3	8.3	7.4	*3.3	*2.2	63.5

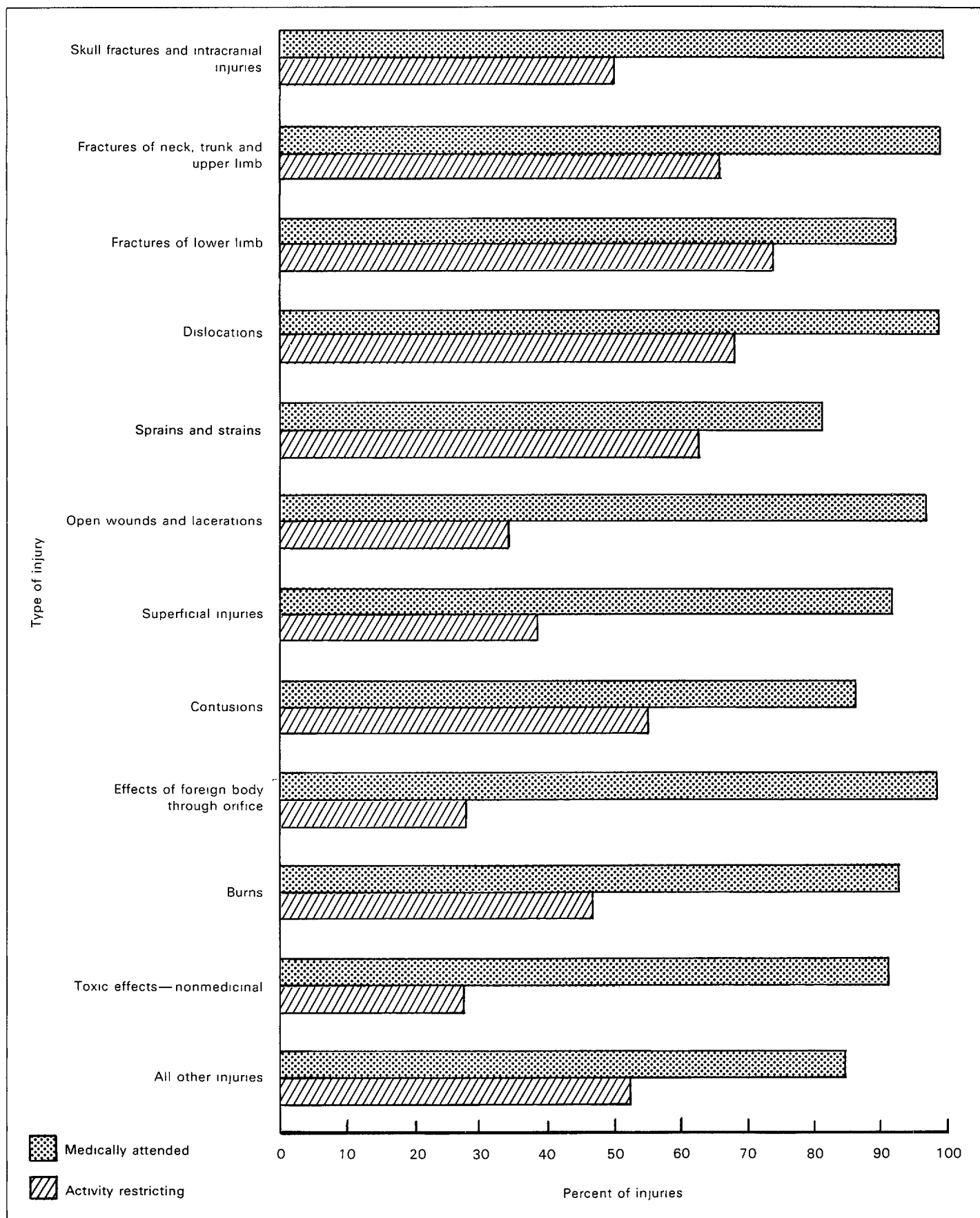


Figure 3. Percent of injuries that were medically attended and activity restricting, by type of injury: United States, 1985-87

(table 17). Almost all skull fractures and intracranial injuries, and fractures of the neck, trunk and upper limb, were medically treated, 99.3 and 98.5 percent, respectively. In addition, 97.0 percent of open wounds and lacerations received medical attention. At the other end of the spectrum, sprains and strains of the back and sprains and strains of the ankle and foot were medically attended in only 76.9 percent and 78.8 percent of the cases, respectively. Fractures of the lower limb and sprains and strains of the back were the types of injuries to cause the highest percents of activity restriction, more than 73 percent in both cases. The types of injuries least likely to cause activity restriction were open wounds and lacerations of several different sites, toxic effects—nonmedicinal, and effects of foreign body through orifice. Fractures of the lower limb and sprains and strains of the back resulted in bed disability more frequently than other types of injuries, 42.9 and 41.7 percent, respectively.

There was very little difference between males and females in the percent of all injuries that were medically attended: 89.4 compared with 89.6 percent. However, by type of injury, females had higher percents of medical attention for fractures of the lower limb, sprains and strains, and burns, whereas males received a higher percent of medical attention for contusions (tables 18 and 19).

The percent of events resulting in activity restriction for all types of injuries was virtually identical for males and females: 50.5 compared with 50.6 percent. With regard to type of injury, fractures of the neck, trunk and upper limb; sprains and strains of the ankle and foot; sprains and strains of the back; and superficial injuries resulted in higher percents of restricted activity among males, whereas skull fractures and intracranial injuries and open wounds and lacerations of the head, neck and trunk resulted in higher percents of restricted activity among females. Fractures of the lower limb resulted in a higher percent of bed disability among females.

A lower percent of injuries were medically attended among persons 45 years of age and over than among persons in the younger age groups, whereas injuries to persons under 18 years of age resulted in lower percents of both restricted activity and bed disability (tables 20–22). Persons with open wounds and lacerations, fractures, and dislocations received medical attention in almost all cases in each of the age groups. The major difference among the age groups was that persons 45 years of age and over with sprains and strains and contusions were less likely to receive medical attention than were persons in the younger age groups. Conversely, persons under 18 years of age were less likely to be restricted in activity due to sprains and strains and contusions than were persons 18–44 and 45 years of age and over, as shown in table E.

### Restricted-activity days

The average annual estimates of restricted-activity days presented in this section include only those days associated with current injuries (that is, those occurring within the past 3 months). The restricted-activity days associated with impairments due to injuries are not included. A restricted-activity day is one in which a person has to cut down on his or her usual activities for at least one-half day as a result of an injury.

Table E. Percent of sprains and strains and contusions that were activity restricting, by age group: United States, 1985–87

Age group	Restricted activity resulting from—	
	Sprains and strains	Contusions
	Percent	
Under 18 years.....	48.2	46.4
18–44 years.....	65.5	51.5
45 years and over.....	67.0	72.0

For the years 1985–87, the average annual number of days of restricted activity resulting from injuries was estimated to be 371.6 million, or 157.3 days per 100 persons per year. The estimated number of restricted-activity days and rates per 100 persons per year are shown by age and type of injury in table 23. The estimated number of restricted-activity days cross-tabulated by sex, age, and type of injury and the accompanying rates per 100 persons per year are presented in tables 24 and 25.

The rate of restricted-activity days was lowest among persons under 18 years of age and highest among persons 65 years of age and over, 79.2 and 231.9 days per 100 persons per year, respectively (table 23). Among persons under 18 years of age, fractures of the neck, trunk and upper limb; sprains and strains; and open wounds and lacerations collectively accounted for more than one-half of the total number of restricted-activity days. Persons 18–44 years of age and 45–64 years of age had similar patterns of restricted-activity days due to injuries by type of injury. For all injuries, persons 18–44 years of age reported 173.9 days per 100 persons a year and persons 45–64 years of age reported 184.1 days per 100 persons per year. Restricted-activity days due to fractures were similar for both these age groups for all sites except fractures of the lower limb. Persons 45–64 years of age reported 28.5 days per 100 persons per year for fractures of lower limb, compared with 15.6 days for persons 18–44 years of age. However, persons 18–44 years of age had higher rates from sprains and strains than persons 45–64 years of age had, 53.5 compared with 42.9 days per 100 persons per year. Persons 65 years of age and over had rates of restricted-activity days from contusions and from fractures of the lower limb that were more than twice as high as the rate for all persons.

The number and rate of restricted-activity days due to injuries were higher among males than among females (tables 24 and 25). Males had higher rates of restricted activity among persons under 18 and 18–44 years of age, whereas females had a higher rate among persons 45 years of age and over.

Among persons under 18 and 18–44 years of age, the differences in rates of restricted activity among males and females can be attributed mostly to higher rates among males from fractures, sprains and strains, and open wounds and lacerations. The higher rate of restricted-activity days among females 45 years of age and over may be attributed to higher rates among women from fractures, sprains and strains, and contusions.

The average number of restricted-activity days per injury is shown by type of injury in table F. The average rate was 5.8 days per injury. Fractures of the lower limb were responsible

for the highest number of restricted-activity days, 24.1; the numbers of days from effects of foreign body through orifice and toxic effects—nonmedicinal were less than 1 per injury.

### Bed-disability days

The average annual number of bed-disability days shown in this section includes only those days associated with current injuries. The bed-disability days associated with impairments due to injuries are not included. Bed days are also considered restricted-activity days. The converse of this is not necessarily true, however, because a person may restrict his or her usual daily activity but not require a bed stay.

For the years 1985–87, the average annual number of days of bed disability due to injuries was estimated to be 119.1 million, or 50.4 days per 100 persons per year. Tables 26 and 27 contain the annual average estimated number of bed-disability days and the number of days per 100 persons per year by age group and type of injury and by sex and type of injury, respectively.

The rates of bed-disability days varied markedly by age, from 20.1 days per 100 persons under 18 years of age to 84.5 days per 100 persons 65 years of age and over. Because of relatively small numbers of bed-disability days within the type-of-injury categories, it is difficult to analyze the rates by age. However, the rate of bed-disability days from sprains and strains was highest among persons 18–44 years of age, and rates of bed-disability days from fractures of the lower limb and from contusions were highest among persons 65 years of age and over (table 26).

The rates of bed-disability days for all injuries were almost the same for males and females: 49.7 and 51.1 days per 100 persons per year, respectively. There were some differences in the rates of bed disability by type of injury, females having a higher rate than males for sprains and strains of the back and males having a higher rate from fractures of the lower limb (table 27).

Average numbers of bed-disability days per injury are shown in table F. Fractures of the lower limb were responsible for the most bed-disability days per injury—9.5 days, five times the rate of 1.9 days for all types of injuries.

The population figures used in computing rates in this report are found in tables 28–29.

Table F. Average annual number of restricted-activity and bed-disability days per injury, by type of injury: United States, 1985–87

Type of injury	Average number of restricted-activity days per injury	Average number of bed-disability days per injury
All injuries	5.8	1.9
Skull fractures and intracranial injuries	7.4	3.0
Fractures of neck, trunk and upper limb	11.6	3.1
Fractures of upper limb	10.7	2.0
Fractures of lower limb	24.1	9.5
Dislocations	10.2	4.0
Sprains and strains—total	6.6	1.7
Sprains and strains of hip, thigh, knee and leg	6.6	1.6
Sprains and strains of ankle and foot	5.0	0.8
Sprains and strains of back	8.3	2.6
Open wounds and lacerations—total	2.8	0.9
Open wounds and lacerations of head, neck and trunk	2.9	1.0
Open wounds and lacerations of upper limb	2.3	0.4
Open wounds and lacerations of shoulder, arm and hand	2.3	*0.8
Open wounds and lacerations of fingers	2.4	*0.2
Open wounds and lacerations of lower limb	3.4	1.5
Open wounds and lacerations of knee, leg and ankle	4.2	2.2
Superficial injury	1.7	*0.5
Contusion with intact skin surface	4.6	1.4
Contusion of face, neck and scalp	*1.8	*0.7
Contusion of trunk	6.0	2.1
Effects of foreign body through orifice	*0.6	*0.2
Effects of foreign body on external eye	*0.6	*0.2
Burns	4.1	1.8
Toxic effects—nonmedicinal	*0.9	*0.2
All other injuries	6.4	2.4

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**Table 1. Average annual number of injuries and number per 100 persons per year, by age group and type of injury: United States, 1985–87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Age group									
	All ages	Under 18 years	18–44 years	45–64 years	65 years and over	All ages	Under 18 years	18–44 years	45–64 years	65 years and over
	Average number of injuries in thousands					Number of injuries per 100 persons per year				
All injuries . . . . .	64,258	20,116	30,159	8,319	5,663	27.2	31.9	29.9	18.6	20.5
Skull fractures and intracranial injuries . . . . .	1,931	685	881	*205	*159	0.8	1.1	0.9	*0.5	*0.6
Fractures of neck, trunk and upper limb . . . . .	4,184	1,643	1,540	631	370	1.8	2.6	1.5	1.4	1.3
Fractures of upper limb . . . . .	3,169	1,575	1,073	397	*124	1.3	2.5	1.1	0.9	*0.4
Fractures of lower limb . . . . .	2,046	490	880	474	*203	0.9	0.8	0.9	1.1	*0.7
Dislocations . . . . .	1,079	*324	603	*120	*32	0.5	*0.5	0.6	*0.3	*0.1
Sprains and strains—total . . . . .	13,848	2,956	7,917	2,053	922	5.9	4.7	7.9	4.6	3.3
Sprains and strains of hip, thigh, knee and leg . . . . .	2,210	469	1,286	*221	*234	0.9	0.7	1.3	*0.5	*0.8
Sprains and strains of ankle and foot . . . . .	3,389	1,010	1,713	490	*175	1.4	1.6	1.7	1.1	*0.6
Sprains and strains of back . . . . .	4,758	*312	3,340	853	*253	2.0	*0.5	3.3	1.9	*0.9
Open wounds and lacerations—total . . . . .	14,202	5,834	6,138	1,332	897	6.0	9.3	6.1	3.0	3.3
Open wounds and lacerations of head, neck and trunk . . . . .	4,593	2,609	1,310	*283	391	1.9	4.1	1.3	*0.6	1.4
Open wounds and lacerations of upper limb . . . . .	5,868	1,513	3,449	564	*342	2.5	2.4	3.4	1.3	*1.2
Open wounds and lacerations of shoulder, arm and hand . . . . .	2,656	770	1,443	*239	*204	1.1	1.2	1.4	*0.5	*0.7
Open wounds and lacerations of fingers . . . . .	3,212	743	2,006	*325	*138	1.4	1.2	2.0	*0.7	*0.5
Open wounds and lacerations of lower limb . . . . .	3,740	1,712	1,380	485	*164	1.6	2.7	1.4	1.1	*0.6
Open wounds and lacerations of knee, leg and ankle . . . . .	1,878	972	555	*265	*86	0.8	1.5	0.6	*0.6	*0.3
Superficial injury . . . . .	4,279	1,505	2,099	394	*281	1.8	2.4	2.1	0.9	*1.0
Contusion with intact skin surface . . . . .	9,823	3,258	4,402	1,009	1,154	4.2	5.2	4.4	2.3	4.2
Contusion of face, neck and scalp . . . . .	1,328	753	407	*45	*124	0.6	1.2	0.4	*0.1	*0.4
Contusion of trunk . . . . .	1,906	560	745	*212	390	0.8	0.9	0.7	*0.5	1.4
Effects of foreign body through orifice . . . . .	1,055	*205	590	*126	*133	0.4	*0.3	0.6	*0.3	*0.5
Effects of foreign body on external eye . . . . .	837	*92	570	*82	*94	0.4	*0.1	0.6	*0.2	*0.3
Burns . . . . .	1,753	385	1,068	*204	*96	0.7	0.6	1.1	*0.5	*0.3
Toxic effects—nonmedicinal . . . . .	1,323	399	542	*227	*154	0.6	0.6	0.5	*0.5	*0.6
All other injuries . . . . .	8,735	2,432	3,499	1,543	1,262	3.7	3.9	3.5	3.4	4.6



**Table 2. Average annual number of injuries among males and number per 100 males per year, by age group and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Age group							
	All ages	Under 18 years	18-44 years	45 years and over	All ages	Under 18 years	18-44 years	45 years and over
	Average number of injuries in thousands				Number of injuries per 100 males per year			
All injuries	34,988	11,632	17,627	5,729	30.6	36.1	35.8	17.5
Skull fractures and intracranial injuries	1,058	520	398	*140	0.9	1.6	0.8	*0.4
Fractures of neck, trunk and upper limb	2,446	1,076	1,109	*261	2.1	3.3	2.3	*0.8
Fractures of upper limb	1,869	1,024	745	*100	1.6	3.2	1.5	*0.3
Fractures of lower limb	939	*236	491	*212	0.8	*0.7	1.0	*0.6
Dislocations	559	*156	351	*51	0.5	*0.5	0.7	*0.2
Sprains and strains—total	7,495	1,609	4,547	1,339	6.6	5.0	9.2	4.1
Sprains and strains of hip, thigh, knee and leg	1,500	*329	883	*288	1.3	*1.0	1.8	*0.9
Sprains and strains of ankle and foot	1,658	480	907	*271	1.5	1.5	1.8	*0.8
Sprains and strains of back	2,628	*225	1,926	477	2.3	*0.7	3.9	1.5
Open wounds and lacerations—total	9,529	3,980	4,244	1,304	8.3	12.3	8.6	4.0
Open wounds and lacerations of head, neck and trunk	3,269	1,921	978	371	2.9	6.0	2.0	1.1
Open wounds and lacerations of upper limb	3,965	979	2,496	490	3.5	3.0	5.1	1.5
Open wounds and lacerations of shoulder, arm and hand	1,861	530	1,086	*246	1.6	1.6	2.2	*0.8
Open wounds and lacerations of fingers	2,104	449	1,410	*244	1.8	1.4	2.9	*0.7
Open wounds and lacerations of lower limb	2,294	1,081	770	444	2.0	3.4	1.6	1.4
Open wounds and lacerations of knee, leg and ankle	1,308	684	364	*260	1.1	2.1	0.7	*0.8
Superficial injury	2,194	752	1,199	*244	1.9	2.3	2.4	*0.7
Contusion with intact skin surface	5,012	1,719	2,491	802	4.4	5.3	5.1	2.5
Contusion of face, neck and scalp	570	*291	*201	*78	0.5	*0.9	*0.4	*0.2
Contusion of trunk	1,126	429	489	*209	1.0	1.3	1.0	*0.6
Effects of foreign body through orifice	845	*121	564	*159	0.7	*0.4	1.1	*0.5
Effects of foreign body on external eye	699	*52	543	*104	0.6	*0.2	1.1	*0.3
Burns	981	*145	701	*136	0.9	*0.4	1.4	*0.4
Toxic effects—nonmedicinal	538	*215	*150	*174	0.5	*0.7	*0.3	*0.5
All other injuries	3,391	1,102	1,382	907	3.0	3.4	2.8	2.8

**Table 3. Average annual number of injuries among females and number per 100 females per year, by age group and type of injury: United States, 1985–87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Age group							
	All ages	Under 18 years	18–44 years	45 years and over	All ages	Under 18 years	18–44 years	45 years and over
	Average number of injuries in thousands				Number of injuries per 100 females per year			
All injuries . . . . .	29,270	8,484	12,533	8,253	24.0	27.5	24.3	20.8
Skull fractures and intracranial injuries . . . . .	872	*165	484	*224	0.7	*0.5	0.9	*0.6
Fractures of neck, trunk and upper limb . . . . .	1,737	567	430	740	1.4	1.8	0.8	1.9
Fractures of upper limb . . . . .	1,301	551	*329	421	1.1	1.8	*0.6	1.1
Fractures of lower limb . . . . .	1,107	*253	389	465	0.9	*0.8	0.8	1.2
Dislocations . . . . .	520	*167	*251	*102	0.4	*0.5	*0.5	*0.3
Sprains and strains—total . . . . .	6,352	1,347	3,370	1,636	5.2	4.4	6.5	4.1
Sprains and strains of hip, thigh, knee and leg . . . . .	710	*140	404	*166	0.6	*0.5	0.8	*0.4
Sprains and strains of ankle and foot . . . . .	1,731	530	806	394	1.4	1.7	1.6	1.0
Sprains and strains of back . . . . .	2,131	*87	1,414	629	1.7	*0.3	2.7	1.6
Open wounds and lacerations—total . . . . .	4,673	1,853	1,894	925	3.8	6.0	3.7	2.3
Open wounds and lacerations of head, neck and trunk . . . . .	1,324	688	*333	*303	1.1	2.2	*0.6	*0.8
Open wounds and lacerations of upper limb . . . . .	1,903	534	952	417	1.6	1.7	1.8	1.1
Open wounds and lacerations of shoulder, arm and hand . . . . .	794	*240	357	*197	0.7	*0.8	0.7	*0.5
Open wounds and lacerations of fingers . . . . .	1,109	*294	595	*219	0.9	*1.0	1.2	*0.6
Open wounds and lacerations of lower limb . . . . .	1,446	631	609	*206	1.2	2.0	1.2	*0.5
Open wounds and lacerations of knee, leg and ankle . . . . .	570	*288	*192	*91	0.5	*0.9	*0.4	*0.2
Superficial injury . . . . .	2,085	753	901	431	1.7	2.4	1.7	1.1
Contusion with intact skin surface . . . . .	4,811	1,539	1,911	1,361	3.9	5.0	3.7	3.4
Contusion of face, neck and scalp . . . . .	758	462	*205	*91	0.6	1.5	*0.4	*0.2
Contusion of trunk . . . . .	780	*131	*256	393	0.6	*0.4	*0.5	1.0
Effects of foreign body through orifice . . . . .	*210	*84	*26	*100	*0.2	*0.3	*0.1	*0.3
Effects of foreign body on external eye . . . . .	*138	*40	*26	*72	*0.1	*0.1	*0.1	*0.2
Burns . . . . .	772	*241	367	*164	0.6	*0.8	0.7	*0.4
Toxic effects—nonmedicinal . . . . .	784	*185	392	*207	0.6	*0.6	0.8	*0.5
All other injuries . . . . .	5,346	1,330	2,118	1,898	4.4	4.3	4.1	4.8

**Table 4. Average annual number of injuries and number per 100 persons per year, by race and type of injury: United States, 1985–87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Race					
	All races <sup>1</sup>	White	Black	All races <sup>1</sup>	White	Black
	Average number of injuries in thousands			Number of injuries per 100 persons per year		
All injuries . . . . .	64,258	56,714	5,975	27.2	28.3	20.9
Skull fractures and intracranial injuries . . . . .	1,931	1,710	*163	0.8	0.9	*0.6
Fractures of neck, trunk and upper limb . . . . .	4,184	3,859	*187	1.8	1.9	*0.7
Fractures of upper limb . . . . .	3,169	2,867	*180	1.3	1.4	*0.6
Fractures of lower limb . . . . .	2,046	1,784	*225	0.9	0.9	*0.8
Dislocations . . . . .	1,079	867	*164	0.5	0.4	*0.6
Sprains and strains—total . . . . .	13,848	12,094	1,374	5.9	6.0	4.8
Sprains and strains of hip, thigh, knee and leg . . . . .	2,210	1,919	*200	0.9	1.0	*0.7
Sprains and strains of ankle and foot . . . . .	3,389	3,035	*290	1.4	1.5	*1.0
Sprains and strains of back . . . . .	4,758	4,154	531	2.0	2.1	1.9
Open wounds and lacerations—total . . . . .	14,202	12,655	1,278	6.0	6.3	4.5
Open wounds and lacerations of head, neck and trunk . . . . .	4,593	4,061	471	1.9	2.0	1.6
Open wounds and lacerations of upper limb . . . . .	5,868	5,179	557	2.5	2.6	2.0
Open wounds and lacerations of shoulder, arm and hand . . . . .	2,656	2,377	*226	1.1	1.2	*0.8
Open wounds and lacerations of fingers . . . . .	3,212	2,802	*330	1.4	1.4	*1.2
Open wounds and lacerations of lower limb . . . . .	3,740	3,415	*250	1.6	1.7	*0.9
Open wounds and lacerations of knee, leg and ankle . . . . .	1,878	1,681	*167	0.8	0.8	*0.6
Superficial injury . . . . .	4,279	3,766	400	1.8	1.9	1.4
Contusion with intact skin surface . . . . .	9,823	8,673	936	4.2	4.3	3.3
Contusion of face, neck and scalp . . . . .	1,328	1,153	*152	0.6	0.6	*0.5
Contusion of trunk . . . . .	1,906	1,699	*186	0.8	0.8	*0.7
Effects of foreign body through orifice . . . . .	1,055	820	*234	0.4	0.4	*0.8
Effects of foreign body on external eye . . . . .	837	687	*150	0.4	0.3	*0.5
Burns . . . . .	1,753	1,502	*180	0.7	0.7	*0.6
Toxic effects—nonmedicinal . . . . .	1,323	1,186	*120	0.6	0.6	*0.4
All other injuries . . . . .	8,735	7,798	713	3.7	3.9	2.5

<sup>1</sup>Includes races other than white and black.

