

## Deaths: Injuries, 2002

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### Abstract

**Objectives**—This report presents injury mortality data for 2002 using the external-cause-of-injury mortality matrix for the *International Classification of Diseases, Tenth Revision* (ICD-10). The external cause matrix is a detailed and comprehensive framework for tabulating and presenting injury deaths by mechanism and intent of death. Data are presented by age, sex, race, Hispanic origin, and State. In addition, trend data are shown for 1999–2002 by age, sex, and mechanism and intent of injury.

This report also introduces the injury mortality diagnosis matrix. This latter is another framework that categorizes the nearly 1,200 injury diagnosis codes from ICD-10's chapter 19 according to body region and nature of the injury diagnosis information captured in the multiple-cause-of-death fields of the national mortality file. This report supplements the annual report of final mortality statistics.

**Methods**—Data in this report are based on information from all death certificates filed in the 50 States and the District of Columbia in 2002. Causes of death and nature of injury are processed and coded in accordance with the ICD-10.

**Results**—In 2002, 161,269 resident deaths occurred as the result of injuries. Of these injury deaths, 66.2 percent were classified as unintentional, 19.6 percent were suicides, 10.9 percent were homicides, 3.0 percent were of undetermined intent, and 0.3 percent involved legal intervention or operations of war. The five leading mechanisms of injury death were motor vehicle traffic, firearm, poisoning, falls, and suffocation, accounting for 81 percent of all injury deaths. The rate of poisoning deaths increased by 17.9 percent between 2001 and 2002, but the reader is advised to interpret these numbers cautiously as a portion of this increase is due to stricter procedures concerning data processing that were implemented in 2002.

Thirty percent of injuries resulting in death were to the head and neck region with the vast majority of these classified as traumatic brain injury. Injuries involving the whole body system accounted for 28 percent of all injuries mentioned (17 percent were poisoning and 7 percent were other effects of external causes, such as submersion or asphyxiation).

**Conclusions**—Injury mortality data presented in this report using the external cause-of-injury mortality matrix for ICD-10 provide detail on the mechanism of death needed for research and other activities related to injury prevention. This report highlights the importance of multiple causes-of-death data when analyzing injury mortality—special attention is given to the issue of accuracy and completeness of information as it pertains to these data. The Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS) is involved in several ongoing projects related to the study of injury and injury mortality.

**Keywords:** deaths • mortality • cause of death • external cause • injury • nature of injury • poisoning • vital statistics • ICD-10 • multiple causes of death

### Highlights

#### Injury mortality in 2002

- 161,269 resident deaths occurred in the United States as the result of injuries.

#### Acknowledgments

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- Unintentional injuries were the fifth leading cause of death overall and the leading cause for those under 45 years of age. Suicide and homicide were the 11th and 14th leading causes, respectively.
- 66.2 percent of injury deaths were classified as unintentional, 19.6 percent were suicides, and 10.9 percent were homicides.
- Persons aged 75 years and over have the highest injury death rates.
- The five leading mechanisms-of-injury death accounted for 81 percent of all injury deaths and were (in rank order):
  - Motor vehicle traffic (27.3 percent)
  - Firearm (18.8 percent)
  - Poisoning (16.4 percent)
  - Fall (10.6 percent)
  - Suffocation (7.9 percent)
- Firearm suicide accounted for 56.6 percent of all firearm-related deaths.
- Age-adjusted death rates due to injury were highest in New Mexico, Alaska, and Wyoming and were lowest in New York and Massachusetts.
- 30.1 percent of injuries that resulted in deaths were to the head and neck region; this was the most commonly mentioned injury condition resulting in death. Poisoning and toxic effects were the second most common injury conditions, together accounting for 20.2 percent of all injuries mentioned.
- 66.4 percent of poisoning deaths were classified as unintentional, 20.8 percent as suicides, 12.6 percent as undetermined intent, and the remainder as homicides.
- 93.4 percent of unintentional poisonings were drug-related. Of suicides involving poisoning, 70.8 percent were drug-related and 25.9 percent were due to exposure to gases and vapors.

## Introduction

Injury deaths are those caused by acute exposure to physical agents, e.g., mechanical force or energy, heat, electricity, chemicals, and ionizing radiation, in amounts or at rates that exceed the threshold of human tolerance (1–4). An injury death may also be the result of a sudden lack of an essential substance (e.g., oxygen in the case of drowning) (1,2,5,6). Causes of death involving injuries are prominent among the leading causes of death in the United States (table A). In 2002, more than 100,000 persons died as the result of an unintentional injury, making this category the fifth leading cause of death overall. Unintentional injuries were the leading cause of death for those under age 45 years, accounting for 24 percent of all deaths in this age category (7). Suicide and homicide were also among the 15 leading causes of death in the United States, ranking 11th and 14th, respectively, and together accounting for nearly 50,000 deaths in 2002 (table A). Among those aged 15–24 years, homicide was the second leading cause of death and suicide ranked third; among those aged 25–34 years, suicide was second and homicide third (7). In these two age groups, all injuries accounted for 63 percent of deaths from any cause.

Statistics for injury deaths are routinely presented in reports published annually by the National Center for Health Statistics (NCHS) (7–9) and are included in standard mortality tabulation lists developed by NCHS (10). Table B shows the external cause-of-injury categories

included in the “List of 113 selected causes of death,” which is the list used in the United States to rank causes of death. The standard mortality tabulation lists contain useful, but very basic, cause-of-death data. For external causes, particularly for suicides and homicides, the categories lack detail on the mechanism of death, i.e., the vector that transfers the energy to the body (e.g., fall, firearm, motor vehicle crash). Important information on the nature and body region affected by the injury and poisoning that can be gleaned from multiple-cause mortality data is also absent from the 113-cause tabulation list.

Underlying causes of death involving injuries are classified according to intent or manner of death (e.g., unintentional or accident, intentional, which can be suicide, homicide or legal intervention, or undetermined intent) in the *Tenth Revision of the International Classification of Diseases (ICD–10)* (11). Within each category of intent or manner are more detailed categories describing mechanisms of death. Thus, all external cause-of-injury codes in the ICD are two-dimensional, indicating both the intent and the mechanism. The external cause-of-injury mortality matrix is organized according to these dimensions and is a more detailed and comprehensive framework for tabulating and presenting injury deaths.

The final 2002 data on injury deaths in the United States are presented in this report by mechanism and intent and stratified by age, sex, race, Hispanic origin, and State using the external cause-of-injury mortality matrix based on underlying cause of death information. Trend data from 1999–2002 are analyzed and discussed. The report also presents data on injury deaths classified according to the nature and body region of the injury based on multiple cause of death information. This report accompanies the release of final national mortality statistics for 2002 in “Deaths: Final Data for 2002” (9).

## Data and Methods

### Data

Data in this report are based on information from death certificates filed in the 50 States and the District of Columbia in 2002. The cause of death is typically investigated, certified, and reported by a medical examiner or coroner when a death involves injury (i.e., an accident, a suicide, or a homicide) or unusual or suspicious circumstances (12,13). A funeral director generally provides demographic information on the decedent. Population data used to calculate death rates were produced under a collaborative arrangement with the U.S. Census Bureau (“Technical Notes”).

*External cause-of-injury mortality matrix*—The external cause-of-injury mortality matrix presents injury data by both mechanism and intent of the death and is shown in table C. The matrix was jointly developed by the Injury Control and Emergency Health Services (ICEHS) section of the American Public Health Association and the International Collaborative Effort (ICE) on Injury Statistics (14). The mission of the Injury ICE is to improve the quality and international comparability of injury data (15,16). The World Health Organization has reviewed the external cause matrix for international use and is now including it as one of its standard cause-of-death lists (17).

The matrix was originally developed using ICD–9 classification schemes (14) and was modified to be consistent with ICD–10 (18). Differences between ICD–9 and ICD–10 in the classification of injury deaths and terminology are discussed in “Technical Notes.” Table I of “Technical Notes,” shows ICD–9 and ICD–10 codes and the

**Table A. Deaths, percentage of total deaths, death rates, and age-adjusted death rates for the 15 leading causes of death in 2002: United States**

[Death rates on an annual basis per 100,000 population: age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes"]

Rank <sup>1</sup>	Cause of death (Based on the <i>Tenth Revision International Classification of Diseases, 1992</i> )	Number	Percent of total deaths	Crude death rate	Age-adjusted death rate
...	All causes	2,443,387	100.0	847.3	845.3
1	Diseases of heart (I00-I09,I11,I13,I20-I51)	696,947	28.5	241.7	240.8
2	Malignant neoplasms (C00-C97)	557,271	22.8	193.2	193.5
3	Cerebrovascular diseases (I60-I69)	162,672	6.7	56.4	56.2
4	Chronic lower respiratory diseases (J40-J47)	124,816	5.1	43.3	43.5
5	<b>Accidents (unintentional injuries) (V01-X59,Y85-Y86)</b>	<b>106,742</b>	<b>4.4</b>	<b>37.0</b>	<b>36.9</b>
6	Diabetes mellitus (E10-E14)	73,249	3.0	25.4	25.4
7	Influenza and pneumonia (J10-J18)	65,681	2.7	22.8	22.6
8	Alzheimer's disease (G30)	58,866	2.4	20.4	20.2
9	Nephritis, nephrotic syndrome, and nephrosis (N00-N07,N17-N19,N25-N27)	40,974	1.7	14.2	14.2
10	Septicemia (A40-A41)	33,865	1.4	11.7	11.7
11	<b>Intentional self-harm (suicide) (*U03,X60-X84,Y87.0)</b>	<b>31,655</b>	<b>1.3</b>	<b>11.0</b>	<b>10.9</b>
12	Chronic liver disease and cirrhosis (K70,K73-K74)	27,257	1.1	9.5	9.4
13	Essential (primary) hypertension and hypertensive renal disease (I10,I12)	20,261	0.8	7.0	7.0
14	<b>Assault (homicide) (*U01-*U02,X85-Y09,Y87.1)</b>	<b>17,638</b>	<b>0.7</b>	<b>6.1</b>	<b>6.1</b>
15	Pneumonitis due to solids and liquids (J69)	17,593	0.7	6.1	6.1
...	All other causes	407,900	16.7	141.5	...

... Category not applicable.

<sup>1</sup>Rank based on number of deaths; see "Technical Notes."**Table B. Injury-related causes from the list of 113 selected underlying causes of death**

[For explanation of asterisks preceding cause-of-death categories, see "Technical Notes"]

	Cause of death (Based on the <i>Tenth Revision, International Classification of Diseases, 1992</i> )
#	Accidents (unintentional injuries) (V01-X59,Y85-Y86)
	Transport accidents (V01-V99,Y85)
	Motor vehicle accidents (V02-V04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5,V81.0-V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0-V88.8,V89.0,V89.2)
	Other land transport accidents (V01,V05-V06,V09.1,V09.3-V09.9,V10-V11,V15-V18,V19.3,V19.8-V19.9,V80.0-V80.2,V80.6-V80.9,V81.2-V81.9,V82.2-V82.9,V87.9,V88.9,V89.1,V89.3,V89.9)
	Water, air and space, and other and unspecified transport accidents and their sequelae (V90-V99,Y85)
	Nontransport accidents (W00-X59,Y86)
	Falls (W00-W19)
	Accidental discharge of firearms (W32-W34)
	Accidental drowning and submersion (W65-W74)
	Accidental exposure to smoke, fire, and flames (X00-X09)
	Accidental poisoning and exposure to noxious substances (X40-X49)
	Other and unspecified nontransport accidents and their sequelae (W20-W31,W35-W64,W75-W99,X10-X39,X50-X59,Y86)
#	Intentional self-harm (suicide) (*U03,X60-X84,Y87.0)
	Intentional self-harm (suicide) by discharge of firearms (X72-X74)
	Intentional self-harm (suicide) by other and unspecified means and their sequelae (*U03,X60-X71,X75-X84,Y87.0)
#	Assault (homicide) (*U01-*U02,X85-Y09,Y87.1)
	Assault (homicide) by discharge of firearms (*U01.4,X93-X95)
	Assault (homicide) by other and unspecified means and their sequelae (*U01.0-*U01.3,*U01.5-*U01.9,*U02,X85-X92,X96-Y09,Y87.1)
#	Legal intervention (Y35,Y89.0)
	Events of undetermined intent (Y10-Y34,Y87.2,Y89.9)
	Discharge of firearms, undetermined intent (Y22-Y24)
	Other and unspecified events of undetermined intent and their sequelae (Y10-Y21,Y25-Y34,Y87.2,Y89.9)
#	Operations of war and their sequelae (Y36,Y89.1)

NOTE: The causes designated by # are ranked to determine leading causes of death.

comparability ratios for each cell of the external cause matrix. Table I has been updated to reflect input from data users and replaces table I presented in the 2001 report (19).

The external cause matrix was developed as a standard framework specifically to facilitate national and international comparability in the presentation of injury mortality statistics. The two essential dimensions of the ICD external cause codes for injuries form the basis for this framework: the mechanism of the injury and the manner or intent of the injury. The mechanism describes the vector that transfers the energy to the body (e.g., fall, motor vehicle traffic accident, poisoning). The intent of the injury describes whether or not the injury was inflicted purposefully (in some cases, intent cannot be determined) and, when purposefully, whether the injury was self-inflicted (suicide or self-harm) or inflicted upon another person (homicide or assault).

### Classification of injury deaths

The external cause-of-injury mortality matrix is based on the underlying cause of death which is defined by the ICD as "(a) the disease or injury which initiated the train of morbid events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury" (11). The underlying cause is chosen from among the multiple causes based on very specific selection rules and guidelines defined by ICD. Most mortality statistics are presented based on the underlying cause because researchers need to know what precipitated the death in order to form the basis for prevention programs.

For injury deaths, the external cause rather than the injury diagnosis is always selected as the underlying cause because public health efforts are generally directed at preventing the incident that led to the death (e.g., motor vehicle traffic crash) rather than toward the injury diagnosis (e.g., skull fracture) that could result from a variety of external causes. For example, for a death resulting from a skull fracture sustained in a motor vehicle traffic crash, the underlying cause would be classified as a motor vehicle traffic crash rather than as the skull fracture.

**Table C. External cause-of-injury mortality matrix based on ICD-10**

[Figures in brackets [ ] apply to the code or range of codes preceding them. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism of death (Based on the Tenth Revision, International Classification of Diseases, 1992)	Intent of death (Based on the Tenth Revision, International Classification of Diseases, 1992)					
	All injury	Unintentional	Suicide	Homicide	Undetermined	Legal intervention/war
All injury . . . . .	*U01-*U03, V01-Y36, Y85-Y87, Y89	V01-X59, Y85-Y86	*U03, X60-X84, Y87.0	*U01-*U02, X85-Y09, Y87.1	Y10-Y34, Y87.2, Y89.9	Y35-Y36, Y89[0.,.1]
# Cut/pierce . . . . .	W25-W29, W45, X78, X99, Y28, Y35.4	W25-W29, W45	X78	X99	Y28	Y35.4
# Drowning . . . . .	W65-W74, X71, X92, Y21	W65-W74	X71	X92	Y21	...
# Fall . . . . .	W00-W19, X80, Y01, Y30	W00-W19	X80	Y01	Y30	...
# Fire/hot object or substance . . . . .	*U01.3, X00-X19, X76-X77, X97-X98, Y26-Y27, Y36.3	X00-X19	X76-X77	*U01.3, X97-X98	Y26-Y27	Y36.3
Fire/flame . . . . .	X00-X09, X76, X97, Y26	X00-X09	X76	X97	Y26	...
Hot object/substance . . . . .	X10-X19, X77, X98, Y27	X10-X19	X77	X98	Y27	...
# Firearm . . . . .	*U01.4, W32-W34, X72-X74, X93-X95, Y22-Y24, Y35.0	W32-W34	X72-X74	*U01.4, X93-X95	Y22-Y24	Y35.0
# Machinery . . . . .	W24, W30-W31	W24, W30-W31	...	...	...	...
All transport . . . . .	*U01.1, V01-V99, X82, Y03, Y32, Y36.1	V01-V99	X82	*U01.1, Y03	Y32	Y36.1
# Motor vehicle traffic . . . . .	V02-V04[.1,.9], V09.2, V12-V14[.3-.9], V19[.4-.6], V20-V28[.3-.9], V29-V79[.4-.9], V80[.3-.5], V81.1, V82.1, V83-V86[.0-.3], V87[.0-.8], V89.2	V02-V04[.1,.9], V09.2, V12-V14[.3-.9], V19[.4-.6], V20-V28[.3-.9], V29-V79[.4-.9], V80[.3-.5], V81.1, V82.1, V83-V86[.0-.3], V87[.0-.8], V89.2	...	...	...	...
Occupant . . . . .	V30-V79[.4-.9], V83-V86[.0-.3]	V30-V79[.4-.9], V83-V86[.0-.3]	...	...	...	...
Motorcyclist . . . . .	V20-V28[.3-.9], V29[.4-.9]	V20-V28[.3-.9], V29[.4-.9]	...	...	...	...
Pedal cyclist . . . . .	V12-V14[.3-.9], V19[.4-.6]	V12-V14[.3-.9], V19[.4-.6]	...	...	...	...
Pedestrian . . . . .	V02-V04[.1,.9], V09.2	V02-V04[.1,.9], V09.2	...	...	...	...
Other . . . . .	V80[.3-.5], V81.1, V82.1	V80[.3-.5], V81.1, V82.1	...	...	...	...
Unspecified . . . . .	V87[.0-.8], V89.2	V87[.0-.8], V89.2	...	...	...	...
# Pedal cyclist, other . . . . .	V10-V11, V12-V14[.0-.2], V15-V18, V19[.0-.3,.8,.9]	V10-V11, V12-V14[.0-.2], V15-V18, V19[.0-.3,.8,.9]	...	...	...	...
# Pedestrian, other . . . . .	V01, V02-V04[.0], V05, V06, V09[.0,.1,.3,.9]	V01, V02-V04[.0], V05, V06, V09[.0,.1,.3,.9]	...	...	...	...
Other land transport . . . . .	V20-V28[.0-.2], V29-V79[.0-.3], V80[.0-.2,.6-.9], V81-V82[.0,.2-.9], V83-V86[.4-.9], V87.9, V88[.0-.9], V89[.0,.1,.3,.9], X82, Y03, Y32	V20-V28[.0-.2], V29-V79[.0-.3], V80[.0-.2,.6-.9], V81-V82[.0,.2-.9], V83-V86[.4-.9], V87.9, V88[.0-.9], V89[.0,.1,.3,.9]	X82	Y03	Y32	...
Other transport . . . . .	*U01.1, V90-V99, Y36.1	V90-V99	...	*U01.1	...	Y36.1
# Natural/environmental . . . . .	W42-W43, W53-W64, W92-W99, X20-X39, X51-X57	W42-W43, W53-W64, W92-W99, X20-X39, X51-X57	...	...	...	...
# Overexertion . . . . .	X50	X50	...	...	...	...
# Poisoning . . . . .	*U01[.6-.7], X40-X49, X60-X69, X85-X90, Y10-Y19, Y35.2	X40-X49	X60-X69	*U01[.6-.7], X85-X90	Y10-Y19	Y35.2
# Struck by or against . . . . .	W20-W22, W50-W52, X79, Y00, Y04, Y29, Y35.3	W20-W22, W50-W52	X79	Y00, Y04	Y29	Y35.3
# Suffocation . . . . .	W75-W84, X70, X91, Y20	W75-W84	X70	X91	Y20	...
Other specified, classifiable . . . . .	*U01[.0,.2,.5], *U03.0, W23, W35-W41, W44, W49, W85-W91, X75, X81, X96, Y02, Y05-Y07, Y25, Y31, Y35[.1,.5], Y36[.0,.2,.4-.8], Y85	W23, W35-W41, W44, W49, W85-W91, Y85	*U03.0, X75, X81	*U01[.0,.2,.5], X96, Y02, Y05-Y07	Y25, Y31	Y35[.1,.5], Y36[.0,.2,.4-.8]
Other specified, not elsewhere classified . . . . .	*U01.8, *U02, X58, X83, Y08, Y33, Y35.6, Y86-Y87, Y89[.0-.1]	X58, Y86	X83, Y87.0	*U01.8, *U02, Y08, Y87.1	Y33, Y87.2	Y35.6, Y89[.0,.1]
Unspecified . . . . .	*U01.9, *U03.9, X59, X84, Y09, Y34, Y35.7, Y36.9, Y89.9	X59	*U03.9, X84	*U01.9, Y09	Y34, Y89.9	Y35.7, Y36.9

... Category not applicable.

NOTE: The causes designated by # are ranked to determine leading mechanisms of injury.

Information beyond the underlying cause of death is typically reported on the death certificate. In Part I of the death certificate, those responsible for certifying the cause of death are asked to provide the chain of events leading to death beginning with the condition most proximate to death (i.e., the immediate cause) and working backwards to the underlying cause. In addition, the certifier is asked to report in Part II other conditions that may have contributed to death, but were not in the causal chain. When more than one cause or condition is included, the underlying cause is determined by 1) the sequence of conditions on the certificate, 2) provisions of the ICD, and 3) associated ICD classification rules (11,20).

Although the underlying cause is the condition or circumstance that is most commonly used in the analysis of cause of death, all cause-of-death related data (up to 20 conditions) reported on the death certificate are coded and available for analysis and are referred to as multiple causes of death (20). Multiple cause-of-death tabulations in this report are based on the version of the multiple cause data that has been edited by NCHS, i.e., record axis codes. One of the most common edits is the deleting of duplicate codes. For example, if two identically-coded leg fractures are recorded on the death certificate, only one will be included in the record axis data. The unedited data are referred to as entity axis codes; these were not used in compiling this report. For more information regarding the characteristics, coding, and use of multiple cause-of-death data, including information on the record axis codes see “[Technical Notes](#).”

In the case of an injury-related death, the underlying cause of death selected is always the external cause and thus provides information about the mechanism and intent of the injury, but not about the nature of the injuries sustained. Multiple causes of death, on the other hand, include information about the injury diagnosis if reported on the death certificate. Some examples include a fracture of the leg or laceration of the arm, a burn covering multiple body sites, or the substance ingested in the case of a poisoning (20). Thus, a single injury diagnosis code is a two-dimensional cross-classification identifying the nature of the injury and the body region that was injured. Examples of SAS (a commonly used statistical tabulation and analysis computer software package) statements that can be used for the tabulation of injury diagnosis codes in the multiple cause data are included in the “[Technical Notes](#).”

Injury deaths are defined in this report as those classified with an underlying cause of death coded to one of the following ICD–10 codes: \*U01–\*U03, V01–Y36, Y85–Y87, or Y89. This code set excludes deaths with an underlying cause due to adverse effects or complications of medical and surgical care. The injury diagnosis codes in this report include ICD–10 codes S00–T75, T90–T98.1. This set of codes also excludes adverse effects and complications of medical and surgical care (ICD–10 codes T78–T88, T98.2, and T98.3). ICD–10 codes that begin with “S” or “T” are used exclusively for multiple cause classification and are never used as underlying cause codes (11,21).

## Multiple cause data and injury diagnoses

Injury mortality diagnosis data that are found in the multiple-cause fields of each record are presented using the new ICD–10 injury mortality diagnosis matrix. The injury mortality diagnosis matrix categorizes the nearly 1,200 injury diagnosis codes from ICD–10’s chapter 19 (“S” and “T” codes excluding adverse effects and

complications of medical and surgical care (T79, T80–T88, T98.3)) by body region and nature of the injury. The matrix was developed by NCHS based on a draft by Australian Richard Hockey (personal communication, December 2002) with programming assistance from the U.S. Pacific Institute for Research and Evaluation (<http://www.pire.org/centers/PSRI.asp>). The ICD–10 injury mortality diagnosis matrix is similar in structure to the Barell Injury Diagnosis Matrix (22) that categorizes ICD–9–CM injury morbidity codes by body region and nature of injury. However, the ICD–10 mortality diagnosis matrix is adapted for use with mortality data, which tend to be less detailed than morbidity data and also takes into account important changes related to the revision of the ICD classification scheme.

At its most detailed level, the ICD–10 mortality diagnosis matrix has 19 nature-of-injury categories and 43 body region categories. (See “[Technical Notes](#)” for codes and labels.) For most analyses of mortality data, similar categories can be aggregated to reduce the categories to those most meaningful for mortality. For purposes of this report, 16 nature-of-injury categories and 17 body region categories are presented. The body regions can be further combined into five groups; this is often useful for analyses using additional dimensions, such as external cause or age. (See [table II](#) in “[Technical Notes](#).”)

Multiple-cause-of-death data allow for more than one injury diagnosis code per death. In the 2001 injury mortality report (19), these data were presented in two ways: 1) counts of the total number of times an injury diagnosis category was mentioned (multiple mentions per death are allowed)—referred to as “total mentions,” or 2) the number of deaths with at least one mention of an injury diagnosis category—referred to in the report as “any mentions.” Regardless of the way the injury diagnosis codes are categorized in the matrix, the number of “total mentions” of injury diagnoses will remain the same (i.e., the number of injury diagnosis codes mentioned in the death). However, the number of “any mentions” varies depending on the level of detail used in the matrix (e.g., 5 body region categories or 17 body region categories). For example, suppose a person was fatally injured by an external cause and sustained an injury to the arm, lower leg, and foot and all three injury diagnoses were documented on the death certificate with unique diagnosis codes. If “any mentions” are counted and the analysis involves one category for extremities, only one injury diagnosis is counted. If “any mentions” are counted and the analysis involves two categories of the extremities (e.g., “upper extremities,” “lower extremities”), then two injury diagnoses would be counted (e.g., one upper extremity and one lower extremity). If “total mentions” are counted, the number of injury diagnoses is three regardless of the number of extremity categories used.

“Any mention” is useful if one is interested in describing the types of injuries sustained for any particular underlying external cause of death. For example, for deaths with an underlying cause of firearm suicide, it may be more useful to know the number of deaths involving a traumatic brain injury (TBI) than the number of specific injury diagnoses classified as TBI. A limitation of using “any mention” is that it is dependent on the level of detail used in the matrix. In addition, if “any mention” is used as the unit of analysis in the matrix, the sum of the marginals of the matrix is not necessarily equivalent to the number of deaths nor to the number of injury diagnoses on the death certificate.

One statistic that can be useful to judge the contribution of multiple injury diagnoses to specific categories of the matrix is the ratio of the number of “total mentions” to “any mention.” The ratio is

equivalent to the average number of injury diagnoses mentioned per death in the specific category. For example, the category for TBI had 51,157 persons with any mention of TBI on their death certificate and a total 66,601 mentions of TBI for a “total mention” to “any mention” ratio of 1 to 3. See [figure 13](#) for the ratio of total mentions to any mentions.

No standard methodology currently exists for selecting a main or primary injury, or for selecting the most severe injury diagnosis when more than one is listed on the death certificate. Selection guidelines are currently being developed by the Mortality Reference Group, an international committee that makes decisions on the application and interpretation of the ICD as it relates to mortality with assistance from the International Collaborative Effort (ICE) on Injury Statistics (23).

## Analysis of 1999–2002 trend data

Age- and sex-specific injury death rates by leading mechanism and by intent ([tables 17](#) and [19](#)) are examined across the four years where ICD–10 injury data are available and presented in the results in a section titled “Trends 1999–2002.” The nonparametric Thiel test (24), which is equivalent to the Kendall’s Tau statistic under the hypothesis of no trend (25), was used to discern if, over the 4 years, death rates consistently increased or decreased. The Thiel Test considers the direction of the trend but does not consider the magnitude of the year-to-year differences in rates. This nonparametric test was chosen because only 4 years of data were tested, and also because it is conservative (i.e., errs on the side of not showing a trend). If the 4 years of data showed a consistent trend (meaning that all four data points are aligned in the same direction) then the Thiel Test indicates a 2-sided “p” value of .08, which for our purposes is considered noteworthy (as opposed to the more traditional value of .05). With additional years of data, these criteria could change.

When a 4-year trend was identified by the Thiel test, the total percentage change was calculated by the percentage change between the death rate for 1999 and for 2002. Percentage change was not calculated when no 4-year trend was evident. Percentage changes were calculated based on unrounded death rates.

The reader should interpret with caution the increases in mortality for external causes of death between 2001 and 2002. At least part of the increase is likely due to new followup procedures put in place by NCHS to facilitate the more timely transmission of amended death certificates rather than real changes in mortality experience. Because injury-related deaths sometimes require lengthy investigations, the manner of death is often filed as “pending investigation,” sometimes with a tentative cause or, more commonly, with no causal information reported. When the investigation is complete, the death certificate is typically amended to include the updated or corrected cause-of-death information. If this information is not transmitted to NCHS prior to closure of the national mortality file, the updated information will not be included in national mortality statistics and the cause is classified as “unknown” (ICD–10 code R99) in the cases where no causal information is reported, or is left as is if a tentative cause was reported. In previous years (2000 and 2001, in particular), because of pressures related to the transition to ICD–10, the proportion of deaths with a cause pending investigation was substantially higher than in earlier years. In 2002, due to the procedural change, transmission of amendments was much more timely and, as a result, fewer death certificates remained

pending investigation when the national mortality data file was closed. Between 2001 and 2002, the number of death certificates that remained with cause of death pending investigation decreased 60 percent (from 10,504 to 6,559). These new procedures have affected some States more than others. For example, in California (which accounted for 55.5 percent of all pending certificates in 2001), the number of certificates with cause of death pending investigation dropped 92 percent from 5,825 in 2001 to 493 in 2002.

Some causes of death are more likely to be initially filed as “pending investigation.” For example, poisoning deaths, because investigations into such deaths tend to be lengthy, are often filed with the cause pending investigation (26). In addition, regardless of the mechanism of injury, homicides and suicides also tend to have more lengthy investigations. As a result in 2001, before the new procedures were implemented, the number of deaths for these causes may be artificially low. In 2002, the number of deaths should better reflect mortality experience for these causes. Bearing this in mind, we do not discuss changes in the injury death rates from 2001–2002. Some tables do include the crude or age-adjusted or age-specific rates and users are cautioned not to “over” interpret changes.

## Results

In 2002, 161,269 resident deaths occurred as the result of injuries ([tables D](#) and [1](#)), a rate of 55.9 deaths per 100,000 population. The age-adjusted death rate for all injuries in 2002 was 55.7 deaths per 100,000 U.S. standard population ([table D](#)).

### Age and sex

Injury mortality in 2002 has three different age-specific patterns ([figure 1](#) and [tables 14](#) and [15](#)). The first is for the population under 18 years of age. The distribution is “U”-shaped with rates nearly as high for infants (33.5 deaths per 100,000 population) as for those 16 years of age (43.6 per 100,000). Within this group, the injury death rates ranged from lows of 6.3 per 100,000 for children 7 years old to 53.1 per 100,000 for teenagers 17 years of age.

The second age group, persons 18–74 years of age, has a long “W”-shaped distribution, with relatively high death rates at both ends of the range (76.1 at 21 years and 74.2 at 74 years of age), low rates at ages 32 and 60 (51.4 and 47.1 per 100,000, respectively), and a moderately high death rate roughly midway between the two ends of the distribution (67.9 per 100,000 at age 41).