**Table 5. Average annual number of injuries and number per 100 persons per year, by geographic region and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Geographic region										
	All regions					All regions					
	Northeast	Midwest	South	West	Northeast	Midwest	South	West	Northeast	Midwest	South
	Average number of injuries in thousands					Number of injuries per 100 persons per year					
All injuries . . . . .	64,258	11,424	15,456	22,457	14,921	27.2	22.8	26.7	27.8	31.6	
Skull fractures and intracranial injuries. . . . .	1,931	375	483	705	367	0.8	0.7	0.8	0.9	0.8	
Fractures of neck, trunk and upper limb. . . . .	4,184	636	790	1,599	1,159	1.8	1.3	1.4	2.0	2.5	
Fractures of upper limb. . . . .	3,169	402	614	1,250	903	1.3	0.8	1.1	1.5	1.9	
Fractures of lower limb. . . . .	2,046	434	434	878	*300	0.9	0.9	0.7	1.1	*0.6	
Dislocations . . . . .	1,079	*89	*242	*329	419	0.5	*0.2	*0.4	*0.4	0.9	
Sprains and strains—total . . . . .	13,848	2,478	3,281	4,743	3,346	5.9	4.9	5.7	5.9	7.1	
Sprains and strains of hip, thigh, knee and leg . . . . .	2,210	387	397	969	458	0.9	0.8	0.7	1.2	1.0	
Sprains and strains of ankle and foot . . . . .	3,389	584	858	998	949	1.4	1.2	1.5	1.2	2.0	
Sprains and strains of back . . . . .	4,758	883	1,073	1,746	1,056	2.0	1.8	1.9	2.2	2.2	
Open wounds and lacerations—total . . . . .	14,202	2,628	3,601	4,881	3,092	6.0	5.2	6.2	6.0	6.5	
Open wounds and lacerations of head, neck and trunk. . . . .	4,593	749	1,223	1,702	919	1.9	1.5	2.1	2.1	1.9	
Open wounds and lacerations of upper limb. . . . .	5,868	1,142	1,720	1,885	1,121	2.5	2.3	3.0	2.3	2.4	
Open wounds and lacerations of shoulder, arm and hand . . . . .	2,656	429	789	1,026	412	1.1	0.9	1.4	1.3	0.9	
Open wounds and lacerations of fingers. . . . .	3,212	713	931	860	709	1.4	1.4	1.6	1.1	1.5	
Open wounds and lacerations of lower limb. . . . .	3,740	737	658	1,294	1,052	1.6	1.5	1.1	1.6	2.2	
Open wounds and lacerations of knee, leg and ankle. . . . .	1,878	382	*311	695	490	0.8	0.8	*0.5	0.9	1.0	
Superficial injury . . . . .	4,279	856	931	1,563	929	1.8	1.7	1.6	1.9	2.0	
Contusion with intact skin surface. . . . .	9,823	2,031	2,433	3,201	2,159	4.2	4.0	4.2	4.0	4.6	
Contusion of face, neck and scalp. . . . .	1,328	*247	*307	517	*257	0.6	*0.5	*0.5	0.6	*0.5	
Contusion of trunk. . . . .	1,906	428	488	560	430	0.8	0.9	0.8	0.7	0.9	
Effects of foreign body through orifice . . . . .	1,055	*179	*218	466	*192	0.4	*0.4	*0.4	0.6	*0.4	
Effects of foreign body on external eye . . . . .	837	*101	*174	369	*192	0.4	*0.2	*0.3	0.5	*0.4	
Burns. . . . .	1,753	380	*343	569	461	0.7	0.8	*0.6	0.7	1.0	
Toxic effects—nonmedicinal . . . . .	1,323	*186	*329	560	*247	0.6	*0.4	*0.6	0.7	*0.5	
All other injuries . . . . .	8,735	1,152	2,372	2,963	2,250	3.7	2.3	4.1	3.7	4.8	

**Table 6. Average annual number of injuries and number per 100 persons per year, by place of residence and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Place of residence							
	All residences	MSA—central city	MSA—not central city	Not MSA	All residences	MSA—central city	MSA—not central city	Not MSA
	Average number of injuries in thousands				Number of injuries per 100 persons per year			
All injuries . . . . .	64,258	19,686	29,670	14,902	27.2	27.0	27.3	27.4
Skull fractures and intracranial injuries . . . . .	1,931	613	846	471	0.8	0.8	0.8	0.9
Fractures of neck, trunk and upper limb . . . . .	4,184	1,411	1,533	1,239	1.8	1.9	1.4	2.3
Fractures of upper limb . . . . .	3,169	974	1,092	1,103	1.3	1.3	1.0	2.0
Fractures of lower limb . . . . .	2,046	534	994	518	0.9	0.7	0.9	1.0
Dislocations . . . . .	1,079	*306	428	*345	0.5	*0.4	0.4	*0.6
Sprains and strains—total . . . . .	13,848	4,077	6,660	3,110	5.9	5.6	6.1	5.7
Sprains and strains of hip, thigh, knee and leg . . . . .	2,210	534	1,087	590	0.9	0.7	1.0	1.1
Sprains and strains of ankle and foot . . . . .	3,389	978	1,572	839	1.4	1.3	1.4	1.5
Sprains and strains of back . . . . .	4,758	1,550	2,325	883	2.0	2.1	2.1	1.6
Open wounds and lacerations—total . . . . .	14,202	4,212	6,596	3,394	6.0	5.8	6.1	6.2
Open wounds and lacerations of head, neck and trunk . . . . .	4,593	1,213	2,359	1,021	1.9	1.7	2.2	1.9
Open wounds and lacerations of upper limb . . . . .	5,868	1,658	2,667	1,544	2.5	2.3	2.5	2.8
Open wounds and lacerations of shoulder, arm and hand . . . . .	2,656	815	1,028	812	1.1	1.1	0.9	1.5
Open wounds and lacerations of fingers . . . . .	3,212	842	1,639	732	1.4	1.2	1.5	1.3
Open wounds and lacerations of lower limb . . . . .	3,740	1,341	1,570	829	1.6	1.8	1.4	1.5
Open wounds and lacerations of knee, leg and ankle . . . . .	1,878	697	738	443	0.8	1.0	0.7	0.8
Superficial injury . . . . .	4,279	1,597	1,958	724	1.8	2.2	1.8	1.3
Contusion with intact skin surface . . . . .	9,823	3,159	4,439	2,226	4.2	4.3	4.1	4.1
Contusion of face, neck and scalp . . . . .	1,328	487	554	*288	0.6	0.7	0.5	*0.5
Contusion of trunk . . . . .	1,906	440	990	475	0.8	0.6	0.9	0.9
Effects of foreign body through orifice . . . . .	1,055	426	*338	*291	0.4	0.6	*0.3	*0.5
Effects of foreign body on external eye . . . . .	837	*311	*288	*238	0.4	*0.4	*0.3	*0.4
Burns . . . . .	1,753	581	786	386	0.7	0.8	0.7	0.7
Toxic effects—nonmedicinal . . . . .	1,323	*319	747	*256	0.6	*0.4	0.7	*0.5
All other injuries . . . . .	8,735	2,451	4,344	1,942	3.7	3.4	4.0	3.6

NOTE: MSA is metropolitan statistical area.

**Table 7. Average annual number of injuries and number per 100 persons per year, by family income and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Family income									
	All incomes <sup>1</sup>	Less than \$10,000	\$10,000-\$19,999	\$20,000-\$34,999	\$35,000 or more	All incomes <sup>1</sup>	Less than \$10,000	\$10,000-\$19,999	\$20,000-\$34,999	\$35,000 or more
	Average number of injuries in thousands					Number of injuries per 100 persons per year				
All injuries.....	64,258	10,956	12,042	18,087	16,752	27.2	33.1	26.5	28.6	26.4
Skull fractures and intracranial injuries.....	1,931	*315	377	464	536	0.8	*1.0	0.8	0.7	0.8
Fractures of neck, trunk and upper limb.....	4,184	728	781	1,253	934	1.8	2.2	1.7	2.0	1.5
Fractures of upper limb.....	3,169	608	630	987	645	1.3	1.8	1.4	1.6	1.0
Fractures of lower limb.....	2,046	446	407	518	498	0.9	1.3	0.9	0.8	0.8
Dislocations.....	1,079	*308	*201	*255	*282	0.5	*0.9	*0.4	*0.4	*0.4
Sprains and strains—total.....	13,848	2,185	2,525	4,027	3,813	5.9	6.6	5.6	6.4	6.0
Sprains and strains of hip, thigh, knee and leg.....	2,210	416	476	576	566	0.9	1.3	1.0	0.9	0.9
Sprains and strains of ankle and foot.....	3,389	598	472	967	927	1.4	1.8	1.0	1.5	1.5
Sprains and strains of back.....	4,758	758	810	1,311	1,491	2.0	2.3	1.8	2.1	2.3
Open wounds and lacerations—total.....	14,202	2,239	2,606	3,722	3,943	6.0	6.8	5.7	5.9	6.2
Open wounds and lacerations of head, neck and trunk.....	4,593	780	628	1,423	1,252	1.9	2.4	1.4	2.3	2.0
Open wounds and lacerations of upper limb.....	5,868	727	1,376	1,521	1,575	2.5	2.2	3.0	2.4	2.5
Open wounds and lacerations of shoulder, arm and hand.....	2,656	*316	725	670	701	1.1	*1.0	1.6	1.1	1.1
Open wounds and lacerations of fingers.....	3,212	411	651	851	874	1.4	1.2	1.4	1.3	1.4
Open wounds and lacerations of lower limb.....	3,740	733	601	778	1,116	1.6	2.2	1.3	1.2	1.8
Open wounds and lacerations of knee, leg and ankle.....	1,878	*332	392	*293	561	0.8	*1.0	0.9	*0.5	0.9
Superficial injury.....	4,279	521	746	1,336	1,383	1.8	1.6	1.6	2.1	2.2
Contusion with intact skin surface.....	9,823	2,086	1,573	2,844	2,215	4.2	6.3	3.5	4.5	3.5
Contusion of face, neck and scalp.....	1,328	*240	*270	*281	425	0.6	*0.7	*0.6	*0.4	0.7
Contusion of trunk.....	1,906	*348	*282	550	536	0.8	*1.1	*0.6	0.9	0.8
Effects of foreign body through orifice.....	1,055	*147	*276	377	*142	0.4	*0.4	*0.6	0.6	*0.2
Effects of foreign body on external eye.....	837	*93	*181	*347	*124	0.4	*0.3	*0.4	*0.5	*0.2
Burns.....	1,753	595	*345	365	*248	0.7	1.8	*0.8	0.6	*0.4
Toxic effects—nonmedicinal.....	1,323	*124	*318	367	*325	0.6	*0.4	*0.7	0.6	*0.5
All other injuries.....	8,735	1,262	1,887	2,560	2,433	3.7	3.8	4.2	4.0	3.8

<sup>1</sup>Includes unknown family income.

**Table 8. Average annual number of injuries and number per 100 persons per year, by education of responsible adult family member and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Education of responsible adult family member							
	All levels <sup>1</sup>	Less than 12 years	12-15 years	16 years or more	All levels <sup>1</sup>	Less than 12 years	12-15 years	16 years or more
	Average number of injuries in thousands				Number of injuries per 100 persons per year			
All injuries	64,258	9,026	39,056	16,085	27.2	25.0	28.0	27.0
Skull fractures and intracranial injuries	1,931	*218	1,317	396	0.8	*0.6	0.9	0.7
Fractures of neck, trunk and upper limb	4,184	632	2,516	1,017	1.8	1.8	1.8	1.7
Fractures of upper limb	3,169	469	1,935	748	1.3	1.3	1.4	1.3
Fractures of lower limb	2,046	377	1,267	383	0.9	1.0	0.9	0.6
Dislocations	1,079	*196	680	*203	0.5	*0.5	0.5	*0.3
Sprains and strains—total	13,848	1,626	8,909	3,313	5.9	4.5	6.4	5.6
Sprains and strains of hip, thigh, knee and leg	2,210	*271	1,482	458	0.9	*0.8	1.1	0.8
Sprains and strains of ankle and foot	3,389	361	2,141	886	1.4	1.0	1.5	1.5
Sprains and strains of back	4,758	609	3,035	1,113	2.0	1.7	2.2	1.9
Open wounds and lacerations—total	14,202	1,746	8,733	3,686	6.0	4.8	6.3	6.2
Open wounds and lacerations of head, neck and trunk	4,593	518	2,702	1,374	1.9	1.4	1.9	2.3
Open wounds and lacerations of upper limb	5,868	685	3,807	1,339	2.5	1.9	2.7	2.3
Open wounds and lacerations of shoulder, arm and hand	2,656	440	1,527	667	1.1	1.2	1.1	1.1
Open wounds and lacerations of fingers	3,212	*244	2,280	672	1.4	*0.7	1.6	1.1
Open wounds and lacerations of lower limb	3,740	543	2,224	973	1.6	1.5	1.6	1.6
Open wounds and lacerations of knee, leg and ankle	1,878	*261	1,196	421	0.8	*0.7	0.9	0.7
Superficial injury	4,279	549	2,492	1,222	1.8	1.5	1.8	2.1
Contusion with intact skin surface	9,823	1,630	5,803	2,391	4.2	4.5	4.2	4.0
Contusion of face, neck and scalp	1,328	*169	621	538	0.6	*0.5	0.4	0.9
Contusion of trunk	1,906	358	1,110	437	0.8	1.0	0.8	0.7
Effects of foreign body through orifice	1,055	*193	719	*142	0.4	*0.5	0.5	*0.2
Effects of foreign body on external eye	837	*115	618	*104	0.4	*0.3	0.4	*0.2
Burns	1,753	498	761	494	0.7	1.4	0.5	0.8
Toxic effects—nonmedicinal	1,323	*94	827	402	0.6	*0.3	0.6	0.7
All other injuries	8,735	1,267	5,032	2,436	3.7	3.5	3.6	4.1

<sup>1</sup>Includes unknown education of responsible adult family member.

**Table 9. Average annual number of injuries and number per 100 persons per year, by living arrangement and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Living arrangement							
	Living alone or with nonrelatives				Living with spouse or other relative			
	All arrangements	Living alone or with nonrelatives	Living with spouse	Living with other relative	All arrangements	Living alone or with nonrelatives	Living with spouse	Living with other relative
	Average number of injuries in thousands				Number of injuries per 100 persons per year			
All injuries . . . . .	64,258	10,552	24,111	29,595	27.2	37.7	21.9	30.2
Skull fractures and intracranial injuries . . . . .	1,931	*184	575	1,172	0.8	*0.7	0.5	1.2
Fractures of neck, trunk and upper limb . . . . .	4,184	719	1,398	2,067	1.8	2.6	1.3	2.1
Fractures of upper limb . . . . .	3,169	450	780	1,939	1.3	1.6	0.7	2.0
Fractures of lower limb . . . . .	2,046	*348	885	813	0.9	*1.2	0.8	0.8
Dislocations . . . . .	1,079	*232	*315	532	0.5	*0.8	*0.3	0.5
Sprains and strains—total . . . . .	13,848	2,410	6,228	5,209	5.9	8.6	5.7	5.3
Sprains and strains of hip, thigh, knee and leg . . . . .	2,210	507	913	791	0.9	1.8	0.8	0.8
Sprains and strains of ankle and foot . . . . .	3,389	709	1,213	1,467	1.4	2.5	1.1	1.5
Sprains and strains of back . . . . .	4,758	740	2,754	1,264	2.0	2.6	2.5	1.3
Open wounds and lacerations—total . . . . .	14,202	1,789	4,761	7,652	6.0	6.4	4.3	7.8
Open wounds and lacerations of head, neck and trunk . . . . .	4,593	483	1,081	3,029	1.9	1.7	1.0	3.1
Open wounds and lacerations of upper limb . . . . .	5,868	858	2,429	2,582	2.5	3.1	2.2	2.6
Open wounds and lacerations of shoulder, arm and hand . . . . .	2,656	436	1,062	1,157	1.1	1.6	1.0	1.2
Open wounds and lacerations of fingers . . . . .	3,212	422	1,366	1,424	1.4	1.5	1.2	1.5
Open wounds and lacerations of lower limb . . . . .	3,740	448	1,251	2,041	1.6	1.6	1.1	2.1
Open wounds and lacerations of knee, leg and ankle . . . . .	1,878	*187	598	1,094	0.8	*0.7	0.5	1.1
Superficial injury . . . . .	4,279	831	1,169	2,279	1.8	3.0	1.1	2.3
Contusion with intact skin surface . . . . .	9,823	1,663	3,024	5,136	4.2	5.9	2.7	5.2
Contusion of face, neck and scalp . . . . .	1,328	*154	*268	906	0.6	*0.5	*0.2	0.9
Contusion of trunk . . . . .	1,906	353	668	885	0.8	1.3	0.6	0.9
Effects of foreign body through orifice . . . . .	1,055	*82	685	*287	0.4	*0.3	0.6	*0.3
Effects of foreign body on external eye . . . . .	837	*82	599	*155	0.4	*0.3	0.5	*0.2
Burns . . . . .	1,753	367	833	552	0.7	1.3	0.8	0.6
Toxic effects—nonmedicinal . . . . .	1,323	*289	530	503	0.6	*1.0	0.5	0.5
All other injuries . . . . .	8,735	1,636	3,707	3,393	3.7	5.8	3.4	3.5



**Table 10. Average annual number of injuries and number per 100 persons 14 years of age and over per year, by marital status and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Marital status									
	Average number of injuries in thousands					Number of injuries per 100 persons per year				
	All statuses	Married	Widowed	Divorced or separated	Never married	All statuses	Married	Widowed	Divorced or separated	Never married
All injuries.....	49,733	24,592	3,166	5,175	16,800	26.6	22.1	24.6	33.7	35.8
Skull fractures and intracranial injuries .....	1,468	604	*122	*207	536	0.8	0.5	*0.9	*1.3	1.1
Fractures of neck, trunk and upper limb.....	3,071	1,398	*159	*274	1,240	1.6	1.3	*1.2	*1.8	2.6
Fractures of upper limb .....	2,072	780	*67	*157	1,068	1.1	0.7	*0.5	*1.0	2.3
Fractures of lower limb.....	1,781	901	*117	*234	530	1.0	0.8	*0.9	*1.5	1.1
Dislocations .....	927	*315	*17	*130	465	0.5	*0.3	*0.1	*0.8	1.0
Sprains and strains—total .....	12,353	6,301	520	1,228	4,304	6.6	5.7	4.0	8.0	9.2
Sprains and strains of hip, thigh, knee and leg .....	2,037	913	*146	*154	824	1.1	0.8	*1.1	*1.0	1.8
Sprains and strains of ankle and foot.....	2,932	1,233	*132	364	1,203	1.6	1.1	*1.0	2.4	2.6
Sprains and strains of back .....	4,629	2,806	*147	426	1,249	2.5	2.5	*1.1	2.8	2.7
Open wounds and lacerations—total.....	9,535	4,952	*317	881	3,386	5.1	4.4	*2.5	5.7	7.2
Open wounds and lacerations of head, neck and trunk .....	2,248	1,118	*34	*221	875	1.2	1.0	*0.3	*1.4	1.9
Open wounds and lacerations of upper limb .....	4,795	2,429	*204	499	1,663	2.6	2.2	*1.6	3.3	3.5
Open wounds and lacerations of shoulder, arm and hand .....	2,110	1,062	*120	*271	657	1.1	1.0	*0.9	*1.8	1.4
Open wounds and lacerations of fingers.....	2,685	1,366	*84	*228	1,007	1.4	1.2	*0.7	*1.5	2.1
Open wounds and lacerations of lower limb .....	2,492	1,406	*78	*161	848	1.3	1.3	*0.6	*1.0	1.8
Open wounds and lacerations of knee, leg and ankle .....	1,205	650	*35	*33	486	0.6	0.6	*0.3	*0.2	1.0
Superficial injury.....	2,888	1,169	*100	371	1,248	1.5	1.0	*0.8	2.4	2.7
Contusion with intact skin surface.....	7,474	3,147	782	934	2,612	4.0	2.8	6.1	6.1	5.6
Contusion of face, neck and scalp .....	737	*303	*78	-	356	0.4	*0.3	*0.6	-	0.8
Contusion of trunk.....	1,536	668	*226	*170	473	0.8	0.6	*1.8	*1.1	1.0
Effects of foreign body through orifice .....	865	685	*71	*41	*68	0.5	0.6	*0.6	*0.3	*0.1
Effects of foreign body on external eye .....	761	599	*53	*41	*68	0.4	0.5	*0.4	*0.3	*0.1
Burns.....	1,472	833	*56	*150	434	0.8	0.7	*0.4	*1.0	0.9
Toxic effects—nonmedicinal .....	969	551	*58	*122	*239	0.5	0.5	*0.5	*0.8	*0.5
All other injuries.....	6,930	3,737	849	604	1,738	3.7	3.4	6.6	3.9	3.7