The third age group, persons 75 years of age and over, had the highest injury death rates. The rates within this group increased steadily with age ([figure 1](#)). The death rate for people 75 years old was 86.1 deaths per 100,000 population. The death rate for people aged 85 years and over is the highest of any age at 296.9.

Death rates for males were higher than rates for females at each year of age ([figure 2](#)). Among infants and children under 12 years of age, injury death rates for males were less than twice the rates for females. From ages 12 through 17 years, the mortality sex ratio, which is the ratio of the rate for males to the rate for females, hovered around a value of 2.0. After the age of 17 and until the age of 23, the mortality sex ratio increases dramatically to 4.6 (highest value). After age 23, the sex ratio decreases until around age 39. The mortality sex ratio then remains moderately stable between 2.5 and 3 times the female rate

**Table D. Injury deaths, percentage of total injury deaths, death rates, and age-adjusted death rates for 2002**

[Figures in brackets [ ] apply to the code or range of codes preceding them. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Cause of death (Based on the <i>Tenth Revision, International Classification of Diseases, 1992</i> )	Number	Percent	Death rate	Age-adjusted death rate
All injury . . . . (*U01–*U03,V01–Y36,Y85–Y87,Y89)	161,269	100.0	55.9	55.7
Unintentional . . . . . (V01–X59,Y85–Y86)	106,742	66.2	37.0	36.9
Suicide . . . . . (*U03,X60–X84,Y87.0)	31,655	19.6	11.0	10.9
Homicide . . . . . (*U01–*U02,X85–Y09,Y87.1)	17,638	10.9	6.1	6.1
Undetermined . . . . . (Y10–Y34,Y87.2,Y89.9)	4,830	3.0	1.7	1.7
Legal intervention/war . . . . (Y35–Y36,Y89[.0,.1])	404	0.3	0.1	0.1

until age 70, when the sex ratio exhibits a generally decreasing trend until it reaches 1.6 times the female rate for ages 85 years and more.

### Race, ethnicity, and sex

The age-adjusted injury death rates were highest for the American Indian or Alaska Native (AIAN) (74.3 per 100,000) and for the non-Hispanic black populations (67.0 per 100,000) and lowest for the Asian or Pacific Islander (API) (26.7 per 100,000) population (tables 12 and 13). Age-adjusted injury death rates for non-Hispanic black males and Hispanic males were over three times the rates for females in these groups. The age-adjusted rates for non-Hispanic white males, API males, and AIAN males were approximately twice the rates for females in these groups.

### Mechanism and intent of injury

In 2002, 66.2 percent of injury deaths were classified as unintentional, 19.6 percent as suicides, 10.9 percent as homicides, 3.0 percent as of undetermined intent, and 0.3 percent as due to legal intervention as indicated by the intent-of-injury axis of the external-cause-of-injury matrix (table D). The five leading mechanisms of injury were: 1) motor vehicle traffic (MVT)- related injuries, accounting for 27.3 percent of all injury deaths; 2) firearms, accounting for 18.8 percent; 3) poisoning, accounting for 16.4 percent; 4) falls, accounting for 10.6 percent; and 5) suffocation, accounting for 7.9 percent (table E). Procedures for ranking leading mechanisms are discussed in "Technical Notes." All other mechanisms combined accounted for 19 percent of injury deaths.

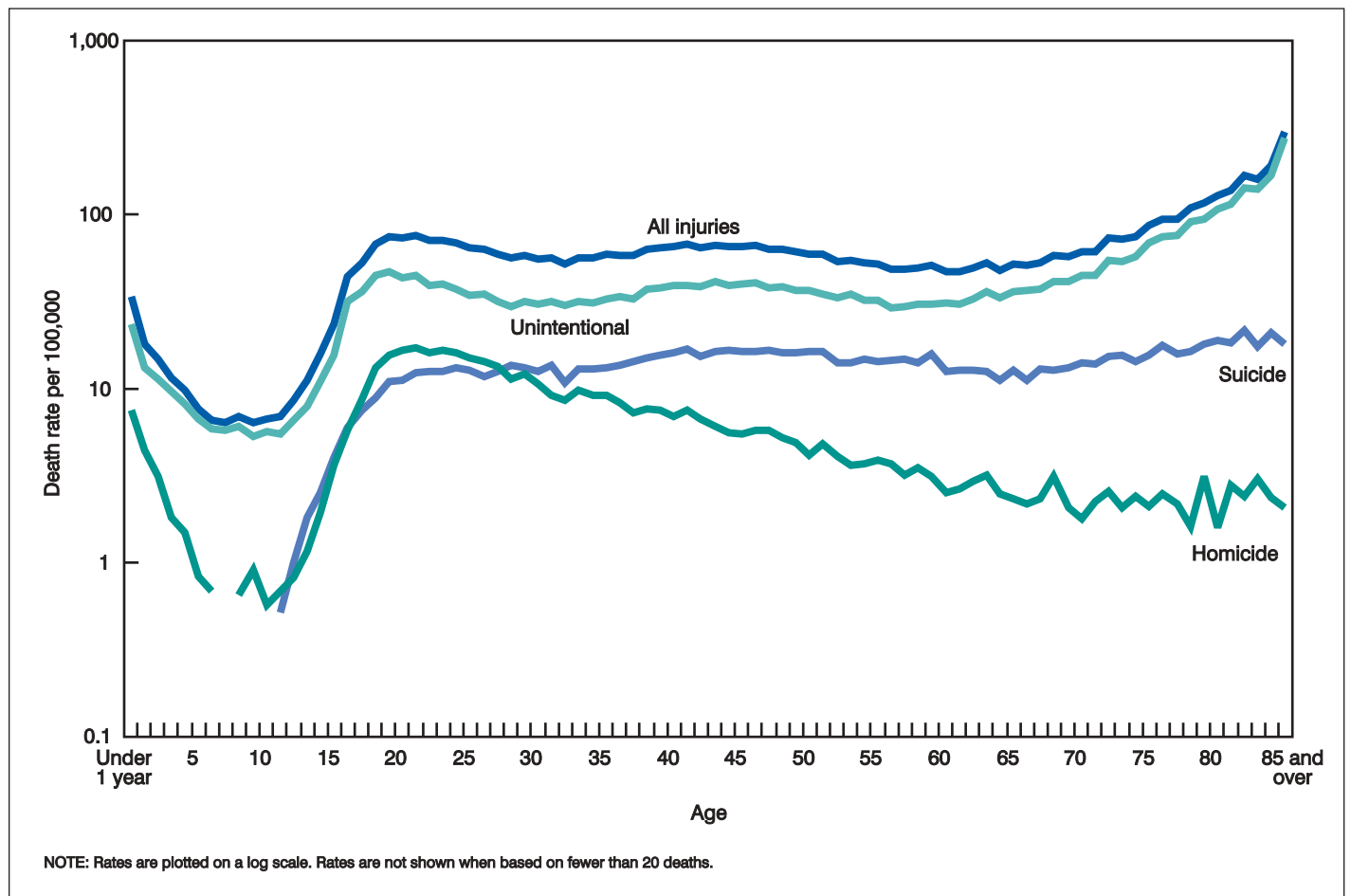
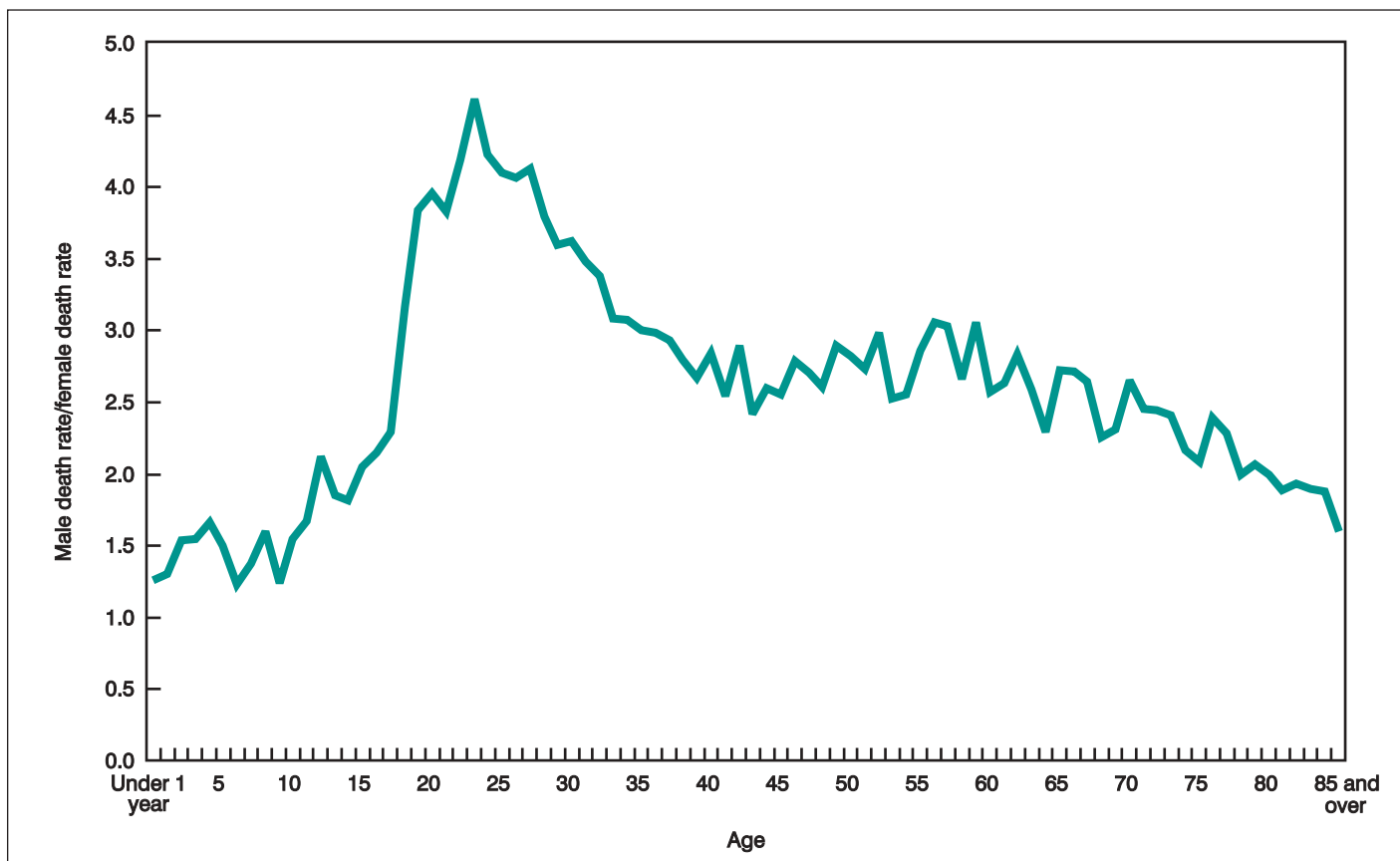


Figure 1. Injury death rates by intent of injury and single years of age: United States, 2002



**Figure 2. Ratios of male to female injury death rates by single years of age: United States, 2002**

In 2002, the three leading intent by mechanism categories were unintentional poisoning (10.9 percent of injury deaths), firearm suicides (10.6 percent of all injury deaths), and unintentional falls (10.1 percent of all injury deaths) (table F). The sections of this report that follow are written by intent of injury, by mechanism of injury, and by the grouping of one by the other (intent by mechanism as well as mechanism by intent).

### Intent of injury death by age and sex

For all ages, age-specific unintentional injury death rates are higher than suicide or homicide rates (figure 1 and tables 5 and 15). Ranking of homicide and suicide rates, on the other hand, fluctuates for ages under 30 years. For children under age 11 years, suicide rates are not statistically reliable; at ages 12–16 years, rates for suicide exceed rates for homicide; at ages 17–27 years homicide rates are higher than suicide rates with the largest differences at

**Table E. Injury deaths, percentage of total injury deaths, death rates, and age-adjusted death rates for 2002 for the five leading mechanisms of injury death: United States, 2002**

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Rank <sup>1</sup>	Mechanism of injury death (Based on the <i>Tenth Revision, International Classification of Diseases, 1992</i> )	Number	Percent	Death rate	Age-adjusted death rate
...	All injury . . . . . (*U01–*U03,V01–Y36,Y85–Y87,Y89)	161,269	100.0	55.9	55.7
1	Motor vehicle traffic . . . . . (V02–V04[.1,.9],V09.2,V12–V14 [.3–.9],V19[.4–.6],V20–V28[.3–.9],V29–V79 [.4–.9],V80[.3–.5],V81.1,V82.1, V83–V86[.0–.3],V87[.0–.8],V89.2)	44,065	27.3	15.3	15.2
2	Firearm . . . . . (*U01.4,W32–W34,X72–X74, X93–X95,Y22–Y24,Y35.0)	30,242	18.8	10.5	10.4
3	Poisoning . . . . . (*U01[.6–.7],X40–X49,X60–X69, X85–X90,Y10–Y19,Y35.2)	26,435	16.4	9.2	9.2
4	Fall . . . . . (W00–W19,X80,Y01,Y30)	17,116	10.6	5.9	5.9
5	Suffocation . . . . . (W75–W84,X70,X91,Y20)	12,791	7.9	4.4	4.4

... Category not applicable.

<sup>1</sup>Rank based on number of deaths; see "Technical Notes."



**Table F. Injury deaths and percentage of total injury deaths by leading mechanisms of injury and intent, 2002**

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Figures in brackets [ ] apply to the code or range of codes preceding them. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism of injury	Intent of injury											
	All injury		Unintentional (V01–X59, Y85–Y86)		Suicide (*U03,X60– X84,Y87.0)		Homicide (*U01–*U02, X85–Y09, Y87.1)		Undetermined (Y10–Y34, Y87.2,Y89.9)		Legal intervention/ war (Y35–Y36, Y89[.0,.1])	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All injury . . . . . (*U01–*U03,V01–Y36, Y85–Y87,Y89)	161,269	100.0	106,742	66.2	31,655	19.6	17,638	10.9	4,830	3.0	404	0.3
Motor vehicle traffic . . . . . (V02–V04[.1,.9],V09.2,V12–V14 [.3–.9],V19[.4–.6],V20–V28[.3–.9],V29–V79 [.4–.9],V80[.3–.5],V81.1,V82.1, V83– V86[.0–.3],V87[.0–.8],V89.2)	44,065	27.3	44,065	27.3	...	...	...	...	...	...	...	...
Firearm . . . . . (*U01.4,W32–W34,X72–X74, X93–X95,Y22–Y24,Y35.0)	30,242	18.8	762	0.5	17,108	10.6	11,829	7.3	243	0.2	300	0.2
Poisoning . . . . . (*U01[.6–.7],X40–X49,X60–X69, X85–X90,Y10–Y19,Y35.2)	26,435	16.4	17,550	10.9	5,486	3.4	63	0.0	3,336	2.1	–	0.0
Fall . . . . . (W00–W19,X80,Y01,Y30)	17,116	10.6	16,257	10.1	740	0.5	16	0.0	103	0.1	...	...
Suffocation . . . . . (W75–W84,X70,X91,Y20)	12,791	7.9	5,517	3.4	6,462	4.0	679	0.4	133	0.1	...	...
All other . . . . . (residual)	30,620	19.0	22,591	14.0	1,859	1.2	5,051	3.1	1,015	0.6	104	0.1

... Category not applicable.

– Quantity zero.0.0 Quantity more than zero but less than 0.05.

ages 18–21 years; and from age 28 years onwards, suicide rates exceed homicide rates and the magnitude of the difference generally increases with age.

Unintentional injury death rates were distributed by age in a pattern similar to the overall injury death rates (figure 1 and table 15). The distribution for those under 18 years of age was "U"-shaped with rates nearly as high for infants (23.5 deaths per 100,000 population) as for those 16 years of age (31.5 per 100,000); death rates were lowest for children 6–12 years with rates ranging between 5.8–6.6 per 100,000. Those aged 18–70 years of age had rates ranging from a low of 29.0 per 100,000 at age 56 years to 47.0 per 100,000 at age 19 years. This age range of 18–70 years shows, upon close inspection, a "W"-shaped pattern with an interim spike at age 43 (40.8 deaths per 100,000). Those aged 71 years and over had the highest unintentional injury death rates ranging from 44.9 per 100,000 at age 71 years to 275.4 per 100,000 for those 85 years and over. The unintentional injury death rates for males 18–64 years were 2.0 to 3.8 times the rates for females (at ages 64 and 23, respectively).

Suicide rates by age increased rapidly from 0.5 per 100,000 population at age 11 years to 13.2 per 100,000 at age 24 years. The rate showed relatively small changes from ages 25 to 68 years (12.7–12.6 per 100,000) (figure 1 and table 15). Among those aged 70 years and over, suicide rates ranged from 13.7 at 71 years to 21.6 per 100,000 population at 82 years. In the age group of 70 years and over, the largest difference in suicide rates between sexes was observed, with rates for males 6 to 13 times the rates for females.

Homicide rates for ages under 18 years were "U"-shaped with rates comparable for infants (7.5 per 100,000) and for those 17 years of age (8.7 per 100,000). Homicide rates rapidly increased after age 13 and reached a peak at 21 years (17.1 per 100,000). After that peak, the death rate generally decreased with age until a stretch of relative stability was reached at around age 60. The homicide rate at age 60 years and over was relatively steady and averaged 2.5 deaths per 100,000 population. Male homicide rates were higher than rates for

females. After the age of 76 there were relatively few homicides reported for either sex and the rates become relatively unstable. The largest difference in homicide rates between the sexes was for those 18–23 years of age with rates for males 6 to 7 times the rate for females.

*Race and ethnicity by intent*—For the non-Hispanic white and American Indian or Alaska Native (AIAN) populations, unintentional injury deaths accounted for 69.1 and 69.7 percent of all injury deaths, respectively (tables 8, 9). For the non-Hispanic black population, unintentional injuries accounted for 53.0 percent of injury deaths. In 2002 the AIAN population had the highest age-adjusted unintentional injury death rate at 53.8 per 100,000 standard population and the Asian or Pacific Islander (API) population had the lowest rate (17.9).

Suicides accounted for 22.9 and 22.0 percent of all injury deaths for the non-Hispanic white and API populations, respectively (tables 8 and 9). For the non-Hispanic black population, suicides accounted for only 8.2 percent of all injury deaths. The non-Hispanic white population showed the highest age-adjusted suicide rate (12.9). The non-Hispanic black, Hispanic, and API populations (5.4–5.7) had similar suicide rates and these were less than half the rate for the non-Hispanic white population. The AIAN population had the second highest rate of suicide (10.2).

For the non-Hispanic black population, homicides accounted for 35.1 percent of all injury deaths (table 9). In contrast, for the AIAN and non-Hispanic white populations, homicides were 12.5 and 4.8 percent, respectively, of all injury deaths. The highest age-adjusted homicide rate was for the non-Hispanic black population (21.6), more than 7 times the rates for the non-Hispanic white and API populations and about 2.5 times that for the AIAN and Hispanic populations.

## Mechanism of injury death

*Leading mechanisms*—In 2002, MVT-related injuries were the leading cause of injury death, accounting for 27.3 percent of all injury deaths. Firearm-related deaths were the second leading cause in

2002, accounting for 18.8 percent of all injury deaths. Firearm suicide and firearm homicide accounted for 57.0 and 39.1 percent, respectively, of all firearm injury deaths in 2002. Poisoning was the third leading cause of injury death, accounting for 16.4 percent of all injury deaths. The majority of poisoning deaths were either unintentional (66.4 percent) or suicides (20.8 percent). However, poisonings of undetermined intent also comprised a substantial proportion (12.6 percent) of poisoning deaths. Falls accounted for 10.6 percent of all injury deaths. The overwhelming majority (95.0 percent) of fall-related deaths were unintentional. Suffocation accounted for 7.9 percent of total injury deaths. Close to 94 percent of all deaths involving suffocation were either suicides (50.5 percent) or unintentional (43.1 percent).

*Intent of injury deaths and leading mechanisms by age*—The leading mechanisms of unintentional injury in 2002 were MVT-related injuries (41.3 percent), poisoning (16.4 percent), and falls (15.2 percent). The leading mechanisms varied by age group (table 2):

- Suffocation was the leading mechanism of unintentional injury death among infants (more than two-thirds of all unintentional injury deaths among infants occurred through suffocation).
- MVT-related injuries were the leading mechanism of unintentional injury deaths among those in age groups 1–4 years to 65–74 years of age. MVT-related injuries were the second and third leading mechanisms of unintentional injury deaths among those age 75–84 and 85 years and over, respectively.
- Drowning was the second leading mechanism of unintentional injury deaths among 1–4 year olds (27.7 percent) and 5–14 year olds (11.8 percent).
- Poisonings were the second leading mechanism of unintentional injury deaths among age groups 15–24 years to 55–64 years of age.
- Falls were the leading mechanism of unintentional injury deaths among those aged 75–84 years and 85 years and over. Falls were the second leading mechanism of unintentional injury deaths among 65–74 year olds.

The leading mechanisms of suicide were firearms (54.1 percent), suffocation (20.4 percent), and poisoning (17.3 percent), and they varied by age group (table 2):

- Firearms were the leading mechanism of suicide among people 15 years of age and over. Firearms accounted for about half of all suicides for age groups 15–24 to 45–54 years, and for over 70 percent of all suicides among people 65–74 and 75–84 years of age. They were the second leading mechanism among those 10–14 years of age.
- Suffocation was the leading mechanism of suicide among those 10–14 years of age and was the second leading mechanism among those 15–24 and 25–34 years of age.
- Poisoning and suffocation were the second and third leading mechanisms of suicide among those aged 35–44, 45–54, 55–64, 65–74, and 75–84 years.
- Suffocation and poisoning were the second and third leading mechanisms of suicide among those aged 85 years or more.

In 2002, the leading mechanisms of homicide were firearms (67.1 percent) and cut/pierce (11.8 percent). The leading mechanisms of homicide varied by age group:

- Firearms were the leading specified mechanism of homicide among all age groups except infants.
- Suffocation was the leading specified mechanism among infants and accounted for 11 percent of the homicides.
- Excluding “other specified” mechanisms, the mechanism of the homicide was not specified on the death certificate in more than a third of the deaths among infants and those aged 1–4 years, and in about a fifth of the homicides among people 65 years of age and over. (See “Unspecified cause and undetermined intent.”)

*Mechanisms of injury death by single year of age*—For each single year of age in the population that is 12 years of age and younger, the death rates for motor vehicle traffic-related injuries are consistently 3–4 per 100,000 population, with more than 100 deaths occurring at each single year (figure 3). Firearm deaths in this age group are rare; for ages 8 and younger, fewer than 20 deaths occur at each single age (hence a rate is not calculated). Firearm and poisoning death rates for children under 12 years of age are low (fewer than 1 per 100,000). It is not until the age of 14 years that the number of poisoning deaths exceeds 20 at any single year of age.

Between adolescence and early adulthood, very distinct patterns emerge for both MVT-related injury and firearm fatalities. Death rates for both mechanisms rise very quickly and then decline (figure 3). The MVT-related injury death rate at the age of 19 years was 10 times the rate at the age of 12 years (34.8 compared with 3.4 per 100,000 population). Between the ages of 15 and 16 years, the MVT-related injury death rate more than doubled from 11 to 25 per 100,000; by ages 25–26 years, the rate had fallen back to 21 per 100,000. Similarly, the firearm death rate nearly quadruples between the ages of 15 and 19 years (from 5.1 to 19.5 per 100,000). The rate then remains relatively unchanged through the age of 25 years. By the early thirties the firearm death rate was as low as it was at the age of 17 years. From ages 25–28 years MVT-related injury and firearm death rates are similar.

From the mid-thirties until the early sixties, death rates for both causes do not change (compared with patterns at younger and older ages) and rates for MVT-related injury are generally 20 to 40 percent higher than rates for firearm deaths.

Because MVT-related injury death rates rise quite rapidly after the age of 65 years, the MVT-related injury death rates are one and a half to nearly two times the firearm death rates for these ages. The MVT-related injury death rates for those in their eighties are as high as those 16–17 years of age.

Although firearm death rates rise more slowly with increasing age, the rates for persons at the oldest ages (15–16 per 100,000) are similar to those for teenagers (16–17 years of age).

Like MVT-related injury and firearm death rates, the poisoning death rate rises rapidly among teenagers from 0.6 per 100,000 at age 14 years to 7.0 per 100,000 at the age of 19 years. Unlike the two leading mechanisms, however, the rise in poisoning death rates continues, although not as precipitously, until the ages of 41 through 46 years when the rates peak at 21–23 per 100,000 population. In fact, from the ages of 35 to 51 years, poisoning is the leading cause of injury death (figure 3). The decline in the age-specific rates begins at the age of 49 years and continues until the age of 60 years before beginning to level off. For those 65 years of age and over, poisoning death rates are considerably lower than firearm death rates.

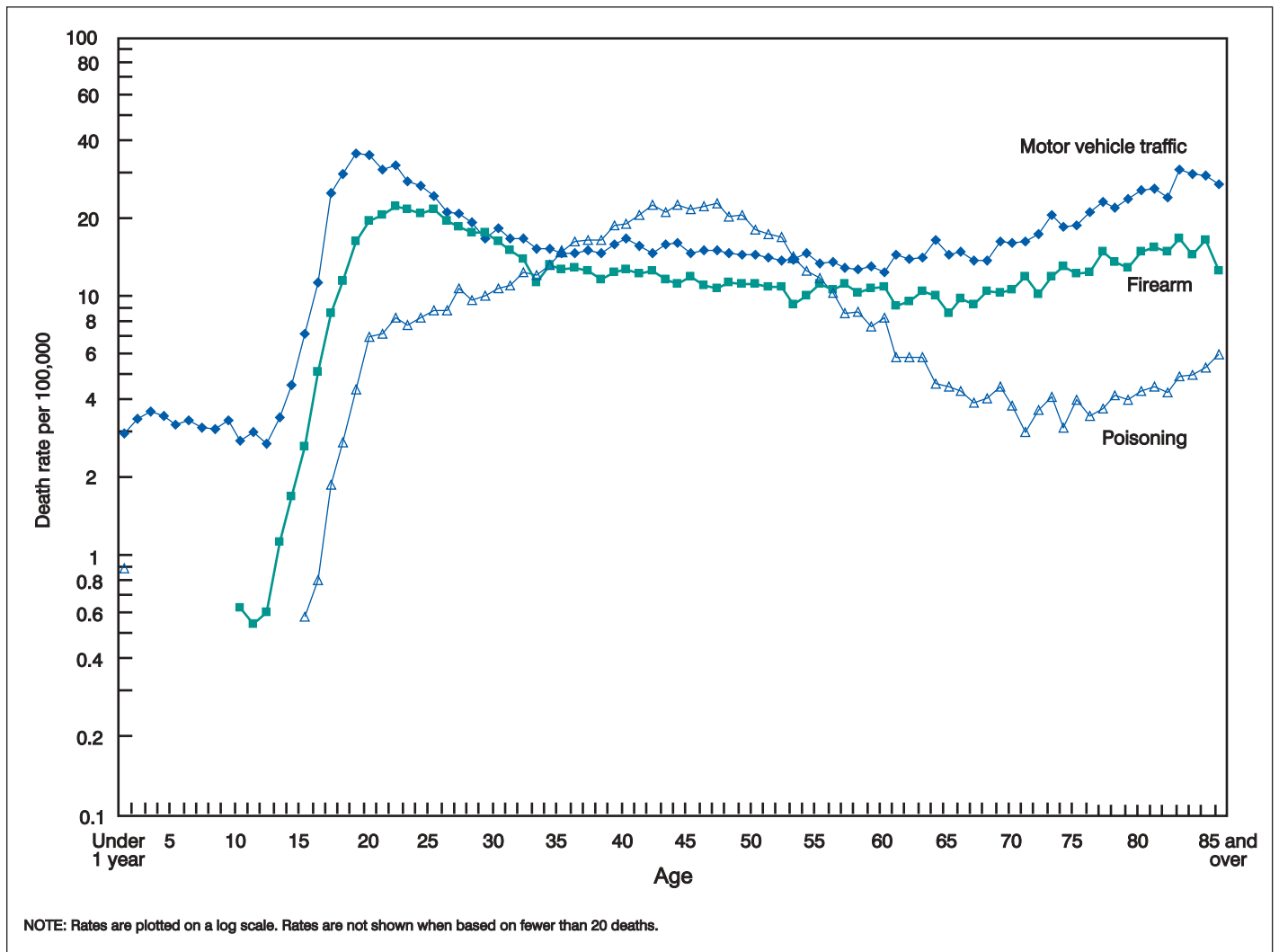


Figure 3. Injury death rates for leading mechanisms of injury by single years of age: United States, 2002

#### Under 20 years of age (figure 4)

- Suffocation is the leading cause of injury death among infants at a rate of 17.9 per 100,000, six times the rate for MVT-related injury and nine times the rate for drowning (3 and 2 per 100,000 respectively), the next two leading causes of injury death in infancy. See “[Technical Notes](#)” for an explanation on the difference between the infant death rate (based on population estimates) and the infant mortality rate (based on live births).
- At the age of 1 year drowning is the leading cause of injury death, with a rate 1.4 and 2.0 times the rates for MVT-related injury and suffocation, respectively.
- At age 2 years, MVT-related injury and drowning death rates are the same (3.6 per 100,000), with death by exposure to smoke, fire, flames, heat or hot substances (“fire/hot”) a more distant third.
- Beginning at the age of 3 years MVT-related injury becomes the leading cause of injury death at a rate of 3.5 per 100,000 while deaths from fire/hot objects and drowning are the second and third leading causes of injury death with rates of 2.1 and 2.0 per 100,000, respectively. For ages 3–8 years drowning and fire/hot remain as either the second or third leading causes of injury death.

- By the age of 10 years deaths from firearms and suffocation have increased so that these causes, along with fire/hot and drowning, share rankings of either second, third, fourth, or fifth.
- The death rate for suffocation begins a rapid increase such that the rate at the age of 15 is 4.5 times the rate at the age of 10 years.
- Beginning with the age of 12 and until the age of 27 years, MVT-related injuries and firearms are consistently the first and second leading causes, respectively. Suffocation ranks third at ages 15–17 and its rate is similar to the rate for poisoning at age 18.
- At age 19, poisoning becomes the third leading cause and remains such until the age of 31 (the age after which it starts ranking higher).

#### Ages 60 and over (figure 5):

- For ages 60–62 MVT-related injuries, firearms, and poisoning are the first, second, and third causes of injury death, respectively.
- Beginning at the age of 63, the number of deaths from falls begins to exceed those from poisoning.