**Table 11. Average annual number of injuries and number per 100 persons per year, by respondent-assessed health status and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Respondent-assessed health status							
	All health statuses <sup>1</sup>	Excellent or very good	Good	Fair or poor	All health statuses <sup>1</sup>	Excellent or very good	Good	Fair or poor
	Average number of injuries in thousands				Number of injuries per 100 persons per year			
All injuries . . . . .	64,258	41,611	14,226	8,187	27.2	26.5	26.2	34.5
Skull fractures and intracranial injuries . . . . .	1,931	1,179	478	*252	0.8	0.8	0.9	*1.1
Fractures of neck, trunk and upper limb . . . . .	4,184	2,795	810	579	1.8	1.8	1.5	2.4
Fractures of upper limb . . . . .	3,169	2,130	645	394	1.3	1.4	1.2	1.7
Fractures of lower limb . . . . .	2,046	1,195	462	389	0.9	0.8	0.9	1.6
Dislocations . . . . .	1,079	721	*164	*194	0.5	0.5	*0.3	*0.8
Sprains and strains—total . . . . .	13,848	8,572	3,376	1,833	5.9	5.5	6.2	7.7
Sprains and strains of hip, thigh, knee and leg . . . . .	2,210	1,492	510	*208	0.9	0.9	0.9	*0.9
Sprains and strains of ankle and foot . . . . .	3,389	2,152	678	558	1.4	1.4	1.3	2.3
Sprains and strains of back . . . . .	4,758	2,890	1,228	613	2.0	1.8	2.3	2.6
Open wounds and lacerations—total . . . . .	14,202	10,561	2,504	1,060	6.0	6.7	4.6	4.5
Open wounds and lacerations of head, neck and trunk . . . . .	4,593	3,289	797	474	1.9	2.1	1.5	2.0
Open wounds and lacerations of upper limb . . . . .	5,868	4,411	1,132	*282	2.5	2.8	2.1	*1.2
Open wounds and lacerations of shoulder, arm and hand . . . . .	2,656	1,900	586	*170	1.1	1.2	1.1	*0.7
Open wounds and lacerations of fingers . . . . .	3,212	2,511	547	*112	1.4	1.6	1.0	*0.5
Open wounds and lacerations of lower limb . . . . .	3,740	2,861	575	*304	1.6	1.8	1.1	*1.3
Open wounds and lacerations of knee, leg and ankle . . . . .	1,878	1,474	*259	*145	0.8	0.9	*0.5	*0.6
Superficial injury . . . . .	4,279	3,226	751	*302	1.8	2.1	1.4	*1.3
Contusion with intact skin surface . . . . .	9,823	5,680	2,686	1,430	4.2	3.6	5.0	6.0
Contusion of face, neck and scalp . . . . .	1,328	991	*194	*144	0.6	0.6	*0.4	*0.6
Contusion of trunk . . . . .	1,906	959	555	392	0.8	0.6	1.0	1.7
Effects of foreign body through orifice . . . . .	1,055	692	*179	*184	0.4	0.4	*0.3	*0.8
Effects of foreign body on external eye . . . . .	837	601	*124	*112	0.4	0.4	*0.2	*0.5
Burns . . . . .	1,753	1,051	*345	*333	0.7	0.7	*0.6	*1.4
Toxic effects—nonmedicinal . . . . .	1,323	876	*337	*110	0.6	0.6	*0.6	*0.5
All other injuries . . . . .	8,735	5,063	2,134	1,521	3.7	3.2	3.9	6.4

<sup>1</sup>Includes unknown respondent-assessed health status.

**Table 12. Average annual number of injuries and number per 100 persons 18 years of age and over per year, by employment status and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Employment status							
	Average number of injuries in thousands				Number of injuries per 100 persons per year			
	All statuses	Currently employed	Currently unemployed	Not in labor force	All statuses	Currently employed	Currently unemployed	Not in labor force
All injuries	44,142	29,923	1,718	12,501	25.5	27.2	26.7	22.1
Skull fractures and intracranial injuries	1,246	584	*52	611	0.7	0.5	*0.8	1.1
Fractures of neck, trunk and upper limb	2,541	1,488	*201	852	1.5	1.4	*3.1	1.5
Fractures of upper limb	1,594	932	*136	526	0.9	0.8	*2.1	0.9
Fractures of lower limb	1,557	950	*82	525	0.9	0.9	*1.3	0.9
Dislocations	755	522	*67	*167	0.4	0.5	*1.0	*0.3
Sprains and strains—total	10,892	7,881	360	2,651	6.3	7.2	5.6	4.7
Sprains and strains of hip, thigh, knee and leg	1,741	1,140	*107	495	1.0	1.0	*1.7	0.9
Sprains and strains of ankle and foot	2,379	1,656	*157	565	1.4	1.5	*2.4	1.0
Sprains and strains of back	4,446	3,425	*78	943	2.6	3.1	*1.2	1.7
Open wounds and lacerations—total	8,368	6,070	*317	1,981	4.8	5.5	*4.9	3.5
Open wounds and lacerations of head, neck and trunk	1,985	1,163	*102	719	1.1	1.1	*1.6	1.3
Open wounds and lacerations of upper limb	4,355	3,497	*200	658	2.5	3.2	*3.1	1.2
Open wounds and lacerations of shoulder, arm and hand	1,886	1,397	*147	*342	1.1	1.3	*2.3	*0.6
Open wounds and lacerations of fingers	2,469	2,100	*53	*316	1.4	1.9	*0.8	*0.6
Open wounds and lacerations of lower limb	2,029	1,410	*15	604	1.2	1.3	*0.2	1.1
Open wounds and lacerations of knee, leg and ankle	906	626	*9	*271	0.5	0.6	*0.1	*0.5
Superficial injury	2,774	1,834	*150	791	1.6	1.7	*2.3	1.4
Contusion with intact skin surface	6,565	4,452	*118	1,996	3.8	4.0	*1.8	3.5
Contusion of face, neck and scalp	575	384	*17	*174	0.3	0.3	*0.3	*0.3
Contusion of trunk	1,346	732	*-	614	0.8	0.7	*-	1.1
Effects of foreign body through orifice	850	653	*38	*158	0.5	0.6	*0.6	*0.3
Effects of foreign body on external eye	745	632	*38	*75	0.4	0.6	*0.6	*0.1
Burns	1,367	909	*105	354	0.8	0.8	*1.6	0.6
Toxic effects—nonmedicinal	923	703	*-	*221	0.5	0.6	*-	*0.4
All other injuries	6,304	3,879	*228	2,195	3.6	3.5	*3.5	3.9

**Table 13. Average quarterly number of injuries and number per 100 persons per quarter, by quarter and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Quarter									
	All quarters	January-March	April-June	July-September	October-December	All quarters	January-March	April-June	July-September	October-December
	Average number of injuries in thousands					Number of injuries per 100 persons per quarter				
All injuries . . . . .	64,258	14,070	17,821	17,116	15,250	27.2	6.0	7.5	7.2	6.5
Skull fractures and intracranial injuries . . . . .	1,931	457	539	531	405	0.8	0.2	0.2	0.2	0.2
Fractures of neck, trunk and upper limb . . . . .	4,184	1,036	999	908	1,240	1.8	0.4	0.4	0.4	0.5
Fractures of upper limb . . . . .	3,169	698	888	634	949	1.3	0.3	0.4	0.3	0.4
Fractures of lower limb . . . . .	2,046	386	554	496	610	0.9	0.2	0.2	0.2	0.3
Dislocations . . . . .	1,079	*338	*310	*147	*285	0.5	*0.1	*0.1	*0.1	*0.1
Sprains and strains—total . . . . .	13,848	3,340	3,838	3,645	3,025	5.9	1.4	1.6	1.5	1.3
Sprains and strains of hip, thigh, knee and leg . . . . .	2,210	462	594	568	587	0.9	0.2	0.3	0.2	0.2
Sprains and strains of ankle and foot . . . . .	3,389	1,046	996	778	568	1.4	0.4	0.4	0.3	0.2
Sprains and strains of back . . . . .	4,758	949	1,353	1,349	1,107	2.0	0.4	0.6	0.6	0.5
Open wounds and lacerations—total . . . . .	14,202	2,748	4,248	4,356	2,850	6.0	1.2	1.8	1.8	1.2
Open wounds and lacerations of head, neck and trunk . . . . .	4,593	1,227	1,057	1,422	887	1.9	0.5	0.4	0.6	0.4
Open wounds and lacerations of upper limb . . . . .	5,868	1,140	1,953	1,470	1,305	2.5	0.5	0.8	0.6	0.6
Open wounds and lacerations of shoulder, arm and hand . . . . .	2,656	374	826	743	713	1.1	0.2	0.3	0.3	0.3
Open wounds and lacerations of fingers . . . . .	3,212	766	1,127	726	593	1.4	0.3	0.5	0.3	0.3
Open wounds and lacerations of lower limb . . . . .	3,740	381	1,238	1,464	657	1.6	0.2	0.5	0.6	0.3
Open wounds and lacerations of knee, leg and ankle . . . . .	1,878	*153	611	839	*275	0.8	*0.1	0.3	0.4	*0.1
Superficial injury . . . . .	4,279	899	1,213	1,310	857	1.8	0.4	0.5	0.6	0.4
Contusion with intact skin surface . . . . .	9,823	2,032	2,811	2,072	2,908	4.2	0.9	1.2	0.9	1.2
Contusion of face, neck and scalp . . . . .	1,328	*244	398	*197	489	0.6	*0.1	0.2	*0.1	0.2
Contusion of trunk . . . . .	1,906	467	471	466	502	0.8	0.2	0.2	0.2	0.2
Effects of foreign body through orifice . . . . .	1,055	*206	*197	352	*300	0.4	*0.1	*0.1	0.1	*0.1
Effects of foreign body on external eye . . . . .	837	*188	*162	*249	*239	0.4	*0.1	*0.1	*0.1	*0.1
Burns . . . . .	1,753	566	512	331	*344	0.7	0.2	0.2	0.1	*0.1
Toxic effects—nonmedicinal . . . . .	1,323	*31	358	692	*242	0.6	*0.0	0.2	0.3	*0.1
All other injuries . . . . .	8,735	2,031	2,242	2,279	2,184	3.7	0.9	0.9	1.0	0.9

**Table 14. Average annual number of injuries and number per 100 persons per year, by class of accident and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Class of accident									
	Moving motor vehicle					All classes				
	All classes	Work	Home	Other	All classes	Work	Home	Other	Work	Home
	Average number of injuries in thousands					Number of injuries per 100 persons per year				
All injuries.....	64,258	6,673	10,512	21,805	26,239	27.2	2.8	4.5	9.2	11.1
Skull fractures and intracranial injuries ...	1,931	599	*164	507	730	0.8	0.3	*0.1	0.2	0.3
Fractures of neck, trunk and upper limb .....	4,184	440	641	1,655	1,526	1.8	0.2	0.3	0.7	0.6
Fractures of upper limb .....	3,169	*264	369	1,354	1,262	1.3	*0.1	0.2	0.6	0.5
Fractures of lower limb .....	2,046	*228	*271	936	633	0.9	*0.1	*0.1	0.4	0.3
Dislocations.....	1,079	*87	*178	*333	480	0.5	*0.0	*0.1	*0.1	0.2
Sprains and strains—total.....	13,848	1,572	2,925	3,859	5,793	5.9	0.7	1.2	1.6	2.5
Sprains and strains of hip, thigh, knee and leg.....	2,210	*144	436	473	1,244	0.9	*0.1	0.2	0.2	0.5
Sprains and strains of ankle and foot.....	3,389	*75	561	1,040	1,768	1.4	*0.0	0.2	0.4	0.7
Sprains and strains of back.....	4,758	1,011	1,326	1,241	1,265	2.0	0.4	0.6	0.5	0.5
Open wounds and lacerations—total....	14,202	654	2,496	6,886	4,280	6.0	0.3	1.1	2.9	1.8
Open wounds and lacerations of head, neck and trunk .....	4,593	479	*341	2,287	1,514	1.9	0.2	0.1	1.0	0.6
Open wounds and lacerations of upper limb.....	5,868	*92	1,750	2,735	1,346	2.5	*0.0	0.7	1.2	0.6
Open wounds and lacerations of shoulder, arm and hand.....	2,656	*69	723	1,171	711	1.1	*0.0	0.3	0.5	0.3
Open wounds and lacerations of fingers .....	3,212	*23	1,027	1,564	635	1.4	*0.0	0.4	0.7	0.3
Open wounds and lacerations of lower limb.....	3,740	*83	406	1,864	1,420	1.6	*0.0	0.2	0.8	0.6
Open wounds and lacerations of knee, leg and ankle .....	1,878	*16	*264	756	858	0.8	*0.0	*0.1	0.3	0.4
Superficial injury.....	4,279	457	661	1,517	1,717	1.8	0.2	0.3	0.6	0.7
Contusion with intact skin surface .....	9,823	1,938	1,517	3,442	3,142	4.2	0.8	0.6	1.5	1.3
Contusion of face, neck and scalp .....	1,328	*163	*53	452	686	0.6	*0.1	*0.0	0.2	0.3
Contusion of trunk .....	1,906	353	*299	750	504	0.8	0.1	*0.1	0.3	0.2
Effects of foreign body through orifice.....	1,055	*16	454	*335	*249	0.4	*0.0	0.2	*0.1	*0.1
Effects of foreign body on external eye.....	837	*16	433	*188	*199	0.4	*0.0	0.2	*0.1	*0.1
Burns.....	1,753	*46	393	995	*335	0.7	*0.0	0.2	0.4	*0.1
Toxic effects—nonmedicinal.....	1,323	*-	*-	*-	1,323	0.6	*-	*-	*-	0.6
All other injuries.....	8,735	636	811	1,339	6,031	3.7	0.3	0.3	0.6	2.6

NOTE: The sum of the data for the 4 classes of accidents may be greater than the total because the classes are not mutually exclusive.

**Table 15. Average annual number of injuries, by place of accident and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Place of accident						
	All places	Home	Street and highway	Industrial place	School	Place of recreation	Other
	Average number of injuries in thousands						
All injuries . . . . .	64,258	21,805	8,617	7,657	5,492	4,596	16,091
Skull fractures and intracranial injuries . . . . .	1,931	507	640	*73	*259	*176	*276
Fractures of neck, trunk and upper limb . . . . .	4,184	1,655	450	475	530	486	589
Fractures of upper limb . . . . .	3,169	1,354	*273	*332	466	380	365
Fractures of lower limb . . . . .	2,046	936	*334	*215	*183	*131	*247
Dislocations . . . . .	1,079	*333	*88	*115	*249	*172	*121
Sprains and strains—total . . . . .	13,848	3,859	2,030	1,993	1,680	1,592	2,693
Sprains and strains of hip, thigh, knee and leg . . . . .	2,210	473	*304	*170	*310	502	452
Sprains and strains of ankle and foot . . . . .	3,389	1,040	*201	392	610	430	715
Sprains and strains of back . . . . .	4,758	1,241	1,054	937	*209	*329	988
Open wounds and lacerations—total . . . . .	14,202	6,886	1,446	2,046	779	901	2,143
Open wounds and lacerations of head, neck and trunk . . . . .	4,593	2,287	724	363	*280	*306	634
Open wounds and lacerations of upper limb . . . . .	5,868	2,735	*341	1,418	*247	*214	913
Open wounds and lacerations of shoulder, arm and hand . . . . .	2,656	1,171	*237	602	*128	*113	404
Open wounds and lacerations of fingers . . . . .	3,212	1,564	*104	816	*119	*101	509
Open wounds and lacerations of lower limb . . . . .	3,740	1,864	382	*265	*252	381	597
Open wounds and lacerations of knee, leg and ankle . . . . .	1,878	756	*267	*179	*130	*135	410
Superficial injury . . . . .	4,279	1,517	698	375	453	*200	1,035
Contusion with intact skin surface . . . . .	9,823	3,442	2,016	1,120	1,070	675	1,499
Contusion of face, neck and scalp . . . . .	1,328	452	*170	*58	*226	*213	*210
Contusion of trunk . . . . .	1,906	750	384	*206	*212	*83	*271
Effects of foreign body through orifice . . . . .	1,055	*335	*42	*329	-	*52	*296
Effects of foreign body on external eye . . . . .	837	*188	*42	*308	-	*52	*247
Burns . . . . .	1,753	995	*151	*267	-	*23	*317
Toxic effects—nonmedicinal . . . . .	1,323	-	-	-	-	-	1,323
All other injuries . . . . .	8,735	1,338	721	649	*289	*188	5,550

**Table 16. Average annual number of injuries per 100 persons per year, by place of accident and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Place of accident						
	All places	Home	Street and highway	Industrial place	School	Place of recreation	Other
	Number of injuries per 100 persons per year						
All injuries.....	27.2	9.2	3.6	3.2	2.3	1.9	6.8
Skull fractures and intracranial injuries.....	0.8	0.2	0.3	*0.0	*0.1	*0.1	*0.1
Fractures of neck, trunk and upper limb.....	1.8	0.7	0.2	0.2	0.2	0.2	0.2
Fractures of upper limb.....	1.3	0.6	*0.1	*0.1	0.2	0.2	0.2
Fractures of lower limb.....	0.9	0.4	*0.1	*0.1	*0.1	*0.1	*0.1
Dislocations.....	0.5	*0.1	*0.0	*0.0	*0.1	*0.1	*0.1
Sprains and strains—total.....	5.9	1.6	0.9	0.8	0.7	0.7	1.1
Sprains and strains of hip, thigh, knee and leg.....	0.9	0.2	*0.1	*0.1	*0.1	0.2	0.2
Sprains and strains of ankle and foot.....	1.4	0.4	*0.1	0.2	0.3	0.2	0.3
Sprains and strains of back.....	2.0	0.5	0.4	0.4	*0.1	*0.1	0.4
Open wounds and lacerations—total.....	6.0	2.9	0.6	0.9	0.3	0.4	0.9
Open wounds and lacerations of head, neck and trunk.....	1.9	1.0	0.3	0.2	*0.1	*0.1	0.3
Open wounds and lacerations of upper limb.....	2.5	1.2	*0.1	0.6	*0.1	*0.1	0.4
Open wounds and lacerations of shoulder, arm and hand.....	1.1	0.5	*0.1	0.3	*0.1	*0.0	0.2
Open wounds and lacerations of fingers.....	1.4	0.7	*0.0	0.3	*0.1	*0.0	0.2
Open wounds and lacerations of lower limb.....	1.6	0.8	0.2	*0.1	*0.1	0.2	0.3
Open wounds and lacerations of knee, leg and ankle.....	0.8	0.3	*0.1	*0.1	*0.1	*0.1	0.2
Superficial injury.....	1.8	0.6	0.3	0.2	0.2	*0.1	0.4
Contusion with intact skin surface.....	4.2	1.5	0.9	0.5	0.5	0.3	0.6
Contusion of face, neck and scalp.....	0.6	0.2	*0.1	*0.0	*0.1	*0.1	*0.1
Contusion of trunk.....	0.8	0.3	0.2	*0.1	*0.1	*0.0	*0.1
Effects of foreign body through orifice.....	0.4	*0.1	*0.0	*0.1	-	*0.0	*0.1
Effects of foreign body on external eye.....	0.4	*0.1	*0.0	*0.1	-	*0.0	*0.1
Burns.....	0.7	0.4	*0.1	*0.1	-	*0.0	*0.1
Toxic effects—nonmedicinal.....	0.6	-	-	-	-	-	0.6
All other injuries.....	3.7	0.6	0.3	0.3	*0.1	*0.1	2.3

**Table 17. Average annual number of injuries and percent that were medically attended, activity restricting, and bed disabling, by type of injury: United States, 1985–87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	All	Medically	Activity-	Bed-	All	Medically	Activity-	Bed-
	injuries	attended	restricting	disabling	injuries	attended	restricting	disabling
	Average number of injuries in thousands				Percent			
All injuries.....	64,258	57,499	32,493	14,331	100.0	89.5	50.6	22.3
Skull fractures and intracranial injuries.....	1,931	1,917	950	710	100.0	99.3	49.2	36.8
Fractures of neck, trunk and upper limb.....	4,184	4,122	2,739	1,098	100.0	98.5	65.5	26.2
Fractures of upper limb.....	3,169	3,169	2,081	672	100.0	100.0	65.7	21.2
Fractures of lower limb.....	2,046	1,887	1,500	877	100.0	92.2	73.3	42.9
Dislocations.....	1,079	1,059	717	424	100.0	98.1	66.5	39.3
Sprains and strains—total.....	13,848	11,305	8,601	3,612	100.0	81.6	62.1	26.1
Sprains and strains of hip, thigh, knee and leg...	2,210	1,772	1,272	493	100.0	80.2	57.6	22.3
Sprains and strains of ankle and foot.....	3,389	2,670	2,191	765	100.0	78.8	64.7	22.6
Sprains and strains of back.....	4,758	3,661	3,485	1,983	100.0	76.9	73.2	41.7
Open wounds and lacerations—total.....	14,202	13,773	4,897	1,959	100.0	97.0	34.5	13.8
Open wounds and lacerations of head, neck								
and trunk.....	4,593	4,464	1,622	839	100.0	97.2	35.3	18.3
Open wounds and lacerations of upper limb.....	5,868	5,731	1,647	417	100.0	97.7	28.1	7.1
Open wounds and lacerations of shoulder, arm								
and hand.....	2,656	2,601	687	*301	100.0	97.9	25.9	*11.3
Open wounds and lacerations of fingers.....	3,212	3,130	960	*116	100.0	97.4	29.9	*3.6
Open wounds and lacerations of lower limb.....	3,740	3,578	1,628	703	100.0	95.7	43.5	18.8
Open wounds and lacerations of knee, leg and								
ankle.....	1,878	1,811	850	376	100.0	96.4	45.3	20.0
Superficial injury.....	4,279	3,929	1,657	587	100.0	91.8	38.7	13.7
Contusion with intact skin surface.....	9,823	8,300	5,337	2,127	100.0	84.5	54.3	21.7
Contusion of face, neck and scalp.....	1,328	1,153	559	*235	100.0	86.8	42.1	*17.7
Contusion of trunk.....	1,906	1,541	1,056	474	100.0	80.8	55.4	24.9
Effects of foreign body through orifice.....	1,055	1,038	*294	*108	100.0	98.4	*27.9	*10.2
Effects of foreign body on external eye.....	837	821	*213	*60	100.0	98.1	*25.4	*7.2
Burns.....	1,753	1,614	810	399	100.0	92.1	46.2	22.8
Toxic effects—nonmedicinal.....	1,323	1,210	367	*77	100.0	91.5	27.7	5.8
All other injuries.....	8,735	7,345	4,624	2,353	100.0	84.1	52.9	26.9

NOTE: The injury impact categories are not mutually exclusive.