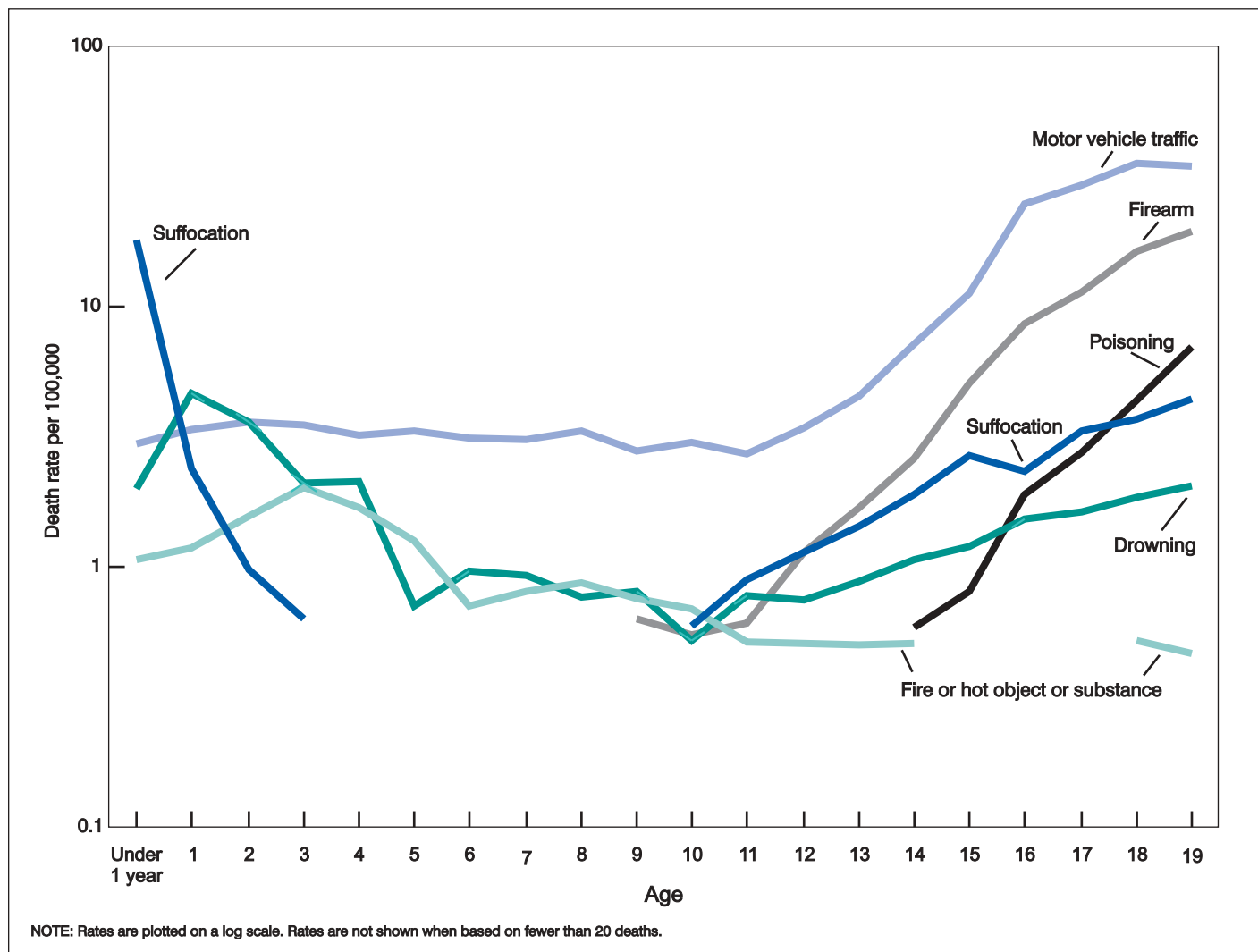


Figure 4. Injury death rates for leading mechanisms of injury by single years of age among persons under 20 years of age: United States, 2002

- At the age of 70 the death rate for falls is similar to that from firearms and continues to rise with age more rapidly than other causes.
- By the age of 75 death rates for MVT-related injuries and falls are the same and, beginning at age 77 years, falls become the single leading cause of injury death. By the age of 81 the death rate for falls is twice the MVT-related injuries death rate.
- Beginning at the age of 75 the death rate for suffocation starts to increase. By the early eighties suffocation rates are similar to those for firearms and at ages 85 and over the death rate exceeds that for MVT-related injuries.

## Leading mechanisms by intent and age

### Firearm by intent (figure 6)

Firearm homicide and firearm suicide, accounting together for 96 percent of all firearm-related deaths, have very different age distributions. The peak in the overall firearm death rate for those in their early twenties is largely a function of the firearm homicide rate while the gradual increase among the elderly largely results from the

rising rates of firearm suicide. Firearm-related death rates for these two intent categories cross each other at the age of 35 years. The homicide rate declines rapidly after the age of 35. The suicide rate begins to rise rapidly at the mid-to-late sixties.

### Poisoning by intent (figure 7)

Most poisoning deaths are classified as unintentional (66.4 percent). Suicide and deaths of undetermined intent accounted for 20.8 and 12.6 percent of poisoning deaths, respectively (tables G and 1). The highest age-specific poisoning death rates are for those in their late thirties through early fifties (figure 3). Death rates for unintentional poisoning are considerably higher than for suicide or for poisoning of undetermined intent from late teens through the late fifties (figure 7). The substances involved in the unintentional poisonings are predominantly drugs and, of these drugs, the largest contributor is narcotics. (See more detail on poisoning deaths in the following text.)

### Suffocation by intent (figure 8)

Death rates for suffocation follow two distinct patterns: deaths among those 12 years of age and younger and among those 65

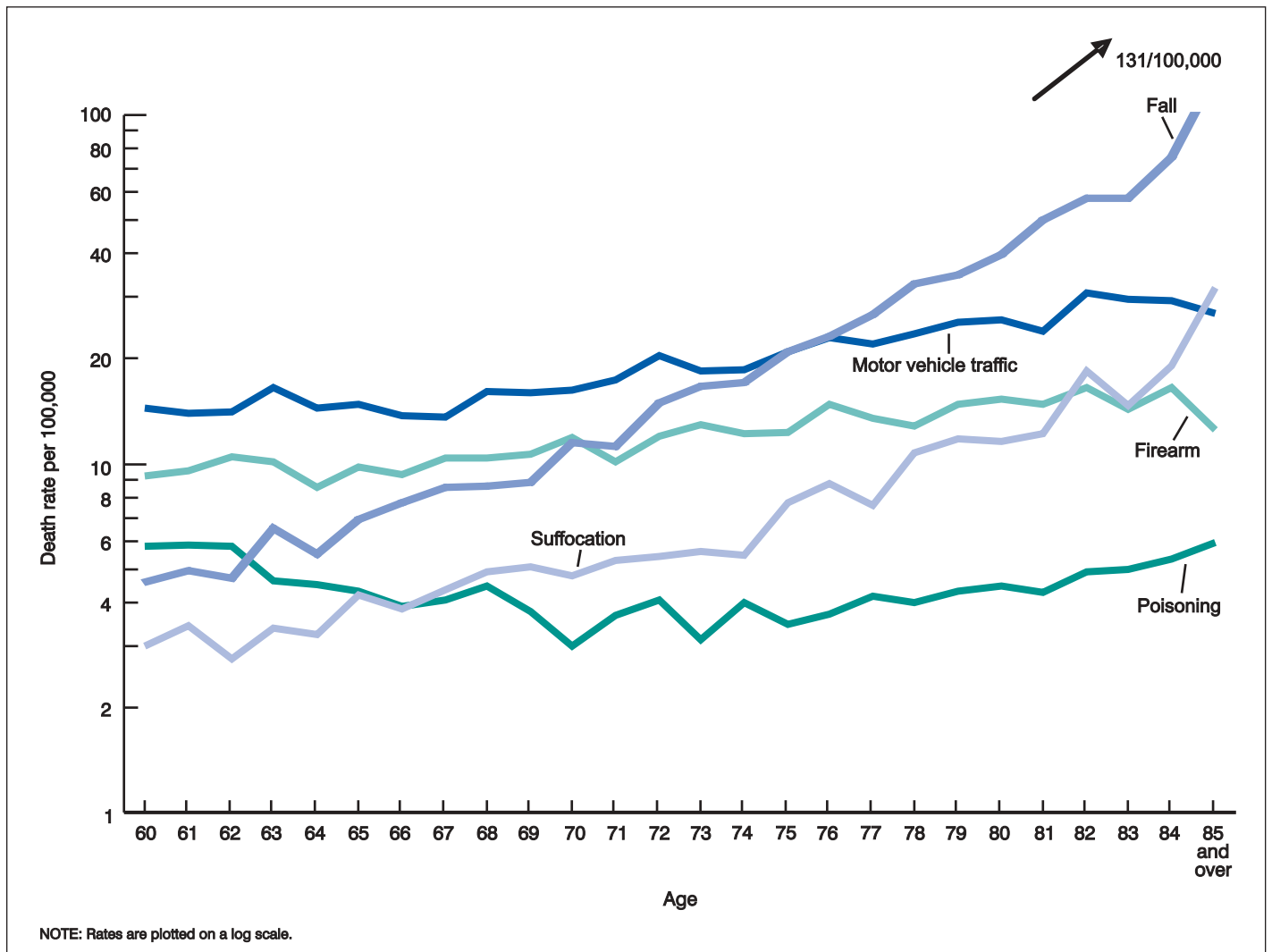


Figure 5. Injury death rates for leading mechanisms of injury by single years of age among persons 60 years of age and over: United States, 2002

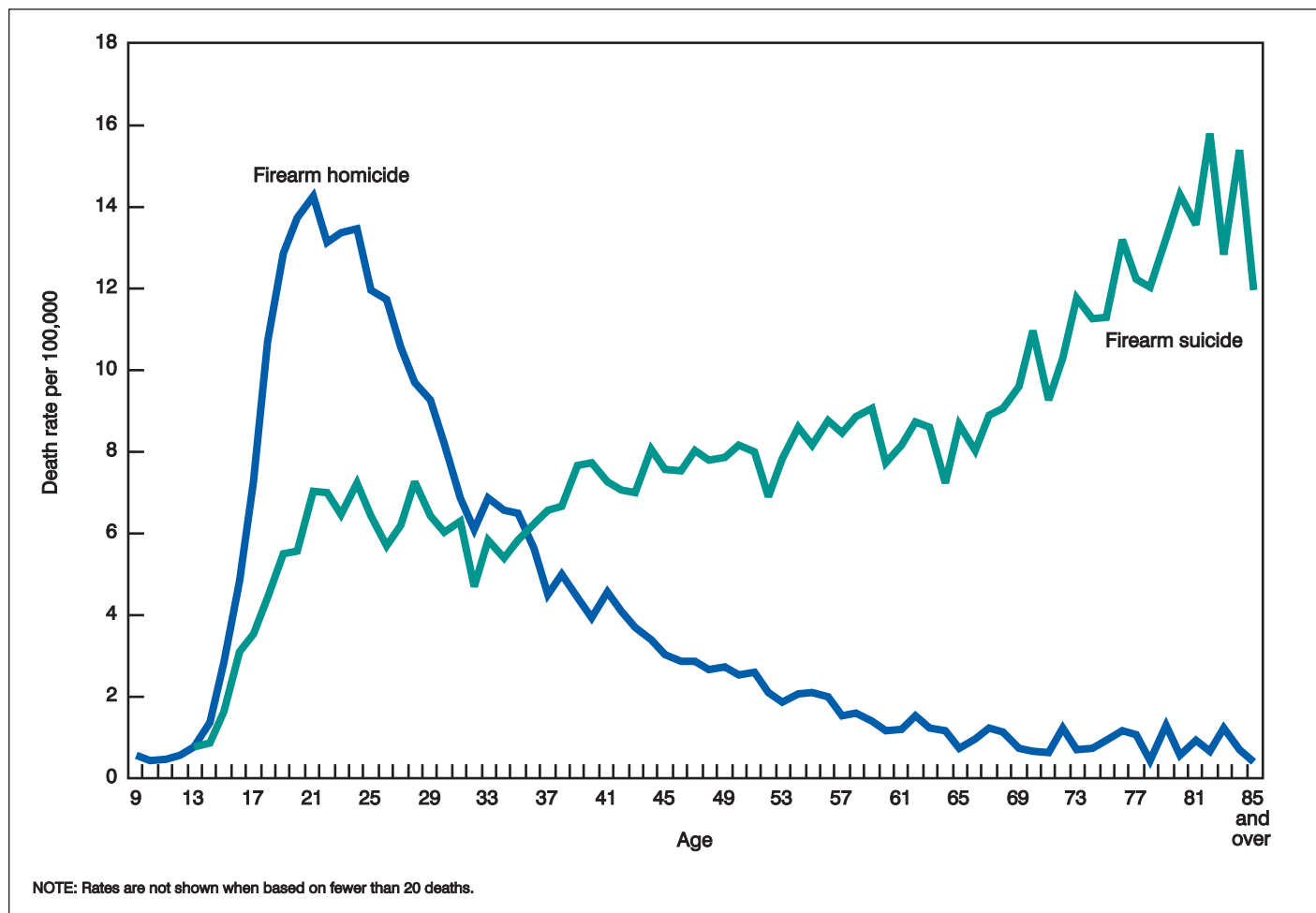
years and over are primarily classified as unintentional; between these ages, the suffocation deaths are usually classified as suicides.

*Leading mechanisms by race, ethnicity, and sex*—Race and ethnic differences in injury mortality vary by sex, mechanism, and intent of injury. Tables 8–13 and figure 9 show injury deaths, death rates, and age-adjusted death rates by race, Hispanic origin, and sex for the United States in 2002. Figure 9 shows the percent distribution of the leading mechanisms of injury death by race or ethnicity and sex for 2002 (see also tables 8 and 9).

MVT-related injuries was the leading mechanism of injury deaths for all specific sex, race, and Hispanic origin categories (non-Hispanic white, Hispanic, AIAN and API males and females, and non-Hispanic black females) except for non-Hispanic black males, among whom MVT-related injuries was the second leading mechanism. The age-adjusted death rate for MVT-related injuries was highest for the AIAN population (28.1 per 100,000 U.S. standard population) and lowest for the API population (8.2 per 100,000) (table 12). Age-adjusted death rates for MVT-related injuries for the Hispanic, non-Hispanic white, and non-Hispanic black populations were similar, ranging from 14.9 (Hispanic) to 15.4 (non-Hispanic white) (table 13). Age-adjusted MVT-related injuries death rates for AIAN males were about 1.8 times the

rates for non-Hispanic black, Hispanic, and non-Hispanic white males. AIAN MVT-related injuries death rates for females were about twice the rates for non-Hispanic white, non-Hispanic black and Hispanic females. Rates for AIAN males and females were more than three times the respective rates for API males and females.

Firearm injury was the leading mechanism of injury death for non-Hispanic black males, accounting for 38.4 percent of injury deaths among this group. It was the second leading mechanism for Hispanic, non-Hispanic white, AIAN, and API males; the third leading mechanism for Hispanic, non-Hispanic black, and AIAN females; and the fifth leading mechanism for API and non-Hispanic white females (figure 9). The age-adjusted death rate for firearm injuries was highest for the non-Hispanic black population (19.8 per 100,000 U.S. standard population) and lowest for the API population (3.2 per 100,000) (tables 12 and 13). Age-adjusted firearm death rates for non-Hispanic black males were between two and three times the rates for non-Hispanic white, Hispanic, and AIAN males. The rate for non-Hispanic black males was close to seven times the rate for API males. Rates for non-Hispanic black females were between 1.4 and 2.6 times the rates for non-Hispanic white, Hispanic, and AIAN females. The rate of firearm injury deaths for non-Hispanic black females was four times that of API



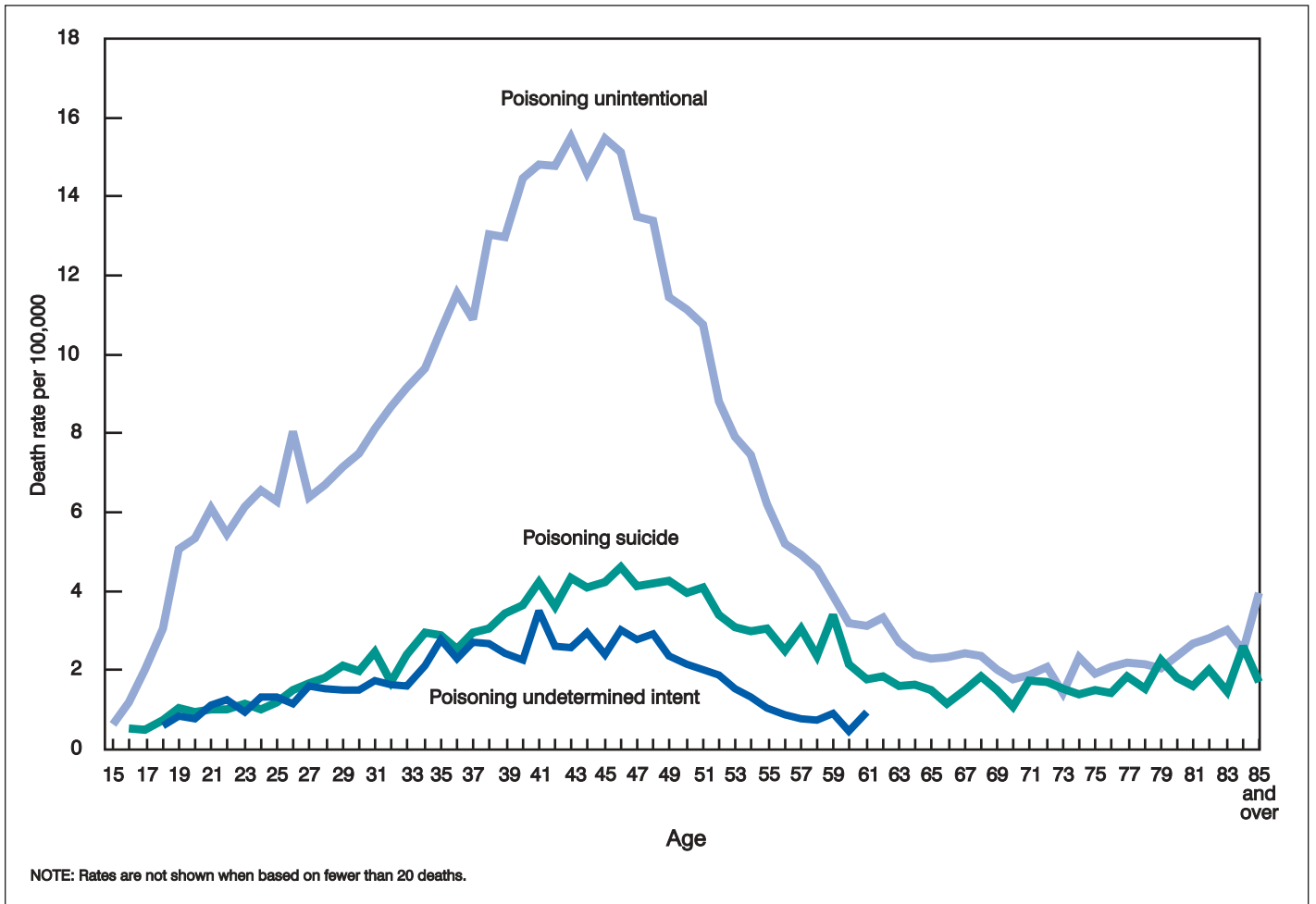
**Figure 6. Death rates for firearm-related injuries and intent of injury by single years of age for ages 9 years and over: United States, 2002**

females. For the non-Hispanic white and AIAN populations, the majority of firearm deaths were suicides; for the non-Hispanic black, API, and Hispanic populations, most firearm deaths were homicides.

Poisoning was the second leading mechanism of injury death for Hispanic, non-Hispanic black, non-Hispanic white, and AIAN females; the third leading mechanism for Hispanic, non-Hispanic black, non-Hispanic white, and AIAN males; the fourth leading mechanism for API females; and the fifth leading mechanism for API males (figure 9, tables 8 and 9). The age-adjusted death rate for poisoning was highest for the non-Hispanic white and non-Hispanic black populations (10.3 and 8.9 per 100,000 U.S. standard population, respectively) (tables 12 and 13). AIAN, Hispanic, and API populations had poisoning age-adjusted death rates of 8.7, 5.8, and 1.8 deaths per 100,000 U.S. standard population, respectively. For females, death rates were higher for the non-Hispanic white and AIAN populations (7.2 and 6.5 per 100,000 U.S. standard population, respectively); for males death rates were higher for the non-Hispanic white and non-Hispanic black populations (13.4 and 12.9 per 100,000 U.S. standard population, respectively). The API population had the lowest poisoning death rates for both sexes separately. For each group a clear majority of poisoning deaths were classified as unintentional, except for the API population where proportions classified as "unintentional" and "suicides" were not as different.

Falls were the second leading mechanism of injury death for API females, the third leading mechanism for non-Hispanic white females, the fourth leading mechanism for Hispanic and AIAN females and for API and non-Hispanic white males. Falls were the fifth leading mechanism for Hispanic and AIAN males, and the sixth and seventh leading mechanism for non-Hispanic black females and males, respectively. The age-adjusted death rate for falls was highest for the non-Hispanic white and AIAN populations (6.2 and 5.6 per 100,000 U.S. standard population, respectively) than for other groups. For males the non-Hispanic white rate was highest at 8.1 per 100,000 U.S. standard population. For females the AIAN rate was highest at 4.8 per 100,000 U.S. standard population (tables 12 and 13). Nearly all fall deaths (over 80 percent in all cases) were classified as unintentional across all race or ethnic groups.

Suffocation was the third leading mechanism for API males and females; the fourth leading mechanism for Hispanic, AIAN and non-Hispanic black males as well as for non-Hispanic white and non-Hispanic black females. It was the fifth leading mechanism for Hispanic and AIAN females, and for non-Hispanic white males; see tables 8 and 9). The age-adjusted death rate for suffocation was higher for the AIAN population (4.9 per 100,000 U.S. standard population) than for other groups (tables 12 and 13). The AIAN rate was also the highest for the male population (7.1 per 100,000), whereas the non-Hispanic black had



**Figure 7. Death rates for poisoning, by intent of injury and single years of age for ages 15 years and over: United States, 2002**

the highest suffocation rate among females (3.3 per 100,000). In each race or ethnic group except for the non-Hispanic black population, the majority of suffocation deaths were suicides (between 51 and 74 percent). For the non-Hispanic black population, unintentional suffocation deaths accounted for the larger share (56 percent).

**Trends 1999–2002**

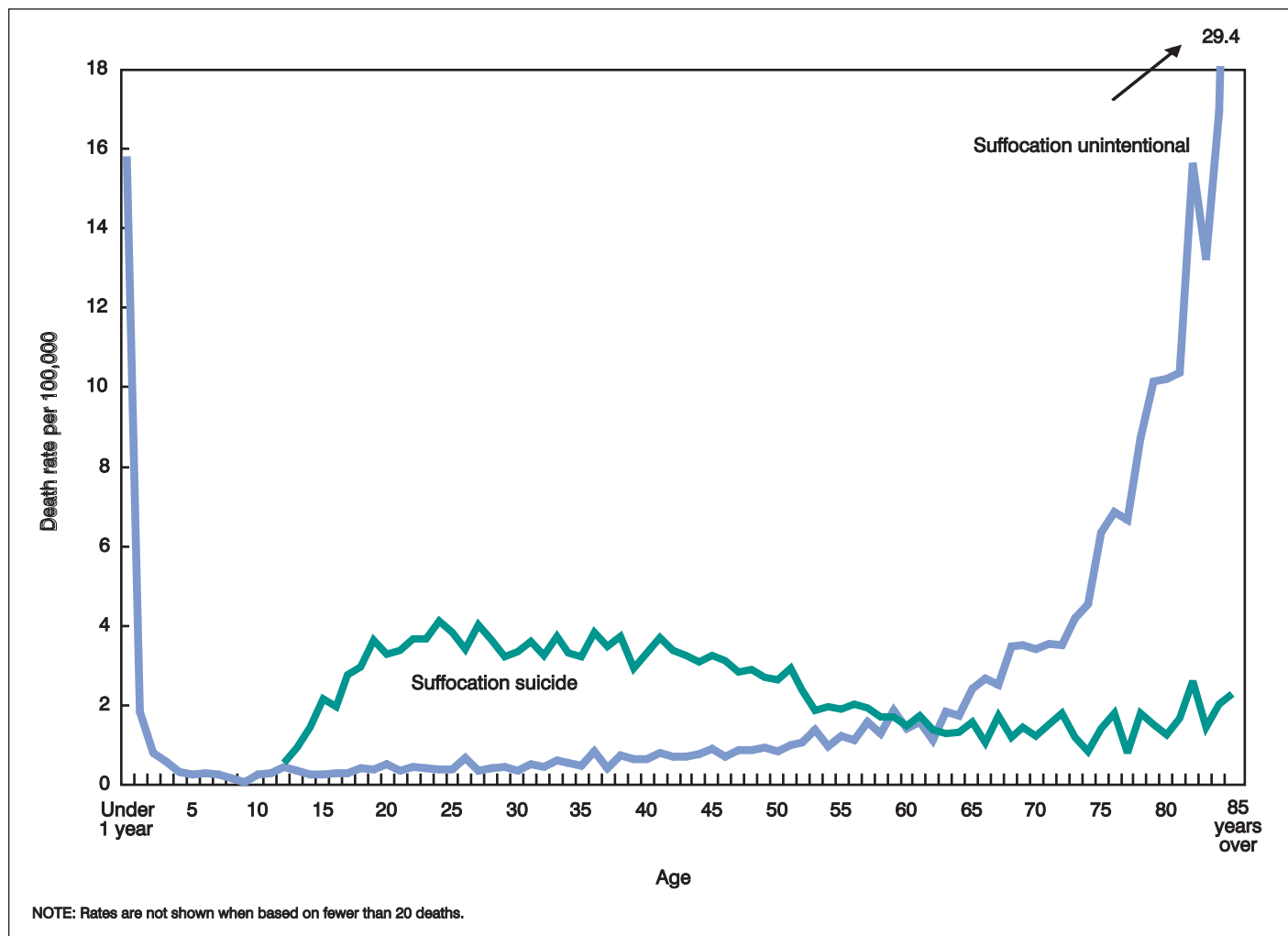
For each year from 1999 to 2002, tables 16–19 show injury deaths and rates by intent of injury and leading mechanisms and by age group and sex. The age groups shown are: under 15 years, 15–24 years, 25–44 years, 45–64 years, and 65 years and over. Note, however, that, as the section on mortality by single year of age illustrated, 5- and 10-year age groups may mask some important

**Table G. Number of deaths for which poisoning was the external underlying cause of death by intent and selected substances: United States, 2002**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Intent of death	All substances	Drugs <sup>1</sup>	Alcohol <sup>2</sup>	Gases and vapors <sup>3</sup>	Other substances <sup>4</sup>
All poisoning . . . . (*U01[.6-.7],X40-X49,X60-X69,X85-X90,Y10-Y19, Y35.2)	26,435	23,518	406	2,145	366
Unintentional . . . . . (X40-X49)	17,550	16,394	355	640	161
Suicide . . . . . (X60-X69)	5,486	3,884	26	1,419	157
Homicide . . . . . (*U01[.6-.7],X85-X90)	63	43	-	15	5
Undetermined . . . . . (Y10-Y19)	3,363	3,197	25	71	43

- Quantity zero.  
<sup>1</sup>ICD-10 codes for Drugs include X40-X44, X60-X64, X85, Y10-Y14.  
<sup>2</sup>ICD-10 codes for Alcohol include X45, X65, Y15.  
<sup>3</sup>ICD-10 codes for Gases and vapors include \*U01.7, X47, X67, X88, Y17, Y35.2.  
<sup>4</sup>ICD-10 codes for Other substances include \*U01.6, X46, X48-X49, X66, X68-X69, X86-X87, X89-X90, Y16, Y18-Y19.



**Figure 8. Death rates for suffocation by intent of injury and by single years of age: United States, 2002**

age-related differences in injury death rates. The extent of the problem varies not only by external cause but also by age group, with the age groups under 25 and 65 years and over most affected. Trends by mechanism and by intent are discussed within age-sex groups rather than across them. As discussed in the “Data and Methods” section, trends are reported as total percentage changes only for those mechanism and intent categories that showed an increasing or decreasing trend over the period 1999–2002. Text [table H](#) summarizes these results. [Tables 16](#) and [17](#) show the deaths and death rates by intent and the three leading mechanisms within an intent category (e.g., suicide by suffocation) by age and sex. [Tables 18](#) and [19](#) show deaths and death rates by mechanism (regardless of intent), and age and sex.

**Males 0–14**—The all-injury death rate for males under 15 years of age declined a total of 8 percent during the 4 years; the rate in 2002 was 13.5 per 100,000 population. MVT-related injuries, the leading mechanism of injury death in this age-sex group, accounted for about 30 percent of the injury deaths during this 4-year time period. The MVT-related injury death rate declined a total of 11 percent during the period to 4.0 per 100,000 population. Suffocation and drowning, the second and third leading mechanisms of injury death in this group, showed no consistent pattern of change over the 4 years.

Unintentional injury accounted for nearly 4 out of 5 injury deaths for males under 15 years of age; and the rate declined a total of

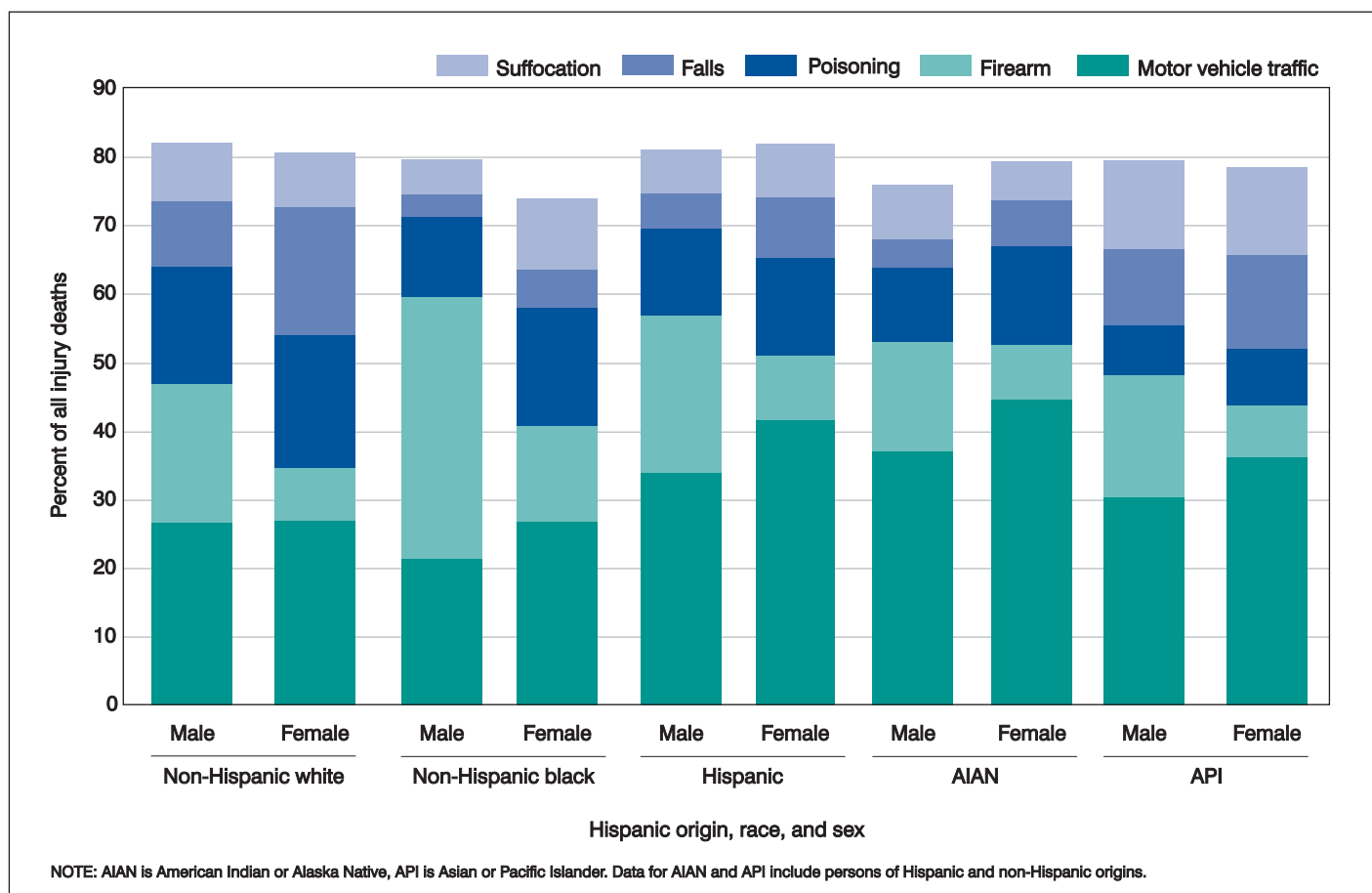
9 percent to 10.6 per 100,000 population in 2002. Suicide rates, calculated for males 10–14 years, showed no overall change during this period. Over the 4 years, homicide rates for males 0–14 years declined a total of 7 percent to 1.9 per 100,000 population in 2002.

**Females 0–14**—The all-injury death rate for females under 15 years of age declined a total of 7 percent during the 4 years; the rate in 2002 was 9.0 per 100,000 population. MVT-related injury was the leading mechanisms of injury death in this age-sex group accounting for about a third of all injury deaths during the period. The total 12 percent decline in the female MVT-related injury death rate, to 3.1 per 100,000, like the pattern for males, was responsible for the overall decline in injury mortality in this group. The second, third, and fourth leading mechanisms were suffocation, drowning, and fire/flames. While the rates for all three mechanisms were low, suffocation did show an increasing trend, rising over the 4 years to 1.6 per 100,000 population in 2002.

Unintentional injury accounted for nearly 4 of 5 injury deaths for females age 0–14 during 1999–2002. The unintentional injury death rate declined a total of 11 percent during the 4 years to 6.8 per 100,000 in 2002. Neither suicide nor homicide showed a consistent trend over the 4 years.

**Males 15–24**—The all injury death rate for males age 15–24 increased a total of 5-percent during this period to 95.0 per 100,000 population in 2002. MVT-related injury and firearms together accounted





**Figure 9. Percent of all injury deaths by leading mechanisms of injury by Hispanic origin, race, and sex: United States, 2002**

for about 70 percent of the injury deaths in this age-sex group; the MVT-related injury death rate rose a total of 10 percent to 38.4 per 100,000 while the firearm death rate showed no consistent change; the rate in 2002 was 29.3 per 100,000. Death rates for both poisoning and suffocation also increased over the 4 years by totals of 46 percent to 8.2 and 26 percent to 6.1 per 100,000, respectively.

Unintentional-injury death rates for males age 15–24 increased an average total of 8 percent to 54.9 per 100,000 in 2002. No consistent pattern was observed in the total suicide rate; in 2002 the rate was 16.5 per 100,000. About 3 out of 5 suicides in this group were caused by firearms and despite the lack of change in the total suicide rate (or in the total firearm death rate), the firearm suicide rate decreased over the 4 years by 13 percent to 9.1 per 100,000. The number of suicides by suffocation (hanging) increased between 1999 and 2002. Similarly, despite the lack of consistent pattern for all suicides in this age-sex group, the suffocation suicide rate increased a total of 29 percent over the 4 years. There was no consistent trend in the homicide rate (and nearly 90 percent of homicides were from firearms).

*Females 15–24*—For females aged 15–24 no consistent trend was observed for the all-injury death rate over the 4 years; the rate in 2002 was 27.5 per 100,000 population. MVT-related injury deaths were the leading cause of injury death accounting for about 3 of 5 injury deaths for this age-sex group in 2002 at a rate of 16.4 per 100,000; no consistent trend was observed over the 4 years analyzed. Firearms and poisoning were the second and third leading mechanisms of injury

death, together accounting for 1 in 4 injury deaths. The poisoning death rate increased 47 percent over the 4 years to 3.0 per 100,000; the firearm death rate did not change during this period.

For females aged 15–24, no consistent increasing or decreasing trends over the 4 years were observed for unintentional injury, suicide or homicide; the respective rates in 2002 were 27.5, 2.9, and 3.8 per 100,000 population.

*Male 25–44*—Overall, the injury death rate for males age 25–44 in 2002 was 91.4 per 100,000, and was unchanged over the 4 years. Three mechanisms of injury—MVT-related injury, firearms, and poisoning accounted for three-fourths of injury deaths in this group. The MVT death rate, 23.5 per 100,000 in 2002, increased 7 percent over the 4 years. No trend was observed for firearm or poisoning deaths; the rates in 2002 were 23.1 and 21.2 per 100,000, respectively.

The unintentional-injury death rate for males age 25–44 increased a total of 7 percent to 50.9 per 100,000 in 2002. No consistent trend was observed in the suicide rate; in 2002 it was 22.2 per 100,000. Firearm suicides accounted for half of all suicides across the 4 years. Similarly, homicide was unchanged over the period; the rate in 2002 was 14.2 per 100,000. In the 2001 report, “Deaths: Injuries 2001,” there is a discussion of the differences in homicide rates including and excluding the terrorism-related deaths (19).

*Females 25–44*—The all-injury death rate for females age 25–44 in 2002, 29.7 per 100,000, was unchanged over the 4 years. In 2002, poisoning was the leading mechanism of injury death in this age-sex

**Table H. Total percentage change in injury death rates from 1999–2002, and injury death rates in 2002 by leading mechanisms of injury and intent, age, and sex**

Age and sex	Mechanism (regardless of intent)											
	All injury		MVT		Firearm		Poisoning		Suffocation		Fall	
	Percent change	Rate	Percent change	Rate	Percent change	Rate	Percent change	Rate	Percent change	Rate	Percent change	Rate
<b>Under 15 years</b>												
Male . . . . .	-8	13.5	-11	4.0	-20	0.9	ns	0.3	ns	2.4	ns	0.2
Female . . . . .	-7	9.0	-12	3.1	ns	0.5	ns	0.2	28	1.6	ns	0.1
<b>15–24 years</b>												
Male . . . . .	5	95.0	7	38.4	-4	29.3	46	8.2	26	6.1	ns	1.5
Female . . . . .	ns	27.5	ns	16.4	ns	3.5	47	3.0	ns	1.5	ns	0.3
<b>25–44 years</b>												
Male . . . . .	ns	91.4	7	23.5	ns	23.1	ns	21.2	ns	6.9	ns	2.5
Female . . . . .	ns	29.7	ns	9.0	-4	4.1	38	10.2	ns	1.8	ns	0.7
<b>45–64 years</b>												
Male . . . . .	9	82.8	ns	20.0	0.06	18.1	30	17.4	19	5.6	ns	5.2
Female . . . . .	15	30.2	ns	8.6	ns	3.4	54	10.1	ns	1.8	27	1.9
<b>65 years and over</b>												
Male . . . . .	ns	148.2	ns	28.6	ns	26.9	ns	5.1	-5	13.2	ns	40.1
Female . . . . .	ns	88.5	ns	15.4	ns	2.0	ns	3.6	-12	9.0	27	33.8
Age and sex	Intent (regardless of mechanism)											
	Unintentional		Suicide		Homicide		Undetermined					
	Percent change	Rate	Percent change	Rate	Percent change	Rate	Percent change	Rate				
<b>Under 15 years</b>												
Male . . . . .	-9	10.6	**ns	**1.8	-7	1.9	27	0.4				
Female . . . . .	-11	6.8	**ns	**0.6	ns	1.6	94	0.4				
<b>15–24 years</b>												
Male . . . . .	8	54.9	ns	16.5	ns	21.5	ns	1.7				
Female . . . . .	ns	20.1	ns	2.9	ns	3.8	ns	0.7				
<b>25–44 years</b>												
Male . . . . .	7	50.9	ns	22.2	ns	14.2	ns	3.7				
Female . . . . .	ns	18.1	ns	5.8	ns	4.0	ns	1.8				
<b>45–64 years</b>												
Male . . . . .	8	50.1	13	23.5	ns	6.2	20	2.8				
Female . . . . .	15	19.7	11	6.7	ns	2.2	52	1.6				
<b>65 years and over</b>												
Male . . . . .	ns	111.9	ns	31.8	ns	3.2	ns	1.1				
Female . . . . .	ns	82.1	ns	4.1	ns	1.6	ns	0.7				

\*\*Calculated for ages 10–14 years.

NOTES: Rates are deaths per 100,000 population. Percentage change is based on a consistent 4-year trend using the Thiel test, see page 6; 'ns' indicates a nonsignificant trend over the 4 years.

group followed closely by MVT-related injury deaths. The poisoning death rate increased a total of 38 percent over the 4 years to 10.2 per 100,000. This contrasts with no consistent trend in the MVT-related injury death rate (9.0 per 100,000 in 2002) and the total 4 percent decline in the firearm death rate to 4.1 per 100,000 in 2002.

For females 25–44, death rates for unintentional injuries, suicide, and homicide (18.1, 5.8, and 4.9 per 100,000 population, respectively) were all unchanged over the 4 years.

**Males 45–64**—The all-injury rate for males 45–64 increased a total of 9 percent over the 4 years to 82.8 per 100,000. The 3 leading mechanisms of injury mortality in this group, MVT-related injuries, firearms, and poisoning, accounted for 69 percent of all injury deaths

in 2002. The MVT-related injury death rate, 20.0 per 100,000 in 2002 was unchanged from 1999–2002. The firearm death rate, 18.1 per 100,000 in 2002, increased a total of 6 percent over the 4 years, and the poisoning death rate, 17.4 per 100,000 in 2002, increased a total of 30 percent over the 4 years.

The unintentional death rate for males 45–64 rose a total of 8 percent over the 4 years to 50.1 per 100,000. The 13 percent total increase in the suicide rate, to 23.5 per 100,000, was largely due to increase in suicide by firearm; the firearm suicide rate increased a total of 8 percent over the 4 years to 14.2 per 100,000, and suffocation suicide increased 29 percent to 3.8 per 100,000. The homicide rate did not show a consistent trend; the rate in 2002 was 6.2 per 100,000.

*Females 45–64*—The injury death rate for females age 45–64 increased a total of 15 percent from 1999 to 2002, reaching 30.2 per 100,000 population in 2002. Poisoning, followed by MVT-related injury, are the two leading mechanisms of injury death for this age-sex group accounting for 33 and 28 percent, respectively, of injury deaths in 2002. The poisoning death rate, 10.1 per 100,000 in 2002, increased a total of 54 percent over the 4 years while no consistent trend was observed for the MVT death rate, 8.6 per 100,000 in 2002.

The unintentional injury death rate for females 45–64 increased an average total of 15 percent over the 4 years to 19.7 per 100,000. Suicide rates increased an average total of 11 percent to 6.7 per 100,000. Similar to the pattern observed for males, the homicide rate showed no consistent trend despite the decline from 2001 to 2002. The 52 percent total increase in the rate of deaths for undetermined intent to 1.6 per 100,000 was a result of an increase in poisoning of undetermined intent.

*Males 65 and over*—The all-injury death rate for males 65 and over showed no consistent trend over the 4 years; the rate in 2002 was 148.2 per 100,000 population. Falls followed by MVT-related injury, firearm injuries, and suffocation were the four leading mechanisms of injury death for this age-sex group, accounting for 70–73 percent of injury deaths across the 4 years considered. Suffocation was the only cause to show a consistent trend, with the rate decreasing a total of 5 percent to 13.2 per 100,000 in 2002. The death rate for falls in 2002 was 40.1 per 100,000.

For males aged 65 years and over, about 75 percent of injury deaths were classified as unintentional and another 22 percent as suicides. No consistent trends were observed for unintentional injury mortality, suicide, or homicide. The death rates in 2002 were 111.9, 31.8, and 3.2 per 100,000, respectively.

*Females 65 and over*—The all-injury death rate for females 65 years and over in 2002 was 88.5 per 100,000 population unchanged over the 4 years. Falls and MVT-related injury accounted for upwards of 55 percent of specified mechanisms of injury deaths in this age-sex group with suffocation a distant third (accounting for another 10 percent). Close to 20 percent of injury deaths were categorized as unspecified across the 4 years (see “Unspecified causes and undetermined intent” section). The death rate for falls increased a total of 27 percent over the 4 years to 33.8 per 100,000. The MVT-related injury death rate, 15.4 per 100,000 in 2002, was unchanged and the suffocation death rate declined a total of 12 percent to 9.0 per 100,000 across the 4 years.

There were no changes in death rates by intent for females aged 65 and over. Over 90 percent of injury deaths were classified as unintentional.

## State-specific differences

Tables 20, 21, and 22 show the number of injury deaths, death rates, and age-adjusted death rates for 2002, respectively, by State. These tables show intent of death and leading mechanisms within each intent category. Table 23 shows number of injury deaths, death rates, and age-adjusted death rates by selected mechanism of injury death and State.

In 2002, age-adjusted death rates due to all injuries were highest in New Mexico, Alaska, and Wyoming (89.4, 89.1, and 85.0 deaths per 100,000 U.S. standard population, respectively) and were lowest in New York (35.7) and Massachusetts (39.2) (table 22).

*Deaths by mechanism*—For many States, MVT-related injury, firearms, and poisoning are the three leading mechanisms of injury death. For some States, however, poisoning rather than MVT-related injury is the leading mechanism of injury death (Connecticut, Maryland, Massachusetts, New Hampshire, New Jersey, Rhode Island, Utah, and Washington). In Alaska, firearms were the leading mechanism of injury death.

Unlike most States, falls were the second leading mechanism of injury death in Iowa, Minnesota, Nebraska, New York, South Dakota, Vermont, and Wisconsin. Oregon has the same number of deaths for firearms and falls (table 23).

*Deaths by intent*—For unintentional injuries, age-adjusted death rates were highest in New Mexico (61.1), Alaska (59.0), Mississippi (57.9), and Wyoming (57.9) and were lowest in Massachusetts (20.5), Rhode Island (23.1), and New York (23.7) (table 22). Within each State (District of Columbia excluded), MVT-related injury was the leading mechanism of unintentional injury death. Age-adjusted MVT-related injury death rates were highest in Mississippi, Wyoming, and Montana (29.7, 29.5, and 26.1 deaths per 100,000 standard population, respectively) and lowest in Massachusetts, Rhode Island, and New York (8.1, 8.3, and 8.4 deaths per 100,000 standard population, respectively). New Mexico, Alaska, Nevada, and Florida had the highest unintentional poisoning death rates. Falls were an important mechanism of unintentional injury death with high age-adjusted death rates in New Mexico, Wisconsin, Montana, and Vermont.

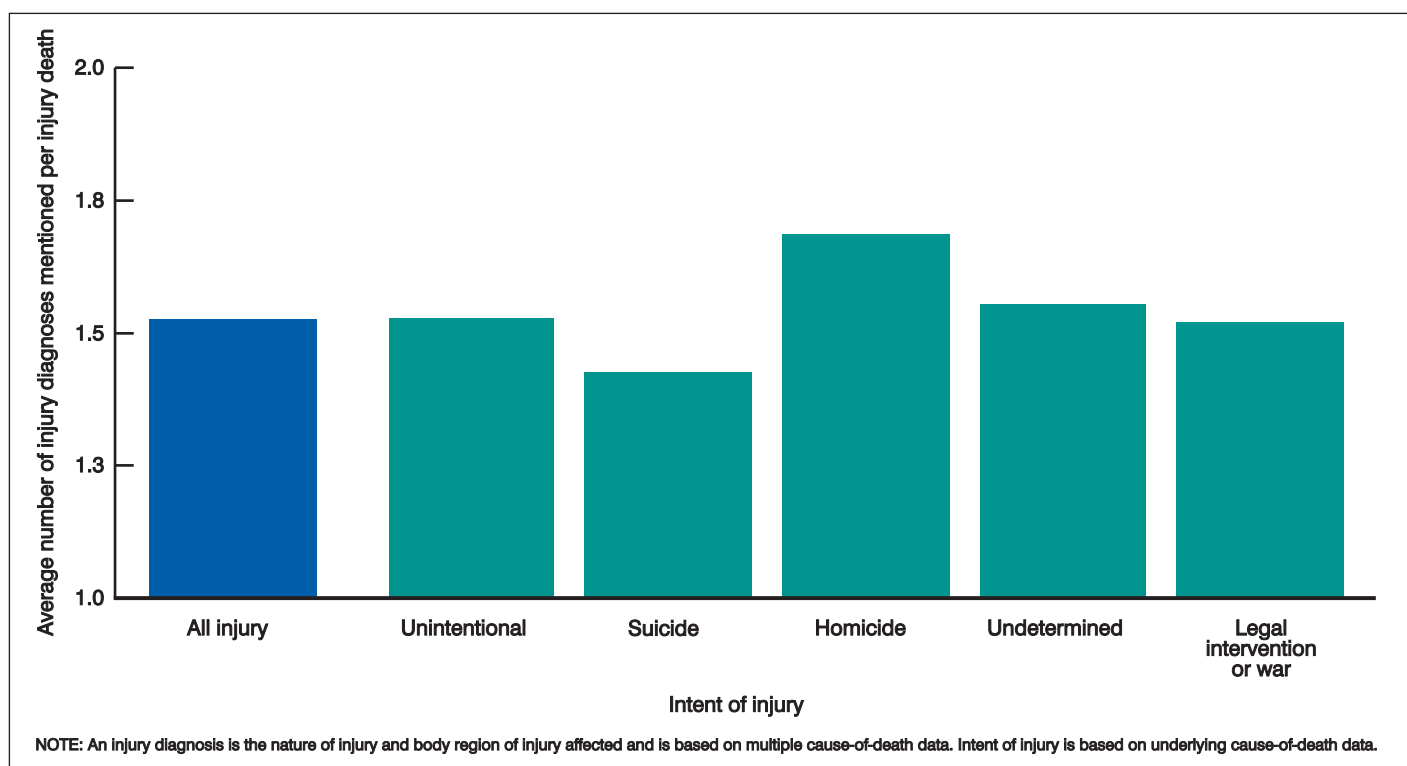
Age-adjusted suicide rates were highest in Alaska, Wyoming, Montana, and Nevada (21.0, 20.7, 19.9, and 19.8 deaths per 100,000 U.S. standard population, respectively) and lowest in New York, New Jersey, and Massachusetts (ranging from 6.3 to 6.5 per 100,000 U.S. standard population) (table 22). In most States, firearms were the leading mechanism of suicide. In Hawaii, Connecticut, Massachusetts, and Rhode Island, however, suffocation was the leading mechanism of suicide. Other than Hawaii, which had the highest age-adjusted rate, suicide rates by suffocation were also high in South Dakota and Alaska. Suicide rates by poisoning were high in Nevada, Utah, and Montana.

In 2002, age-adjusted homicide rates were higher in Louisiana, Mississippi, and Maryland than in other States (13.3, 10.7, and 10.0 deaths per 100,000 standard population, respectively) (table 22). For all States, firearms were the leading mechanism of homicide.

## Injury diagnoses from multiple cause-of-death data

Information about injury diagnoses is obtained from the multiple-cause-of-death data. Injury diagnoses provide information about the nature of the injury and body region affected. On the death certificates of the 161,269 deaths due to an external cause there were a total of 247,195 injury diagnoses mentioned for an average of 1.5 injuries per death. The average number of injury diagnoses per death ranged from 1.4 for suicide to 1.7 for homicide, with the ratio for unintentional injuries similar to that for all injuries (figure 10 and table 26).

The mechanism with the highest average number of injury diagnoses per death was cutting or piercing deaths with 2.3 injury diagnoses mentioned per death (figure 11). Three-fourths of the cutting or piercing deaths were homicides with an average of 2.4 injury diagnoses men-



**Figure 10. Average number of injury diagnoses per injury death, by intent of injury: United States, 2002**

tioned per death (figure 12). Deaths caused by struck by or against, poisoning, and machinery-related deaths also had relatively high averages of 1.7–1.8. Nearly all drowning and suffocation deaths had only one injury diagnosis (some had none) mentioned per death. For the two leading causes of injury death, MVT-related injuries and firearms, the numbers of injury diagnoses per death were 1.6 and 1.5, respectively (figure 11).

Focusing on body region, the ratios of “total mentions” of an injury to that body region to the “any mention” of an injury to that body region (i.e., the average number of injury diagnosis mentioned per body region) were at or above 1.2 for traumatic brain injury (TBI) and injuries to the thorax and the abdomen (figure 13). When analyzing the nature of injury, open wounds, internal organ injuries, and crushing also had ratios of about 1.2 (figure 14). System-wide injury ratios are particularly high because these include poisoning, for which ratios are high (1.7) (figure 14).

It is important to note that some deaths only include information about the external cause on the death certificate but no information regarding the injury diagnosis (i.e., no “S” or “T” code). The external causes of death with highest proportion of deaths lacking an “S” or “T” code are firearm-related and natural/environmental (i.e., suffocation and drowning) injuries, each with about 2 percent of records with no diagnosis mentioned.

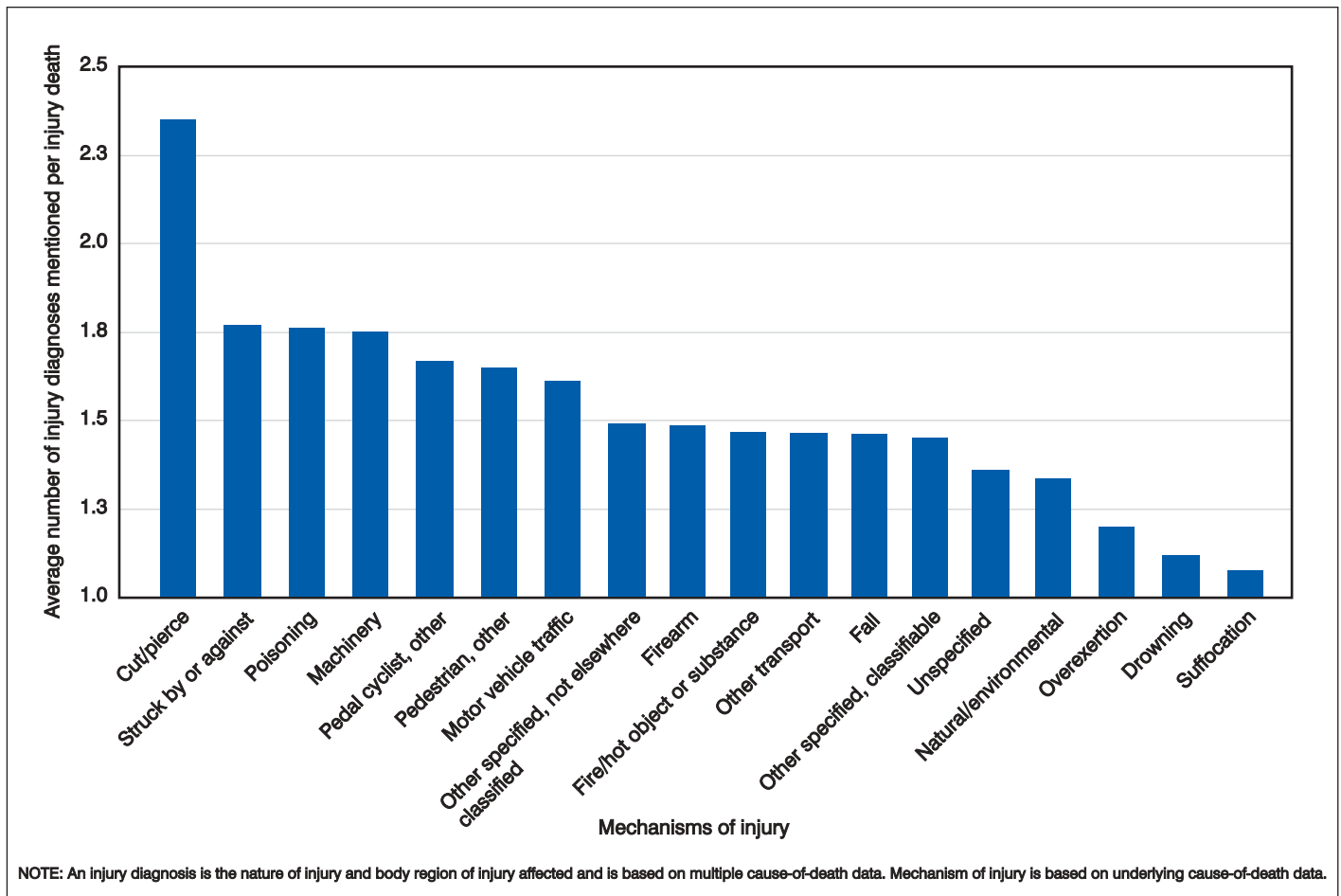
*Body region and nature of injury*—For purposes of this report, injuries are grouped into six major body regions as follows: head and neck, spine and upper back, torso, and extremities, injuries unclassifiable by region and unspecified region. The first five (of the six) body regions can be divided to provide more detail for the body region where needed. The nature of injury is grouped into 17 categories (e.g., fracture, open wound, amputation, etc). See table II of “Technical Notes” for the detailed list of body regions and nature of injury cat-

egories as well as the ICD–10 codes that make up these categories. Multiple cause-of-injury death data are presented as the total number of times an injury diagnosis (i.e., “S” or “T” code) was mentioned as contributing to the death as categorized by the matrix (table 24).

- Thirty percent of injuries resulting in death were to the head and neck region with the vast majority of these (27 of 30 percent) classified as traumatic brain injury (TBI) (table 24). More than half of the injuries to the brain were either internal organ injuries (7 percent of all mentions) or open wounds (8 percent of all mentions).
- Injuries involving the whole body system accounted for 28 percent of all injuries mentioned. Seventeen percent were poisoning; 7 percent were other effects of external causes (i.e., submersion or asphyxiation); and nearly 4 percent were toxic effects.
- Seventeen percent of injuries were to the torso (9 percent of which were to the thorax). A third of the thorax injuries were open wounds and another third were classified as unspecified nature of injury.
- By nature of injury, open wounds accounted for 17 percent of all injuries mentioned (tables 24 and 26).
- Nature of injury was unspecified for 28 percent of injuries mentioned; 10 percent were TBIs and 7 percent were classified as multiple body regions.

The analyses in this report do not present information injury diagnoses that co-occur (e.g., TBI and thorax injuries). Dr. Aharonson-Daniel (27) in Israel has begun to explore different analytic techniques that assist in the presentation of these data referred to as multiple injury profiles. These techniques will be explored in a forthcoming report.

*Nature of injuries sustained in MVT-related injury deaths*—In all, 71,062 injuries were mentioned for 44,065 MVT-related injury deaths



**Figure 11. Average number of injury diagnoses per injury death, by mechanisms of injury: United States, 2002**

for a ratio of 1.6 injury diagnoses per death (figure 11). Two-thirds of injuries sustained in fatal MVT-related injuries were unspecified as to their nature; 10 and 12 percent, respectively, were fractures and internal organ injuries. Thirty-six percent were injuries to the head and neck and 85 percent of those were classified as TBI. Twenty-three percent were injuries to the torso, and 59 percent of those were to the thorax. Half of the thorax injuries were unspecified as to their nature. An additional 24 percent of MVT-related injuries were not classifiable to a single body region and 13 percent were unspecified as to their nature. Relatively few fatal MVT-related injuries were classified to the spine and back or to extremities.

*Nature of injuries sustained in firearm-related deaths*—The number and nature of fatal firearm injuries differ by intent of the death. The average number of injury diagnoses mentioned for firearm deaths was 1.5 for all intents, 1.5 for unintentional, 1.4 for suicides, 1.5 for undetermined intent, 1.6 for homicides, and 1.7 for legal intervention (figures 11 and 12).

“Open wounds” are most commonly reported as the nature of injury for firearm deaths, accounting for 82 percent of firearm suicide-related injuries and 78 percent of firearm homicide-related injuries. Suicides were more likely than homicides to involve injuries to the head and neck region. Injuries to the head or neck accounted for 71 percent of all firearm suicides compared with 32 percent of all firearm homicides. For both homicides and suicides, the large majority of the head and neck injuries mentioned were traumatic injuries to the brain with 98 percent for suicides and 86 percent for homicides.

Homicides, on the other hand, were more likely than suicides to involve injuries to the torso. Injuries to the torso accounted for 40 percent of firearm homicides compared with 14 percent of firearm suicides. Firearm homicides had a much higher proportion than firearm suicides of injuries not classifiable by site (16 rather than 1 percent, respectively), while firearm suicides had higher proportion than homicides of injury diagnoses with no specificity (15 rather than 7 percent).

## Poisoning

Poisoning was the underlying cause of 26,435 deaths in 2002 (table E). The age-adjusted death rate for poisoning increased 17.9 percent from 2001 to 2002. Nearly half of this increase was due to the 132 percent increase in the number of poisoning deaths reported in California from 2001 to 2002. Assuming that California's numbers of poisoning deaths had changed at the rate of the rest of the country, the increase in poisoning would have been 11 percent—still higher than any other mechanism. The reason for most of the increase in California's poisoning deaths is that, until 2002, many poisoning deaths were captured in the ICD-10 code R99 (Other ill-defined and unspecified causes of mortality) because they remained pending investigation with no tentative cause reported after closure of the national mortality file (see “Data and Methods”). As stated elsewhere in this report, poisoning trends must be interpreted with caution due to changes in reporting practices.