**Table 18. Average annual number of injuries among males and percent that were medically attended, activity restricting, and bed disabling, by type of injury: United States, 1985-87**

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

Type of injury	All injuries	Medically attended injuries	Activity-restricting injuries	Bed-disabling injuries	All injuries	Medically attended injuries	Activity-restricting injuries	Bed-disabling injuries
	Average number of injuries in thousands				Percent			
All injuries.....	34,988	31,274	17,682	7,355	100.0	89.4	50.5	21.0
Skull fractures and intracranial injuries.....	1,058	1,058	462	*311	100.0	100.0	43.7	*29.4
Fractures of neck, trunk and upper limb.....	2,446	2,430	1,662	529	100.0	99.3	67.9	21.6
Fractures of upper limb.....	1,869	1,869	1,264	*269	100.0	100.0	67.6	*14.4
Fractures of lower limb.....	939	843	684	355	100.0	89.8	72.8	37.8
Dislocations.....	559	559	383	*236	100.0	100.0	68.5	*42.2
Sprains and strains—total.....	7,495	5,984	4,765	1,911	100.0	79.8	63.6	25.5
Sprains and strains of hip, thigh, knee and leg.....	1,500	1,174	853	*274	100.0	78.3	56.9	*18.3
Sprains and strains of ankle and foot.....	1,658	1,219	1,166	439	100.0	73.5	70.3	26.5
Sprains and strains of back.....	2,628	2,047	1,998	1,083	100.0	77.9	76.0	41.2
Open wounds and lacerations—total.....	9,529	9,209	3,253	1,284	100.0	96.6	34.1	13.5
Open wounds and lacerations of head, neck and trunk.....	3,269	3,184	1,042	549	100.0	97.4	31.9	16.8
Open wounds and lacerations of upper limb.....	3,965	3,862	1,140	*254	100.0	97.4	28.8	*6.4
Open wounds and lacerations of shoulder, arm and hand.....	1,861	1,821	439	*179	100.0	97.9	23.6	*9.6
Open wounds and lacerations of fingers.....	2,104	2,041	701	*76	100.0	97.0	33.3	*3.6
Open wounds and lacerations of lower limb.....	2,294	2,162	1,071	481	100.0	94.2	46.7	21.0
Open wounds and lacerations of knee, leg and ankle.....	1,308	1,241	570	*267	100.0	94.9	43.6	*20.4
Superficial injury.....	2,194	1,993	962	372	100.0	90.8	43.8	17.0
Contusion with intact skin surface.....	5,012	4,317	2,696	1,208	100.0	86.1	53.8	24.1
Contusion of face, neck and scalp.....	570	548	*195	*104	100.0	96.1	*34.2	*18.2
Contusion of trunk.....	1,126	878	676	*296	100.0	78.0	60.0	*26.3
Effects of foreign body through orifice.....	845	845	*228	*64	100.0	100.0	*27.0	*7.6
Effects of foreign body on external eye.....	699	699	*197	*44	100.0	100.0	*28.2	*6.3
Burns.....	981	876	504	*290	100.0	89.3	51.4	*29.6
Toxic effects—nonmedicinal.....	538	493	*107	*14	100.0	91.6	*19.9	*2.6
All other injuries.....	3,391	2,667	1,976	780	100.0	78.6	58.3	23.0

NOTE: The injury impact categories are not mutually exclusive

**Table 19. Average annual number of injuries among females and percent that were medically attended, activity restricting, and bed disabling, by type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	All	Medically	Activity-	Bed-	All	Medically	Activity-	Bed-
	injuries	attended	restricting	disabling	injuries	attended	restricting	disabling
	Average number of injuries in thousands				Percent			
All injuries.....	29,270	26,225	14,811	6,976	100.0	89.6	50.6	23.8
Skull fractures and intracranial injuries.....	872	859	488	399	100.0	98.5	56.0	45.8
Fractures of neck, trunk and upper limb.....	1,737	1,692	1,077	568	100.0	97.4	62.0	32.7
Fractures of upper limb.....	1,301	1,301	817	402	100.0	100.0	62.8	30.9
Fractures of lower limb.....	1,107	1,044	816	522	100.0	94.3	73.7	47.2
Dislocations.....	520	501	*335	*188	100.0	96.3	*64.4	*36.2
Sprains and strains—total.....	6,352	5,321	3,836	1,701	100.0	83.8	60.4	26.8
Sprains and strains of hip, thigh, knee and leg....	710	598	419	*219	100.0	84.2	59.0	*30.8
Sprains and strains of ankle and foot.....	1,731	1,450	1,025	*325	100.0	83.8	59.2	*18.8
Sprains and strains of back.....	2,131	1,614	1,487	900	100.0	75.7	69.8	42.2
Open wounds and lacerations—total.....	4,673	4,564	1,643	675	100.0	97.7	35.2	14.4
Open wounds and lacerations of head, neck and trunk.....	1,324	1,279	580	*290	100.0	96.6	43.8	*21.9
Open wounds and lacerations of upper limb.....	1,903	1,869	507	*163	100.0	98.2	26.6	*8.6
Open wounds and lacerations of shoulder, arm and hand.....	794	780	*248	*122	100.0	98.2	*31.2	*15.4
Open wounds and lacerations of fingers.....	1,109	1,089	*259	*40	100.0	98.2	*23.4	*3.6
Open wounds and lacerations of lower limb.....	1,446	1,416	557	*223	100.0	97.9	38.5	*15.4
Open wounds and lacerations of knee, leg and ankle.....	570	570	*280	*109	100.0	100.0	*49.1	*19.1
Superficial injury.....	2,085	1,936	695	*215	100.0	92.9	33.3	*10.3
Contusion with intact skin surface.....	4,811	3,983	2,641	919	100.0	82.8	54.9	19.1
Contusion of face, neck and scalp.....	758	604	364	*131	100.0	79.7	48.0	*17.3
Contusion of trunk.....	780	663	380	*178	100.0	85.0	48.7	*22.8
Effects of foreign body through orifice.....	*210	*194	*66	*44	100.0	*92.4	*31.4	*21.0
Effects of foreign body on external eye.....	*138	*122	*16	*16	100.0	*88.4	*11.6	*11.6
Burns.....	772	738	*306	*109	100.0	95.6	*39.6	*14.1
Toxic effects—nonmedicinal.....	784	716	*259	*63	100.0	91.3	*33.0	*8.0
All other injuries.....	5,346	4,677	2,649	1,573	100.0	87.5	49.6	29.4

NOTE: The injury impact categories are not mutually exclusive

**Table 20. Average annual number of injuries among persons under 18 years of age and percent that were medically attended, activity restricting, and bed disabling, by type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	All	Medically	Activity-	Bed-	All	Medically	Activity-	Bed-
	injuries	attended	restricting	disabling	injuries	attended	restricting	disabling
	Average number of injuries in thousands				Percent			
All injuries...	20,116	18,444	8,477	3,299	100.0	91.7	42.1	16.4
Skull fractures and intracranial injuries...	685	671	354	*220	100.0	98.0	*51.7	*32.1
Fractures of neck, trunk and upper limb...	1,643	1,643	1,098	*289	100.0	100.0	66.8	*17.6
Fractures of upper limb...	1,575	1,575	1,076	*289	100.0	100.0	68.3	18.3
Fractures of lower limb...	490	474	*318	*221	100.0	96.7	*64.9	*45.1
Dislocations...	*324	*324	*159	*112	*100.0	*100.0	*49.1	*34.6
Sprains and strains—total...	2,956	2,616	1,424	389	100.0	88.5	48.2	13.2
Sprains and strains of hip, thigh, knee and leg...	469	429	*241	*73	100.0	91.5	*51.4	*15.6
Sprains and strains of ankle and foot...	1,010	864	547	*87	100.0	85.5	54.2	*8.6
Sprains and strains of back...	*312	*225	*219	*157	*100.0	*72.1	*70.2	*50.3
Open wounds and lacerations—total...	5,834	5,646	1,720	810	100.0	96.8	29.5	13.9
Open wounds and lacerations of head, neck and trunk...	2,609	2,530	761	393	100.0	97.0	29.2	15.1
Open wounds and lacerations of upper limb...	1,513	1,496	*308	*120	100.0	98.9	*20.4	*7.9
Open wounds and lacerations of shoulder, arm and hand...	770	770	*188	*69	100.0	100.0	*24.4	*9.0
Open wounds and lacerations of fingers...	743	727	*120	*51	100.0	97.8	*16.2	*6.9
Open wounds and lacerations of lower limb...	1,712	1,619	651	*297	100.0	94.6	38.0	*17.3
Open wounds and lacerations of knee, leg and ankle...	972	949	358	*132	100.0	97.6	36.8	*13.6
Superficial injury...	1,505	1,343	397	*64	100.0	89.2	26.4	*4.3
Contusion with intact skin surface...	3,258	2,815	1,512	548	100.0	86.4	46.4	16.8
Contusion of face, neck and scalp...	753	672	*308	*160	100.0	89.2	*40.9	*21.2
Contusion of trunk...	560	429	*287	*190	100.0	76.6	*51.3	*33.9
Effects of foreign body through orifice...	*205	*205	*33	*-	*100.0	*100.0	*16.1	*-
Effects of foreign body on external eye...	*92	*92	*-	*-	*100.0	*100.0	*-	*-
Burns...	385	360	*163	*86	100.0	93.5	*42.3	*22.3
Toxic effects—nonmedicinal...	399	357	*56	*14	100.0	89.5	*14.0	*3.5
All other injuries...	2,432	1,990	1,243	544	100.0	81.8	51.1	*22.4

NOTE: The injury impact categories are not mutually exclusive.

**Table 21. Average annual number of injuries among persons 18–44 years of age and percent that were medically attended, activity restricting, and bed disabling, by type of injury: United States, 1985–87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	All injuries	Medically attended injuries	Activity-restricting injuries	Bed-disabling injuries	All injuries	Medically attended injuries	Activity-restricting injuries	Bed-disabling injuries
	Average number of injuries in thousands				Percent			
All injuries.....	30,159	27,170	16,270	7,347	100.0	90.1	53.9	24.4
Skull fractures and intracranial injuries .....	881	881	411	*333	100.0	100.0	46.7	*37.8
Fractures of neck, trunk and upper limb .....	1,540	1,523	1,068	483	100.0	98.9	69.4	31.4
Fractures of upper limb .....	1,073	1,073	737	*226	100.0	100.0	68.7	*21.1
Fractures of lower limb .....	880	801	658	*251	100.0	91.0	74.8	*28.5
Dislocations .....	603	583	438	*213	100.0	96.7	72.6	*35.3
Sprains and strains—total.....	7,917	6,567	5,185	2,322	100.0	82.9	65.5	29.3
Sprains and strains of hip, thigh, knee and leg ...	1,286	1,103	794	*323	100.0	85.8	61.7	*25.1
Sprains and strains of ankle and foot.....	1,713	1,360	1,173	502	100.0	79.4	68.5	29.3
Sprains and strains of back.....	3,340	2,676	2,346	1,299	100.0	80.1	70.2	38.9
Open wounds and lacerations—total.....	6,138	5,937	2,434	888	100.0	96.7	39.7	14.5
Open wounds and lacerations of head, neck and trunk .....	1,310	1,259	666	359	100.0	96.1	50.8	27.4
Open wounds and lacerations of upper limb.....	3,449	3,343	1,129	*259	100.0	96.9	32.7	*7.5
Open wounds and lacerations of shoulder, arm and hand.....	1,443	1,403	369	*194	100.0	97.2	25.6	*13.4
Open wounds and lacerations of fingers.....	2,006	1,940	759	*65	100.0	96.7	37.8	*3.2
Open wounds and lacerations of lower limb.....	1,380	1,336	640	*270	100.0	96.8	46.4	*19.6
Open wounds and lacerations of knee, leg and ankle .....	555	538	*320	*157	100.0	96.9	*57.7	*28.3
Superficial injury.....	2,099	1,952	1,053	471	100.0	93.0	50.2	22.4
Contusion with intact skin surface .....	4,402	3,844	2,267	1,041	100.0	87.3	51.5	23.6
Contusion of face, neck and scalp .....	407	*346	*160	*31	100.0	*85.0	*39.3	*7.6
Contusion of trunk .....	745	612	357	*215	100.0	82.1	47.9	*28.9
Effects of foreign body through orifice.....	590	590	*169	*44	100.0	100.0	*28.6	*7.5
Effects of foreign body on external eye .....	570	570	*169	*44	100.0	100.0	*29.6	*7.7
Burns .....	1,068	973	507	*266	100.0	91.1	47.5	*24.9
Toxic effects—nonmedicinal.....	542	471	*172	*41	100.0	86.9	*31.7	*7.6
All other injuries.....	3,499	3,047	1,908	993	100.0	87.1	54.5	28.4

NOTE: The injury impact categories are not mutually exclusive.

**Table 22. Average annual number of injuries among persons 45 years of age and over and percent that were medically attended, activity restricting, and bed disabling, by type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 III]

Type of injury	All	Medically	Activity-	Bed-	All	Medically	Activity-	Bed-
	injuries	attended	restricting	disabling	injuries	attended	restricting	disabling
	Average number of injuries in thousands				Percent			
All injuries . . . . .	13,982	11,885	7,746	3,685	100.0	85.0	55.4	26.4
Skull fractures and intracranial injuries . . . . .	364	364	*185	*156	100.0	100.0	*50.8	*42.9
Fractures of neck, trunk and upper limb . . . . .	1,001	956	572	*325	100.0	95.5	57.1	*32.5
Fractures of upper limb . . . . .	521	521	*268	*156	100.0	100.0	*51.4	*29.9
Fractures of lower limb . . . . .	676	612	524	405	100.0	90.5	77.5	59.9
Dislocations . . . . .	*153	*153	*121	*98	*100.0	*100.0	*79.1	*64.1
Sprains and strains—total . . . . .	2,975	2,122	1,992	900	100.0	71.3	67.0	30.3
Sprains and strains of hip, thigh, knee and leg . . . . .	455	*241	*236	*97	100.0	*53.0	*51.9	*21.3
Sprains and strains of ankle and foot . . . . .	665	446	472	*176	100.0	67.1	71.0	*26.5
Sprains and strains of back . . . . .	1,106	760	920	527	100.0	68.7	83.2	47.6
Open wounds and lacerations—total . . . . .	2,230	2,189	743	*262	100.0	98.2	33.3	*11.7
Open wounds and lacerations of head, neck and trunk . . . . .	674	674	*196	*87	100.0	100.0	*29.1	*12.9
Open wounds and lacerations of upper limb . . . . .	906	892	*210	*38	100.0	98.5	*23.2	*4.2
Open wounds and lacerations of shoulder, arm and hand . . . . .	443	429	*129	*38	100.0	96.8	*29.1	*8.6
Open wounds and lacerations of fingers . . . . .	463	463	*80	*	100.0	100.0	*17.3	*
Open wounds and lacerations of lower limb . . . . .	649	623	*337	*137	100.0	96.0	*51.9	*21.1
Open wounds and lacerations of knee, leg and ankle . . . . .	351	*324	*172	*87	100.0	*92.3	*49.0	*24.8
Superficial injury . . . . .	675	634	*207	*52	100.0	93.9	*30.7	*7.7
Contusion with intact skin surface . . . . .	2,163	1,641	1,558	537	100.0	75.9	72.0	24.8
Contusion of face, neck and scalp . . . . .	*169	*135	*91	*45	*100.0	*79.9	*53.8	*26.6
Contusion of trunk . . . . .	601	499	411	*69	100.0	83.0	68.4	*11.5
Effects of foreign body through orifice . . . . .	*259	*243	*93	*65	*100.0	*93.8	*35.9	*25.1
Effects of foreign body on external eye . . . . .	*176	*160	*44	*16	*100.0	*90.9	*25.0	*9.1
Burns . . . . .	*300	*281	*139	*47	*100.0	*93.7	*46.3	*15.7
Toxic effects—nonmedicinal . . . . .	381	381	*139	*22	100.0	100.0	*36.5	*5.8
All other injuries . . . . .	2,805	2,309	1,473	816	100.0	82.3	52.5	29.1

NOTE: The injury impact categories are not mutually exclusive

**Table 23. Average annual number of days of restricted activity due to injuries and number per 100 persons per year, by age group and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Age group									
	All ages	Under 18 years	18-44 years	45-64 years	65 years and over	All ages	Under 18 years	18-44 years	45-64 years	65 years and over
	Average number of restricted-activity days in thousands					Number of restricted-activity days per 100 persons per year				
All injuries . . . . .	371,596	49,943	175,333	82,353	63,966	157.3	79.2	173.9	184.1	231.9
Skull fractures and intracranial injuries . . . . .	14,335	*1,481	8,273	3,182	*1,399	6.1	*2.3	8.2	7.1	*5.1
Fractures of neck, trunk and upper limb . . . . .	48,405	9,745	20,567	10,063	8,029	20.5	15.5	20.4	22.5	29.1
Fractures of upper limb . . . . .	33,979	9,370	14,769	5,466	4,374	14.4	14.9	14.6	12.2	15.9
Fractures of lower limb . . . . .	49,347	5,924	15,760	12,730	14,933	20.9	9.4	15.6	28.5	54.1
Dislocations . . . . .	10,954	*1,290	7,068	*857	*1,739	4.6	*2.0	7.0	*1.9	*6.3
Sprains and strains—total . . . . .	91,293	9,335	53,975	19,172	8,812	38.6	14.8	53.5	42.9	32.0
Sprains and strains of hip, thigh, knee and leg . . . . .	14,548	*1,729	9,489	*1,627	*1,703	6.2	*2.7	9.4	*3.6	*6.2
Sprains and strains of ankle and foot . . . . .	16,882	2,615	9,417	2,746	*2,104	7.1	4.1	9.3	6.1	*7.6
Sprains and strains of back . . . . .	39,408	*1,808	24,964	10,142	2,494	16.7	*2.9	24.8	22.7	9.0
Open wounds and lacerations—total . . . . .	39,516	7,693	20,727	7,531	3,565	16.7	12.2	20.6	16.8	12.9
Open wounds and lacerations of head, neck and trunk . . . . .	13,294	2,934	7,665	*1,511	*1,184	5.6	4.7	7.6	*3.4	*4.3
Open wounds and lacerations of upper limb . . . . .	13,671	*1,511	9,043	2,652	*464	5.8	*2.4	9.0	5.9	*1.7
Open wounds and lacerations of shoulder, arm and hand . . . . .	6,043	*1,342	2,996	*1,580	*125	2.6	*2.1	3.0	*3.5	*0.5
Open wounds and lacerations of fingers . . . . .	7,628	*170	6,047	*1,072	*339	3.2	*0.3	6.0	*2.4	*1.2
Open wounds and lacerations of lower limb . . . . .	12,551	3,248	4,019	3,368	*1,917	5.3	5.2	4.0	7.5	*7.0
Open wounds and lacerations of knee, leg and ankle . . . . .	7,955	*2,178	*2,354	*2,368	*1,053	3.4	*3.5	*2.3	*5.3	*3.8
Superficial injury . . . . .	7,468	*1,011	4,886	*895	*676	3.2	*1.6	4.8	*2.0	*2.5
Contusion with intact skin surface . . . . .	45,144	5,114	18,722	9,227	12,082	19.1	8.1	18.6	20.6	43.8
Contusion of face, neck and scalp . . . . .	*2,372	*595	*431	*1,133	*213	*1.0	*0.9	*0.4	*2.5	*0.8
Contusion of trunk . . . . .	11,470	*863	4,300	2,480	3,826	4.9	*1.4	4.3	5.5	13.9
Effects of foreign body through orifice . . . . .	*600	*54	*383	*75	*87	*0.3	*0.1	*0.4	*0.2	*0.3
Effects of foreign body on external eye . . . . .	*487	*-	*383	*56	*48	*0.2	*-	*0.4	*0.1	*0.2
Burns . . . . .	7,146	*1,367	4,015	*1,495	*270	3.0	*2.2	4.0	*3.3	*1.0
Toxic effects—nonmedicinal . . . . .	*1,243	*87	*557	*319	*280	*0.5	*0.1	*0.6	*0.7	*1.0
All other injuries . . . . .	56,145	6,842	20,400	16,807	12,095	23.8	10.9	20.2	37.6	43.9

NOTE: Restricted-activity days are condition days, not person days.

**Table 24. Average annual number of days of restricted activity due to injuries among males and number per 100 males per year, by age group and type of injury: United States, 1985–87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Age group							
	All ages	Under 18 years	18–44 years	45 years and over	All ages	Under 18 years	18–44 years	45 years and over
	Average number of restricted-activity days in thousands				Number of restricted-activity days per 100 males per year			
All injuries.....	190,527	29,912	105,725	54,891	166.8	92.8	214.6	167.9
Skull fractures and intracranial injuries.....	7,424	*1,185	4,593	*1,646	6.5	*3.7	9.3	*5.0
Fractures of neck, trunk and upper limb.....	25,450	6,771	12,898	5,780	22.3	21.0	26.2	17.7
Fractures of upper limb.....	19,352	6,727	9,623	3,001	16.9	20.9	19.5	9.2
Fractures of lower limb.....	24,109	3,146	9,563	11,399	21.1	9.8	19.4	34.9
Dislocations.....	8,180	*830	5,769	*1,580	7.2	*2.6	11.7	*4.8
Sprains and strains—total.....	47,543	5,601	30,716	11,226	41.6	17.4	62.3	34.3
Sprains and strains of hip, thigh, knee and leg.....	10,827	*1,330	7,563	*1,934	9.5	*4.1	15.4	*5.9
Sprains and strains of ankle and foot.....	6,993	*1,284	4,729	*980	6.1	*4.0	9.6	*3.0
Sprains and strains of back.....	18,825	*750	13,029	5,046	16.5	*2.3	26.4	15.4
Open wounds and lacerations—total.....	25,522	4,932	16,185	4,405	22.3	15.3	32.9	13.5
Open wounds and lacerations of head, neck and trunk.....	8,961	*1,870	6,079	*1,011	7.8	*5.8	12.3	*3.1
Open wounds and lacerations of upper limb.....	9,914	*1,219	7,225	*1,470	8.7	*3.8	14.7	*4.5
Open wounds and lacerations of shoulder, arm and hand.....	4,401	*1,134	2,670	*597	3.9	*3.5	5.4	*1.8
Open wounds and lacerations of fingers.....	5,513	*85	4,555	*873	4.8	*0.3	9.2	*2.7
Open wounds and lacerations of lower limb.....	6,648	*1,843	2,880	*1,924	5.8	*5.7	5.8	*5.9
Open wounds and lacerations of knee, leg and ankle.....	3,709	*1,346	*1,716	*647	3.2	*4.2	*3.5	*2.0
Superficial injury.....	3,469	*513	*1,996	*960	3.0	*1.6	*4.1	*2.9
Contusion with intact skin surface.....	20,395	*2,129	10,770	7,496	17.9	*6.6	21.9	22.9
Contusion of face, neck and scalp.....	*1,374	*224	*185	*965	*1.2	*0.7	*0.4	*3.0
Contusion of trunk.....	6,311	*605	3,169	2,536	5.5	*1.9	6.4	7.8
Effects of foreign body through orifice.....	*470	*11	*383	*77	*0.4	*-	*0.8	*0.2
Effects of foreign body on external eye.....	*439	*-	*383	*56	*0.4	*-	*0.8	*0.2
Burns.....	5,162	*937	3,106	*1,119	4.5	*2.9	6.3	*3.4
Toxic effects—nonmedicinal.....	*430	*59	*47	*324	*0.4	*0.2	*0.1	*1.0
All other injuries.....	22,373	3,797	9,699	8,878	19.6	11.8	19.7	27.1

NOTE: Restricted-activity days are condition days, not person days

**Table 25. Average annual number of days of restricted activity due to injuries among females and number per 100 females per year, by age group and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Age group							
	All ages	Under 18 years	18-44 years	45 years and over	All ages	Under 18 years	18-44 years	45 years and over
	Average number of restricted-activity days in thousands				Number of restricted-activity days per 100 females per year			
All injuries.....	181,069	20,032	69,608	91,429	148.4	65.0	134.9	230.8
Skull fractures and intracranial injuries.....	6,910	*295	3,680	2,935	5.7	*1.0	7.1	7.4
Fractures of neck, trunk and upper limb.....	22,955	2,974	7,669	12,312	18.8	9.7	14.9	31.1
Fractures of upper limb.....	14,628	2,643	5,145	6,839	12.0	8.6	10.0	17.3
Fractures of lower limb.....	25,238	2,778	6,197	16,263	20.7	9.0	12.0	41.1
Dislocations.....	2,774	*459	*1,298	*1,016	2.3	*1.5	*2.5	*2.6
Sprains and strains—total.....	43,750	3,734	23,259	16,758	35.9	12.1	45.1	42.3
Sprains and strains of hip, thigh, knee and leg.....	3,721	*399	*1,927	*1,395	3.1	*1.3	*3.7	*3.5
Sprains and strains of ankle and foot.....	9,889	*1,331	4,688	3,871	8.1	*4.3	9.1	9.8
Sprains and strains of back.....	20,583	*1,058	11,935	7,590	16.9	*3.4	23.1	19.2
Open wounds and lacerations—total.....	13,994	2,761	4,543	6,691	11.5	9.0	8.8	16.9
Open wounds and lacerations of head, neck and trunk.....	4,333	*1,064	*1,586	*1,683	3.6	*3.5	*3.1	*4.2
Open wounds and lacerations of upper limb.....	3,757	*292	*1,818	*1,647	3.1	*0.9	*3.5	*4.2
Open wounds and lacerations of shoulder, arm and hand.....	*1,642	*208	*326	*1,108	*1.3	*0.7	*0.6	*2.8
Open wounds and lacerations of fingers.....	*2,115	*85	*1,492	*538	*1.7	*0.3	*2.9	*1.4
Open wounds and lacerations of lower limb.....	5,903	*1,405	*1,138	3,360	4.8	*4.6	*2.2	8.5
Open wounds and lacerations of knee, leg and ankle.....	4,246	*833	*638	2,775	3.5	*2.7	*1.2	7.0
Superficial injury.....	3,999	*498	2,891	*610	3.3	*1.6	5.6	*1.5
Contusion with intact skin surface.....	24,750	2,985	7,952	13,813	20.3	9.7	15.4	34.9
Contusion of face, neck and scalp.....	*999	*371	*246	*382	*0.8	*1.2	*0.5	*1.0
Contusion of trunk.....	5,159	*259	*1,131	3,770	4.2	*0.8	*2.2	9.5
Effects of foreign body through orifice.....	*129	*43	*	*86	*0.1	*0.1	*	*0.2
Effects of foreign body on external eye.....	*48	*	*	*48	*0.0	*	*	*0.1
Burns.....	*1,984	*430	*909	*645	*1.6	*1.4	*1.8	*1.6
Toxic effects—nonmedicinal.....	*813	*27	*510	*276	*0.7	*1.0	*1.0	*0.7
All other injuries.....	33,773	3,048	10,700	20,024	27.7	9.9	20.7	50.6

NOTE: Restricted-activity days are condition days, not person days.



**Table 26. Average annual number of days of bed disability due to injuries and number per 100 persons per year, by age group and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Age group									
	All ages	Under 18 years	18-44 years	45-64 years	65 years and over	All ages	Under 18 years	18-44 years	45-64 years	65 years and over
	Average number of bed-disability days in thousands					Number of bed-disability days per 100 persons per year				
All injuries . . . . .	119,114	12,647	52,083	31,074	23,309	50.4	20.1	51.6	69.5	84.5
Skull fractures and intracranial injuries . . . . .	5,856	*767	3,456	*1,192	*442	2.5	*1.2	3.4	*2.7	*1.6
Fractures of neck, trunk and upper limb . . . . .	12,873	*1,383	5,803	2,998	2,689	5.4	*2.2	5.8	6.7	9.8
Fractures of upper limb . . . . .	6,284	*1,053	3,339	*940	*952	2.7	*1.7	3.3	*2.1	*3.5
Fractures of lower limb . . . . .	19,433	*1,845	3,899	6,271	7,417	8.2	*2.9	3.9	14.0	26.9
Dislocations . . . . .	4,342	*387	3,254	*439	*262	1.8	*0.6	3.2	*1.0	*1.0
Sprains and strains—total . . . . .	22,900	*1,374	14,482	5,134	*1,910	9.7	*2.2	14.4	11.5	*6.9
Sprains and strains of hip, thigh, knee and leg . . . . .	3,637	*476	*2,188	*446	*527	1.5	*0.8	*2.2	*1.0	*1.9
Sprains and strains of ankle and foot . . . . .	2,640	*214	*1,624	*516	*286	1.1	*0.3	*1.6	*1.2	*1.0
Sprains and strains of back . . . . .	12,407	*381	7,814	3,551	*661	5.3	*0.6	7.7	7.9	*2.4
Open wounds and lacerations—total . . . . .	12,766	*1,723	5,958	3,026	*2,059	5.4	*2.7	5.9	6.8	*7.5
Open wounds and lacerations of head, neck and trunk . . . . .	4,768	*923	2,730	*318	*797	2.0	*1.5	2.7	*0.7	*2.9
Open wounds and lacerations of upper limb . . . . .	2,553	*269	*1,443	*764	*76	1.1	*0.4	*1.4	*1.7	*0.3
Open wounds and lacerations of shoulder, arm and hand . . . . .	*2,012	*218	*953	*764	*76	*0.9	*0.3	*0.9	*1.7	*0.3
Open wounds and lacerations of fingers . . . . .	*541	*51	*490	*-	*-	*0.2	*0.1	*0.5	*-	*-
Open wounds and lacerations of lower limb . . . . .	5,446	*531	*1,785	*1,944	*1,185	2.3	*0.8	*1.8	*4.3	*4.3
Open wounds and lacerations of knee, leg and ankle . . . . .	4,063	*155	*1,314	*1,687	*907	1.7	*0.2	*1.3	*3.8	*3.3
Superficial injury . . . . .	*2,016	*256	*1,084	*423	*253	*0.9	*0.4	*1.1	*0.9	*0.9
Contusion with intact skin surface . . . . .	14,061	*1,681	5,309	3,533	3,538	6.0	*2.7	5.3	7.9	12.8
Contusion of face, neck and scalp . . . . .	*965	*223	*139	*603	*-	*0.4	*0.4	*0.1	*1.3	*-
Contusion of trunk . . . . .	3,936	*436	*1,362	*1,054	*1,084	1.7	*0.7	*1.4	*2.4	*3.9
Effects of foreign body through orifice . . . . .	*205	*-	*108	*10	*87	*0.1	*-	*0.1	*0.0	*0.3
Effects of foreign body on external eye . . . . .	*156	*-	*108	*-	*48	*0.1	*-	*0.1	*-	*0.2
Burns . . . . .	3,223	*580	*1,812	*652	*179	1.4	*0.9	*1.8	*1.5	*0.6
Toxic effects—nonmedicinal . . . . .	*312	*44	*98	*147	*22	*0.1	*0.1	*0.1	*0.3	*0.1
All other injuries . . . . .	21,127	2,606	6,821	7,249	4,451	8.9	4.1	6.7	16.2	16.1

NOTE: Bed-disability days are condition days, not person days.

**Table 27. Average annual number of days of bed disability due to injuries and number per 100 persons per year, by sex and type of injury: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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 injury	Sex					
	Both sexes	Male	Female	Both sexes	Male	Female
	Average number of bed-disability days in thousands			Number of bed-disability days per 100 persons per year		
All injuries	119,114	56,819	62,295	50.4	49.7	51.1
Skull fractures and intracranial injuries	5,856	2,993	2,864	2.5	2.6	2.3
Fractures of neck, trunk and upper limb	12,873	6,166	6,707	5.4	5.4	5.5
Fractures of upper limb	6,284	3,540	2,744	2.8	2.3	3.2
Fractures of lower limb	19,433	10,384	9,049	8.2	9.1	7.4
Dislocations	4,342	3,480	*862	1.8	3.0	*0.7
Sprains and strains—total	22,900	10,378	12,521	9.7	9.1	10.3
Sprains and strains of hip, thigh, knee and leg	3,637	*2,259	*1,378	1.5	*2.0	*1.1
Sprains and strains of ankle and foot	2,640	*1,655	*985	1.1	*1.4	*0.8
Sprains and strains of back	12,407	4,875	7,532	5.3	4.3	6.2
Open wounds and lacerations—total	12,766	6,992	5,775	5.4	6.1	4.7
Open wounds and lacerations of head, neck and trunk	4,768	3,089	*1,679	2.0	2.7	*1.4
Open wounds and lacerations of upper limb	2,553	*1,352	*1,201	1.1	*1.2	*1.0
Open wounds and lacerations of shoulder, arm and hand	*2,012	*1,071	*940	*0.9	*0.9	*0.8
Open wounds and lacerations of fingers	*541	*280	*261	*0.2	*0.2	*0.2
Open wounds and lacerations of lower limb	5,446	2,551	2,895	2.3	2.2	2.4
Open wounds and lacerations of knee, leg and ankle	4,063	*1,545	2,517	1.7	*1.4	2.1
Superficial injury	*2,016	*1,334	*682	*0.9	*1.2	*0.6
Contusion with intact skin surface	14,061	6,257	7,804	6.0	5.5	6.4
Contusion of face, neck and scalp	*965	*732	*233	*0.4	*0.6	*0.2
Contusion of trunk	3,936	*1,133	2,803	1.7	*1.0	2.3
Effects of foreign body through orifice	*205	*129	*76	*0.1	*0.1	*0.1
Effects of foreign body on external eye	*156	*108	*48	*0.1	*0.1	*0.0
Burns	3,223	2,595	*627	1.4	2.3	*0.5
Toxic effects—nonmedicinal	*312	*179	*133	*0.1	*0.2	*0.1
All other injuries	21,127	5,932	15,195	8.9	5.2	12.5

NOTE: Bed-disability days are condition days, not person days.

**Table 28. Population used in obtaining rates shown in this publication, by age group and sex: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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]

Sex	Age group					
	All ages	Under 18 years	18-44 years	45-64 years	65 years and over	45 years and over
	Population in thousands					
Both sexes .....	236,205	63,052	100,847	44,729	27,578	72,307
Male .....	114,216	32,250	49,266	21,330	11,370	32,701
Female .....	121,989	30,802	51,582	23,398	16,208	39,606

**Table 29. Population used in obtaining rates shown in this publication, by selected characteristics: United States, 1985-87**

[Data are based on household interviews of the civilian noninstitutionalized 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	Population in thousands	Characteristic	Population in thousands
All persons <sup>1</sup> .....	236,205	Living arrangement	
		Living alone or with nonrelatives .....	28,002
		Living with spouse .....	110,059
		Living with other relative .....	98,144
Race		Marital status <sup>2</sup>	
White .....	200,478	Married .....	111,485
Black .....	28,548	Widowed .....	12,850
Geographic region		Divorced or separated .....	15,348
Northeast .....	50,161	Never married .....	46,953
Midwest .....	57,924	Respondent-assessed health status	
South .....	80,830	Excellent or very good .....	157,081
West .....	47,290	Good .....	54,207
Place of residence		Fair or poor .....	23,748
MSA—central city .....	73,031	Current employment status <sup>3</sup>	
MSA—not central city .....	108,751	Currently employed .....	110,105
Not MSA .....	54,423	Currently unemployed .....	6,435
Family income		Not in labor force .....	56,614
Less than \$10,000 .....	33,131		
\$10,000-\$19,999 .....	45,450		
\$20,000-\$34,999 .....	63,217		
\$35,000 or more .....	63,449		
Education of responsible adult family member			
Less than 12 years .....	36,089		
12-15 years .....	139,293		
16 years or more .....	59,511		

<sup>1</sup>Includes races other than white and black, unknown family income, unknown education of responsible family member, unknown marital status, unknown health status, and unknown current employment status.

<sup>2</sup>14 years and over.

<sup>3</sup>18 years and over.

NOTE: MSA is metropolitan statistical area.

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# Appendix I

## Technical notes on methods

### Background

This report is one of a series of statistical reports published by the staff of the National Center for Health Statistics (NCHS). It is based on information collected in a continuing nationwide sample of households included in the National Health Interview Survey (NHIS). Data are obtained on the personal, sociodemographic, and health characteristics of the family members and unrelated individuals living in these households.

Field operations for the survey are conducted by the U.S. Bureau of the Census under specifications established by NCHS. The U.S. Bureau of the Census participates in the survey planning, selects the sample, and conducts the interviews. The data are then transmitted to NCHS for preparation, processing, and analysis.

Summary reports and reports on special topics for each year's data are prepared by the staff of the Division of Health Interview Statistics for publication in Series 10 publications of NCHS. Data are also tabulated for other reports published by NCHS staff and for use by other organizations and by researchers within and outside the Government. Since 1969, public use tapes have been prepared for each year of data collection.

It should be noted that the health characteristics described by NHIS estimates pertain only to the resident, civilian non-institutionalized population of the United States living at the time of the interview. The sample does not include persons residing in nursing homes, members of the Armed Forces, institutionalized persons, or U.S. nationals living abroad.

### Statistical design of NHIS

#### General design

Data from NHIS have been collected continuously since 1957. The sample design of the survey has undergone changes following each decennial census. This periodic redesign of the NHIS sample allows the incorporation of the latest population information and statistical methodology into the survey design. The data presented in this report are from an NHIS sample design first used in 1985. It is anticipated that this design will be used until 1995.

The sample design plan of NHIS follows a multistage probability design that permits a continuous sampling of the civilian noninstitutionalized population residing in the United States. The survey is designed in such a way that the sample scheduled for each week is representative of the target popula-

tion, and the weekly samples are additive over time. This design permits estimates for high-frequency measures or for large population groups to be produced from a short period of data collection. Estimates for low-frequency measures or for smaller population subgroups can be obtained from a longer period of data collection. The annual sample is designed so that tabulations can be provided for each of the four major geographic regions. Because interviewing is done throughout the year, there is no seasonal bias for annual estimates.

The continuous data collection also has administrative and operational advantages because fieldwork can be handled on a continuing basis with an experienced, stable staff.

#### Sample selection

The target population for NHIS is the civilian noninstitutionalized population residing in the United States. For the first stage of the sample design, the United States is considered to be a universe composed of approximately 1,900 geographically defined primary sampling units (PSU's). A PSU consists of a county, a small group of contiguous counties, or a metropolitan statistical area. The PSU's collectively cover the 50 States and the District of Columbia. The 52 largest PSU's are selected into the sample with certainty and are referred to as self-representing PSU's. The other PSU's in the universe are referred to as non-self-representing PSU's. These PSU's are clustered into 73 strata, and 2 sample PSU's are chosen from each stratum with probability proportional to population size. This gives a total of 198 PSU's selected in the first stage.

Within a PSU, two types of second-stage units are used: area segments and permit area segments. Area segments are defined geographically and contain an expected eight households. Permit area segments cover geographical areas containing housing units built after the 1980 census. The permit area segments are defined using updated lists of building permits issued in the PSU since 1980 and contain an expected four households.

Within each segment all occupied households are targeted for interview. On occasion, a sample segment may contain a large number of households. In this situation the households are subsampled to provide a manageable interviewer workload.

The sample was designed so that a typical NHIS sample for the data collection years 1985 to 1995 will consist of approximately 7,500 segments containing about 59,000 assigned households. Of these households, an expected 10,000 will be vacant, demolished, or occupied by persons not in the target population of the survey. The expected sample of 49,000

occupied households will yield a probability sample of about 127,000 persons.

#### Features of the NHIS sample redesign

Starting in 1985, the NHIS design incorporated several new design features. The major changes include the following:

1. *The use of an all-area frame.* The NHIS sample is now designed so that it can serve as a sample frame for other NCHS population-based surveys. In previous NHIS designs about two-thirds of the sample was obtained from lists of addresses compiled at the time of the decennial census; that is, a list frame. Because of U.S. Bureau of the Census confidentiality restrictions, these sample addresses could be used for only those surveys being conducted by the U.S. Bureau of the Census. The methodology used to obtain addresses in the 1985 NHIS area frame does not use the census address lists. The sample addresses thus obtained can be used as a sampling frame for other NCHS surveys.
2. *NHIS as four panels.* Four national subdesigns, or panels, constitute the full NHIS. Each panel contains a representative sample of the U.S. civilian noninstitutionalized population. Each of the four panels has the same sampling properties, and any combination of panels defines a national design. Panels were constructed to facilitate the linkage of NHIS to other surveys, and also to efficiently make large reductions in the size of the sample by eliminating panels from the survey.

During 1985–87, the sample consisted of 17,946 segments containing 134,760 assigned households. Of the 110,567 households eligible for interview, 105,922 were actually interviewed, resulting in a sample of 276,442 persons.
3. *The oversampling of black persons.* One of the goals in designing the current NHIS was to improve the precision of estimates for black persons. This was accomplished by the use of differential sampling rates in PSU's with between about 5 and 50 percent black population. Sampling rates for selection of segments were increased in areas known to have the highest concentrations of black persons. Segment sampling rates were decreased in other areas within the PSU to ensure that the total sample in each PSU was the same size as it would have been without oversampling black persons.
4. *The reduction of the number of sampled PSU's.* Interviewer travel to sample PSU's constitutes a large component of the total field costs for NHIS. The previous NHIS design included 376 PSU's. Research showed that reducing the number of sample PSU's while increasing the sample size within PSU's would reduce travel costs and also maintain the reliability of health estimates (13). The design now contains 198 PSU's.
5. *The selection of two PSU's per non-self-representing stratum.* In the previous design, one PSU was selected from each non-self-representing stratum. This feature necessitated the use of less efficient variance estimation procedures; the selection of two PSU's allows more efficient variance estimation methodology (13).

#### Collection and processing of data

The NHIS questionnaire contains two major parts: The first consists of topics that remain relatively the same from year to year. Among these topics are the incidence of acute conditions, the prevalence of chronic conditions, persons limited in activity due to chronic conditions, restriction in activity due to impairment or health problems, and utilization of health care services involving physician care and short-stay hospitalization. The second part consists of special topics added as supplements to each year's questionnaire.

Careful procedures are followed to assure the quality of data collected in the interview. Most households in the sample are contacted by mail before the interviewers arrive. Potential respondents are informed of the importance of the survey and assured that all information obtained in the interview will be held in strict confidence. Interviewers make repeated trips to a household when a respondent is not immediately found. The success of these procedures is indicated by the response rate for the survey, which has been between 96 and 98 percent over the years.