Deaths due to poisoning can be identified in three different ways using ICD-10: 1) as the underlying external cause of injury death, 2)

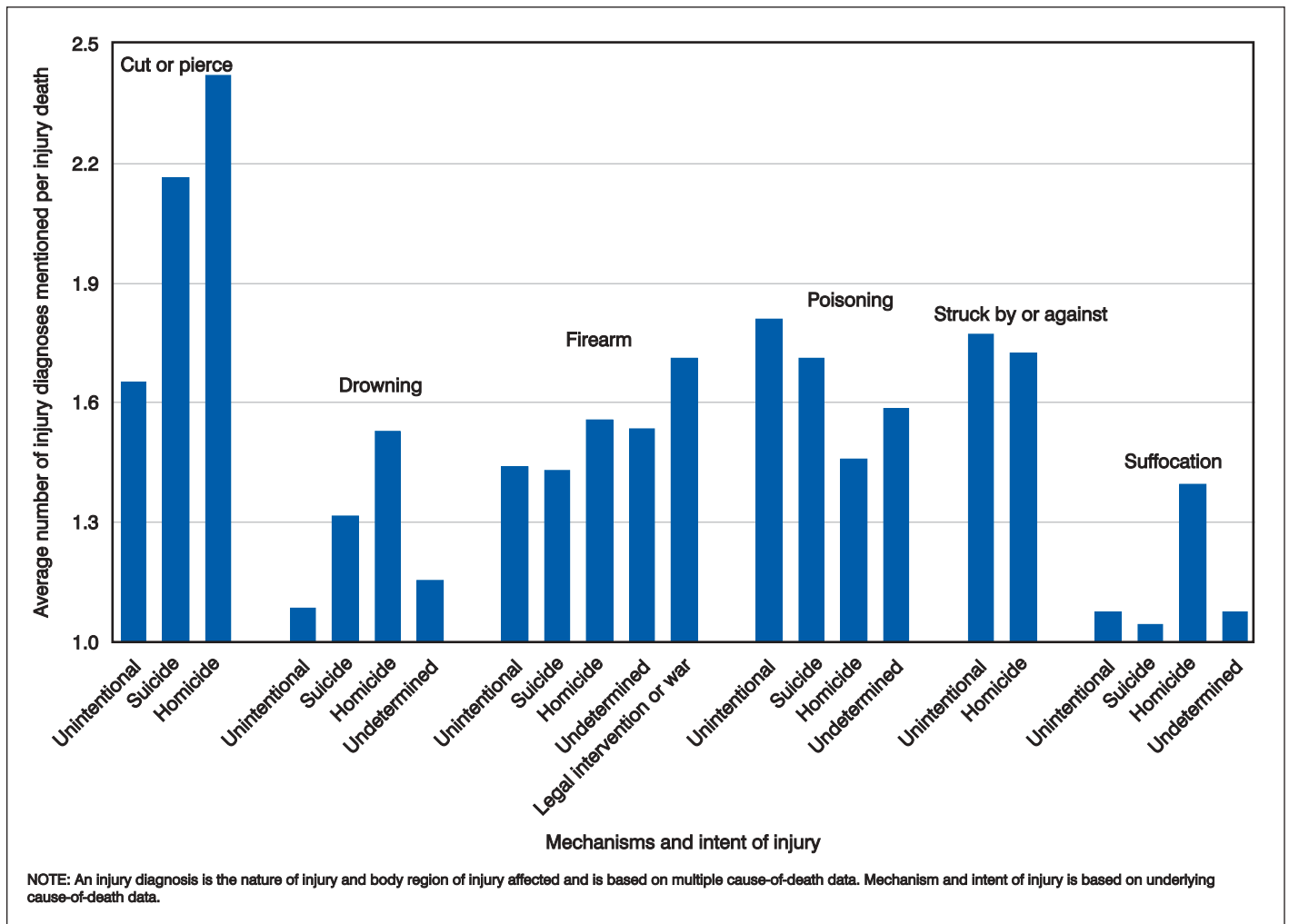


Figure 12. Average number of injury diagnoses per injury death, by mechanisms and intent of injury: United States, 2002

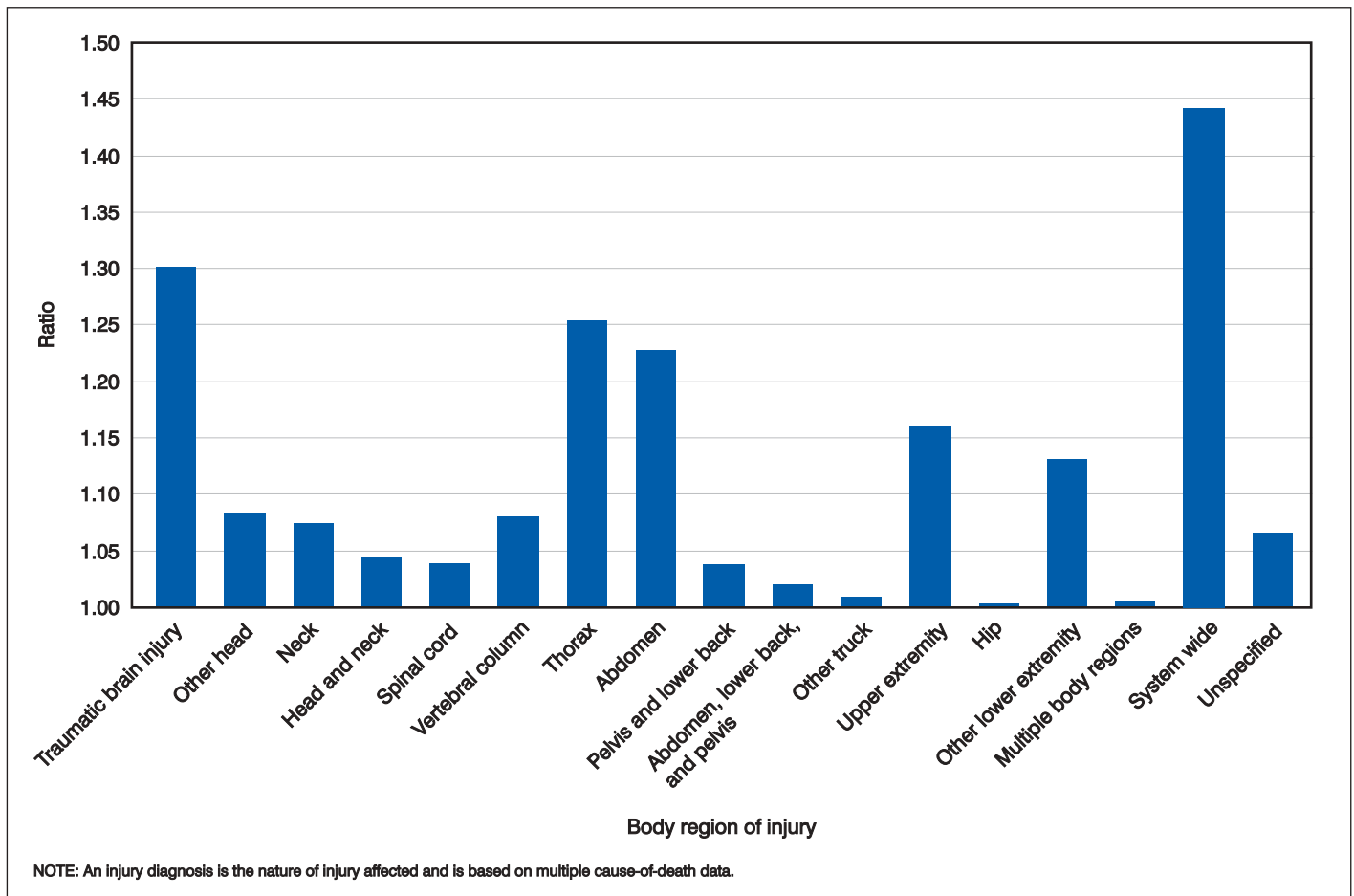
as the underlying cause of death classified to certain mental and behavioral disorders due to psychoactive substance use, and 3) as the nature of injury found in the multiple cause data (see sections on “Nature of injury” in the “Results” section, and “Changing injury mortality classifications from ICD-9 to ICD-10” in the “Technical Notes”). It is important to take into account deaths classified by each of these methods when tabulating and analyzing deaths due to poisoning because it gives a more complete picture of the role of poisoning in deaths. In particular, deaths related to drug and alcohol abuse can be missed if only the underlying external cause is considered.

Poisoning was the underlying external cause of 16 percent of all injury deaths and was the third leading mechanism of injury death (table F). Sixty-six percent of poisoning deaths were classified as unintentional, 21 percent as suicides, 13 percent as undetermined intent; less than 1 percent were classified as homicides. In addition to intent, external cause codes for poisonings describe the type of substance involved, e.g., drugs, alcohol, or gases and vapors. Of the external cause poisoning deaths that were classified as unintentional or of undetermined intent, 93 percent and 95 percent, respectively, were drug-related; of the suicides, 71 percent were drug-related and 26 percent were due to exposure to gases and vapors (table G).

Poisoning deaths may also be identified using the nature-of-injury codes available in the multiple cause data. The nature of injury codes

for poisoning and toxic effects (ICD-10 codes T36-T65, T96-T97) specify the type of drug or toxic substances involved in the poisonings. Table 27 shows the number of injury deaths with any mention of the substance involved and the total number of times the substance was mentioned by intent of death. The number of deaths with any mention of the poison or toxic substance is most appropriately used when describing the number of deaths involving a specific category of poison/toxic substance, e.g., the number of deaths in which any narcotic or psychodysleptic (hallucinogen) (ICD-10 code T40) was a contributing factor (n=14,468). The total number of mentions is most appropriate when counting the total number of poisons or toxic substances mentioned, e.g., the total number of times narcotics and psychodysleptics are mentioned (n=18,240). More than one substance within a particular category may be mentioned on the same death record, e.g., heroin and methadone are commonly mentioned together. The average number of mentions of a specific category of substances per death can be calculated by dividing total mentions by any mention, e.g., the average number of times narcotics and psychodysleptics are mentioned per death (18,240/14,468=1.3). See also “Classification of injury deaths” under the “Data and Methods” section.

The substances described by the nature of injury codes shown in table 27 provide additional information regarding the drug or toxic substances involved for injury deaths. Poisoning nature-of-injury codes



**Figure 13. Ratio of total number of injury diagnoses mentioned to any injury diagnosis mention, by body region: United States, 2002**

are sometimes included as contributing factors in the multiple-cause-of-death listing for decedents where poisoning was not the underlying cause of death. Poisoning was the underlying cause of death in 88 percent (26,435/30,050) of injury deaths in which a poisoning or toxic effect was mentioned (table 27). For all underlying-cause poisoning deaths, an average of 1.7 total substances were listed per death (45,586/26,435) (table 26). Deaths with an underlying cause related to fires and flames often mention a toxic effect because substances are inhaled in the incident. Deaths with an underlying cause of either poisoning or fires and flames accounted for 97 percent of the injury deaths that mentioned specific poisoning and toxic effect substances in the death record.

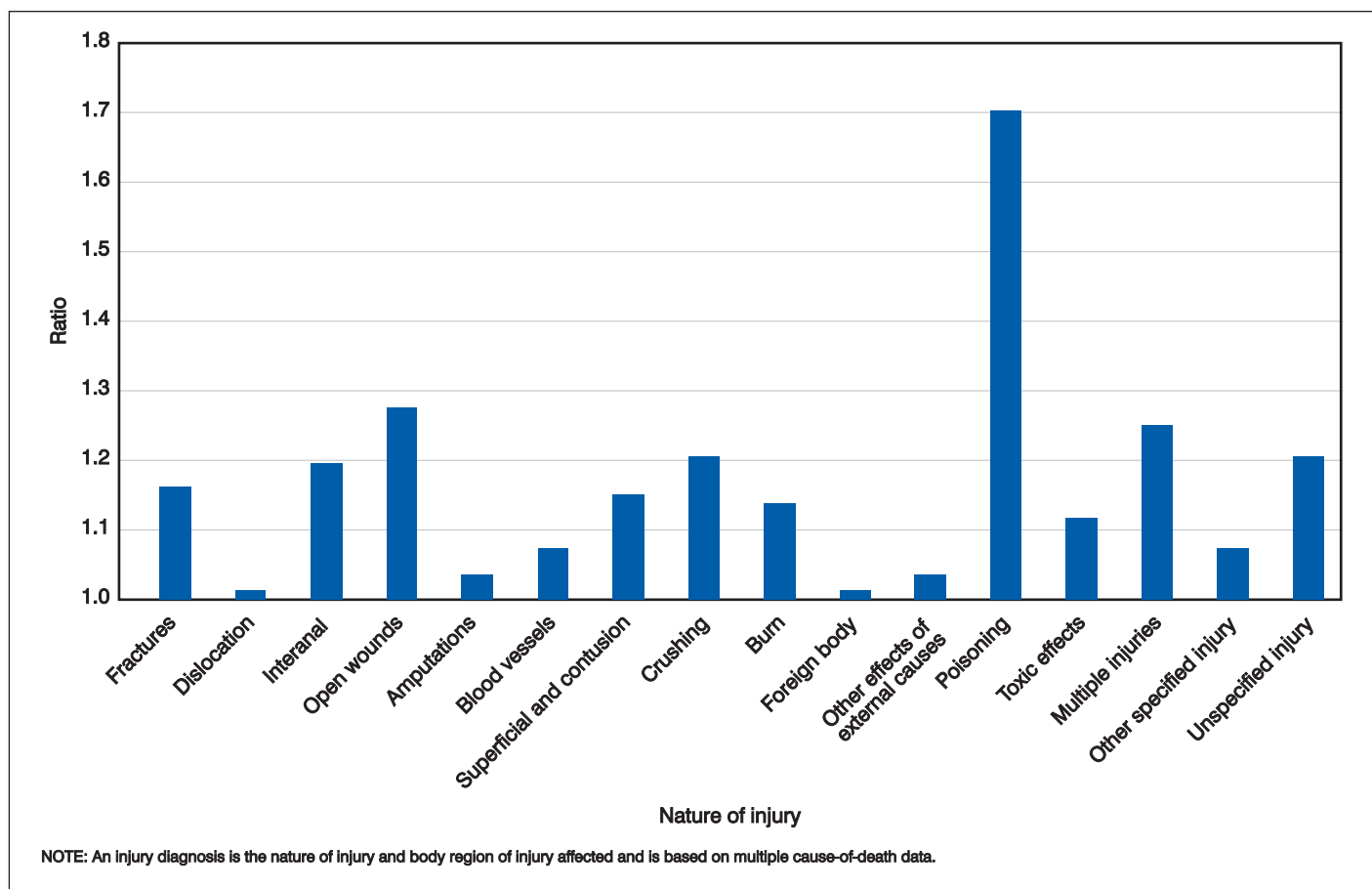
In 2002, there were 24,283 injury deaths in which poisoning by a drug, medicament, or biological substance was mentioned (table 27). The type of drug mentioned as contributing to the death varied with intent of the death. For example, narcotics and psychodysleptics (hallucinogens) were mentioned in 53 percent of the unintentional and in 65 percent of the undetermined intent deaths involving poisonings and toxic effects. Narcotics and psychodysleptics accounted for only 21 percent of suicides involving poisoning and toxic effects. Cocaine (T40.5), followed closely by "other opioids" (T40.2) were more commonly listed than other narcotic drugs, especially with deaths classified

as unintentional. In contrast, antiepileptic, sedative-hypnotic, and anti-Parkinsonism drugs and antidepressants were more likely to be associated with suicides than with unintentional or undetermined intent deaths.

In 2002, 7,801 injury deaths involved the toxic effect of a substance that was chiefly nonmedicinal (table 27). The toxic effects of alcohol or of carbon monoxide were more likely to be listed on death certificates than other toxic, nonmedicinal substances. Twenty-four percent of suicides involving poisoning and toxic effects had mention of carbon monoxide poisoning, and 9 percent of unintentional deaths involving poisoning and toxic effects included mention of alcohol as a toxic effect.

For some injury deaths, more than one poison or toxic substance was listed on the death record. Poisoning deaths involving drugs and other biological substances had an average of 1.7 (41,323/24,283) specific substances mentioned per death (table 27). Toxic effects of nonmedicinal substances, on the other hand, had an average of only 1.1 substances (8,709/7,801) mentioned per death.

*Deaths classified to mental and behavioral disorders*—In addition to using external cause codes and the nature of injury codes to identify deaths from poisoning, drug and alcohol-related deaths can be further identified using underlying cause codes from the Mental and Behavioral



**Figure 14. Ratio of total number of injury diagnoses mentioned to any injury diagnosis mention, by nature of injury: United States, 2002**

Disorders (MBD) chapter of ICD-10 (F10-F16, F18-F19). F10 relates to alcohol abuse while F11-F16 and F18-F19 are codes for drug abuse. (F17 is a code for tobacco use and tobacco is not considered a drug in the same way the other substances are.) Since these causes of death are not in the Injury and Poisoning chapter of ICD-10, they have not traditionally been included in counts of injury deaths or tabulated with other poisoning deaths. Therefore, substance abuse-related deaths may be underrepresented in fatal poisoning statistics that are based solely on external cause codes.

The precise wording on the death certificate determines whether a drug or alcohol-related death is assigned an underlying cause of poisoning or MBD (15). The classification system is attempting to distinguish between deaths that are due to a one-time event (i.e., an injury) and deaths due to a chronic problem (i.e., a disorder). This is difficult to accomplish based on the very few words on the death certificate, and often the medical examiner or coroner is unaware of the importance of the exact wording. For example, if "cocaine abuse" was written as the underlying cause of death on the death certificate, the death would be coded as a mental and behavioral disorder (F14.1). In contrast, if "cocaine overdose" was written the death would be assumed accidental and would be coded as a poisoning (X42) with nature of injury specifying the substance involved (T40.5).

The World Health Organization's Mortality Reference Group (MRG) has been deliberating on how to "correct" misclassification due to differences in wording. For example, beginning with 2006, F10.0

(MBD due to acute alcohol intoxication) will no longer be a valid code and ICD-10 X45 (accidental poisoning by and exposure to alcohol) will become the default unless another intent was ascribed. In addition, if any language related to an external cause is included on the death certificate in Part I or Part II, the rule will be to code to the external cause rather than to the MBD code. This will result in an increase in the number deaths from (external cause) poisoning.

In 2002 in the United States, there were 2,137 deaths classified as mental and behavioral disorders involving drugs and 6,842 deaths involving alcohol (table J). The fourth digit of the F10-F16, F18-F19 codes can be used to distinguish between States such as dependent abuse, nondependent abuse (which was a distinction also made in ICD-9 with codes 304 and 305), as well as an "unspecified state." After omitting the 15 percent of MBD drug deaths with unspecified state, 79 percent of the drug deaths were classified as nondependent abuse. About a third (34 percent) of these nondependent drug-related deaths were classified as involving cocaine and or opioids. After omitting the 6 percent of MBD alcohol-related deaths with unspecified state, 57 percent were attributed to a dependence syndrome, 27 percent to harmful use, and 10 percent to acute alcohol intoxication.

Whether or not language related to dependency should result in a drug death considered as poisoning has not been firmly determined. In England and Wales, for example, ICD-9 304, the code for drug dependency and ICD-9 codes 305 (.2-.9), the codes for nondependency are included in definitions of drug-related deaths (28). In an



**Table J. Number of deaths for which mental and behavioral disorders due to drugs and alcohol was the underlying cause of death by type of drug and disorder: United States, 2002**

Underlying cause of death	Total	Acute intoxication (.0)	Harmful use (.1)	Dependence syndrome (.2)	Withdrawal state (.3-.4)	Other (.5-.8)	Unspecified (.9)
Mental and behavioral disorders due to use of:							
Alcohol . . . . . (F10)	6,842	617	1,741	3,679	212	195	398
Drugs . . . . . (F11-F16, F18-F19) <sup>1</sup>	2,137	15	1,399	390	14	8	311
Opioids . . . . . (F11)	281	—	148	75	2	—	56
Cannabinoids . . . . . (F12)	1	—	1	—	—	—	—
Sedatives/hypnotics . . . . . (F13)	4	—	—	1	2	—	1
Cocaine . . . . . (F14)	437	11	266	50	1	6	103
Other stimulants . . . . . (F15)	52	4	28	5	—	1	14
Hallucinogens . . . . . (F16)	5	—	4	1	—	—	—
Volatile solvents . . . . . (F18)	5	—	4	—	—	—	1
Multiple drug use and use of other psychoactive substances . . . (F19)	1,352	—	948	258	9	1	136

—Quantity zero.

<sup>1</sup>Mental and behavioral disorders due to use of tobacco (F17) is not included as a drug in this table. In 2002, F17 was the underlying cause for 549 deaths.

earlier work by Fingerhut and Cox on poisoning trends in the United States, ICD-9 code 304 was excluded from this category as the risk profile for dependent abusers was considered different from those of nondependent abusers (29).

Currently, NCHS recommends users consider expanding the definition of poisoning deaths beyond the number based on the external cause of injury matrix (26,435 deaths) to include deaths due to alcohol intoxication (617 deaths), and deaths due to drug nondependence (1,436). If poisoning-related deaths mentioned above are included, the number of poisonings is 28,488 (\*U01[.6-.7],X40-X49,X60-X69,X85-X90,Y10-Y19,Y35.2, F10.0, F11-F16[.0-.1,.3-.8],F18-F19[.0-.1,.3-.8]) (table J). Deciding what proportion of the remaining drug and alcohol deaths should be reclassified requires a careful examination of the language on the death certificate.

*Poisoning deaths and the overall increase in external cause deaths*—In 2002, poisoning was the cause of injury death largely responsible for the increase in the overall number of injury deaths. While other causes such as MVT and falls had smaller increases, the number of poisoning deaths increased in 1 year by 4,193 deaths. Nearly 80 percent of the increase in poisoning deaths was associated with increases in unintentional poisoning.

These increases in poisoning deaths should be interpreted with caution, as has been pointed out elsewhere in this report. For more on interpreting increases in poisoning deaths, the reader should turn to the section of “Analysis of 1999–2002 trend data” under the “Data and Methods” chapter, and to the introduction of this section (“Poisoning”).

## Unspecified cause and undetermined intent

Important injury prevention information is missing for a substantial number of deaths because of nonspecific external and injury diagnosis information reported on the death certificate. Nonspecific codes are often a consequence of incomplete, missing, or nonspecific information available to the certifier.

Between 1979 and 2002, the percentage of all injury deaths where the cause was not specified (ICD-10 codes for deaths coded to unspecified cause are listed in the data tables) ranged from 4 to 5 percent. In 2002, the cause of the injury death was not specified for 8,656 deaths. In addition to the cause not being specified, the intent

of the injury was classified as undetermined for 4,830 deaths of external cause. Intent is left undetermined when the available information is insufficient to enable a medical or legal authority to make a distinction between accident (unintentional), self-harm (suicide), and assault (homicide) (11). Researchers have suggested that a portion of these undetermined intent deaths are intentional (homicide or suicide), therefore, intentional deaths are likely underreported in the cause of death data (30–34). While lack of specificity often denotes a lack of care in the determination and/or certification of cause of death, undetermined intent is typically only reported after a thorough investigation fails to provide sufficient information. Such a classification (undetermined intent) does not necessarily imply a poor process of certification on the part of the physician or medical examiner.

There are age differences related to nonspecific reporting. In 2002, 22 percent of injury deaths for those 85 years of age and over did not include a specific cause of the injury. Rates of unspecified cause injury deaths were highest for those under 1 year of age and for those 65 years of age, and over (3.7 and 15.6, respectively, per 100,000 population). Undetermined intent rates were highest for those under 1 year of age and for those between 35 and 54 years of age (averaging about 3 per 100,000 population for these ages).

In 2002, the ICD-10 code X59 titled “Exposure to unspecified factor” accounted for about three-fourths of injury deaths classified as “unspecified cause” in the external cause matrix table. Between 1979 and 1998 the ICD-9 code E887 entitled “fracture, cause unspecified” accounted for an average of 43 percent of all injury deaths classified as “unspecified cause” in the ICD-9 external cause matrix. Traditionally, the World Health Organization grouped ICD-9 E887 with external cause codes for falls (E880–E889) in their tabulations as these fractures were assumed to have resulted from a fall even if not specifically stated as such on the death certificate (35,36). The ICD-9 external cause of injury mortality matrix, however, does not include E887 with unintentional falls because there is no documented evidence that the fracture resulted from a fall. In ICD-10 there is no code for fractures from unspecified causes comparable to the ICD-9 code E887 so such deaths are coded to ICD-10 X59. The information regarding the fracture is not included in the ICD-10 underlying-cause-of-death code because fracture is a nature of injury and can only be identified using the multiple cause data. Arguably, however, some information about the

type of external cause is masked because only certain external causes result in fractures. Nearly all of the unspecified cause of injury deaths for those 65 years of age and over (who have higher rates of fall injuries in general) were coded to ICD-10 X59 (between 1999 and 2002 this code accounted for 97 percent of the unspecified deaths for females and 93 percent among males).

Poisoning currently accounts for a large portion of all injury deaths of undetermined intent, rising from 32 percent of the undetermined injury deaths in 1979 to 69 percent in 2002. In 2002, over half (54 percent) of the undetermined intent poisoning deaths were due to narcotics and hallucinogens (ICD-10 code Y12).

In the mortality public-use data file, two variables are related to place of event. One variable describes the place where the death occurred (hospital, nursing home, residence) and the other, provides information as to where the injury occurred (home, school, street, etc.). Differences in unspecified cause of injury reporting were noted based on where the injury death occurred. For example, about 30 percent of the injury deaths that occurred in a nursing home among those 65 years of age and over did not specify a cause of the injury, whereas for injury deaths that occurred in a hospital, about 15 percent did not identify a specific cause of injury for this same age group. Place where the injury occurred is unspecified for 24 percent of the nontransportation injury deaths.

*State reporting differences*—Individual State reporting of injury deaths where the cause of the injury was unspecified ranged from 1.5 to 10.7 percent of the State's total injury death certificates (unspecified cause of injury death by State not shown). States that had the highest percentage of their total injury death certificates coded to an unspecified cause were New Jersey (10.7 percent), Hawaii (9.8 percent), Massachusetts (9.7 percent), Alabama (9.7 percent), and Indiana (9.6 percent). States reporting of undetermined intent ranged from 0.2 to 23.1 percent of that individual State's total injury death certificates. States that had the highest percent of their injury deaths classified as undetermined intent were: Massachusetts (23.1 percent), Maryland (22.3 percent), Rhode Island (18.6 percent), and Utah (13.2). Some deaths may be classified as both undetermined intent and unspecified mechanism/cause of injury.

*Other areas of concern regarding lack of specific information*—For motor vehicle traffic deaths, 32 percent are coded to a category where it is unknown if the person who died was an occupant, pedestrian, or cyclist. The National Highway Traffic Safety Administration's Fatality Analysis Reporting System, a data system separate from vital statistics, provides more complete information as to the role of the decedent in the motor vehicle traffic accident based on reviews of multiple official records (37).

For firearm deaths, 71 percent are coded to "...other and unspecified firearm..." (ICD codes W34, X74, X95, Y24), although other more specific categories exist. Efforts are underway to have the death certificate verbatim text coded and available for more detailed analysis of other and unspecified firearm types.

For poisoning deaths, 39 percent are coded (as the underlying cause of death) to the "other and unspecified poisoning" codes (ICD-10 codes X44, X49, X64, X69, Y14, Y19), but more information as to the substance involved is available on the multiple-cause-of-death file.

Information concerning the activity at the time of injury is not being reported for nearly all injury deaths in the United States.

## Natural underlying cause of death with mention of external cause of injury death

In 2002, there were 36,884 deaths (1.5 percent of all deaths) classified with a natural underlying cause of death (A01-R99) that included one or more mentions of an external cause of injury in the multiple-cause fields (table 28). A natural cause may be selected as the underlying cause even though an external cause is mentioned on the death certificate, if the external cause did not "initiate" the chain of events leading to death. For example, a fatal stroke might precipitate a fall and subsequent leg fracture. Since the stroke initiated the chain of events, it is reasonable to select the stroke as the underlying cause of death. Some of these deaths, however, are likely to be the result of certification errors, i.e., mistakes in the certifier's description of the sequence of events or conditions leading to death. For example, if the certifier wrongly listed the external cause in Part II of the death certificate, the external cause would likely be coded as a contributing factor and not as the underlying cause of death. In contrast, if the external cause had been properly listed at the end of the sequence in Part I, it would have been selected as the underlying cause of death (12).

Forty-three percent of the underlying natural-cause deaths in which an external cause of injury was mentioned at least once consisted of major cardiovascular diseases (e.g., heart disease and stroke). Heart disease alone makes up more than a quarter of these natural-cause deaths; stroke accounts for 13 percent. Except for other specified subcategories of diseases of the heart such as ischemic heart diseases (19 percent) and other residual categories, most other categories in the list presented do not account for substantial numbers of such deaths. For example, the next most prevalent natural cause of death is pneumonitis due to solids and liquids, accounting for 7 percent of natural-cause deaths mentioning some external cause of injury.

However, although the numbers of such deaths are not large in an absolute sense, they do constitute a significant proportion of deaths in some cause-of-death categories. For example, 15.4 percent of all deaths from pneumonitis due to solids and liquids (J69) had mention of some external cause of injury. Other natural causes that were likely to have any mention of an external cause include hernia (6.3 percent) and Parkinson's disease (5.0 percent). Stroke and heart disease, although they constitute the bulk of natural underlying cause deaths with mention of an external cause of injury, are not as likely overall to have mention of an external condition among their multiple causes (1.7 percent of major cardiovascular diseases, 3.0 percent of stroke deaths, and 1.5 percent of heart diseases).

Unintentional suffocations (W75-W84) and unintentional exposures to unspecified factors (X59) were the external causes of injury most likely to be mentioned on death records with a natural underlying cause and mention of an external cause (44.1 and 29.3 percent, respectively; table 28). The section "Changing injury mortality classifications from ICD-9 to ICD-10" in "Technical Notes" compares the way that fractures of unspecified cause are classified across these Revisions of the ICD. This concerns primarily ICD-10 code X59.

A large percentage of the suffocations that were mentioned along with a natural underlying cause had stroke as the cause of death (21.2 percent), followed by pneumonitis (15.0 percent). Pneumonitis was the natural underlying cause most likely to have mention of a

suffocation code (13.8 percent). Most of these natural causes are associated with an increased risk of aspiration of food, vomit, or other objects.

## Discussion

This report presents data describing mortality due to injuries in the United States for 2002. The data are presented using the external cause-of-injury mortality matrix for ICD-10 which provides detail on the mechanism of death that is needed for research and other activities related to injury prevention. This report also highlights the importance of multiple causes of death when analyzing injury mortality data. Statistics are presented on the nature of the injury and body site of the decedent and the poison or toxic substance to which the decedent was exposed. Without examining the multiple cause-of-death data, useful information that is reported on the death certificate is lost. In the case of injury deaths, the underlying cause of death will always be an external cause (e.g., firearm, motor vehicle), and the injury diagnosis (penetrating injury to the thorax, fracture to the skull) is always in the multiple cause data. Therefore, an analysis solely based on the underlying cause of death will not yield a complete picture of injury deaths in the United States.

### Role of medical examiner and coroner systems for data quality

Statistical data derived from death certificates are only as accurate as the information provided by the certifier. When a death involves injury or unusual or suspicious circumstances, the cause of death is typically investigated, certified, and reported by a medical examiner or coroner (12,13). Thus, it is incumbent on the medical examiner or coroner to report the cause of death accurately according to the available medical and forensic evidence. Instructional materials on how to correctly certify injury deaths are provided by NCHS (12) and the National Association of Medical Examiners ([www.thename.org](http://www.thename.org)).

Currently, little is known at the national level in the United States regarding the accuracy of reported circumstances and causes of injury mortality. The cause of death for injury tends to be more straightforward and immediate in its fatal action than other causes and thus, in general, one would expect the accuracy of the reported cause to be high (15,38). However, lack of specificity with regard to the circumstances of the injury (39,40) and inconsistencies in the definition and specification of the manner or intent of death (39) may contribute to bias for some mechanisms of death.

Lack of specificity is also relevant in the analysis of injury diagnoses. Table 24 shows that the third and fifth most commonly reported injured body regions are “unspecified” and “multiple sites,” respectively. Within the “multiple sites” category, close to 80 percent are coded as unspecified in nature. Of the injuries with unspecified body regions, more than half also are missing specification of the nature of injury. Specification of the body region injured and nature of all injuries sustained is vital. While it is useful to know that multiple injuries were sustained, it is even more important to know specific detail about these injuries. Injury diagnosis information can further prevention efforts. For example, knowing what kinds of injuries are sustained and what parts of the body are injured in motor vehicle crashes is valuable to the transportation industry.

It is important that the cause of death is reported in a timely fashion. Sometimes circumstances are such that the cause of death is not determined in the timeframe required for reporting to State authorities and NCHS. Under these circumstances, the cause of death is typically submitted with “unknown cause pending further investigation.” Once the investigation is complete and a cause of death determined, a supplementary report is filed to amend the death certificate. Amendments are also filed when the reported cause of death is later found upon review of the evidence or the discovery of new evidence to be incorrect. Timing of amendments has important implications for the quality of injury data. The national mortality data file is typically closed to changes within 10 to 12 months after the end of the data year, although every effort is made to incorporate amendments when they are received, even if receipt is past the closing date. Amendments not submitted to NCHS are not included in the national mortality file.

On average, 8,000 to 10,000 death records each year are still pending investigation when the national mortality file is finalized. Since 1999, between 40 and 80 percent of records pending investigation in the final data for any given year have been submitted with unknown or unspecified cause of death and are thus classified to ICD-10 code R99 (Other ill-defined and unspecified causes of mortality) at the time the file is closed. Not all of these would have been coded to external causes had the updates for these records been received, but it is probable that a significant proportion would fall into this category. Deaths due to natural causes are less likely than those due to external causes to be submitted pending investigation. Another 10 to 25 percent of the records that are submitted pending investigation are coded to external causes of injury after the file is closed. While most pending records include no cause of death information, some do report tentative findings including presumed intent. These records are coded assuming that the tentative information provided was correct.

The difficulty in determining intent is one of the reasons that the external cause of injury matrix which focuses on the mechanism of death is so critical. For instance, if poisonings of undetermined intent are not considered, 13 percent of the deaths by poisoning are missed. In the absence of witnesses, the intent of the poisoning may never be known even with extensive investigation. Nevertheless, it is important to consider the fact that the numbers of unintentional and/or intentional poisoning deaths as reported are likely to be significantly understated.

On March 24–25, 2003, the Institute of Medicine (IOM) convened a workshop focused on medical examiner and coroner death investigations and their potential to improve the criminal justice, public health, and health care systems, and their ability to respond to terrorist threats (41). It was concluded that the public has a powerful and broad interest in learning from mortality data to facilitate prevention, design interventions, and contain incipient bioterrorism. To do this, accurate data are needed regarding the circumstances and causes of death. The IOM workshop highlighted the importance of promoting adequate resources, training, technical infrastructure, quality measures and quality control mechanisms, and researching in improving the quality of mortality data.

### Future developments in the study of injury mortality

NCHS is involved in several ongoing projects related to the study of injury and injury mortality. Many of these projects are being done in conjunction with the International Collaborative Effort (ICE)

on Injury Statistics, a research activity involving researchers from more than a dozen countries and organizations intended to improve the international comparability and quality of injury data (15,23). The ICE on Injury Statistics is sponsored by NCHS, with funding from the National Institute on Child Health and Development, National Institutes of Health. Current research activities of the ICE on Injury Statistics include work on reporting frameworks, injury indicators, and classification schemes.

The ICE on Injury Statistics, with the Mortality Reference Group, is also working on developing selection criteria for main injury. No standard methodology currently exists for selecting a main or primary injury, or for selecting the most severe injury when more than one injury diagnosis is listed on the death certificate. Selecting a single most severe injury diagnosis from among those listed on the death certificate will allow for the calculation of death rates to measure the risk of dying as the result of a particular injury. Once selection criteria are developed and agreed upon, the goal is to include the main injury diagnosis as a standard part of the national mortality data file and in future editions of this report.

The National Violent Death Reporting System (NVDRS) is a cooperative program between the Centers for Disease Control and Prevention (CDC) and State health departments designed to gather detailed information on the circumstances surrounding violent deaths in the United States. The program is being directed by CDC's National Center for Injury Prevention and Control. For the purposes of the NVDRS, violent deaths include suicides, homicides, legal interventions and unintentional firearm deaths, and deaths of undetermined intent. Sources of information for the NVDRS include the death certificate, medical examiner/coroner records, police records, and crime lab reports. Currently, cooperative agreements are in place with seventeen States to collect and transmit violent death-related information to CDC; six States (MA, MD, NJ, OR, SC, and VA) are reporting deaths since January 2003 (42), seven States (AK, CO, GA, NC, OK, RI, and WI) are reporting deaths beginning in January 2004, and four States (CA, KY, NM, and UT) are reporting deaths occurring from January 2005. The ultimate goal is to include all States in order to provide a comprehensive national picture of violent death in the United States. From a vital statistics perspective, it is hoped that the NVDRS will help to evaluate the quality of the information collected in the national mortality data file.

## Where to find injury mortality data on the Web

More injury mortality data can be found at the following Web sites:

- Reports and tabulated data from the National Center for Health Statistics, CDC (<http://www.cdc.gov/nchs/>). Injury mortality tables containing more detail than the tables presented in this report can be found under "Detailed Statistical Tables" in the "Data Warehouse" section of the NCHS Web site. More information about many of the issues and methods raised in the report can be found at the NCHS Web site in "Injury data and resources" (<http://www.cdc.gov/nchs/injury.htm>). This site also includes presentations related to mortality data that were made during recent national conferences.
- Reports and tabulated data from the National Center for Injury Prevention and Control, CDC (<http://www.cdc.gov/ncipc/>).

- WISQARS (Web-based Injury Statistics Query and Reporting System) (<http://www.cdc.gov/ncipc/wisqars/>) is an interactive database system developed by the National Center for Injury Prevention and Control that provides customized reports of injury-related data (fatal and nonfatal).
- CDC WONDER (<http://wonder.cdc.gov>) also has an interactive system designed to produce customized reports based on mortality data.
- Reports and tabulated data from the Bureau of Labor Statistics' Census of Fatal Occupational Injuries (<http://www.bls.gov/>).
- Reports and tabulated data on fatal motor vehicle traffic crashes from the National Highway Traffic Safety Administration's Fatal Analysis Reporting System (FARS) (<http://www-fars.nhtsa.dot.gov/>).

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**Table 1. Deaths, death rates, and age-adjusted death rates due to injury according to mechanism and intent of death: United States, 1999–2002**

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see "Technical Notes." Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Deaths				Death rate				Age-adjusted death rate <sup>1</sup>			
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
All injury . . . . . (*U01-*U03,V01–Y36,Y85–Y87,Y89) <sup>2</sup>	148,286	148,209	157,078	161,269	53.1	52.7	55.2	55.9	53.3	52.8	55.1	55.7
Unintentional . . . . . (V01–X59,Y85–Y86)	97,860	97,900	101,537	106,742	35.1	34.8	35.7	37	35.3	34.9	35.7	36.9
Suicide . . . . . (*U03,X60–X84,Y87.0) <sup>2</sup>	29,199	29,350	30,622	31,655	10.5	10.4	10.8	11	10.5	10.4	10.7	10.9
Homicide . . . . . (*U01–*U02,X85–Y09,Y87.1) <sup>2</sup>	16,889	16,765	20,308	17,638	6.1	6	7.1	6.1	6.0	5.9	7.1	6.1
Undetermined . . . . . (Y10–Y34,Y87.2,Y89.9)	3,917	3,819	4,198	4,830	1.4	1.4	1.5	1.7	1.4	1.3	1.5	1.7
Legal intervention/war . . . . . (Y35–Y36,Y89[.0,.1])	421	375	413	404	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.1
Cut/pierce . . . . . (W25–W29,W45,X78,X99,Y28,Y35.4)	2,369	2,288	2,532	2,762	0.8	0.8	0.9	1	0.8	0.8	0.9	1
Unintentional . . . . . (W25–W29,W45)	74	85	85	109	0.0	0	0	0	0.0	0	0	0
Suicide . . . . . (X78)	404	383	458	566	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2
Homicide . . . . . (X99)	1,879	1,805	1,971	2,074	0.7	0.6	0.7	0.7	0.7	0.6	0.7	0.7
Undetermined . . . . . (Y28)	12	15	18	13	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.4)	–	–	–	–	*	*	*	*	*	*	*	*
Drowning . . . . . (W65–W74,X71,X92,Y21)	4,153	4,073	3,923	4,146	1.5	1.4	1.4	1.4	1.5	1.4	1.4	1.4
Unintentional . . . . . (W65–W74)	3,529	3,482	3,281	3,447	1.3	1.2	1.2	1.2	1.3	1.2	1.1	1.2
Suicide . . . . . (X71)	311	321	339	368	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Homicide . . . . . (X92)	70	39	68	72	0.0	0	0	0	0.0	0	0	0
Undetermined . . . . . (Y21)	243	231	235	259	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Fall . . . . . (W00–W19,X80,Y01,Y30)	13,931	14,002	15,764	17,116	5.0	5	5.5	5.9	5.1	5.1	5.6	5.9
Unintentional . . . . . (W00–W19)	13,162	13,322	15,019	16,257	4.7	4.7	5.3	5.6	4.8	4.8	5.3	5.6
Suicide . . . . . (X80)	693	607	651	740	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2
Homicide . . . . . (Y01)	17	18	17	16	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y30)	59	55	77	103	0.0	0	0	0	0.0	0	0	0
Fire/hot object or substance . . . . . (*U01.3,X00–X19,X76–X77, X97–X98,Y26–Y27,Y36.3) <sup>3</sup>	3,910	3,907	3,796	3,645	1.4	1.4	1.3	1.3	1.4	1.4	1.3	1.3
Unintentional . . . . . (X00–X19)	3,471	3,487	3,423	3,261	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.1
Suicide . . . . . (X76–X77)	171	162	148	150	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Homicide . . . . . (*U01.3,X97–X98)	197	181	148	134	0.1	0.1	0.1	0	0.1	0.1	0	0
Undetermined . . . . . (Y26–Y27)	71	77	77	100	0.0	0	0	0	0.0	0	0	0
Legal intervention/war . . . . . (Y36.3)	–	–	–	–	*	*	*	*	*	*	*	*
Fire/flame . . . . . (X00–X09,X76,X97,Y26)	3,779	3,789	3,673	3,539	1.4	1.3	1.3	1.2	1.3	1.4	1.3	1.2
Unintentional . . . . . (X00–X09)	3,348	3,377	3,309	3,159	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.1
Suicide . . . . . (X76)	171	162	147	150	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Homicide . . . . . (X97)	190	174	141	131	0.1	0.1	0	0	0.1	0.1	0	0
Undetermined . . . . . (Y26)	70	76	76	99	0.0	0	0	0	0.0	0	0	0
Hot object/substance . . . . . (X10–X19,X77,X98,Y27)	131	118	123	106	0.0	0	0	0	0.0	0	0	0
Unintentional . . . . . (X10–X19)	123	110	114	102	0.0	0	0	0	0.0	0	0	0
Suicide . . . . . (X77)	–	–	1	–	*	*	*	*	*	*	*	*
Homicide . . . . . (X98)	7	7	7	3	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y27)	1	1	1	1	*	*	*	*	*	*	*	*
Firearm . . . . . (*U01.4,W32–W34,X72–X74, X93–X95,Y22–Y24,Y35.0)	28,874	28,663	29,573	30,242	10.3	10.2	10.4	10.5	10.3	10.2	10.3	10.4
Unintentional . . . . . (W32–W34)	824	776	802	762	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Suicide . . . . . (X72–X74)	16,599	16,586	16,869	17,108	5.9	5.9	5.9	5.9	6.0	5.9	5.9	5.9
Homicide . . . . . (*U01.4,X93–X95)	10,828	10,801	11,348	11,829	3.9	3.8	4	4.1	3.8	3.8	3.9	4.1
Undetermined . . . . . (Y22–Y24)	324	230	231	243	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Legal intervention/war . . . . . (Y35.0)	299	270	323	300	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Machinery . . . . . (W24,W30–W31) <sup>4</sup>	622	676	648	652	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

See footnotes at end of table.



**Table 1. Deaths, death rates, and age-adjusted death rates due to injury according to mechanism and intent of death: United States, 1999–2002—Con.**

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see “Technical Notes.” Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see “Technical Notes”]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Deaths				Death rate				Age-adjusted death rate <sup>1</sup>			
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
All transport . . . . . (*U01.1,V01–V99,X82,Y03,Y32,Y36.1) <sup>2</sup>	46,150	46,509	49,827	47,939	16.5	16.5	17.5	16.6	16.5	16.5	17.4	16.5
Unintentional . . . . . (V01–V99)	45,927	46,259	46,706	47,739	16.5	16.4	16.4	16.6	16.4	16.4	16.3	16.5
Suicide . . . . . (X82)	87	103	91	112	0.0	0	0	0	0.0	0	0	0.1
Homicide . . . . . (*U01.1,Y03) <sup>2</sup>	106	106	3,008	61	0.0	0	1.1	0	0.0	0	1	0
Undetermined . . . . . (Y32)	30	41	22	27	0.0	0	0	0	0.0	0	0	0
Legal intervention/war . . . . . (Y36.1)	–	–	–	–	*	*	*	*	*	*	*	*
Motor vehicle traffic . . . . . (V02–V04[.1,.9],V09.2, V12–V14[.3–.9],V19[.4–.6],V20–V28[.3–.9], V29–V79[.4–.9],V80[.3–.5],V81.1,V82.1,V83–V86[.0–.3], V87[.0–.8],V89.2) <sup>4</sup>	40,965	41,994	42,443	44,065	14.7	14.9	14.9	15.3	14.7	14.9	14.9	15.2
Occupant . . . . . (V30–V79[.4–.9],V83–V86[.0–.3]) <sup>4</sup>	18,326	18,649	19,270	21,344	6.6	6.6	6.8	7.4	6.6	6.6	6.8	7.4
Motorcyclist . . . . . (V20–V28[.3–.9],V29[.4–.9]) <sup>4</sup>	2,254	2,704	2,976	3,153	0.8	1	1	1.1	0.8	1	1	1.1
Pedal cyclist . . . . . (V12–V14[.3–.9],V19[.4–.6]) <sup>4</sup>	615	572	585	550	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Pedestrian . . . . . (V02–V04[.1,.9],V09.2) <sup>4</sup>	4,545	4,598	4,822	5,041	1.6	1.6	1.7	1.7	1.7	1.6	1.7	1.7
Other . . . . . (V80[.3–.5],V81.1,V82.1) <sup>4</sup>	9	12	15	16	*	*	*	*	*	*	*	*
Unspecified . . . . . (V87[.0–.8],V89.2) <sup>4</sup>	15,216	15,459	14,775	13,961	5.5	5.5	5.2	4.8	5.4	5.5	5.2	4.8
Pedal cyclist, other . . . . . (V10–V11,V12–V14[.0–.2],V15– V18,V19[.0–.3,.8,.9]) <sup>4</sup>	185	168	207	217	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Pedestrian, other . . . . . (V01,V02–V04[.0],V05,V06, V09[.0,.1,.3,.9]) <sup>4</sup>	1,502	1,272	1,249	1,050	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.4
Other land transport . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82[.0,.2–.9], V83–V86[.4–.9],V87.9,V88[.0–.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	2,090	1,662	1,493	1,333	0.7	0.6	0.5	0.5	0.7	0.6	0.5	0.4
Unintentional . . . . . (V20–V28[.0–.2],V29–V79[.0–.3], V80[.0–.2,.6–.9],V81–V82[.0,.2–.9],V83–V86[.4–.9], V87.9,V88[.0–.9],V89[.0,.1,.3,.9])	1,867	1,412	1,294	1,134	0.7	0.5	0.5	0.4	0.7	0.5	0.5	0.4
Suicide . . . . . (X82)	87	103	91	112	0.0	0	0	0	0.0	0	0	0.1
Homicide . . . . . (Y03)	106	106	86	60	0.0	0	0	0	0.0	0	0	0
Undetermined . . . . . (Y32)	30	41	22	27	0.0	0	0	0	0.0	0	0	0
Other transport . . . . . (*U01.1,V90–V99,Y36.1) <sup>2</sup>	1,408	1,413	4,435	1,274	0.5	0.5	1.6	0.4	0.5	0.5	1.5	0.5
Unintentional . . . . . (V90–V99)	1,408	1,413	1,513	1,273	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.4
Homicide . . . . . (*U01.1) <sup>2</sup>	–	–	2,922	1	*	*	1	*	*	*	1	*
Legal intervention/war . . . . . (Y36.1)	–	–	–	–	*	*	*	*	*	*	*	*
Natural/environmental . . . . . (W42–W43,W53–W64, W92–W99,X20–X39,X51–X57) <sup>4</sup>	1,923	1,643	1,427	1,554	0.7	0.6	0.5	0.5	0.7	0.6	0.5	0.5
Overexertion . . . . . (X50) <sup>4</sup>	21	13	8	10	0.0	*	*	*	0.0	*	*	*
Poisoning . . . . . (*U01[.6–.7],X40–X49,X60–X69, X85–X90,Y10–Y19,Y35.2)	19,741	20,230	22,242	26,435	7.1	7.2	7.8	9.2	7.1	7.2	7.8	9.2
Unintentional . . . . . (X40–X49)	12,186	12,757	14,078	17,550	4.4	4.5	4.9	6.1	4.4	4.5	4.9	6.1
Suicide . . . . . (X60–X69)	4,893	4,859	5,191	5,486	1.8	1.7	1.8	1.9	1.8	1.7	1.8	1.9
Homicide . . . . . (*U01[.6–.7],X85–X90)	67	56	64	63	0.0	0	0	0	0.0	0	0	0
Undetermined . . . . . (Y10–Y19)	2,595	2,557	2,909	3,336	0.9	0.9	1	1.2	0.9	0.9	1	1.2
Legal intervention/war . . . . . (Y35.2)	–	1	–	–	*	*	*	*	*	*	*	*
Struck by or against . . . . . (W20–W22,W50–W52,X79,Y00, Y04,Y29,Y35.3)	1,309	1,292	1,244	1,182	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.4
Unintentional . . . . . (W20–W22,W50–W52)	894	938	898	890	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

See footnotes at end of table.

**Table 1. Deaths, death rates, and age-adjusted death rates due to injury according to mechanism and intent of death: United States, 1999–2002—Con.**

[Rates per 100,000 population; age-adjusted rates per 100,000 U.S. standard population; see “Technical Notes.” Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see “Technical Notes”]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Deaths				Death rate				Age-adjusted death rate <sup>1</sup>			
	1999	2000	2001	2002	1999	2000	2001	2002	1999	2000	2001	2002
Suicide . . . . . (X79)	3	2	2	3	*	*	*	*	*	*	*	*
Homicide . . . . . (Y00,Y04)	408	349	341	287	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Undetermined . . . . . (Y29)	3	3	3	2	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.3)	1	—	—	—	*	*	*	*	*	*	*	*
Suffocation . . . . . (W75–W84,X70,X91,Y20)	11,748	12,098	12,574	12,791	4.2	4.3	4.4	4.4	4.2	4.3	4.4	4.4
Unintentional . . . . . (W75–W84)	5,503	5,648	5,555	5,517	2.0	2	2	1.9	2.0	2.1	2	1.9
Suicide . . . . . (X70)	5,427	5,688	6,198	6,462	1.9	2	2.2	2.2	1.9	2	2.2	2.2
Homicide . . . . . (X91)	708	658	690	679	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Undetermined . . . . . (Y20)	110	104	131	133	0.0	0	0	0	0.0	0	0	0
Other specified, classifiable . . . . . (*U01[.0,.2,.5],*U03.0,W23,W35–W41,W44,W49,W85–W91,X75,X81,X96,Y02,Y05–Y07,Y25,Y31,Y35[.1,.5],Y36[.0,.2,.4–.8],Y85) <sup>2</sup>	2,047	1,970	2,061	2,073	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Unintentional . . . . . (W23,W35–W41,W44,W49,W85–W91,Y85)	1,310	1,238	1,355	1,398	0.5	0.4	0.5	0.5	0.5	0.4	0.5	0.5
Suicide . . . . . (*U03.0,X75,X81) <sup>2</sup>	280	278	283	315	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05–Y07)	317	325	316	267	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Undetermined . . . . . (Y25,Y31)	51	48	42	26	0.0	0	0	0	0.0	0	0	0
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4–.8])	89	81	65	67	0.0	0	0	0	0.0	0	0	0
Other specified, not elsewhere classified . . . . . (*U01.8,*U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	2,230	2,261	2,299	2,066	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.7
Unintentional . . . . . (X58,Y86)	955	903	1,034	1,046	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.4
Suicide . . . . . (X83,Y87.0)	215	216	246	200	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	881	964	831	623	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2
Undetermined . . . . . (Y33,Y87.2)	149	156	163	163	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	30	22	25	34	0.0	0	0	0	0.0	0	0	0
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9)	9,258	8,584	9,160	8,656	3.3	3.1	3.2	3	3.4	3.1	3.2	3
Unintentional . . . . . (X59)	7,459	6,673	7,218	6,550	2.7	2.4	2.5	2.3	2.7	2.4	2.5	2.3
Suicide . . . . . (*U03.9,X84)	116	145	146	145	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Homicide . . . . . (*U01.9,Y09)	1,411	1,463	1,506	1,533	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Undetermined . . . . . (Y34,Y89.9)	270	302	290	425	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Legal intervention/war . . . . . (Y35.7,Y36.9)	2	1	—	3	*	*	*	*	*	*	*	*_

— Quantity zero.

\* Figure does not meet standard of reliability or precision; see “Technical Notes.”

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>For method of computation, see “Technical Notes.”

<sup>2</sup>2001 and 2002 figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see “Technical Notes.”

<sup>3</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.

<sup>4</sup>Intent of death is unintentional.

**Table 2. Deaths due to injury according to mechanism and intent of death, by age: United States, 2002**

[Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	65-74 years	75-84 years	85 years and over
All injury . . . . . (*U01-U03,V01-Y36,Y85-Y87,Y89) <sup>2</sup>	161,269	1,350	2,121	1,346	2,063	10,709	14,510	23,035	28,426	24,095	13,143	40,321	11,118	15,565	13,638
Unintentional . . . . . (V01-X59,Y85-Y86)	106,742	946	1,641	1,176	1,542	7,137	8,275	12,569	16,710	14,675	8,345	33,641	8,086	12,904	12,651
Suicide . . . . . (*U03,X60-X84,Y87.0) <sup>2</sup>	31,655	...	...	4	260	1,513	2,497	5,046	6,851	6,308	3,618	5,548	2,463	2,259	826
Homicide . . . . . (*U01-U02,X85-Y09,Y87.1) <sup>2</sup>	17,638	303	423	140	216	1,892	3,327	4,489	3,239	1,915	841	812	421	296	95
Undetermined . . . . . (Y10-Y34,Y87.2,Y89.9)	4,830	101	57	26	42	143	344	828	1,516	1,140	320	299	139	95	65
Legal intervention/war . . . . . (Y35-Y36,Y89[0,.1])	404	-	-	-	3	24	67	103	110	57	19	21	9	11	1
Cut/pierce . . . . . (W25-W29,W45,X78,X99,Y28,Y35.4)	2,762	6	9	23	20	160	307	600	648	456	229	299	140	112	47
Unintentional . . . . . (W25-W29,W45)	109	-	1	2	2	4	7	12	10	11	20	40	19	16	5
Suicide . . . . . (X78)	566	...	...	-	2	10	18	83	129	140	71	113	38	50	25
Homicide . . . . . (X99)	2,074	6	8	21	16	144	281	499	507	304	138	145	82	46	17
Undetermined . . . . . (Y28)	13	-	-	-	-	2	1	6	2	1	-	1	1	-	-
Legal intervention/war . . . . . (Y35.4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drowning . . . . . (W65-W74,X71,X92,Y21)	4,146	80	490	166	168	335	361	538	688	480	285	529	220	206	103
Unintentional . . . . . (W65-W74)	3,447	63	454	159	162	320	309	433	526	374	212	415	169	167	79
Suicide . . . . . (X71)	368	...	...	-	1	6	22	61	84	60	46	87	41	32	14
Homicide . . . . . (X92)	72	12	20	3	2	4	5	10	11	4	-	1	1	-	-
Undetermined . . . . . (Y21)	259	5	16	4	3	5	25	34	67	42	27	26	9	7	10
Fall . . . . . (W00-W19,X80,Y01,Y30)	17,116	28	39	18	28	120	255	484	849	1,159	1,174	12,961	2,010	4,931	6,020
Unintentional . . . . . (W00-W19)	16,257	16	37	18	24	83	164	307	664	1,017	1,089	12,837	1,967	4,880	5,990
Suicide . . . . . (X80)	740	...	...	-	3	32	83	156	157	123	75	111	40	44	27
Homicide . . . . . (Y01)	16	-	1	-	-	1	1	2	5	4	2	-	-	-	-
Undetermined . . . . . (Y30)	103	12	1	-	1	4	7	19	23	15	8	13	3	7	3
Fire/hot object or substance . . . . . (*U01.3,X00-X19, X76-X77,X97-X98,Y26-Y27,Y36.3) <sup>3</sup>	3,645	43	251	174	115	94	138	325	446	527	391	1,135	421	468	246
Unintentional . . . . . (X00-X19)	3,261	40	226	153	101	86	110	269	368	459	351	1,095	401	457	237
Suicide . . . . . (X76-X77)	150	...	...	-	-	3	9	25	39	39	22	13	7	2	4
Homicide . . . . . (*U01.3,X97-X98)	134	1	15	11	9	3	12	20	22	17	7	14	5	6	3
Undetermined . . . . . (Y26-Y27)	100	2	10	10	5	2	7	11	17	12	11	13	8	3	2
Legal intervention/war . . . . . (Y36.3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire/flame . . . . . (X00-X09,X76,X97,Y26)	3,539	39	244	173	115	94	135	322	439	516	379	1,077	405	442	230
Unintentional . . . . . (X00-X09)	3,159	36	221	152	101	86	107	266	361	448	340	1,038	385	432	221
Suicide . . . . . (X76)	150	...	...	-	-	3	9	25	39	39	22	13	7	2	4
Homicide . . . . . (X97)	131	1	13	11	9	3	12	20	22	17	7	13	5	5	3
Undetermined . . . . . (Y26)	99	2	10	10	5	2	7	11	17	12	10	13	8	3	2
Hot object/substance . . . . . (X10-X19,X77,X98,Y27)	106	4	7	1	-	-	3	3	7	11	12	58	16	26	16
Unintentional . . . . . (X10-X19)	102	4	5	1	-	-	3	3	7	11	11	57	16	25	16
Suicide . . . . . (X77)	...	...	-	-	-	-	-	-	-	-	-	-	-	-	-
Homicide . . . . . (X98)	3	-	2	-	-	-	-	-	-	-	-	1	-	1	-
Undetermined . . . . . (Y27)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Firearm . . . . . (*U01.4,W32-W34,X72-X74, X93-X95,Y22-Y24,Y35.0)	30,242	10	61	71	277	2,474	4,306	6,140	5,446	4,321	2,719	4,402	1,993	1,833	576
Unintentional . . . . . (W32-W34)	762	1	11	14	34	107	103	143	123	95	56	75	36	32	7
Suicide . . . . . (X72-X74)	17,108	...	...	-	86	742	1,346	2,399	3,157	3,136	2,234	4,006	1,776	1,680	550
Homicide . . . . . (*U01.4,X93-X95)	11,829	9	49	55	150	1,567	2,750	3,465	2,042	1,025	409	295	161	115	19
Undetermined . . . . . (Y22-Y24)	243	-	1	2	4	35	44	46	50	29	12	20	15	5	-
Legal intervention/war . . . . . (Y35.0)	300	-	-	-	3	23	63	87	74	36	8	6	5	1	-
Machinery . . . . . (W24,W30-W31) <sup>4</sup>	652	-	7	6	11	11	29	71	99	117	115	186	99	69	18

See footnotes at end of table.

**Table 2. Deaths due to injury according to mechanism and intent of death, by age: United States, 2002—Con.**

[Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1–4 years	5–9 years	10–14 years	15–19 years	20–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65 years and over	65–74 years	75–84 years	85 years and over
All transport . . . . . (*U01.1,V01–V99,X82,Y03,Y32,Y36.1) <sup>2</sup>	47,939	128	635	699	1,027	5,789	6,025	7,441	7,607	6,447	4,087	8,014	3,319	3,388	1,307
Unintentional . . . . . (V01–V99)	47,739	127	634	697	1,026	5,766	6,004	7,406	7,559	6,412	4,075	7,994	3,308	3,381	1,305
Suicide . . . . . (X82)	112	...	...	–	–	12	14	21	27	23	8	7	4	2	1
Homicide . . . . . (*U01.1,Y03) <sup>2</sup>	61	1	1	2	–	6	5	11	12	9	3	10	4	5	1
Undetermined . . . . . (Y32)	27	–	–	–	1	5	2	3	9	3	1	3	3	–	–
Legal intervention/war . . . . . (Y36.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Motor vehicle traffic . . . . . (V02–V04[.1,.9],V09.2, V12–V14[.3–.9],V19[.4–.6],V20–V28[.3–.9], V29–V79[.4–.9],V80[.3–.5],V81.1,V82.1, V83–V86[.0–.3],V87[.0–.8],V89.2) <sup>4</sup>	44,065	120	533	621	874	5,522	5,712	6,933	6,883	5,767	3,645	7,420	3,006	3,170	1,244
Occupant . . . . . (V30–V79[.4–.9],V83–V86[.0–.3]) <sup>4</sup>	21,344	71	235	281	416	3,125	3,041	3,336	3,130	2,482	1,721	3,492	1,389	1,525	578
Motorcyclist . . . . . (V20–V28[.3–.9],V29[.4–.9]) <sup>4</sup>	3,153	–	–	3	17	153	439	756	766	653	262	104	72	22	10
Pedal cyclist . . . . . (V12–V14[.3–.9],V19[.4–.6]) <sup>4</sup>	550	–	2	33	70	46	27	67	104	106	43	51	27	20	4
Pedestrian . . . . . (V02–V04[.1,.9],V09.2) <sup>4</sup>	5,041	6	158	149	147	292	307	596	856	814	518	1,182	495	483	204
Other . . . . . (V80[.3–.5],V81.1,V82.1) <sup>4</sup>	16	1	2	3	1	–	–	6	1	–	1	1	–	–	1
Unspecified . . . . . (V87[.0–.8],V89.2) <sup>4</sup>	13,961	42	136	152	223	1,906	1,898	2,172	2,026	1,712	1,100	2,590	1,023	1,120	447
Pedal cyclist, other . . . . . (V10–V11,V12–V14[.0–.2], V15–V18,V19[.0–.3,.8,.9]) <sup>4</sup>	217	–	2	4	19	7	10	23	46	44	27	35	21	13	1
Pedestrian, other . . . . . (V01,V02–V04[.0],V05,V06, V09[.0,.1,.3,.9]) <sup>4</sup>	1,050	3	83	27	26	68	86	135	190	163	99	167	70	67	30
Other land transport . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82[.0,.2–.9], V83–V86[.4–.9],V87.9,V88[.0–.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	1,333	3	10	35	81	123	134	174	229	209	114	219	97	93	29
Unintentional . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82 [.0,.2–.9],V83–V86[.4–.9],V87.9,V88[.0–.9], V89[.0,.1,.3,.9])	1,134	2	9	33	80	100	113	139	181	174	102	200	86	87	27
Suicide . . . . . (X82)	112	...	...	–	–	12	14	21	27	23	8	7	4	2	1
Homicide . . . . . (Y03)	60	1	1	2	–	6	5	11	12	9	3	9	4	4	1
Undetermined . . . . . (Y32)	27	–	–	–	1	5	2	3	9	3	1	3	3	–	–
Other transport . . . . . (*U01.1,V90–V99,Y36.1) <sup>2</sup>	1,274	2	7	12	27	69	83	176	259	264	202	173	125	45	3
Unintentional . . . . . (V90–V99)	1,273	2	7	12	27	69	83	176	259	264	202	172	125	44	3
Homicide . . . . . (*U01.1) <sup>2</sup>	1	–	–	–	–	–	–	–	–	–	–	1	–	1	–
Legal intervention/war . . . . . (Y36.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Natural/environmental . . . . . (W42–W43,W53–W64, W92–W99,X20–X39,X51–X57) <sup>4</sup>	1,554	18	29	7	11	30	27	95	217	250	203	655	185	267	203
Overexertion . . . . . (X50) <sup>4</sup>	10	–	–	–	–	–	–	1	4	3	1	1	–	1	–
Poisoning . . . . . (*U01[.6–.7],X40–X49,X60–X69, X85–X90,Y10–Y19,Y35.2)	26,435	36	48	22	50	685	1,623	4,549	8,784	7,167	1,939	1,519	704	542	273
Unintentional . . . . . (X40–X49)	17,550	26	31	15	28	486	1,193	3,116	6,007	4,682	1,098	859	383	295	181
Suicide . . . . . (X60–X69)	5,486	...	...	–	11	118	207	794	1,569	1,571	641	575	272	225	78
Homicide . . . . . (*U01[.6–.7],X85–X90)	63	4	11	4	1	4	5	8	5	7	5	9	2	4	3
Undetermined . . . . . (Y10–Y19)	3,336	6	6	3	10	77	218	631	1,203	907	195	76	47	18	11
Legal intervention/war . . . . . (Y35.2)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Struck by or against . . . . . (W20–W22,W50–W52, X79,Y00,Y04,Y29,Y35.3)	1,182	8	39	21	24	47	75	172	223	228	136	208	100	76	32
Unintentional . . . . . (W20–W22,W50–W52)	890	2	26	20	22	30	46	121	159	169	115	180	88	63	29

See footnotes at end of table.