When contact is made, the interviewer attempts to have all family members of the household 19 years of age and over present during the interview. When this is not possible, proxy responses for absent adult family members are accepted. In most situations, proxy respondents are used for persons under 19 years of age. Persons 17 and 18 years of age may respond for themselves, however.

Interviewers undergo extensive training and retraining. The quality of their work is checked by means of periodic observation and by reinterview. Their work is also evaluated by statistical studies of the data they obtain in their interviews. A field edit is performed on all completed interviews so that, if there are any problems with the information on the questionnaire, respondents may be recontacted to solve the problem.

Completed questionnaires are sent from the U.S. Bureau of the Census field offices to NCHS for coding and editing. To ensure the accuracy of coding, a 5-percent sample of all questionnaires is recoded and keyed by other coders. A 100-percent verification procedure is used if certain error tolerances are exceeded. Staff of the Division of Health Interview Statistics then edit the files to remove impossible and inconsistent codes.

The interview, fieldwork, and data processing procedures summarized above are described in detail in Series 1, No. 18 (14).

#### Estimation procedures

Because the design of NHIS is a complex multistage probability sample, it is necessary to reflect these complex procedures in the derivation of estimates. The estimates presented in this report are based upon 1985–87 sample person counts weighted to produce national estimates. The weight for each sample person is the product of four component weights:

1. *Probability of selection.* The basic weight for each person is obtained by multiplying the reciprocals of the probabilities of selection at each step in the design: PSU, segment, and household.

2. *Household nonresponse adjustment within segment.* In NHIS, interviews are completed in about 96 percent of all eligible households. Because of household nonresponse, a weighting adjustment is required. The nonresponse adjustment weight is a ratio with the number of households in a sample segment as the numerator and the number of households actually interviewed in that segment as the denominator. This adjustment reduces bias in an estimate to the extent that persons in the noninterviewed households have the same characteristics as the persons in the interviewed households in the same segment.
3. *First-stage ratio adjustment.* The weight for persons in the non-self-representing PSU's is ratio adjusted to the 1980 population within four race-residence classes of the non-self-representing strata within each geographic region.
4. *Poststratification by age-sex-race.* Within each of 60 age-sex-race cells (table I), a weight is constructed each quarter to ratio adjust the first-stage population estimate based on NHIS to an independent estimate of the population of each cell. These independent estimates are prepared by the U.S. Bureau of the Census and are updated quarterly.

The main effect of the ratio-estimating process is to make the sample more closely representative of the target population by age, sex, race, and residence. The poststratification adjustment helps to reduce the component of bias resulting from sampling frame undercoverage; furthermore, this adjustment frequently reduces sampling variance.

### Types of estimates

As noted, NHIS data were collected on a weekly basis, with each week's sample representing the resident, civilian noninstitutionalized population of the United States living during that week. The weekly samples are consolidated to produce quarterly files (each consisting of data for 13 weeks). Weights to adjust the data to represent the U.S. population are assigned to each of the four quarterly files. These quarterly files are later consolidated to produce the annual file, which is the basis of most tabulations of NHIS data.

Table I. The 60 poststratification age-sex-race cells in the National Health Interview Survey

Age	Black		All other	
	Male	Female	Male	Female
Under 1 year . . . . .	X	X	X	X
1-4 years . . . . .	X	X	X	X
5-9 years . . . . .	X	X	X	X
10-14 years . . . . .	X	X	X	X
15-17 years . . . . .	X	X	X	X
18-19 years . . . . .	X	X	X	X
20-24 years . . . . .	X	X	X	X
25-29 years . . . . .	X	X	X	X
30-34 years . . . . .	X	X	X	X
35-44 years . . . . .	X	X	X	X
45-49 years . . . . .	X	X	X	X
50-54 years . . . . .	X	X	X	X
55-64 years . . . . .	X	X	X	X
65-74 years . . . . .	X	X	X	X
75 years and over . . . . .	X	X	X	X

NHIS uses various reference periods to reduce the amount of bias associated with respondent memory loss. A 2-week reference period is used in collecting data on the incidence of acute conditions, restriction in activity due to a health problem, and physician contacts. Each of these measures health events that may be forgotten soon after they occur. Examples of such events are telephoning a physician about a minor illness, missing a day from work because of a routine health problem, or having a cold. Either a 12- or 6-month (depending on the type of statistic) reference period is used for hospitalization data because hospitalization ordinarily involves a major event in a person's life and is not quickly forgotten. Chronic condition prevalence estimates are based on a 12-month reference period.

Because most NHIS estimates based on a 2-week reference period are designed to represent the number of health events for a 12-month period, these data must be adjusted to an annual basis. Data based on a 2-week reference period are multiplied by 6.5 to produce the 13-week estimate for the quarter. These reference period adjustments are made at the time that the quarterly files are produced. Therefore, the data can be used to produce estimates for each quarter and are used that way to study seasonal variation. The data from the four quarterly files (representing the number of events in each quarter) are summed to produce the annual estimate. Although these data are collected for only 2 weeks for each person included in the survey, any unusual event that may have occurred during a particular 2-week period does not bias the estimate because the quarterly estimate is a sum of the estimates produced for each week's sample during the entire quarter and the annual estimate is the sum of the four quarters.

For prevalence statistics, such as the number of persons limited in activity due to chronic conditions, the annual estimate results from summing the weighted quarterly files and dividing by 4. This division is necessary because, as noted above, each quarterly file has been weighted to produce an estimate of the number of persons in the U.S. population with a given characteristic. Summing the four quarters and dividing by 4 in effect averages these quarterly results for the year. Thus, the type of prevalence estimate ordinarily derived from NHIS data is an annual average prevalence estimate.

For data related to short-stay hospital discharges that are based on a 6-month reference period, cases identified during any quarter of data collection are multiplied by 2 to produce a quarterly estimate of the annual number of characteristics associated with short-stay hospital discharges. The NHIS average annual estimate of hospital discharges is derived by summing the four quarterly estimates and dividing by 4, just as the prevalence estimates are.

### Reliability of the estimates

Because NHIS estimates are based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same survey and processing procedures. There are two types of errors possible in an estimate based on a sample survey: Sampling and nonsampling errors. To the extent possible, these types of errors are kept to a minimum by methods built into the survey

procedures described earlier (15). Although it is very difficult to measure the extent of bias in NHIS, several studies have been conducted to examine this problem. The results have been published in several reports (16–19).

#### **Nonsampling errors**

*Interviewing process.* Information such as the number of days of restricted activity caused by the condition can be obtained more accurately from household members than from any other source because only the persons concerned are in a position to report this information. However, there are limitations to the accuracy of diagnostic and other information collected in household interviews. For example, 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. Further, a respondent may not answer a question in the intended manner because he or she has not properly understood the question, has forgotten the event, does not know, or does not wish to divulge the answer. Regardless of the type of measure, all NHIS data are estimates of known reported morbidity, disability, and so forth.

*Reference period bias.* NHIS estimates do not represent a complete measure of any given topic during the specified calendar period because data are not collected in the interview for persons who died or became institutionalized during the reference period. For many types of statistics collected in the survey, the reference period is 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 (such as 1 year) might be significant, especially for older persons.

Underreporting associated with a long reference period is most germane to data on hospitalization. Analysis has shown that there is an increase in underreporting of hospitalizations with an increase in the time interval between the discharge and the interview. Exclusive of the hospital experience of decedents, the net underreporting using a 12-month recall period is in the neighborhood of 10 percent (20). The underreporting of discharges within 6 months of the week of interview is estimated to be about 5 percent (20). For this reason, hospital discharge data are based on hospital discharges reported to have occurred within 6 months of the week of interview.

Because hospitalization is common in the period immediately preceding death or institutionalization and older persons are much more likely to die than younger ones, the data should not be used to estimate the volume of hospitalization of the elderly, although the data can be used to measure characteristics of elderly people.

It should further be noted that, although the reported frequencies and rates related to hospital episodes are presented by the year in which the data were collected, the estimates are, in most cases, based on hospitalizations that occurred during the year of data collection and the prior year. Overall, approximately one-half of the reported hospitalizations for the 12-month reference period occurred in the year prior to the year of data collection.

*Population estimates.* Some of the published tables include population figures for specified categories. Except for overall totals for the 60 age, sex, and race groups, which are adjusted to independent estimates, these figures are based on the sample of households in NHIS. They are given primarily to provide denominators for rate computation, and for this purpose they 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 race mentioned above, the population figures may differ from figures (which are derived from different sources) published in reports of the U.S. Bureau of the Census. Official population estimates are presented in U.S. Bureau of the Census reports in Series P-20, P-25, and P-60.

*Rounding of numbers.* In published tables, the figures are rounded to the nearest thousand, although they are not necessarily accurate to that detail. Derived statistics, such as rates and percent distributions, are computed after the estimates on which these are based have been rounded to the nearest thousand.

*Combining data years.* To reduce sampling error, data for a number of years may be combined. However, in so doing, the questionnaire for each of the years should be checked, because even a small change in the questionnaire design may lead to large changes in the derived estimates. This caution also applies to using NHIS data on health measures where changes in other events, such as legislative changes, have occurred over time.

#### **Sampling errors**

The standard error is primarily a measure of sampling error, that is, the variations that might occur by chance because only a sample of the population is surveyed. The chances are about 68 in 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 in 100 that the difference would be less than twice the standard error and about 99 in 100 that it would be less than 2½ times as large.

Individual standard errors were not computed for each estimate in this report. Instead, standard errors were computed for a broad spectrum of estimates. Regression techniques were then applied to produce equations from which a standard error for any estimate can be approximated. The regression equations, represented by parameters *a* and *b*, are presented in table II. Rules explaining their use are presented in the section below.

The reader is cautioned that this procedure will give an approximate standard error of an estimate rather than the precise standard error. The reader is further cautioned that particular care should be exercised when the denominator is small.

#### **General rules for determining standard errors**

To produce approximate standard errors for NHIS estimates, the reader must first determine the type of characteristic to be estimated, that is, the parameter set in table II to be used. The reader must then determine the type of estimate for which the standard error is needed. The type of estimate corresponds to one of five general rules for determining standard errors. Examples of their use are available in the "Current estimates" reports for 1985, 1986, and 1987 (3–5).



Table II. Estimated standard error parameters for the National Health Interview Survey (NHIS), 1985–87

Parameter set	Characteristic	Estimated parameters	
		a	b
I	Number of acute conditions	0.00013318	31,234.7
II	Restricted-activity or bed days	0.00020713	218,169.5
III	Population estimates for demographic, socioeconomic, and health characteristics	0.00001533	1,912.0
IV	Age-sex-race population based on combining the poststratification cells of table I	0.0	0.0

NOTE: The 1985 NHIS contained a three-fourths sample, the 1986 NHIS a one-half sample, and the 1987 NHIS a full sample. Therefore, 105,922 households were interviewed, resulting in a sample of 276,442 persons

Rule 1. *Estimated number of people or events*—For the estimated number of people or events published in this report, there are two cases to consider. For the first case, if the estimated number is any combination of the poststratification age-sex-race cells in table I, then its value has been adjusted to official U.S. Bureau of the Census figures and its standard error is assumed to be 0.0. This corresponds to parameter set IV in table II. As an example, this would be the case for the number of persons in the U.S. target population or the number of black persons in the age group 18–44 years. Although the race class “white” is not specifically adjusted to U.S. Bureau of the Census figures, it dominates the poststratification “all other” race class; consequently, age-sex-“all other” race combinations of table I can be treated as age-sex-white combinations for the purpose of approximating standard errors.

For the second case, the standard errors for all other estimates of numbers of people or events, such as the number of people limited in activity or the number of acute conditions, are approximated by using the parameters provided in table II and formula 1 below.

If the aggregate  $x$  for a characteristic has associated parameters  $a$  and  $b$ , then the approximate standard error for  $x$ ,  $SE(x)$ , can be computed by the formula

$$SE(x) = \sqrt{ax^2 + bx} \quad (1)$$

Rule 2. *Proportions and percents when the denominator is not generated by the poststratification age-sex-race classes*—If  $p$  represents an estimated percent,  $b$  is the parameter from table II associated with the numerator characteristics, and  $y$  is the number of persons in the denominator upon which  $p$  is based, then the standard error of  $p$  may be approximated by

$$SE(p) = \sqrt{\frac{bp(100 - p)}{y}} \quad (2)$$

(If  $p$  is a proportion, then the above formula can be used but with 100 replaced by 1.0.)

Rule 3. *For rates, proportions, and percents when the denominator is generated by the poststratification age-sex-race classes (table I)*—In this case, the denominator has no sampling error. For example, rule 3 would

apply to the estimated number of injuries among females 18–44 years of age because the denominator is a combination of the poststratification cells. Approximate standard errors for such estimates can be computed using table II  $a$  and  $b$  parameters associated with the numerator characteristics along with formula 3 below.

If the estimate of rate, proportion, or percent  $p$  is the ratio of two estimated numbers,  $p = x/Y$  (where  $p$  may be inflated by 100 for percents or 1,000 for rates per 1,000 persons), with  $Y$  having no sampling error, then the approximate standard error for  $p$  is given by the formula

$$SE(p) = p\sqrt{a + \frac{b}{x}} \quad (3)$$

In this report, the value of the denominator  $Y$  is always provided, but in a few cases the numerator value  $x$  is not published. For these cases the value of  $x$  may be computed by the formula

$$\begin{aligned} x &= pY && \text{if } p \text{ is a proportion or rate per unit} \\ x &= \frac{pY}{100} && \text{if } p \text{ is a percent or rate per 100 units} \\ x &= \frac{pY}{1,000} && \text{if } p \text{ is a rate per 1,000 units} \end{aligned}$$

Rule 4. *Rates when the denominator is not generated by the poststratification age-sex-race classes*—If the estimated rate  $p$  is expressed as the ratio of two estimates,  $p = x/y$  (inflated by 100 or 1,000 when appropriate), then the estimated standard error for  $p$  is given by the formula

$$SE(p) = p\sqrt{\frac{SE(x)^2}{x^2} + \frac{SE(y)^2}{y^2} - 2r\frac{SE(x)SE(y)}{xy}} \quad (4)$$

where  $SE(x)$  and  $SE(y)$  are computed using rule 1 and  $x$  and  $y$  are obtained from the tables. No estimates of  $r$ , the correlation between the numerator and denominator, are presented in this report; therefore, only the first two terms are available. The reader must assume that  $r = 0.0$ . Assuming  $r = 0.0$  will yield an overestimate of

the standard error if  $r$  is actually positive and an underestimate if  $r$  is negative.

Rule 5. *Difference between two statistics (mean, rate, total, and proportion)*—If  $x_1$  and  $x_2$  are two estimates, then the standard error of the difference ( $x_1 - x_2$ ) can be computed as follows:

$$SE(x_1 - x_2) = \sqrt{SE(x_1)^2 + SE(x_2)^2 - 2rSE(x_1)SE(x_2)} \quad (5)$$

where  $SE(x_1)$  and  $SE(x_2)$  are computed using rules 1–4 as appropriate and  $r$  is the correlation coefficient between  $x_1$  and  $x_2$ .

Assuming  $r = 0.0$  will result in an accurate standard error if the two estimates are actually uncorrelated

and will result in an overestimate of the standard error if the correlation is positive or an underestimate if the correlation is negative.

### Relative standard errors

Prior to 1985, relative standard error (RSE) curves were presented in NHIS reports for approximating relative standard error. For readers who wish to continue using them, the following provides guidance. The RSE of an estimate is obtained by dividing the standard error (SE) of the estimate by the estimate  $x$  itself. This quantity is expressed as a percent of the estimate:

$$RSE = 100 \frac{SE(x)}{x}$$

# Appendix II

## Definitions of certain terms used in this report

### Terms relating to injuries

*Injury condition*—An injury condition, or simply an injury, is a condition of the type that is classified according to the nature of injury code numbers (800–999) in the International Classification of Diseases (2). In addition to fractures, lacerations, contusions, burns, and so forth, which are commonly thought of as injuries, this group of codes includes effects of exposure, such as sunburn; adverse reactions to immunization and other medical procedures; and poisonings. Unless otherwise specified, the term “injury” is used to cover all of these.

Because a person may sustain more than one injury in a single accident, for example, a broken leg and laceration of the scalp, the number of injury conditions may exceed the number of persons injured.

Statistics of acute injury conditions include only those injuries that involved at least one-half day of restricted activity or medical attendance.

*Injury condition groups*—In this report, injury condition data are grouped for presentation as follows:

Skull fractures and intracranial injuries	(800–804, 850–854)
Fractures of neck, trunk and upper limb	(805–809, 810–819)
Fractures of upper limb	(810–819)
Fractures of lower limb	(820–829)
Dislocations	(830–839)
Sprains and strains—total	(840–848)
Sprains and strains of hip, thigh, knee and leg	(843–844)
Sprains and strains of ankle and foot	(845)
Sprains and strains of back	(846, 847)
Open wounds and lacerations—total	(870–884, 890–894)
Open wounds and lacerations—head, neck and trunk	(870–879)
Open wounds and lacerations of upper limb	(880–884)
Open wounds and lacerations of shoulder, arm and hand	(880, 881, 882, 884)

Open wounds and lacerations of fingers	(883)
Open wounds and lacerations of lower limb	(890–894)
Open wounds and lacerations of knee, leg and ankle	(891)
Superficial injury	(910–919)
Contusion with intact skin surface	(920–924)
Contusion of face, neck and scalp	(920)
Contusion of trunk	(922)
Effects of foreign body through orifice	(930–939)
Effects of foreign body on external eye	(930)
Burns	(940–949)
Toxic effects—nonmedicinal	(980–989)
All other injuries	(860–869, 900–904, 925–929, 950–957, 959, 960–979, 990–999)

*Episodes of persons injured*—Each time a person is involved in an accident or nonaccidental violence causing injury that results in medical attention or at least a half day of restricted activity, it is counted as a separate episode of a person injured. Therefore, one person may account for more than one episode of a person injured.

The number of episodes of persons injured is not equivalent to the number of accidents for several reasons: (1) the term “accident” as commonly used may not involve injury at all; (2) more than one injured person may be involved in a single accident, so the number of accidents resulting in injury would be less than the number of persons injured in accidents; and (3) the term “accident” ordinarily implies an accidental origin, whereas “persons injured” as used in the National Health Interview Survey (NHIS) include persons whose injuries resulted from certain nonaccidental violence.

The number of episodes of persons injured in a specified time interval is equal to or less than the incidence of injury conditions because a person may incur more than one injury in a single accident.

## 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 that resulted in personal injuries. Most of these events are accidents in the usual sense of the word, but some are other kinds of mishaps, 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) accidents occurring at home, 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; for example, “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.

*Accident while at work*—The class of accident is “while at work” if the injured person was 18 years of age or over and was at work at a job or a business at the time the accident occurred.

*Accident while at home*—The class of accident is “while at 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 the person may have been when 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. This category includes persons injured in public places (for example, 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 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.

## Terms relating to place of accident

*Place of accident*—Persons injured are classified according to the type of place where the injury occurred. The places of

accidents are (1) home, (2) street or highway, (3) industrial place, (4) school, (5) place of recreation, and (6) other.

*Home*—The place of accident is considered as “home” if the injury occurred either inside or outside the home but within the property boundaries. “Home” includes not only the person’s own home but also any other home (vacant or occupied) in which he or she may have been at the time of the injury. “Home” includes any structure that has the primary function of a dwelling unit and includes the structure and premises of such places as apartment houses and house trailers.

- *Inside the house*—This subcategory includes any room, attic, cellar, porch, or steps leading to an entrance of the house. However, inside the garage is not considered as inside the house.
- *Outside the house*—This subcategory includes the yard, driveway, garage, patio, gardens, or walks. On a farm, only the premises adjacent to the house are considered as part of the home. Injuries due to accidents occurring on cultivated land, in barns, or in other similar farm buildings would not be considered home injuries.

*Street or highway*—This category means the entire area between property lines of which any part is open for the use of the public as a matter of right or custom. It includes the roadway, shoulder, curb, or public sidewalk; excluded are private driveways, lanes, or sidewalks.

*Industrial place*—This term is applied to accidents occurring in an industrial place or on the premises. Included are such places as factories, railway yards, warehouses, workshops, logging camps, shipping piers, oil fields, shipyards, sand and gravel pits, canneries, and auto repair garages. Construction projects such as houses, buildings, bridges, and new roads are included in this category. Buildings undergoing remodeling, with the exception of private homes, are classified as industrial places or premises.

*School*—“School” as a place of accident includes all accidents occurring in school buildings or on the premises. This classification includes elementary schools, high schools, colleges, and trade and business schools.

*Place of recreation*—“Place of recreation” is used to describe accidents occurring in places organized for sports and recreation other than recreational areas located at a place already defined as “home,” “industrial place,” or “school.” Bowling alley, amusement park, football stadium, and dance hall are examples of “place of recreation.” In “place of accident” classification of injuries, the place is significant rather than the activity in which the person was engaged at the time of accident. Hence, an injury sustained by a person at a dance hall while he was at work is classified as a “place-of-recreation” injury. Likewise, an injury occurring while a person was engaged in a sport in an industrial place is classified as an “industrial-place” injury.

*Other*—Accidents which cannot be classified in any of the above groups or for which the place is unknown are classified as “other.” Included in the classification are such places as farms, restaurants, churches, business and professional offices, and open or wooded country.

## 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. Restriction of activity refers to particular kinds of behavior usually associated with a reduction in activity due to either long- or short-term conditions. Restriction of activity ordinarily refers to a relatively short-term reduction in a person's activity below his or her normal capacity.

*Restriction of activity*—Four types of restricted activity are measured in NHIS: *bed days*, *work-loss days* for currently employed persons 18 years of age and over, *school-loss days* for children 5–17 years of age, and *cut-down days*.

A *bed-disability day* is one during which a person stayed in bed more than half a day because of illness or injury. All hospital days for inpatients are considered bed days even if the patient was not in bed more than half a day.

A *work-loss day* is one on which a currently employed person 18 years of age and over missed more than half a day from a job or business.

A *school-loss day* is one on which a student 5–17 years of age missed more than half a day from the school in which he or she was currently enrolled.