**Table 2. Deaths due to injury according to mechanism and intent of death, by age: United States, 2002—Con.**

[Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1–4 years	5–9 years	10–14 years	15–19 years	20–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65 years and over	65–74 years	75–84 years	85 years and over
Suicide . . . . . (X79)	3	...	...	–	–	–	–	1	1	–	–	1	–	1	–
Homicide . . . . . (Y00,Y04)	287	6	13	1	2	17	29	49	62	59	21	27	12	12	3
Undetermined . . . . . (Y29)	2	–	–	–	–	–	–	1	1	–	–	–	–	–	–
Legal intervention/war . . . . . (Y35.3)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Suffocation . . . . . (W75–W84,X70,X91,Y20)	12,791	724	176	64	250	670	896	1,737	1,996	1,567	876	3,826	889	1,473	1,464
Unintentional . . . . . (W75–W84)	5,517	636	139	40	70	68	87	190	305	378	387	3,217	611	1,255	1,351
Suicide . . . . . (X70)	6,462	...	...	4	154	550	731	1,411	1,525	1,076	447	558	250	203	105
Homicide . . . . . (X91)	679	32	30	14	12	46	70	125	151	108	39	50	28	14	8
Undetermined . . . . . (Y20)	133	56	7	6	14	6	8	11	15	5	3	1	–	1	–
Other specified, classifiable . . . . . (*U01[.0,.2,.5], *U03.0,W23,W35–W41,W44,W49,W85–W91,X75,X81,X96,Y02,Y05–Y07,Y25,Y31,Y35[.1,.5], Y36[.0,.2,.4–.8],Y85) <sup>2</sup>	2,073	102	113	34	26	87	145	281	441	399	207	237	97	101	39
Unintentional . . . . . (W23,W35–W41,W44,W49,W85–W91,Y85)	1,398	4	23	17	20	56	102	210	314	296	161	195	78	84	33
Suicide . . . . . (*U03.0,X75,X81) <sup>2</sup>	315	...	...	–	2	24	33	52	80	74	30	19	12	6	1
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05–Y07)	267	98	90	17	4	4	4	3	10	8	8	21	6	10	5
Undetermined . . . . . (Y25,Y31)	26	–	–	–	–	3	5	3	8	5	1	1	–	1	–
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4–.8])	67	–	–	–	–	–	1	13	29	16	7	1	1	–	–
Other specified, not elsewhere classified . . . . . (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	2,066	18	49	11	22	53	96	189	308	310	222	784	195	305	284
Unintentional . . . . . (X58,Y86)	1,046	–	10	8	12	11	23	54	89	117	103	619	128	236	255
Suicide . . . . . (X83,Y87.0)	200	...	...	–	1	10	19	17	53	36	28	36	13	11	12
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	623	12	36	3	6	31	45	92	121	124	76	75	35	32	8
Undetermined . . . . . (Y33,Y87.2)	163	6	3	–	3	–	6	24	38	28	11	42	17	16	9
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	34	–	–	–	–	1	3	2	7	5	4	12	2	10	–
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9)	8,656	149	175	30	34	154	227	412	670	664	559	5,565	746	1,793	3,026
Unintentional . . . . . (X59)	6,550	13	13	20	19	79	71	141	266	295	359	5,273	614	1,701	2,958
Suicide . . . . . (*U03.9,X84)	145	...	...	–	–	6	15	26	30	30	16	22	10	3	9
Homicide . . . . . (*U01.9,Y09)	1,533	122	149	9	14	65	120	205	291	246	133	165	85	52	28
Undetermined . . . . . (Y34,Y89.9)	425	14	13	1	1	4	21	39	83	93	51	103	36	37	30
Legal intervention/war . . . . . (Y35.7,Y36.9)	3	–	–	–	–	–	–	1	–	–	–	2	1	–	1

– Quantity zero.

... Category not applicable.

<sup>1</sup>Figures for age not stated are included in "All ages" but not distributed among age groups.

<sup>2</sup>2001 and 2002 figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>3</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.

<sup>4</sup>Intent of death is unintentional.

**Table 3. Male deaths due to injury according to mechanism and intent of death, by age: United States, 2002**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	65-74 years	75-84 years	85 years and over
All injury . . . . . (*U01-U03,V01-Y36,Y85-Y87,Y89) <sup>2</sup>	111,809	769	1,286	798	1,352	7,996	11,793	18,124	20,790	17,431	9,454	21,887	7,453	8,840	5,594
Unintentional . . . . . (V01-X59,Y85-Y86)	69,257	553	1,024	720	993	4,981	6,457	9,635	12,012	10,492	5,781	16,535	5,031	6,687	4,817
Suicide . . . . . (*U03,X60-X84,Y87.0) <sup>2</sup>	25,409	...	...	3	196	1,280	2,152	4,135	5,305	4,796	2,837	4,695	2,053	1,938	704
Homicide . . . . . (*U01-U02,X85-Y09,Y87.1) <sup>2</sup>	13,640	164	234	64	133	1,604	2,870	3,669	2,386	1,394	614	476	277	158	41
Undetermined . . . . . (Y10-Y34,Y87.2,Y89.9)	3,114	52	28	11	27	108	250	585	981	696	203	160	83	46	31
Legal intervention/war . . . . . (Y35-Y36,Y89[0..1])	389	-	-	-	3	23	64	100	106	53	19	21	9	11	1
Cut/pierce . . . . . (W25-W29,W45,X78,X99,Y28,Y35.4)	2,037	5	6	13	15	125	250	425	465	353	169	208	103	70	35
Unintentional . . . . . (W25-W29,W45)	93	-	1	1	2	3	6	11	9	9	18	33	17	11	5
Suicide . . . . . (X78)	463	...	...	-	2	7	15	70	110	115	54	90	31	39	20
Homicide . . . . . (X99)	1,470	5	5	12	11	113	228	339	345	228	97	84	54	20	10
Undetermined . . . . . (Y28)	11	-	-	-	-	2	1	5	1	1	-	1	1	-	-
Legal intervention/war . . . . . (Y35.4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drowning . . . . . (W65-W74,X71,X92,Y21)	3,215	48	332	130	123	301	330	453	548	375	205	346	163	125	58
Unintentional . . . . . (W65-W74)	2,761	40	312	126	118	288	290	380	439	301	161	288	132	106	50
Suicide . . . . . (X71)	225	...	...	-	1	6	17	40	53	40	27	40	22	14	4
Homicide . . . . . (X92)	45	5	13	2	2	2	4	5	9	2	-	1	1	-	-
Undetermined . . . . . (Y21)	184	3	7	2	2	5	19	28	47	32	17	17	8	5	4
Fall . . . . . (W00-W19,X80,Y01,Y30)	9,060	17	29	9	21	93	219	399	654	859	835	5,925	1,229	2,470	2,226
Unintentional . . . . . (W00-W19)	8,463	9	28	9	18	65	146	269	522	772	771	5,854	1,202	2,444	2,208
Suicide . . . . . (X80)	514	-	3	25	67	113	111	75	54	66	24	25	17	-	-
Homicide . . . . . (Y01)	10	-	-	-	-	-	-	1	4	3	2	-	-	-	-
Undetermined . . . . . (Y30)	73	8	1	-	-	3	6	16	17	9	8	5	3	1	1
Fire/hot object or substance . . . . . (*U01.3,X00-X19, X76-X77,X97-X98,Y26-Y27,Y36.3) <sup>3</sup>	2,225	23	142	95	66	66	92	209	302	352	250	622	264	250	108
Unintentional . . . . . (X00-X19)	1,987	21	130	90	62	61	73	172	256	300	222	597	250	243	104
Suicide . . . . . (X76-X77)	111	...	...	-	-	3	9	19	24	33	15	8	4	1	3
Homicide . . . . . (*U01.3,X97-X98)	77	-	6	3	4	2	6	11	14	13	6	9	5	4	-
Undetermined . . . . . (Y26-Y27)	50	2	6	2	-	-	4	7	8	6	7	8	5	2	1
Legal intervention/war . . . . . (Y36.3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire/flame . . . . . (X00-X09,X76,X97,Y26)	2,172	23	137	94	66	66	90	207	297	344	247	595	256	238	101
Unintentional . . . . . (X00-X09)	1,935	21	126	89	62	61	71	170	251	292	219	570	242	231	97
Suicide . . . . . (X76)	111	...	...	-	-	3	9	19	24	33	15	8	4	1	3
Homicide . . . . . (X97)	76	-	5	3	4	2	6	11	14	13	6	9	5	4	-
Undetermined . . . . . (Y26)	50	2	6	2	-	-	4	7	8	6	7	8	5	2	1
Hot object/substance . . . . . (X10-X19,X77,X98,Y27)	53	-	5	1	-	-	2	2	5	8	3	27	8	12	7
Unintentional . . . . . (X10-X19)	52	-	4	1	-	-	2	2	5	8	3	27	8	12	7
Suicide . . . . . (X77)	...	...	-	-	-	-	-	-	-	-	-	-	-	-	-
Homicide . . . . . (X98)	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Undetermined . . . . . (Y27)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Firearm . . . . . (*U01.4,W32-W34,X72-X74, X93-X95,Y22-Y24,Y35.0)	26,098	4	38	38	204	2,209	3,887	5,347	4,503	3,579	2,296	3,979	1,768	1,671	540
Unintentional . . . . . (W32-W34)	667	1	7	10	29	101	94	129	98	84	50	64	32	26	6
Suicide . . . . . (X72-X74)	15,045	...	...	-	68	668	1,229	2,078	2,672	2,677	1,930	3,721	1,620	1,576	525
Homicide . . . . . (*U01.4,X93-X95)	9,899	3	30	26	101	1,384	2,467	3,017	1,623	761	301	174	101	64	9
Undetermined . . . . . (Y22-Y24)	199	-	1	2	3	34	37	39	39	23	7	14	10	4	-
Legal intervention/war . . . . . (Y35.0)	288	-	-	-	3	22	60	84	71	34	8	6	5	1	-
Machinery . . . . . (W24,W30-W31) <sup>4</sup>	610	-	7	4	9	11	29	63	95	111	110	171	95	63	13

See footnotes at end of table.

**Table 3. Male deaths due to injury according to mechanism and intent of death, by age: United States, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1–4 years	5–9 years	10–14 years	15–19 years	20–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65 years and over	65–74 years	75–84 years	85 years and over
All transport . . . . . (*U01.1,V01–V99,X82,Y03,Y32,Y36.1) <sup>2</sup>	33,207	73	376	402	630	3,876	4,587	5,645	5,440	4,634	2,820	4,688	2,071	1,887	730
Unintentional . . . . . (V01–V99)	33,067	72	376	402	630	3,863	4,573	5,617	5,404	4,609	2,810	4,675	2,065	1,882	728
Suicide . . . . . (X82)	78	...	...	–	–	5	9	16	20	16	6	6	3	2	1
Homicide . . . . . (*U01.1,Y03) <sup>2</sup>	45	1	–	–	–	5	4	10	8	7	3	7	3	3	1
Undetermined . . . . . (Y32)	17	–	–	–	–	3	1	2	8	2	1	–	–	–	–
Legal intervention/war . . . . . (Y36.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Motor Vehicle Traffic . . . . . (V02–V04[.1,.9],V09.2, V12–V14[.3–.9],V19[.4–.6],V20–V28[.3–.9], V29–V79[.4–.9],V80[.3–.5],V81.1,V82.1, V83–V86[.0–.3],V87[.0–.8],V89.2) <sup>4</sup>	29,989	65	309	353	516	3,675	4,312	5,201	4,823	4,041	2,441	4,220	1,808	1,718	694
Occupant . . . . . (V30–V79[.4–.9],V83–V86[.0–.3]) <sup>4</sup>	14,119	41	134	154	222	2,064	2,244	2,445	2,112	1,649	1,109	1,932	795	827	310
Motorcyclist . . . . . (V20–V28[.3–.9],V29[.4–.9]) <sup>4</sup>	2,850	–	–	1	15	142	413	696	670	582	237	94	67	19	8
Pedal cyclist . . . . . (V12–V14[.3–.9],V19[.4–.6]) <sup>4</sup>	491	–	2	25	59	43	21	60	98	96	39	47	25	18	4
Pedestrian . . . . . (V02–V04[.1,.9],V09.2) <sup>4</sup>	3,421	1	103	84	95	210	246	429	603	600	354	681	311	257	113
Other . . . . . (V80[.3–.5],V81.1,V82.1) <sup>4</sup>	8	–	1	2	–	–	–	3	–	–	1	1	–	–	1
Unspecified . . . . . (V87[.0–.8],V89.2) <sup>4</sup>	9,100	23	69	87	125	1,216	1,388	1,568	1,340	1,114	701	1,465	610	597	258
Pedal cyclist, other . . . . . (V10–V11,V12–V14[.0–.2], V15–V18,V19[.0–.3,.8,.9]) <sup>4</sup>	200	–	2	4	17	6	9	20	40	43	25	34	20	13	1
Pedestrian, other . . . . . (V01,V02–V04[.0],V05,V06, V09[.0,.1,.3,.9]) <sup>4</sup>	817	3	55	17	16	51	80	111	157	141	79	104	46	44	14
Other land transport . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82[.0,.2–.9], V83–V86[.4–.9],V87.9,V88[.0–.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	1,079	3	5	22	65	95	111	153	187	174	97	167	76	72	19
Unintentional . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82 [.0,.2–.9],V83–V86[.4–.9],V87.9,V88[.0–.9], V89[.0,.1,.3,.9])	940	2	5	22	65	82	97	125	151	149	87	155	70	68	17
Suicide . . . . . (X82)	78	...	...	–	–	5	9	16	20	16	6	6	3	2	1
Homicide . . . . . (Y03)	44	1	–	–	–	5	4	10	8	7	3	6	3	2	1
Undetermined . . . . . (Y32)	17	–	–	–	–	3	1	2	8	2	1	–	–	–	–
Other transport . . . . . (*U01.1,V90–V99,Y36.1) <sup>2</sup>	1,122	2	5	6	16	49	75	160	233	235	178	163	121	40	2
Unintentional . . . . . (V90–V99)	1,121	2	5	6	16	49	75	160	233	235	178	162	121	39	2
Homicide . . . . . (*U01.1) <sup>2</sup>	1	–	–	–	–	–	–	–	–	–	–	1	–	1	–
Legal intervention/war . . . . . (Y36.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Natural/environmental . . . . . (W42–W43,W53–W64, W92–W99,X20–X39,X51–X57) <sup>4</sup>	1,024	13	19	3	7	22	24	81	167	193	159	327	124	127	76
Overexertion . . . . . (X50) <sup>4</sup>	10	–	–	–	–	–	–	1	4	3	1	1	–	1	–
Poisoning . . . . . (*U01[.6–.7],X40–X49,X60–X69, X85–X90,Y10–Y19,Y35.2)	17,257	26	19	15	25	495	1,212	3,256	5,780	4,525	1,134	760	361	273	126
Unintentional . . . . . (X40–X49)	12,059	21	14	10	18	366	940	2,319	4,122	3,136	690	416	209	136	71
Suicide . . . . . (X60–X69)	3,097	...	...	–	–	75	116	504	900	861	333	308	133	128	47
Homicide . . . . . (*U01[.6–.7],X85–X90)	38	2	5	3	–	1	3	6	5	6	4	3	–	1	2
Undetermined . . . . . (Y10–Y19)	2,063	3	–	2	7	53	153	427	753	522	107	33	19	8	6
Legal intervention/war . . . . . (Y35.2)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Struck by or against . . . . . (W20–W22,W50–W52, X79,Y00,Y04,Y29,Y35.3)	1,001	5	21	13	15	42	65	155	197	209	121	157	85	58	14
Unintentional . . . . . (W20–W22,W50–W52)	781	2	16	13	14	27	42	115	149	159	108	136	74	50	12

See footnotes at end of table.

**Table 3. Male deaths due to injury according to mechanism and intent of death, by age: United States, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1–4 years	5–9 years	10–14 years	15–19 years	20–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65 years and over	65–74 years	75–84 years	85 years and over
Suicide . . . . . (X79)	2	...	...	–	–	–	–	1	1	–	–	–	–	–	–
Homicide . . . . . (Y00,Y04)	217	3	5	–	1	15	23	38	47	50	13	21	11	8	2
Undetermined . . . . . (Y29)	1	–	–	–	–	–	–	1	–	–	–	–	–	–	–
Legal intervention/war . . . . . (Y35.3)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Suffocation . . . . . (W75–W84,X70,X91,Y20)	8,722	406	107	31	189	531	733	1,409	1,548	1,180	636	1,943	555	785	603
Unintentional . . . . . (W75–W84)	3,048	364	88	22	56	58	68	146	218	262	246	1,520	349	643	528
Suicide . . . . . (X70)	5,355	...	...	3	120	453	637	1,217	1,280	868	368	403	192	139	72
Homicide . . . . . (X91)	238	17	13	3	2	16	21	37	39	47	21	20	14	3	3
Undetermined . . . . . (Y20)	81	25	6	3	11	4	7	9	11	3	1	–	–	–	–
Other specified, classifiable . . . . . (*U01[.0,.2,.5], *U03.0,W23,W35–W41,W44,W49,W85–W91,X75,X81,X96,Y02,Y05–Y07,Y25,Y31,Y35[.1,.5], Y36[.0,.2,.4–.8],Y85) <sup>2</sup>	1,619	52	61	17	17	77	126	244	380	331	162	151	74	61	16
Unintentional . . . . . (W23,W35–W41,W44,W49,W85–W91,Y85)	1,151	1	14	7	13	50	91	184	275	251	133	132	64	53	15
Suicide . . . . . (*U03.0,X75,X81) <sup>2</sup>	251	...	...	–	2	23	27	43	63	59	21	12	7	4	1
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05–Y07)	133	51	47	10	2	3	2	3	5	4	–	6	2	4	–
Undetermined . . . . . (Y25,Y31)	19	–	–	–	–	1	5	1	8	3	1	–	–	–	–
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4–.8])	65	–	–	–	–	–	1	13	29	14	7	1	1	–	–
Other specified, not elsewhere classified . . . . . (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	1,413	12	31	9	12	40	75	147	240	239	174	430	137	174	119
Unintentional . . . . . (X58,Y86)	652	–	5	7	6	8	20	45	67	93	80	321	89	128	104
Suicide . . . . . (X83,Y87.0)	156	...	...	–	–	10	14	13	47	27	18	27	10	7	10
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	460	8	25	2	3	21	34	68	91	94	63	49	26	21	2
Undetermined . . . . . (Y33,Y87.2)	112	4	1	–	3	–	4	19	29	20	9	21	10	8	3
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	33	–	–	–	–	1	3	2	6	5	4	12	2	10	–
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9)	4,311	85	98	19	19	108	164	290	467	488	382	2,179	424	825	930
Unintentional . . . . . (X59)	2,884	9	7	16	11	58	61	103	187	209	222	2,000	329	774	897
Suicide . . . . . (*U03.9,X84)	112	...	...	–	–	5	12	21	24	25	11	14	7	3	4
Homicide . . . . . (*U01.9,Y09)	1,008	69	85	3	7	42	78	134	196	179	104	102	60	30	12
Undetermined . . . . . (Y34,Y89.9)	304	7	6	–	1	3	13	31	60	75	45	61	27	18	16
Legal intervention/war . . . . . (Y35.7,Y36.9)	3	–	–	–	–	–	–	1	–	–	–	2	1	–	1

– Quantity zero.

... Category not applicable.

<sup>1</sup>Figures for age not stated are included in "All ages" but not distributed among age groups.

<sup>2</sup>2001 and 2002 figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>3</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.

<sup>4</sup>Intent of death is unintentional.



**Table 4. Female deaths due to injury according to mechanism and intent of death by age: United States, 2002**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	65-74 years	75-84 years	85 years and over
All injury . . . . . (*U01-U03,V01-Y36,Y85-Y87,Y89) <sup>2</sup>	49,460	581	835	548	711	2,713	2,717	4,911	7,636	6,664	3,689	18,434	3,665	6,725	8,044
Unintentional . . . . . (V01-X59,Y85-Y86)	37,485	393	617	456	549	2,156	1,818	2,934	4,698	4,183	2,564	17,106	3,055	6,217	7,834
Suicide . . . . . (*U03,X60-X84,Y87.0) <sup>2</sup>	6,246	...	...	1	64	233	345	911	1,546	1,512	781	853	410	321	122
Homicide . . . . . (*U01-U02,X85-Y09,Y87.1) <sup>2</sup>	3,998	139	189	76	83	288	457	820	853	521	227	336	144	138	54
Undetermined . . . . . (Y10-Y34,Y87.2,Y89.9)	1,716	49	29	15	15	35	94	243	535	444	117	139	56	49	34
Legal intervention/war . . . . . (Y35-Y36,Y89[0,.1])	15	-	-	-	-	1	3	3	4	4	-	-	-	-	-
Cut/pierce . . . . . (W25-W29,W45,X78,X99,Y28,Y35.4)	725	1	3	10	5	35	57	175	183	103	60	91	37	42	12
Unintentional . . . . . (W25-W29,W45)	16	-	-	1	-	1	1	1	1	2	2	7	2	5	-
Suicide . . . . . (X78)	103	...	...	-	-	3	3	13	19	25	17	23	7	11	5
Homicide . . . . . (X99)	604	1	3	9	5	31	53	160	162	76	41	61	28	26	7
Undetermined . . . . . (Y28)	2	-	-	-	-	-	-	1	1	-	-	-	-	-	-
Legal intervention/war . . . . . (Y35.4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drowning . . . . . (W65-W74,X71,X92,Y21)	931	32	158	36	45	34	31	85	140	105	80	183	57	81	45
Unintentional . . . . . (W65-W74)	686	23	142	33	44	32	19	53	87	73	51	127	37	61	29
Suicide . . . . . (X71)	143	...	...	-	-	-	5	21	31	20	19	47	19	18	10
Homicide . . . . . (X92)	27	7	7	1	-	2	1	5	2	2	-	-	-	-	-
Undetermined . . . . . (Y21)	75	2	9	2	1	-	6	6	20	10	10	9	1	2	6
Fall . . . . . (W00-W19,X80,Y01,Y30)	8,056	11	10	9	7	27	36	85	195	300	339	7,036	781	2,461	3,794
Unintentional . . . . . (W00-W19)	7,794	7	9	9	6	18	18	38	142	245	318	6,983	765	2,436	3,782
Suicide . . . . . (X80)	226	...	...	-	-	7	16	43	46	48	21	45	16	19	10
Homicide . . . . . (Y01)	6	-	1	-	-	1	1	1	1	1	-	-	-	-	-
Undetermined . . . . . (Y30)	30	4	-	-	1	1	1	3	6	6	-	8	-	6	2
Fire/hot object or substance . . . . . (*U01.3,X00-X19, X76-X77,X97-X98,Y26-Y27,Y36.3) <sup>3</sup>	1,420	20	109	79	49	28	46	116	144	175	141	513	157	218	138
Unintentional . . . . . (X00-X19)	1,274	19	96	63	39	25	37	97	112	159	129	498	151	214	133
Suicide . . . . . (X76-X77)	39	...	...	-	-	-	-	6	15	6	7	5	3	1	1
Homicide . . . . . (*U01.3,X97-X98)	57	1	9	8	5	1	6	9	8	4	1	5	-	2	3
Undetermined . . . . . (Y26-Y27)	50	-	4	8	5	2	3	4	9	6	4	5	3	1	1
Legal intervention/war . . . . . (Y36.3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire/flame . . . . . (X00-X09,X76,X97,Y26)	1,367	16	107	79	49	28	45	115	142	172	132	482	149	204	129
Unintentional . . . . . (X00-X09)	1,224	15	95	63	39	25	36	96	110	156	121	468	143	201	124
Suicide . . . . . (X76)	39	...	...	-	-	-	-	6	15	6	7	5	3	1	1
Homicide . . . . . (X97)	55	1	8	8	5	1	6	9	8	4	1	4	-	1	3
Undetermined . . . . . (Y26)	49	-	4	8	5	2	3	4	9	6	3	5	3	1	1
Hot object/substance . . . . . (X10-X19,X77,X98,Y27)	53	4	2	-	-	-	1	1	2	3	9	31	8	14	9
Unintentional . . . . . (X10-X19)	50	4	1	-	-	-	1	1	2	3	8	30	8	13	9
Suicide . . . . . (X77)	-	...	...	-	-	-	-	-	-	-	-	-	-	-	-
Homicide . . . . . (X98)	2	-	1	-	-	-	-	-	-	-	-	1	-	1	-
Undetermined . . . . . (Y27)	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Firearm . . . . . (*U01.4,W32-W34,X72-X74, X93-X95,Y22-Y24,Y35.0)	4,144	6	23	33	73	265	419	793	943	742	423	423	225	162	36
Unintentional . . . . . (W32-W34)	95	-	4	4	5	6	9	14	25	11	6	11	4	6	1
Suicide . . . . . (X72-X74)	2,063	...	...	-	18	74	117	321	485	459	304	285	156	104	25
Homicide . . . . . (*U01.4,X93-X95)	1,930	6	19	29	49	183	283	448	419	264	108	121	60	51	10
Undetermined . . . . . (Y22-Y24)	44	-	-	-	1	1	7	7	11	6	5	6	5	1	-
Legal intervention/war . . . . . (Y35.0)	12	-	-	-	-	1	3	3	3	2	-	-	-	-	-
Machinery . . . . . (W24,W30-W31) <sup>4</sup>	42	-	-	2	2	-	-	8	4	6	5	15	4	6	5

See footnotes at end of table.

**Table 4. Female deaths due to injury according to mechanism and intent of death by age: United States, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	65-74 years	75-84 years	85 years and over
All transport . . . . . (*U01.1,V01-V99,X82,Y03,Y32,Y36.1) <sup>2</sup>	14,732	55	259	297	397	1,913	1,438	1,796	2,167	1,813	1,267	3,326	1,248	1,501	577
Unintentional . . . . . (V01-V99)	14,672	55	258	295	396	1,903	1,431	1,789	2,155	1,803	1,265	3,319	1,243	1,499	577
Suicide . . . . . (X82)	34	...	...	-	-	7	5	5	7	7	2	1	1	-	-
Homicide . . . . . (*U01.1,Y03) <sup>2</sup>	16	-	1	2	-	1	1	1	4	2	-	3	1	2	-
Undetermined . . . . . (Y32)	10	-	-	-	1	2	1	1	1	1	-	3	3	-	-
Legal intervention/war . . . . . (Y36.1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Motor Vehicle Traffic . . . . . (V02-V04[.1,.9],V09.2, V12-V14[.3-.9],V19[.4-.6],V20-V28[.3-.9], V29-V79[.4-.9],V80[.3-.5],V81.1,V82.1, V83-V86[.0-.3],V87[.0-.8],V89.2) <sup>4</sup>	14,076	55	224	268	358	1,847	1,400	1,732	2,060	1,726	1,204	3,200	1,198	1,452	550
Occupant . . . . . (V30-V79[.4-.9],V83-V86[.0-.3]) <sup>4</sup>	7,225	30	101	127	194	1,061	797	891	1,018	833	612	1,560	594	698	268
Motorcyclist . . . . . (V20-V28[.3-.9],V29[.4-.9]) <sup>4</sup>	303	-	-	2	2	11	26	60	96	71	25	10	5	3	2
Pedal cyclist . . . . . (V12-V14[.3-.9],V19[.4-.6]) <sup>4</sup>	59	-	-	8	11	3	6	7	6	10	4	4	2	2	-
Pedestrian . . . . . (V02-V04[.1,.9],V09.2) <sup>4</sup>	1,620	5	55	65	52	82	61	167	253	214	164	501	184	226	91
Other . . . . . (V80[.3-.5],V81.1,V82.1) <sup>4</sup>	8	1	1	1	1	-	-	3	1	-	-	-	-	-	-
Unspecified . . . . . (V87[.0-.8],V89.2) <sup>4</sup>	4,861	19	67	65	98	690	510	604	686	598	399	1,125	413	523	189
Pedal cyclist, other . . . . . (V10-V11,V12-V14[.0-.2], V15-V18,V19[.0-.3,.8,.9]) <sup>4</sup>	17	-	-	-	2	1	1	3	6	1	2	1	1	-	-
Pedestrian, other . . . . . (V01,V02-V04[.0],V05,V06, V09[.0,.1,.3,.9]) <sup>4</sup>	233	-	28	10	10	17	6	24	33	22	20	63	24	23	16
Other land transport . . . . . (V20-V28[.0-.2], V29-V79[.0-.3],V80[.0-.2,.6-.9],V81-V82[.0,.2-.9], V83-V86[.4-.9],V87.9,V88[.0-.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	254	-	5	13	16	28	23	21	42	35	17	52	21	21	10
Unintentional . . . . . (V20-V28[.0-.2], V29-V79[.0-.3],V80[.0-.2,.6-.9],V81-V82 [.0,.2-.9],V83-V86[.4-.9],V87.9,V88[.0-.9], V89[.0,.1,.3,.9])	194	-	4	11	15	18	16	14	30	25	15	45	16	19	10
Suicide . . . . . (X82)	34	...	...	-	-	7	5	5	7	7	2	1	1	-	-
Homicide . . . . . (Y03)	16	-	1	2	-	1	1	1	4	2	-	3	1	2	-
Undetermined . . . . . (Y32)	10	-	-	-	1	2	1	1	1	1	-	3	3	-	-
Other transport . . . . . (*U01.1,V90-V99,Y36.1) <sup>2</sup>	152	-	2	6	11	20	8	16	26	29	24	10	4	5	1
Unintentional . . . . . (V90-V99)	152	-	2	6	11	20	8	16	26	29	24	10	4	5	1
Homicide . . . . . (*U01.1) <sup>2</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Legal intervention/war . . . . . (Y36.1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Natural/environmental . . . . . (W42-W43,W53-W64, W92-W99,X20-X39,X51-X57) <sup>4</sup>	530	5	10	4	4	8	3	14	50	57	44	328	61	140	127
Overexertion . . . . . (X50) <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Poisoning . . . . . (*U01[.6-.7],X40-X49,X60-X69, X85-X90,Y10-Y19,Y35.2)	9,178	10	29	7	25	190	411	1,293	3,004	2,642	805	759	343	269	147
Unintentional . . . . . (X40-X49)	5,491	5	17	5	10	120	253	797	1,885	1,546	408	443	174	159	110
Suicide . . . . . (X60-X69)	2,389	...	...	-	11	43	91	290	669	710	308	267	139	97	31
Homicide . . . . . (*U01[.6-.7],X85-X90)	25	2	6	1	1	3	2	2	-	1	1	6	2	3	1
Undetermined . . . . . (Y10-Y19)	1,273	3	6	1	3	24	65	204	450	385	88	43	28	10	5
Legal intervention/war . . . . . (Y35.2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Struck by or against . . . . . (W20-W22,W50-W52, X79,Y00,Y04,Y29,Y35.3)	181	3	18	8	9	5	10	17	26	19	15	51	15	18	18
Unintentional . . . . . (W20-W22,W50-W52)	109	-	10	7	8	3	4	6	10	10	7	44	14	13	17

See footnotes at end of table.