A *cut-down day* is a day on which a person cuts down for more than half a day on the things he or she usually does.

Work-loss, school-loss, and cut-down days refer to the short-term effects of illness or injury. However, bed days are a measure of both long- and short-term disability, because a chronically ill bedridden person and a person with a cold could both report having spent more than half a day in bed due to an illness.

The number of restricted-activity days is the number of days a person experienced at least one of the four types of activity restriction just described. It is the most inclusive measure of disability days and the least descriptive; 4 days of restricted activity may mean 4 bed-disability days associated with serious illness or 4 days during which a person merely cut down on his or her usual activities due to a mild illness.

A single restricted-activity day may involve both a bed-disability day and a work-loss or school-loss day. However, a cut-down day cannot overlap with any of these three types of disability days. In calculating the sum of restricted-activity days, each day is counted only once even if more than one type of activity restriction was involved.

Restricted-activity days may be associated with either persons or conditions. *Person days* are days during which a person restricted his or her activity. *Condition days* are days during which a condition caused a person to restrict his or her activity. A person day of restricted activity can be caused by more than one condition. In such a case, each condition causing restriction is associated with that day of restricted activity. Therefore, the number of condition days of restricted activity may exceed the number of person days of restricted activity. This relationship holds for each type of restricted-activity day.

When two or more conditions cause a day of restricted activity, the conditions may be (1) both (all) acute, (2) one

(some) acute and the other (some) chronic, or (3) both (all) chronic. The number of restricted-activity days associated with acute conditions includes groups (1) and (2); the number of such days associated with chronic conditions includes groups (2) and (3). The phrase “associated with” rather than “caused by” is used to indicate that some days associated with acute or chronic conditions are not necessarily caused solely by that type of condition.

*Classification of injuries by activity restriction or medical attention*—By NHIS definition, an injury must either result in restricted activity or medical attention. Injuries involving one-half day or more of restricted activity, one-half day or more of bed disability, or medical attendance are correspondingly classified as activity-restricting, bed-disabling, and medically attended injuries.

*Activity-restricting injury*—An activity-restricting injury is an injury that has caused at least one-half day of restricted activity. (See definition of restricted-activity day.) The incidence of activity-restricting injuries is estimated from the number of such injuries reported as having occurred in the 2 weeks before the interview week. For this reason, an injury that did not result in restricted activity until after the end of the 2-week period in which it occurred is not classified as an activity-restricting injury.

*Bed-disabling injury*—An injury resulting in at least one-half day of bed disability is called a bed-disabling injury. (See also definition of activity-restricting injury.)

*Medically attended injury*—An injury for which a physician was consulted is called a medically attended injury. Consulting a physician includes consultation in person or by telephone for treatment or advice. Advice from the physician transmitted to the patient through the nurse is counted as medical consultation, as are visits to physicians in clinics or hospitals. If at one visit the physician is consulted about more than one injury for each of several patients, each injury is counted as medically attended.

A parent consulting a physician about a child's injury is counted as medical consultation about that injury even if the child was not seen by the physician at that time.

For the purpose of this definition, “physician” includes doctors of medicine and osteopathic physicians. The term “doctor” is used in the interview rather than “physician” because of popular usage. However, the concept toward which all instructions are directed is that which is described here.

An injury is counted as medically attended if a physician was consulted about it at its onset or at any time thereafter. However, the first medical attention for an injury that was experienced during the 2-week period prior to the household interview may not occur until after the end of the 2-week period. Such cases are treated as though there was no medical attention.

*Assessed health status*—The categories related to this concept result from asking the respondent, “Would you say \_\_\_\_\_'s health is excellent, very good, good, fair, or poor?” As such, it is based on a respondent's opinion and not directly on any clinical evidence.

## Terms relating to conditions

**Condition**—Condition is a general term that includes any specific illness, injury, or impairment. Condition data are derived from the survey in two ways. First, respondents are asked to identify any conditions that caused certain types of impact associated with health, such as a visit to a doctor or a day spent in bed. Second, respondents are read lists of selected chronic conditions and asked whether they or any family members have any of these conditions.

At a later point in the survey, a series of questions is asked about each of the conditions identified in either of the two ways just described. The information obtained on each condition helps to clarify the nature of the condition and whether medical services have been involved in its diagnosis or treatment. It also aids in the coding of the condition. All conditions except impairments are coded according to the Ninth Revision of the International Classification of Diseases (2), with certain modifications adopted to make the codes more suitable for information derived from a household survey. A special set of codes devised by NHIS is used to code impairments.

**Acute condition**—A condition is considered acute if (1) it was first noticed no longer than 3 months before the reference date of the interview and (2) it is not one of the conditions considered chronic regardless of the time of onset. However, any acute condition not associated with either at least one doctor visit or at least one-half day of restricted activity during the reference period is considered to be of minor consequence and is excluded from the final data produced by the survey.

**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 the person or family was first told by a physician that the person had a condition of which he or she had been previously unaware.

**Incidence of conditions**—The incidence of a condition is the number of cases that had their onset during a specified period of time. A person may have more than one acute condition during a period of time or may have the same condition, such as a headache, more than once. Ordinarily, however, a chronic condition can begin only one time during a given reference period.

## 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.

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

Region	States included
Northeast . . .	Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, and Pennsylvania.
Midwest . . .	Ohio, Illinois, Indiana, Michigan, Wisconsin, Minnesota, Iowa, Missouri, North

Region	States included—Con.
South . . . . .	Dakota, South Dakota, Kansas, and Nebraska. Delaware, Maryland, District of Columbia, West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Oklahoma, Arkansas, and Texas.
West . . . . .	Washington, Oregon, California, Nevada, New Mexico, Arizona, Idaho, Utah, Colorado, Montana, Wyoming, Alaska, and Hawaii.

**Place of residence**—The place of residence of a member of the civilian noninstitutionalized population is classified as inside a metropolitan statistical area (MSA) or outside an MSA. Place of residence inside an MSA is further classified as either central city or not central city.

**Metropolitan statistical area**—The definition and titles of MSA's are established by the U.S. Office of Management and Budget with the advice of the Federal Committee on Metropolitan Statistical Areas. Generally speaking, an MSA consists of a county or group of counties containing at least one city (or twin cities) having a population of 50,000 or more plus adjacent counties that are metropolitan in character and are economically and socially integrated with the central city. In New England, towns and cities rather than counties are the units used in defining MSA's. There is no limit to the number of adjacent counties included in the MSA as long as they are integrated with the central city, nor is an MSA limited to a single State; boundaries may cross State lines. The metropolitan population in this report is based on MSA's as defined in the 1980 census and does not include any subsequent additions or changes.

**Central city of an MSA**—The largest city in an MSA is always a central city. One or two additional cities may be secondary central cities in the MSA on the basis of either of the following criteria:

1. The additional city or cities must have a population one-third or more of that of the largest city and a minimum population of 25,000.
2. The additional city or cities must have at least 250,000 inhabitants.

**Not central city of an MSA**—This includes all of the MSA that is not part of the central city itself.

**Not in MSA**—This includes all other places in the country.

**Race**—The population is divided into three racial groups: "white," "black," and "all other." "All other" includes Aleut, Eskimo or American Indian, Asian or Pacific Islander, and any other races. Race characterization is based on the respondent's description of his or her racial background.

**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 or she 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 incomes.

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—for example, wages, salaries, rents from property, pensions, government payments, and help from relatives—is included.

*Highest education of responsible adult family member*—Each member of a family is classified according to the highest education level of a responsible adult family member of the family of which he or she 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. The highest education level is classified in terms of highest grade of school completed. Only grades completed in regular schools, where persons are given a formal education, are included. A “regular” school is one that 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.

*Living arrangement*—The three categories of living arrangements shown in this report are as follows:

- *Living alone or with nonrelative*—Living alone is defined as living in a one-member household; living with non-relatives is defined as living with nonrelatives in a household of two or more members.
- *Living with spouse*—This category includes married persons who are living together in a household. Marital status is recorded only for persons 14 years of age and over. Persons with common-law marriages are considered to be married. Persons other than the husband and wife in the household are included in the next category.
- *Living with other relatives*—This category includes all persons living with relatives except husband and wife living together.

*Marital status*—Marital status is classified by the following four categories:

- *Currently married* includes all persons not separated from their spouses for reasons of marital discord. Persons living apart because of circumstances of their employment are considered married. Persons living together as husband and wife are considered married, regardless of legal status.
- *Separated and divorced* includes persons who are legally separated or divorced or who are living apart for reasons of marital discord.
- *Widowed* includes persons who have lost their spouse due to death.
- *Never married* includes persons who were never married and persons whose only marriage was annulled.

*Employment status*—Employment status is classified by the following three categories:

- *Currently employed*—Persons 18 years of age and over who reported that 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 currently employed if they expected to work as soon as the particular event causing the absence no longer existed.

Freelance 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 received 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 NHIS 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, the estimates include three primary conceptual differences: (1) NHIS estimates are for persons 18 years of age and over, and CPS estimates are for persons 16 years of age and over; (2) NHIS uses a 2-week reference period, whereas CPS uses a 1-week reference period; (3) NHIS is a continuing survey with separate samples taken weekly, whereas CPS is a monthly sample taken for the survey week that includes the 12th of the month.

- *Currently unemployed*—Persons 18 years of age 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 were on layoff and looking for work are considered currently unemployed.
- *Not in labor force*—Persons not in the labor force include those under 18 years of age and those 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 the age of 18, retired persons, physically handicapped persons unable to work, and housewives or charity workers who receive no pay.

*Quarter*—The quarters used in the National Health Survey are actually 13-week periods rather than 3 calendar months. Because each 13-week period begins on a Monday and ends on a Sunday, the actual dates of the beginning and end of each 13-week period may overlap into another calendar quarter. Therefore, the time periods in the table headings are the approximate rather than the precise periods during which the interviewing was conducted.

# Appendix III

## Questionnaires and flashcards

PHS-T-513 OMB No. 0937-0021: Approval Expires March 31, 1988

**NOTICE** — Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

FORM HIS-1 (1987)  
(5-30-86)

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

### NATIONAL HEALTH INTERVIEW SURVEY

1. Book ___ of ___ books	2. R.O. number	3. Sample
4. Segment type <input type="checkbox"/> Area <input type="checkbox"/> Permit <input type="checkbox"/> Block	5. Control number PSU Segment Serial	

**6a. What is your exact address?** (Include House No., Apt. No., or other identification, county and ZIP Code)

-----

City State County ZIP Code

LISTING SHEET  
Sheet No. \_\_\_\_\_  
Line No. \_\_\_\_\_

**b. Is this your mailing address?** (Mark box or specify if different.  Same as 6a. Include county and ZIP Code.)

-----

City State County ZIP Code

**c. Special place name** Sample unit number Type code

### Household composition page

SP  Old age  Hisp

### A. HOUSEHOLD COMPOSITION PAGE

**1a. What are the names of all persons living or staying here? Start with the name of the person or one of the persons who owns or rents this home. Enter name in REFERENCE PERSON column.**

**b. What are the names of all other persons living or staying here? Enter names in columns.** If "Yes," enter names in columns

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

**c. I have listed (read names). Have I missed:**

- any babies or small children? .....
- any lodgers, boarders, or persons you employ who live here? .....
- anyone who USUALLY lives here but is now away from home traveling or in a hospital? .....
- anyone else staying here? .....

**d. Do all of the persons you have named usually live here?**  Yes (2)  No (APPLY HOUSEHOLD MEMBERSHIP RULES. Delete nonhousehold members by an "X" from 1—C2 and enter reason.)

Probe if necessary:  
**Does — usually live somewhere else?**

Ask for all persons beginning with column 2:

**2. What is — relationship to (reference person)?**

**3. What is — date of birth? (Enter date and age and mark sex.)**

1. First name		Mid. init.	Age
Last name			Sex 1 <input type="checkbox"/> M 2 <input type="checkbox"/> F
2. Relationship REFERENCE PERSON			
3. Date of birth			
Month	Date	Year	
HOSP.	WORK	RD	2-WK. DV
00 <input type="checkbox"/> None	1 <input type="checkbox"/> Wa	1 <input type="checkbox"/> Yes	00 <input type="checkbox"/> None
Number	2 <input type="checkbox"/> Wb	2 <input type="checkbox"/> No	Number
C1			
LA	TRA	DV	TINJ. T CCLTRI HSTCOND.
C2			
LA	TRA	DV	TINJ. T CCLTRI HSTCOND.



Restricted-activity page

<b>D. RESTRICTED ACTIVITY PAGE PERSON 1</b>	
<p><i>Hand calendar.</i>                      {The next questions refer to the 2 weeks outlined in red on that calendar, beginning Monday, <u>(date)</u> and ending this past Sunday <u>(date)</u> }</p>	
<b>D1</b>	<p>Refer to age.</p> <p><input type="checkbox"/> Under 5 (4)    <input type="checkbox"/> 5-17 (3)    <input type="checkbox"/> 18 and over (1)</p>
<p><b>1 a. DURING THOSE 2 WEEKS, did -- work at any time at a job or business not counting work around the house? (Include unpaid work in the family [farm/business].)</b></p> <p>1 <input type="checkbox"/> Yes (Mark "Wa" box, THEN 2)    2 <input type="checkbox"/> No</p> <hr style="border-top: 1px dashed black;"/> <p><b>b. Even though -- did not work during those 2 weeks, did -- have a job or business?</b></p> <p>1 <input type="checkbox"/> Yes (Mark "Wb" box, THEN 2)    2 <input type="checkbox"/> No (4)</p>	
<p><b>2 a. During those 2 weeks, did -- miss any time from a job or business because of illness or injury?</b></p> <p><input type="checkbox"/> Yes    oo <input type="checkbox"/> No (4)</p> <hr style="border-top: 1px dashed black;"/> <p><b>b. During that 2-week period, how many days did -- miss more than half of the day from -- job or business because of illness or injury?</b></p> <p>oo <input type="checkbox"/> None (4)    <input style="width: 80px;" type="text"/> No. of work-loss days (4)</p>	
<p><b>3 a. During those 2 weeks, did -- miss any time from school because of illness or injury?</b></p> <p><input type="checkbox"/> Yes    oo <input type="checkbox"/> No (4)</p> <hr style="border-top: 1px dashed black;"/> <p><b>b. During that 2-week period, how many days did -- miss more than half of the day from school because of illness or injury?</b></p> <p>oo <input type="checkbox"/> None    <input style="width: 80px;" type="text"/> No. of school-loss days</p>	
<p><b>4 a. During those 2 weeks, did -- stay in bed because of illness or injury?</b></p> <p><input type="checkbox"/> Yes    oo <input type="checkbox"/> No (6)</p> <hr style="border-top: 1px dashed black;"/> <p><b>b. During that 2-week period, how many days did -- stay in bed more than half of the day because of illness or injury?</b></p> <p>oo <input type="checkbox"/> None (6)    <input style="width: 80px;" type="text"/> No. of bed days (D2)</p>	
<b>D2</b>	<p>Refer to 2b and 3b.</p> <p><input type="checkbox"/> No days in 2b or 3b (6)  <input type="checkbox"/> 1 or more days in 2b or 3b (5)</p>
<p><b>5. On how many of the <u>(number in 2b or 3b)</u> days missed from [work/school] did -- stay in bed more than half of the day because of illness or injury?</b></p> <p>oo <input type="checkbox"/> None    <input style="width: 100px;" type="text"/> No. of days</p>	
<p>Refer to 2b, 3b, and 4b.</p> <p><b>6 a. (Not counting the day(s) [missed from work missed from school (and) in bed] ),</b></p> <p><b>Was there any (OTHER) time during those 2 weeks that -- cut down on the things -- usually does because of illness or injury?</b></p> <p><input type="checkbox"/> Yes    oo <input type="checkbox"/> No (D3)</p> <hr style="border-top: 1px dashed black;"/> <p><b>b. (Again, not counting the day(s) [missed from work missed from school (and) in bed] ),</b></p> <p><b>During that period, how many (OTHER) days did -- cut down for more than half of the day because of illness or injury?</b></p> <p>oo <input type="checkbox"/> None    <input style="width: 80px;" type="text"/> No. of cut-down days</p>	
<b>D3</b>	<p>Refer to 2-6.</p> <p><input type="checkbox"/> No days in 2-6 (Mark "No" in RD, THEN NP)  <input type="checkbox"/> 1 or more days in 2-6 (Mark "Yes" in RD, THEN 7)</p>
<p>Refer to 2b, 3b, 4b, and 6b.</p> <p><b>7 a. What (other) condition caused -- to [miss work miss school (or) stay in bed (or) cut down] during those 2 weeks?</b></p> <p>(Enter condition in C2, THEN 7b)</p> <hr style="border-top: 1px dashed black;"/> <p><b>b. Did any other condition cause -- to [miss work miss school (or) stay in bed (or) cut down] during that period?</b></p> <p>1 <input type="checkbox"/> Yes (Reask 7a and b)    2 <input type="checkbox"/> No</p>	
<p>FOOTNOTES</p>	

2-week doctor visits probe page

<b>E. 2-WEEK DOCTOR VISITS PROBE PAGE</b>			
<p><i>Read to respondent(s):</i>  <b>These next questions are about health care received during the 2 weeks outlined in red on that calendar.</b></p>			
<b>E1</b>	<p><i>Refer to age.</i></p>	<b>E1</b>	<input type="checkbox"/> Under 14 (1b) <input type="checkbox"/> 14 and over (1a)
<p><b>1 a. During those 2 weeks, how many times did — see or talk to a medical doctor? {Include all types of doctors, such as dermatologists, psychiatrists, and ophthalmologists, as well as general practitioners and osteopaths.} (Do not count times while an overnight patient in a hospital.)</b></p> <p><b>b. During those 2 weeks, how many times did anyone see or talk to a medical doctor about —? (Do not count times while an overnight patient in a hospital.)</b></p>		<b>1 a. and b.</b>	<input type="checkbox"/> None <input type="text"/> } (NP) Number of times
<p><b>2 a. (Besides the time(s) you just told me about) During those 2 weeks, did anyone in the family receive health care at home or go to a doctor's office, clinic, hospital or some other place? Include care from a nurse or anyone working with or for a medical doctor. Do not count times while an overnight patient in a hospital.</b></p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No (3a)</p>			
<p><b>b. Who received this care? Mark "DR Visit" box in person's column.</b></p>		<b>2b.</b>	<input type="checkbox"/> DR Visit
<p><b>c. Anyone else?</b></p> <p style="text-align: center;"><input type="checkbox"/> Yes (Reask 2b and c) <input type="checkbox"/> No</p>			
<p><i>Ask for each person with "DR Visit" in 2b:</i></p> <p><b>d. How many times did — receive this care during that period?</b></p>		<b>d.</b>	<input type="text"/> Number of times
<p><b>3 a. (Besides the time(s) you already told me about) During those 2 weeks, did anyone in the family get any medical advice, prescriptions or test results over the PHONE from a doctor, nurse, or anyone working with or for a medical doctor?</b></p> <p style="text-align: center;"><input type="checkbox"/> Yes <input type="checkbox"/> No (E2)</p>			
<p><b>b. Who was the phone call about? Mark "Phone call" box in person's column.</b></p>		<b>3b.</b>	<input type="checkbox"/> Phone call
<p><b>c. Were there any calls about anyone else?</b></p> <p style="text-align: center;"><input type="checkbox"/> Yes (Reask 3b and c) <input type="checkbox"/> No</p>			
<p><i>Ask for each person with "Phone call" in 3b:</i></p> <p><b>d. How many telephone calls were made about —?</b></p>		<b>d.</b>	<input type="text"/> Number of calls

2-week doctor visits page

F. 2-WEEK DOCTOR VISITS PAGE		DR VISIT 1
Refer to C1, "2-WK. DV" box.		<b>PERSON NUMBER</b> _____
<b>F1</b> Refer to age.	<b>F1</b> <input type="checkbox"/> Under 14 (1b) <input type="checkbox"/> 14 and over (1a)	
<b>1 a.</b> On what (other) date(s) during those 2 weeks did --- see or talk to a medical doctor, nurse, or doctor's assistant? <b>b.</b> On what (other) date(s) during those 2 weeks did anyone see or talk to a medical doctor, nurse, or doctor's assistant about ---? <i>Ask after last DR visit column for this person:</i> <b>c.</b> Were there any other visits or calls for --- during that period? Make necessary correction to 2-Wk. DV box in C1.	<b>1 a. and b.</b> Month _____ Date _____ OR { 7777 <input type="checkbox"/> Last week 8888 <input type="checkbox"/> Week before <b>c.</b> 1 <input type="checkbox"/> Yes (Reask 1a or b and c) 2 <input type="checkbox"/> No (Ask 2-5 for each visit)	
<b>2.</b> Where did --- receive health care on (date in 1), at a doctor's office, clinic, hospital, some other place, or was this a telephone call? <i>If doctor's office: Was this office in a hospital?</i> <i>If hospital: Was it the outpatient clinic or the emergency room?</i> <i>If clinic: Was it a hospital outpatient clinic, a company clinic, a public health clinic, or some other kind of clinic?</i> <i>If lab: Was this lab in a hospital?</i> <b>What was done during this visit? (Footnote)</b>	<b>2.</b> 01 <input type="checkbox"/> Telephone <b>Not in hospital:</b> 02 <input type="checkbox"/> Home 03 <input type="checkbox"/> Doctor's office 04 <input type="checkbox"/> Co 'or Ind. clinic 05 <input type="checkbox"/> Other clinic 06 <input type="checkbox"/> Lab 07 <input type="checkbox"/> Other (Specify) - <b>Hospital:</b> 08 <input type="checkbox"/> O P clinic 09 <input type="checkbox"/> Emergency room 10 <input type="checkbox"/> Doctor's office 11 <input type="checkbox"/> Lab 12 <input type="checkbox"/> Overnight patient (Next DR visit) 88 <input type="checkbox"/> Other (Specify) -	
<i>Ask 3b if under 14.</i> <b>3a.</b> Did --- actually talk to a medical doctor? <b>b.</b> Did anyone actually talk to a medical doctor about ---? <b>c.</b> What type of medical person or assistant was talked to? <b>d.</b> Does the (entry in 3c) work with or for ONE doctor or MORE than one doctor? <b>e.</b> For this (visit/call) what kind of doctor was the (entry in 3c) working with or for - a general practitioner or a specialist? <b>f.</b> Is that doctor a general practitioner or a specialist? <b>g.</b> What kind of specialist?	<b>3a. and b.</b> 1 <input type="checkbox"/> Yes (3f) 2 <input type="checkbox"/> No (3c) <b>c.</b> _____ Type _____ 99 <input type="checkbox"/> DK <b>d.</b> 1 <input type="checkbox"/> One (3f) 2 <input type="checkbox"/> More 3 <input type="checkbox"/> None (4) 9 <input type="checkbox"/> DK <b>e. and f.</b> 1 <input type="checkbox"/> GP (4) 2 <input type="checkbox"/> Specialist (3g) 9 <input type="checkbox"/> DK (4) <b>g.</b> _____ Kind of specialist	
<i>Ask 4b if under 14.</i> <b>4a.</b> For what condition did --- see or talk to the [doctor/(entry in 3c)] on (date in 1)? Mark first appropriate box. <b>b.</b> For what condition did anyone see or talk to the [doctor/(entry in 3c)] about --- on (date in 1)? Mark first appropriate box. <b>c.</b> Was a condition found as a result of the [test(s)/examination]? <b>d.</b> Was this [test/examination] because of a specific condition --- had? <b>e.</b> During the past 2 weeks was --- sick because of --- pregnancy? <b>f.</b> What was the matter? <b>g.</b> During this [visit/call] was the [doctor/(entry in 3c)] talked to about any (other) condition? <b>h.</b> What was the condition?	<b>4a. and b.</b> 1 <input type="checkbox"/> Condition (Item C2, THEN 4g) 2 <input type="checkbox"/> Pregnancy (4e) 3 <input type="checkbox"/> Test(s) or examination (4c) 8 <input type="checkbox"/> Other (Specify) - _____ (4g) <b>c.</b> <input type="checkbox"/> Yes (4h) <input type="checkbox"/> No <b>d.</b> <input type="checkbox"/> Yes (4h) <input type="checkbox"/> No (4g) <b>e.</b> <input type="checkbox"/> Yes <input type="checkbox"/> No (4g) <b>f.</b> _____ Condition (Item C2, THEN 4g) <b>g.</b> <input type="checkbox"/> Yes <input type="checkbox"/> No (5) <b>h.</b> <input type="checkbox"/> Pregnancy (4e) _____ Condition (Item C2, THEN 4g)	
<i>Mark box if "Telephone" in 2.</i> <b>5a.</b> Did --- have any kind of surgery or operation during this visit, including bone settings and stitches? <b>b.</b> What was the name of the surgery or operation? If name of operation not known, describe what was done. <b>c.</b> Was there any other surgery or operation during this visit?	<b>5a.</b> 0 <input type="checkbox"/> Telephone in 2 (Next DR visit) 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (Next DR visit) <b>b.</b> (1) _____ (2) _____ <b>c.</b> <input type="checkbox"/> Yes (Reask 5b and c) <input type="checkbox"/> No	

Health indicator page

<b>G. HEALTH INDICATOR PAGE</b>		
<p><b>1 a.</b> During the 2-week period outlined in red on that calendar, has anyone in the family had an injury from an accident or other cause that you have not yet told me about?</p> <p style="text-align: center;"><input type="checkbox"/> Yes <span style="margin-left: 100px;"><input type="checkbox"/> No (2)</span></p> <p><b>b.</b> Who was this? Mark "Injury" box in person's column.</p> <p><b>c.</b> What was -- injury? Enter injury(ies) in person's column.</p> <p><b>d.</b> Did anyone have any other injuries during that period?</p> <p style="text-align: center;"><input type="checkbox"/> Yes (Reask 1b, c, and d) <span style="margin-left: 50px;"><input type="checkbox"/> No</span></p> <p><i>Ask for each injury in 1c:</i></p> <p><b>e.</b> As a result of the (injury in 1c) did [---/anyone] see or talk to a medical doctor or assistant (about ---) or did --- cut down on --- usual activities for more than half of a day?</p>	<p><b>1b.</b> <input type="checkbox"/> Injury</p> <p><b>c.</b> _____ Injury</p> <p><b>e.</b> <input type="checkbox"/> Yes (Enter injury in C2, THEN 1e for next injury) <input type="checkbox"/> No (1e for next injury)</p>	
<p><b>2.</b> During the past 12 months, {that is, since (12-month date) a year ago} ABOUT how many days did illness or injury keep --- in bed more than half of the day? (Include days while an overnight patient in a hospital.)</p>	<p><b>2.</b> 000 <input type="checkbox"/> None</p> <p>_____ No. of days</p>	
<p><b>3a.</b> During the past 12 months, ABOUT how many times did [---/anyone] see or talk to a medical doctor or assistant (about ---)? (Do not count doctors seen while an overnight patient in a hospital.) (Include the (number in 2-WK DV box) visit(s) you already told me about.)</p> <p><b>b.</b> About how long has it been since [---/anyone] last saw or talked to a medical doctor or assistant (about ---)? Include doctors seen while a patient in a hospital.</p>	<p><b>3a.</b> 000 <input type="checkbox"/> None (3b) 000 <input type="checkbox"/> Only when overnight patient in hospital } (NP)</p> <p>_____ No. of visits</p> <p><b>b.</b> 1 <input type="checkbox"/> Interview week (Reask 3b) 2 <input type="checkbox"/> Less than 1 yr. (Reask 3a) 3 <input type="checkbox"/> 1 yr., less than 2 yrs. 4 <input type="checkbox"/> 2 yrs., less than 5 yrs. 5 <input type="checkbox"/> 5 yrs. or more 0 <input type="checkbox"/> Never</p>	
<p><b>4.</b> Would you say --- health in general is excellent, very good, good, fair, or poor?</p>	<p><b>4.</b> 1 <input type="checkbox"/> Excellent 4 <input type="checkbox"/> Fair 2 <input type="checkbox"/> Very good 5 <input type="checkbox"/> Poor 3 <input type="checkbox"/> Good</p>	



**K1**

Refer to RD and C2.

- 1  "Yes" in "RD" box AND more than 1 condition in C2 (6)
- 8  Other (K2)

6a. During the 2 weeks outlined in red on that calendar, did -- (condition) cause -- to cut down on the things -- usually does?  
 Yes  No (K2)

b. During that period, how many days did -- cut down for more than half of the day?  
 00  None (K2) \_\_\_\_\_ Days

7. During those 2 weeks, how many days did -- stay in bed for more than half of the day because of this condition?  
 00  None \_\_\_\_\_ Days

Ask if "Wa/Wb" box marked in C1:  
 8. During those 2 weeks, how many days did -- miss more than half of the day from -- job or business because of this condition?  
 00  None \_\_\_\_\_ Days

Ask if age 5-17:  
 9. During those 2 weeks, how many days did -- miss more than half of the day from school because of this condition?  
 00  None \_\_\_\_\_ Days

**K2**  
 Condition has "CL LTR" in C2 as source (10)  
 Condition does not have "CL LTR" in C2 as source (K4)

10. About how many days since (12-month date) a year ago, has this condition kept -- in bed more than half of the day? (Include days while an overnight patient in a hospital.)  
 000  None \_\_\_\_\_ Days

11. Was -- ever hospitalized for -- (condition in 3b)?  
 1  Yes 2  No

**K3**  
 Missing extremity or organ (K4)  
 Other (12)

12a. Does -- still have this condition?  
 1  Yes (K4)  No

b. Is this condition completely cured or is it under control?  
 2  Cured 8  Other (Specify) --  
 3  Under control (K4) \_\_\_\_\_ (K4)

c. About how long did -- have this condition before it was cured?  
 000  Less than 1 month OR \_\_\_\_\_ Number { 1  Months  
 2  Years

d. Was this condition present at any time during the past 12 months?  
 1  Yes 2  No

**K4**  
 0  Not an accident/injury (NC)  
 1  First accident/injury for this person (14)  
 8  Other (13)

13. Is this (condition in 3b) the result of the same accident you already told me about?  
 Yes (Record condition page number where accident questions first completed.) → \_\_\_\_\_ (NC) Page No.  
 No

14. Where did the accident happen?  
 1  At home (inside house)  
 2  At home (adjacent premises)  
 3  Street and highway (includes roadway and public sidewalk)  
 4  Farm  
 5  Industrial place (includes premises)  
 6  School (includes premises)  
 7  Place of recreation and sports, except at school  
 8  Other (Specify) --

Mark box if under 18.  Under 18 (16)  
 15a. Was -- under 18 when the accident happened?  
 1  Yes (16)  No

b. Was -- in the Armed Forces when the accident happened?  
 2  Yes (16)  No

c. Was -- at work at -- job or business when the accident happened?  
 3  Yes 4  No

16a. Was a car, truck, bus, or other motor vehicle involved in the accident in any way?  
 1  Yes 2  No (17)

b. Was more than one vehicle involved?  
 1  Yes 2  No

c. Was [it/either one] moving at the time?  
 1  Yes 2  No

17a. At the time of the accident what part of the body was hurt? What kind of injury was it? Anything else?

Part(s) of body *	Kind of injury

Ask if box 3, 4, or 5 marked in Q. 5:  
 b. What part of the body is affected now? How is -- (part of body) affected? Is -- affected in any other way?

Part(s) of body *	Present effects **

\* Enter part of body in same detail as for 3g.  
 \*\* If multiple present effects, enter in C2 each one that is not the same as 3b or C2 and complete a separate condition page for it.

Demographic background page

<p><b>2a. What is the highest grade or year of regular school — has ever attended?</b></p> <p>-----</p> <p><b>b. Did — finish the (number in 2a) [grade/year]?</b></p>	<p><b>2a.</b> 00 <input type="checkbox"/> Never attended or kindergarten (NP)</p> <p>Elem: 1 2 3 4 5 6 7 8</p> <p>High: 9 10 11 12</p> <p>College: 1 2 3 4 5 6 +</p> <p><b>b.</b> 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No</p>
<p><i>Hand Card R. Ask first alternative for first person; ask second alternative for other persons.</i></p>	
<p><b>3a. What is the number of the group or groups which represents — race?</b>  <b>What is — race?</b></p> <p>Circle all that apply</p> <p>1 — Aleut, Eskimo, or American Indian      4 — White          2 — Asian or Pacific Islander              5 — Another group not listed — Specify          3 — Black</p> <p>-----</p> <p><b>b. Which of those groups; that is, (entries in 3a) would you say BEST represents — race?</b></p> <p>-----</p> <p><b>c. Mark observed race of respondent(s) only.</b></p>	<p><b>3a.</b> 1 2 3 4 5 7</p> <p>----- (Specify)</p> <p><b>b.</b> 1 2 3 4 5 7</p> <p>----- (Specify)</p> <p><b>c.</b> 1 <input type="checkbox"/> W 2 <input type="checkbox"/> B 3 <input type="checkbox"/> O</p>

<p><b>L2</b> Refer to "Age" and "Wa/Wb" boxes in C1.</p>	<p><b>L2</b></p> <p>0 <input type="checkbox"/> Under 18 (NP)          1 <input type="checkbox"/> Wa box marked (6a)          2 <input type="checkbox"/> Wb box marked (5a)          3 <input type="checkbox"/> Neither box marked (5b)</p>
<p><b>5a. Earlier you said that — has a job or business but did not work last week or the week before. Was — looking for work or on layoff from a job during those 2 weeks?</b></p> <p>-----</p> <p><b>b. Earlier you said that — didn't have a job or business last week or the week before. Was — looking for work or on layoff from a job during those 2 weeks?</b></p> <p>-----</p> <p><b>c. Which, looking for work or on layoff from a job?</b></p>	<p><b>5a.</b> 1 <input type="checkbox"/> Yes (5c) 2 <input type="checkbox"/> No (6b)</p> <p><b>b.</b> 1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No (NP)</p> <p><b>c.</b> 1 <input type="checkbox"/> Looking (6c) 3 <input type="checkbox"/> Both (6b)          2 <input type="checkbox"/> Layoff (6b)</p>
<p><b>6a. Earlier you said that — worked last week or the week before. Ask 6b.</b></p> <p>-----</p> <p><b>b. For whom did — work? Enter name of company, business, organization, or other employer.</b></p> <p>-----</p> <p><b>c. For whom did — work at — last full-time job or business lasting 2 consecutive weeks or more? Enter name of company, business, organization, or other employer, or mark "NEV" or "AF" box in person's column.</b></p> <p>-----</p> <p><b>d. What kind of business or industry is this? For example, TV and radio manufacturing, retail shoe store, State Labor Department, farm.</b></p> <p>-----</p> <p><i>If "AF" in 6b/c, mark "AF" box in person's column without asking.</i></p> <p><b>e. What kind of work was — doing? For example, electrical engineer, stock clerk, typist, farmer.</b></p> <p>-----</p> <p><b>f. What were — most important activities or duties at that job? For example, types, keeps account books, files, sells cars, operates printing press, finishes concrete.</b></p> <p>-----</p> <p><i>Complete from entries in 6b-f. If not clear, ask:</i></p> <p><b>g. Was —</b></p> <p>An employee of a PRIVATE company, business or individual for wages, salary, or commission . . . . . P          A FEDERAL government employee? . . . . . F          A STATE government employee? . . . . . S          A LOCAL government employee? . . . . . L</p> <p>Self-employed in OWN business, professional practice, or farm?          Ask: Is the business incorporated? . . . . . I              Yes . . . . . SE              No . . . . . SE</p> <p>Working WITHOUT PAY in family business or farm? . . . . . WP          — NEVER WORKED or never worked at a full-time job lasting 2 weeks or more . . . . . NEV</p>	<p><b>6b. and c.</b> Employer <input type="checkbox"/> NEV (6g) <input type="checkbox"/> AF (6e)</p> <p><b>d.</b> industry</p> <p><b>e.</b> Occupation <input type="checkbox"/> AF (NP)</p> <p><b>f.</b> Duties</p> <p><b>g.</b> Class of worker</p> <p>1 <input type="checkbox"/> P 5 <input type="checkbox"/> I          2 <input type="checkbox"/> F 6 <input type="checkbox"/> SE          3 <input type="checkbox"/> S 7 <input type="checkbox"/> WP          4 <input type="checkbox"/> L 8 <input type="checkbox"/> NEV</p>

<p>Mark box if under 14. If "Married" refer to household composition and mark accordingly.</p> <p>7. Is — — now married, widowed, divorced, separated, or has — — never been married?</p>	<p>7.</p> <p><input type="checkbox"/> Under 14</p> <p><input type="checkbox"/> Married — spouse in HH</p> <p><input type="checkbox"/> Married — spouse not in HH</p> <p><input type="checkbox"/> Widowed</p> <p><input type="checkbox"/> Divorced</p> <p><input type="checkbox"/> Separated</p> <p><input type="checkbox"/> Never married</p>																																																												
<p>8a. Was the total combined FAMILY income during the past 12 months — that is, yours, <i>(read names, including Armed Forces members living at home)</i> more or less than \$20,000? Include money from jobs, social security, retirement income, unemployment payments, public assistance, and so forth. Also include income from interest, dividends, net income from business, farm, or rent, and any other money income received.</p> <p><i>Read if necessary: Income is important in analyzing the health information we collect. For example, this information helps us to learn whether persons in one income group use certain types of medical care services or have certain conditions more or less often than those in another group.</i></p> <p><i>Read parenthetical phrase if Armed Forces member living at home or if necessary.</i></p> <p>b. Of those income groups, which letter best represents the total combined FAMILY income during the past 12 months (that is, yours, <i>(read names, including Armed Forces members living at home)</i>)? Include wages, salaries, and other items we just talked about.</p> <p><i>Read if necessary: Income is important in analyzing the health information we collect. For example, this information helps us to learn whether persons in one income group use certain types of medical care services or have certain conditions more or less often than those in another group.</i></p>	<p>8a.</p> <p><input type="checkbox"/> \$20,000 or more (Hand Card I)</p> <p><input type="checkbox"/> Less than \$20,000 (Hand Card J)</p> <p>b.</p> <table border="0"> <tr> <td><input type="checkbox"/> 00</td><td><input type="checkbox"/> A</td> <td><input type="checkbox"/> 10</td><td><input type="checkbox"/> K</td> <td><input type="checkbox"/> 20</td><td><input type="checkbox"/> U</td> </tr> <tr> <td><input type="checkbox"/> 01</td><td><input type="checkbox"/> B</td> <td><input type="checkbox"/> 11</td><td><input type="checkbox"/> L</td> <td><input type="checkbox"/> 21</td><td><input type="checkbox"/> V</td> </tr> <tr> <td><input type="checkbox"/> 02</td><td><input type="checkbox"/> C</td> <td><input type="checkbox"/> 12</td><td><input type="checkbox"/> M</td> <td><input type="checkbox"/> 22</td><td><input type="checkbox"/> W</td> </tr> <tr> <td><input type="checkbox"/> 03</td><td><input type="checkbox"/> D</td> <td><input type="checkbox"/> 13</td><td><input type="checkbox"/> N</td> <td><input type="checkbox"/> 23</td><td><input type="checkbox"/> X</td> </tr> <tr> <td><input type="checkbox"/> 04</td><td><input type="checkbox"/> E</td> <td><input type="checkbox"/> 14</td><td><input type="checkbox"/> O</td> <td><input type="checkbox"/> 24</td><td><input type="checkbox"/> Y</td> </tr> <tr> <td><input type="checkbox"/> 05</td><td><input type="checkbox"/> F</td> <td><input type="checkbox"/> 15</td><td><input type="checkbox"/> P</td> <td><input type="checkbox"/> 25</td><td><input type="checkbox"/> Z</td> </tr> <tr> <td><input type="checkbox"/> 06</td><td><input type="checkbox"/> G</td> <td><input type="checkbox"/> 16</td><td><input type="checkbox"/> Q</td> <td><input type="checkbox"/> 26</td><td><input type="checkbox"/> ZZ</td> </tr> <tr> <td><input type="checkbox"/> 07</td><td><input type="checkbox"/> H</td> <td><input type="checkbox"/> 17</td><td><input type="checkbox"/> R</td> <td></td><td></td> </tr> <tr> <td><input type="checkbox"/> 08</td><td><input type="checkbox"/> I</td> <td><input type="checkbox"/> 18</td><td><input type="checkbox"/> S</td> <td></td><td></td> </tr> <tr> <td><input type="checkbox"/> 09</td><td><input type="checkbox"/> J</td> <td><input type="checkbox"/> 19</td><td><input type="checkbox"/> T</td> <td></td><td></td> </tr> </table>	<input type="checkbox"/> 00	<input type="checkbox"/> A	<input type="checkbox"/> 10	<input type="checkbox"/> K	<input type="checkbox"/> 20	<input type="checkbox"/> U	<input type="checkbox"/> 01	<input type="checkbox"/> B	<input type="checkbox"/> 11	<input type="checkbox"/> L	<input type="checkbox"/> 21	<input type="checkbox"/> V	<input type="checkbox"/> 02	<input type="checkbox"/> C	<input type="checkbox"/> 12	<input type="checkbox"/> M	<input type="checkbox"/> 22	<input type="checkbox"/> W	<input type="checkbox"/> 03	<input type="checkbox"/> D	<input type="checkbox"/> 13	<input type="checkbox"/> N	<input type="checkbox"/> 23	<input type="checkbox"/> X	<input type="checkbox"/> 04	<input type="checkbox"/> E	<input type="checkbox"/> 14	<input type="checkbox"/> O	<input type="checkbox"/> 24	<input type="checkbox"/> Y	<input type="checkbox"/> 05	<input type="checkbox"/> F	<input type="checkbox"/> 15	<input type="checkbox"/> P	<input type="checkbox"/> 25	<input type="checkbox"/> Z	<input type="checkbox"/> 06	<input type="checkbox"/> G	<input type="checkbox"/> 16	<input type="checkbox"/> Q	<input type="checkbox"/> 26	<input type="checkbox"/> ZZ	<input type="checkbox"/> 07	<input type="checkbox"/> H	<input type="checkbox"/> 17	<input type="checkbox"/> R			<input type="checkbox"/> 08	<input type="checkbox"/> I	<input type="checkbox"/> 18	<input type="checkbox"/> S			<input type="checkbox"/> 09	<input type="checkbox"/> J	<input type="checkbox"/> 19	<input type="checkbox"/> T		
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Flashcards

**CARD I**

**INCOME**

- U .... \$20,000 – \$24,999
- V .... \$25,000 – \$29,999
- W ... \$30,000 – \$34,999
- X .... \$35,000 – \$39,999
- Y .... \$40,000 – \$44,999
- Z .... \$45,000 – \$49,999
- ZZ... \$50,000 and over

**CARD J**

**INCOME**

- A ..... Less than \$1,000 (including loss)
- B ..... \$1,000 – \$1,999
- C ..... \$2,000 – \$2,999
- D ..... \$3,000 – \$3,999
- E ..... \$4,000 – \$4,999
- F ..... \$5,000 – \$5,999
- G ..... \$6,000 – \$6,999
- H ..... \$7,000 – \$7,999
- I ..... \$8,000 – \$8,999
- J ..... \$9,000 – \$9,999
- K ..... \$10,000 – \$10,999
- L ..... \$11,000 – \$11,999
- M ..... \$12,000 – \$12,999
- N ..... \$13,000 – \$13,999
- O ..... \$14,000 – \$14,999
- P ..... \$15,000 – \$15,999
- Q ..... \$16,000 – \$16,999
- R ..... \$17,000 – \$17,999
- S ..... \$18,000 – \$18,999
- T ..... \$19,000 – \$19,999

Card I

Card J

(Cut along this line)

**CARD R**

**RACE**

1. Aleut, Eskimo, or American Indian
2. Asian or Pacific Islander
3. Black
4. White

# Vital and Health Statistics series descriptions

- SERIES 1. Programs and Collection Procedures**—Reports describing the general programs of the National Center for Health Statistics and its offices and divisions and the data collection methods used. They also include definitions and other material necessary for understanding the data.
- SERIES 2. Data Evaluation and Methods Research**—Studies of new statistical methodology including experimental tests of new survey methods, studies of vital statistics collection methods, new analytical techniques, objective evaluations of reliability of collected data, and contributions to statistical theory. Studies also include comparison of U.S. methodology with those of other countries
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