**Table 4. Female deaths due to injury according to mechanism and intent of death by age: United States, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1–4 years	5–9 years	10–14 years	15–19 years	20–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65 years and over	65–74 years	75–84 years	85 years and over
Suicide . . . . . (X79)	1	...	...	–	–	–	–	–	–	–	–	1	–	1	–
Homicide . . . . . (Y00,Y04)	70	3	8	1	1	2	6	11	15	9	8	6	1	4	1
Undetermined . . . . . (Y29)	1	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Legal intervention/war . . . . . (Y35.3)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Suffocation . . . . . (W75–W84,X70,X91,Y20)	4,069	318	69	33	61	139	163	328	448	387	240	1,883	334	688	861
Unintentional . . . . . (W75–W84)	2,469	272	51	18	14	10	19	44	87	116	141	1,697	262	612	823
Suicide . . . . . (X70)	1,107	...	...	1	34	97	94	194	245	208	79	155	58	64	33
Homicide . . . . . (X91)	441	15	17	11	10	30	49	88	112	61	18	30	14	11	5
Undetermined . . . . . (Y20)	52	31	1	3	3	2	1	2	4	2	2	1	–	1	–
Other specified, classifiable . . . . . (*U01[.0,.2,.5], *U03.0,W23,W35–W41,W44,W49,W85–W91,X75,X81,X96,Y02,Y05–Y07,Y25,Y31,Y35[.1,.5], Y36[.0,.2,.4–.8],Y85) <sup>2</sup>	454	50	52	17	9	10	19	37	61	68	45	86	23	40	23
Unintentional . . . . . (W23,W35–W41,W44,W49,W85–W91,Y85)	247	3	9	10	7	6	11	26	39	45	28	63	14	31	18
Suicide . . . . . (*U03.0,X75,X81) <sup>2</sup>	64	...	...	–	–	1	6	9	17	15	9	7	5	2	–
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05–Y07)	134	47	43	7	2	1	2	–	5	4	8	15	4	6	5
Undetermined . . . . . (Y25,Y31)	7	–	–	–	–	2	–	2	–	2	–	1	–	1	–
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4–.8])	2	–	–	–	–	–	–	–	–	2	–	–	–	–	–
Other specified, not elsewhere classified . . . . . (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	653	6	18	2	10	13	21	42	68	71	48	354	58	131	165
Unintentional . . . . . (X58,Y86)	394	–	5	1	6	3	3	9	22	24	23	298	39	108	151
Suicide . . . . . (X83,Y87.0)	44	...	...	–	1	–	5	4	6	9	10	9	3	4	2
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	163	4	11	1	3	10	11	24	30	30	13	26	9	11	6
Undetermined . . . . . (Y33,Y87.2)	51	2	2	–	–	–	2	5	9	8	2	21	7	8	6
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	1	–	–	–	–	–	–	–	1	–	–	–	–	–	–
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9)	4,345	64	77	11	15	46	63	122	203	176	177	3,386	322	968	2,096
Unintentional . . . . . (X59)	3,666	4	6	4	8	21	10	38	79	86	137	3,273	285	927	2,061
Suicide . . . . . (*U03.9,X84)	33	...	...	–	–	1	3	5	6	5	5	8	3	–	5
Homicide . . . . . (*U01.9,Y09)	525	53	64	6	7	23	42	71	95	67	29	63	25	22	16
Undetermined . . . . . (Y34,Y89.9)	121	7	7	1	–	1	8	8	23	18	6	42	9	19	14
Legal intervention/war . . . . . (Y35.7,Y36.9)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

– Quantity zero.

... Category not applicable.

<sup>1</sup>Figures for age not stated are included in "All ages" but not distributed among age groups.

<sup>2</sup>2001 and 2002 figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>3</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.

<sup>4</sup>Intent of death is unintentional.

**Table 5. Death rates due to injury according to mechanism and intent of death, by age: United States, 2002**

[Crude rates per 100,000 population. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	65-74 years	75-84 years	85 years and over
All injury . . . . . (*U01-U03,V01-Y36,Y85-Y87,Y89) <sup>2</sup>	55.9	33.5	13.6	6.8	9.8	52.6	71.8	57.7	63.3	60.1	49.4	113.3	60.8	122.2	296.9
Unintentional . . . . . (V01-X59,Y85-Y86)	37.0	23.5	10.5	5.9	7.3	35.0	40.9	31.5	37.2	36.6	31.4	94.5	44.2	101.3	275.4
Suicide . . . . . (*U03,X60-X84,Y87.0) <sup>2</sup>	11.0	...	...	*	1.2	7.4	12.4	12.6	15.3	15.7	13.6	15.6	13.5	17.7	18.0
Homicide . . . . . (*U01-U02,X85-Y09,Y87.1) <sup>2</sup>	6.1	7.5	2.7	0.7	1.0	9.3	16.5	11.2	7.2	4.8	3.2	2.3	2.3	2.3	2.1
Undetermined . . . . . (Y10-Y34,Y87.2,Y89.9)	1.7	2.5	0.4	0.1	0.2	0.7	1.7	2.1	3.4	2.8	1.2	0.8	0.8	0.7	1.4
Legal intervention/war . . . . . (Y35-Y36,Y89[0,.1])	0.1	*	*	*	*	0.1	0.3	0.3	0.2	0.1	*	0.1	*	*	*
Cut/pierce . . . . . (W25-W29,W45,X78,X99,Y28,Y35.4)	1.0	*	*	0.1	0.1	0.8	1.5	1.5	1.4	1.1	0.9	0.8	0.8	0.9	1.0
Unintentional . . . . . (W25-W29,W45)	0.0	*	*	*	*	*	*	*	*	*	0.1	0.1	*	*	*
Suicide . . . . . (X78)	0.2	...	...	*	*	*	*	0.2	0.3	0.3	0.3	0.3	0.2	0.4	0.5
Homicide . . . . . (X99)	0.7	*	*	0.1	*	0.7	1.4	1.2	1.1	0.8	0.5	0.4	0.4	0.4	*
Undetermined . . . . . (Y28)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.4)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Drowning . . . . . (W65-W74,X71,X92,Y21)	1.4	2.0	3.1	0.8	0.8	1.6	1.8	1.3	1.5	1.2	1.1	1.5	1.2	1.6	2.2
Unintentional . . . . . (W65-W74)	1.2	1.6	2.9	0.8	0.8	1.6	1.5	1.1	1.2	0.9	0.8	1.2	0.9	1.3	1.7
Suicide . . . . . (X71)	0.1	...	...	*	*	*	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.3	*
Homicide . . . . . (X92)	0.0	*	0.1	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y21)	0.1	*	*	*	*	*	0.1	0.1	0.1	0.1	0.1	0.1	*	*	*
Fall . . . . . (W00-W19,X80,Y01,Y30)	5.9	0.7	0.3	*	0.1	0.6	1.3	1.2	1.9	2.9	4.4	36.4	11.0	38.7	131.1
Unintentional . . . . . (W00-W19)	5.6	*	0.2	*	0.1	0.4	0.8	0.8	1.5	2.5	4.1	36.1	10.8	38.3	130.4
Suicide . . . . . (X80)	0.3	...	...	*	*	0.2	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.6
Homicide . . . . . (Y01)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y30)	0.0	*	*	*	*	*	*	*	0.1	*	*	*	*	*	*
Fire/hot object or substance . . . . . (*U01.3,X00-X19, X76-X77,X97-X98,Y26-Y27,Y36.3) <sup>3</sup>	1.3	1.1	1.6	0.9	0.5	0.5	0.7	0.8	1.0	1.3	1.5	3.2	2.3	3.7	5.4
Unintentional . . . . . (X00-X19)	1.1	1.0	1.5	0.8	0.5	0.4	0.5	0.7	0.8	1.1	1.3	3.1	2.2	3.6	5.2
Suicide . . . . . (X76-X77)	0.1	...	...	*	*	*	*	0.1	0.1	0.1	0.1	*	*	*	*
Homicide . . . . . (*U01.3,X97-X98)	0.0	*	*	*	*	*	*	0.1	0.0	*	*	*	*	*	*
Undetermined . . . . . (Y26-Y27)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fire/flame . . . . . (X00-X09,X76,X97,Y26)	1.2	1.0	1.6	0.9	0.5	0.5	0.7	0.8	1.0	1.3	1.4	3.0	2.2	3.5	5.0
Unintentional . . . . . (X00-X09)	1.1	0.9	1.4	0.8	0.5	0.4	0.5	0.7	0.8	1.1	1.3	2.9	2.1	3.4	4.8
Suicide . . . . . (X76)	0.1	...	...	*	*	*	*	0.1	0.1	0.1	0.1	*	*	*	*
Homicide . . . . . (X97)	0.0	*	*	*	*	*	*	0.1	0.0	*	*	*	*	*	*
Undetermined . . . . . (Y26)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hot object/substance . . . . . (X10-X19,X77,X98,Y27)	0.0	*	*	*	*	*	*	*	*	*	*	0.2	*	0.2	*
Unintentional . . . . . (X10-X19)	0.0	*	*	*	*	*	*	*	*	*	*	0.2	*	0.2	*
Suicide . . . . . (X77)	*	...	...	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (X98)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y27)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Firearm . . . . . (*U01.4,W32-W34,X72-X74, X93-X95,Y22-Y24,Y35.0)	10.5	*	0.4	0.4	1.3	12.1	21.3	15.4	12.1	10.8	10.2	12.4	10.9	14.4	12.5
Unintentional . . . . . (W32-W34)	0.3	*	*	*	0.2	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.3	*
Suicide . . . . . (X72-X74)	5.9	...	...	*	0.4	3.6	6.7	6.0	7.0	7.8	8.4	11.3	9.7	13.2	12.0
Homicide . . . . . (*U01.4,X93-X95)	4.1	*	0.3	0.3	0.7	7.7	13.6	8.7	4.5	2.6	1.5	0.8	0.9	0.9	*
Undetermined . . . . . (Y22-Y24)	0.1	*	*	*	*	0.2	0.2	0.1	0.1	0.1	*	0.1	*	*	*
Legal intervention/war . . . . . (Y35.0)	0.1	*	*	*	*	0.1	0.3	0.2	0.2	0.1	*	*	*	*	*
Machinery . . . . . (W24,W30-W31) <sup>4</sup>	0.2	*	*	*	*	*	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.5	*

See footnotes at end of table.

**Table 5. Death rates due to injury according to mechanism and intent of death, by age: United States, 2002—Con.**

[Crude rates per 100,000 population. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1–4 years	5–9 years	10–14 years	15–19 years	20–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65 years and over	65–74 years	75–84 years	85 years and over
All transport . . . . . (*U01.1,V01–V99,X82,Y03,Y32,Y36.1) <sup>2</sup>	16.6	3.2	4.1	3.5	4.9	28.4	29.8	18.6	16.9	16.1	15.4	22.5	18.2	26.6	28.5
Unintentional . . . . . (V01–V99)	16.6	3.1	4.1	3.5	4.9	28.3	29.7	18.5	16.8	16.0	15.3	22.5	18.1	26.5	28.4
Suicide . . . . . (X82)	0.0	...	...	*	*	*	*	0.1	0.1	0.1	*	*	*	*	*
Homicide . . . . . (*U01.1,Y03) <sup>2</sup>	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y32)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Motor vehicle traffic . . . . . (V02–V04[.1,.9],V09.2, V12–V14[.3–.9],V19[.4–.6],V20–V28[.3–.9], V29–V79[.4–.9],V80[.3–.5],V81.1,V82.1, V83–V86[.0–.3],V87[.0–.8],V89.2) <sup>4</sup>	15.3	3.0	3.4	3.1	4.1	27.1	28.3	17.4	15.3	14.4	13.7	20.8	16.4	24.9	27.1
Occupant . . . . . (V30–V79[.4–.9],V83–V86[.0–.3]) <sup>4</sup>	7.4	1.8	1.5	1.4	2.0	15.3	15.0	8.4	7.0	6.2	6.5	9.8	7.6	12.0	12.6
Motorcyclist . . . . . (V20–V28[.3–.9],V29[.4–.9]) <sup>4</sup>	1.1	*	*	*	*	0.8	2.2	1.9	1.7	1.6	1.0	0.3	0.4	0.2	*
Pedal cyclist . . . . . (V12–V14[.3–.9],V19[.4–.6]) <sup>4</sup>	0.2	*	*	0.2	0.3	0.2	0.1	0.2	0.2	0.3	0.2	0.1	0.1	0.2	*
Pedestrian . . . . . (V02–V04[.1,.9],V09.2) <sup>4</sup>	1.7	*	1.0	0.7	0.7	1.4	1.5	1.5	1.9	2.0	1.9	3.3	2.7	3.8	4.4
Other . . . . . (V80[.3–.5],V81.1,V82.1) <sup>4</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Unspecified . . . . . (V87[.0–.8],V89.2) <sup>4</sup>	4.8	1.0	0.9	0.8	1.1	9.4	9.4	5.4	4.5	4.3	4.1	7.3	5.6	8.8	9.7
Pedal cyclist, other . . . . . (V10–V11,V12–V14[.0–.2], V15–V18,V19[.0–.3,.8,.9]) <sup>4</sup>	0.1	*	*	*	*	*	*	0.1	0.1	0.1	0.1	0.1	0.1	*	*
Pedestrian, other . . . . . (V01,V02–V04[.0],V05,V06, V09[.0,.1,.3,.9]) <sup>4</sup>	0.4	*	0.5	0.1	0.1	0.3	0.4	0.3	0.4	0.4	0.4	0.5	0.4	0.5	0.7
Other land transport . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82[.0–.2–.9], V83–V86[.4–.9],V87.9,V88[.0–.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	0.5	*	*	0.2	0.4	0.6	0.7	0.4	0.5	0.5	0.4	0.6	0.5	0.7	0.6
Unintentional . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82 [.0,.2–.9],V83–V86[.4–.9],V87.9,V88[.0–.9], V89[.0,.1,.3,.9])	0.4	*	*	0.2	0.4	0.5	0.6	0.3	0.4	0.4	0.4	0.6	0.5	0.7	0.6
Suicide . . . . . (X82)	0.0	...	...	*	*	*	*	0.1	0.1	0.1	*	*	*	*	*
Homicide . . . . . (Y03)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y32)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other transport . . . . . (*U01.1,V90–V99,Y36.1) <sup>2</sup>	0.4	*	*	*	0.1	0.3	0.4	0.4	0.6	0.7	0.8	0.5	0.7	0.4	*
Unintentional . . . . . (V90–V99)	0.4	*	*	*	0.1	0.3	0.4	0.4	0.6	0.7	0.8	0.5	0.7	0.3	*
Homicide . . . . . (*U01.1) <sup>2</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Natural/environmental . . . . . (W42–W43,W53–W64, W92–W99,X20–X39,X51–X57) <sup>4</sup>	0.5	*	0.2	*	*	0.1	0.1	0.2	0.5	0.6	0.8	1.8	1.0	2.1	4.4
Overexertion . . . . . (X50) <sup>4</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Poisoning . . . . . (*U01[.6–.7],X40–X49,X60–X69, X85–X90,Y10–Y19,Y35.2)	9.2	0.9	0.3	0.1	0.2	3.4	8.0	11.4	19.6	17.9	7.3	4.3	3.9	4.3	5.9
Unintentional . . . . . (X40–X49)	6.1	0.6	0.2	*	0.1	2.4	5.9	7.8	13.4	11.7	4.1	2.4	2.1	2.3	3.9
Suicide . . . . . (X60–X69)	1.9	...	...	*	*	0.6	1.0	2.0	3.5	3.9	2.4	1.6	1.5	1.8	1.7
Homicide . . . . . (*U01[.6–.7],X85–X90)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y10–Y19)	1.2	*	*	*	*	0.4	1.1	1.6	2.7	2.3	0.7	0.2	0.3	*	*
Legal intervention/war . . . . . (Y35.2)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Struck by or against . . . . . (W20–W22,W50–W52, X79,Y00,Y04,Y29,Y35.3)	0.4	*	0.3	0.1	0.1	0.2	0.4	0.4	0.5	0.6	0.5	0.6	0.5	0.6	0.7
Unintentional . . . . . (W20–W22,W50–W52)	0.3	*	0.2	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6

See footnotes at end of table.

**Table 5. Death rates due to injury according to mechanism and intent of death, by age: United States, 2002—Con.**

[Crude rates per 100,000 population. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1–4 years	5–9 years	10–14 years	15–19 years	20–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65 years and over	65–74 years	75–84 years	85 years and over
Suicide . . . . . (X79)	*	...	...	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (Y00,Y04)	0.1	*	*	*	*	*	0.1	0.1	0.1	0.1	0.1	0.1	*	*	*
Undetermined . . . . . (Y29)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Suffocation . . . . . (W75–W84,X70,X91,Y20)	4.4	17.9	1.1	0.3	1.2	3.3	4.4	4.4	4.4	3.9	3.3	10.7	4.9	11.6	31.9
Unintentional . . . . . (W75–W84)	1.9	15.8	0.9	0.2	0.3	0.3	0.4	0.5	0.7	0.9	1.5	9.0	3.3	9.9	29.4
Suicide . . . . . (X70)	2.2	...	...	*	0.7	2.7	3.6	3.5	3.4	2.7	1.7	1.6	1.4	1.6	2.3
Homicide . . . . . (X91)	0.2	0.8	0.2	*	*	0.2	0.3	0.3	0.3	0.3	0.1	0.1	0.2	*	*
Undetermined . . . . . (Y20)	0.0	1.4	*	*	*	*	*	*	*	*	*	*	*	*	*
Other specified, classifiable . . . . . (*U01[.0,.2,.5], *U03.0,W23,W35–W41,W44,W49,W85–W91,X75, X81,X96,Y02,Y05–Y07,Y25,Y31,Y35[.1,.5], Y36[.0,.2,.4–.8],Y85) <sup>2</sup>	0.7	2.5	0.7	0.2	0.1	0.4	0.7	0.7	1.0	1.0	0.8	0.7	0.5	0.8	0.8
Unintentional (W23,W35–W41,W44,W49,W85–W91,Y85)	0.5	*	0.1	*	0.1	0.3	0.5	0.5	0.7	0.7	0.6	0.5	0.4	0.7	0.7
Suicide . . . . . (*U03.0,X75,X81) <sup>2</sup>	0.1	...	...	*	0.1	0.1	0.2	0.1	0.2	0.2	0.1	*	*	*	*
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05–Y07)	0.1	2.4	0.6	*	*	*	*	*	*	*	*	0.1	*	*	*
Undetermined . . . . . (Y25,Y31)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4–.8])	0.0	*	*	*	*	*	*	*	0.1	*	*	*	*	*	*
Other specified, not elsewhere classified . . . . . (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	0.7	*	0.3	*	0.1	0.3	0.5	0.5	0.7	0.8	0.8	2.2	1.1	2.4	6.2
Unintentional . . . . . (X58,Y86)	0.4	*	*	*	*	*	0.1	0.1	0.2	0.3	0.4	1.7	0.7	1.9	5.6
Suicide . . . . . (X83,Y87.0)	0.1	...	...	*	*	*	*	*	0.1	0.1	0.1	0.1	*	*	*
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	0.2	*	0.2	*	*	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	*
Undetermined . . . . . (Y33,Y87.2)	0.1	*	*	*	*	*	*	0.1	0.1	0.1	*	0.1	*	*	*
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34, Y35.7,Y36.9,Y89.9)	3.0	3.7	1.1	0.2	0.2	0.8	1.1	1.0	1.5	1.7	2.1	15.6	4.1	14.1	65.9
Unintentional . . . . . (X59)	2.3	*	*	0.1	*	0.4	0.4	0.4	0.6	0.7	1.3	14.8	3.4	13.4	64.4
Suicide . . . . . (*U03.9,X84)	0.1	...	...	*	*	*	*	0.1	0.1	0.1	*	0.1	*	*	*
Homicide . . . . . (*U01.9,Y09)	0.5	3.0	1.0	*	*	0.3	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.4	0.6
Undetermined . . . . . (Y34,Y89.9)	0.1	*	*	*	*	*	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.7
Legal intervention/war . . . . . (Y35.7,Y36.9)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

... Category not applicable.

\* Figure does not meet standard of reliability or precision; see "Technical Notes."

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>Figures for age not stated are included in "All ages" but not distributed among age groups.

<sup>2</sup>2001 and 2002 figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>3</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.

<sup>4</sup>Intent of death is unintentional.

**Table 6. Male death rates due to injury according to mechanism and intent of death, by age: United States, 2002**

[Crude rates per 100,000 population. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	65-74 years	75-84 years	85 years and over
All injury . . . . . (*U01-U03,V01-Y36,Y85-Y87,Y89) <sup>2</sup>	78.9	37.3	16.2	7.8	12.5	76.4	113.9	89.7	93.0	88.6	74.0	148.2	89.8	174.0	402.5
Unintentional . . . . . (V01-X59,Y85-Y86)	48.9	26.8	12.9	7.1	9.2	47.6	62.4	47.7	53.7	53.3	45.2	111.9	60.6	131.6	346.6
Suicide . . . . . (*U03,X60-X84,Y87.0) <sup>2</sup>	17.9	...	...	*	1.8	12.2	20.8	20.5	23.7	24.4	22.2	31.8	24.7	38.1	50.7
Homicide . . . . . (*U01-U02,X85-Y09,Y87.1) <sup>2</sup>	9.6	7.9	2.9	0.6	1.2	15.3	27.7	18.2	10.7	7.1	4.8	3.2	3.3	3.1	3.0
Undetermined . . . . . (Y10-Y34,Y87.2,Y89.9)	2.2	2.5	0.4	*	0.2	1.0	2.4	2.9	4.4	3.5	1.6	1.1	1.0	0.9	2.2
Legal intervention/war . . . . . (Y35-Y36,Y89[0,.1])	0.3	*	*	*	*	0.2	0.6	0.5	0.5	0.3	*	0.1	*	*	*
Cut/pierce . . . . . (W25-W29,W45,X78,X99,Y28,Y35.4)	1.4	*	*	*	*	1.2	2.4	2.1	2.1	1.8	1.3	1.4	1.2	1.4	2.5
Unintentional . . . . . (W25-W29,W45)	0.1	*	*	*	*	*	*	*	*	*	*	0.2	*	*	*
Suicide . . . . . (X78)	0.3	...	...	*	*	*	*	0.3	0.5	0.6	0.4	0.6	0.4	0.8	1.4
Homicide . . . . . (X99)	1.0	*	*	*	*	1.1	2.2	1.7	1.5	1.2	0.8	0.6	0.7	0.4	*
Undetermined . . . . . (Y28)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.4)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Drowning . . . . . (W65-W74,X71,X92,Y21)	2.3	2.3	4.2	1.3	1.1	2.9	3.2	2.2	2.5	1.9	1.6	2.3	2.0	2.5	4.2
Unintentional . . . . . (W65-W74)	1.9	1.9	3.9	1.2	1.1	2.8	2.8	1.9	2.0	1.5	1.3	1.9	1.6	2.1	3.6
Suicide . . . . . (X71)	0.2	...	...	*	*	*	*	0.2	0.2	0.2	0.2	0.3	0.3	*	*
Homicide . . . . . (X92)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y21)	0.1	*	*	*	*	*	*	0.1	0.2	0.2	*	*	*	*	*
Fall . . . . . (W00-W19,X80,Y01,Y30)	6.4	*	0.4	*	0.2	0.9	2.1	2.0	2.9	4.4	6.5	40.1	14.8	48.6	160.2
Unintentional . . . . . (W00-W19)	6.0	*	0.4	*	*	0.6	1.4	1.3	2.3	3.9	6.0	39.6	14.5	48.1	158.9
Suicide . . . . . (X80)	0.4	...	...	*	*	0.2	0.6	0.6	0.5	0.4	0.4	0.4	0.3	0.5	*
Homicide . . . . . (Y01)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y30)	0.1	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fire/hot object or substance . . . . . (*U01.3,X00-X19, X76-X77,X97-X98,Y26-Y27,Y36.3) <sup>3</sup>	1.6	1.1	1.8	0.9	0.6	0.6	0.9	1.0	1.4	1.8	2.0	4.2	3.2	4.9	7.8
Unintentional . . . . . (X00-X19)	1.4	1.0	1.6	0.9	0.6	0.6	0.7	0.9	1.1	1.5	1.7	4.0	3.0	4.8	7.5
Suicide . . . . . (X76-X77)	0.1	...	...	*	*	*	*	*	0.1	0.2	*	*	*	*	*
Homicide . . . . . (*U01.3,X97-X98)	0.1	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y26-Y27)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fire/flame . . . . . (X00-X09,X76,X97,Y26)	1.5	1.1	1.7	0.9	0.6	0.6	0.9	1.0	1.3	1.7	1.9	4.0	3.1	4.7	7.3
Unintentional . . . . . (X00-X09)	1.4	1.0	1.6	0.9	0.6	0.6	0.7	0.8	1.1	1.5	1.7	3.9	2.9	4.5	7.0
Suicide . . . . . (X76)	0.1	...	...	*	*	*	*	*	0.1	0.2	*	*	*	*	*
Homicide . . . . . (X97)	0.1	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y26)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hot object/substance . . . . . (X10-X19,X77,X98,Y27)	0.0	*	*	*	*	*	*	*	*	*	*	0.2	*	*	*
Unintentional . . . . . (X10-X19)	0.0	*	*	*	*	*	*	*	*	*	*	0.2	*	*	*
Suicide . . . . . (X77)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (X98)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y27)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Firearm . . . . . (*U01.4,W32-W34,X72-X74, X93-X95,Y22-Y24,Y35.0)	18.4	*	0.5	0.4	1.9	21.1	37.6	26.5	20.1	18.2	18.0	26.9	21.3	32.9	38.9
Unintentional . . . . . (W32-W34)	0.5	*	*	*	0.3	1.0	0.9	0.6	0.4	0.4	0.4	0.4	0.4	0.5	*
Suicide . . . . . (X72-X74)	10.6	...	...	*	0.6	6.4	11.9	10.3	11.9	13.6	15.1	25.2	19.5	31.0	37.8
Homicide . . . . . (*U01.4,X93-X95)	7.0	*	0.4	0.3	0.9	13.2	23.8	14.9	7.3	3.9	2.4	1.2	1.2	1.3	*
Undetermined . . . . . (Y22-Y24)	0.1	*	*	*	*	0.3	0.4	0.2	0.2	0.1	*	*	*	*	*
Legal intervention/war . . . . . (Y35.0)	0.2	*	*	*	*	0.2	0.6	0.4	0.3	0.2	*	*	*	*	*
Machinery . . . . . (W24,W30-W31) <sup>4</sup>	0.4	*	*	*	*	*	0.3	0.3	0.4	0.6	0.9	1.2	1.1	1.2	*

See footnotes at end of table.

**Table 6. Male death rates due to injury according to mechanism and intent of death, by age: United States, 2002—Con.**

[Crude rates per 100,000 population. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	65-74 years	75-84 years	85 years and over
All transport . . . . . (*U01.1,V01-V99,X82,Y03,Y32,Y36.1) <sup>2</sup>	23.4	3.5	4.7	3.9	5.8	37.0	44.3	27.9	24.3	23.6	22.1	31.7	24.9	37.1	52.5
Unintentional . . . . . (V01-V99)	23.3	3.5	4.7	3.9	5.8	36.9	44.2	27.8	24.2	23.4	22.0	31.6	24.9	37.0	52.4
Suicide . . . . . (X82)	0.1	...	...	*	*	*	*	*	0.1	*	*	*	*	*	*
Homicide . . . . . (*U01.1,Y03) <sup>2</sup>	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y32)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Motor vehicle traffic . . . . . (V02-V04[.1,.9],V09.2, V12-V14[.3-.9],V19[.4-.6],V20-V28[.3-.9], V29-V79[.4-.9],V80[.3-.5],V81.1,V82.1, V83-V86[.0-.3],V87[.0-.8],V89.2) <sup>4</sup>	21.2	3.1	3.9	3.5	4.8	35.1	41.7	25.7	21.6	20.5	19.1	28.6	21.8	33.8	49.9
Occupant . . . . . (V30-V79[.4-.9],V83-V86[.0-.3]) <sup>4</sup>	10.0	2.0	1.7	1.5	2.1	19.7	21.7	12.1	9.4	8.4	8.7	13.1	9.6	16.3	22.3
Motorcyclist . . . . . (V20-V28[.3-.9],V29[.4-.9]) <sup>4</sup>	2.0	*	*	*	*	1.4	4.0	3.4	3.0	3.0	1.9	0.6	0.8	*	*
Pedal cyclist . . . . . (V12-V14[.3-.9],V19[.4-.6]) <sup>4</sup>	0.3	*	*	0.2	0.5	0.4	0.2	0.3	0.4	0.5	0.3	0.3	0.3	*	*
Pedestrian . . . . . (V02-V04[.1,.9],V09.2) <sup>4</sup>	2.4	*	1.3	0.8	0.9	2.0	2.4	2.1	2.7	3.0	2.8	4.6	3.7	5.1	8.1
Other . . . . . (V80[.3-.5],V81.1,V82.1) <sup>4</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Unspecified . . . . . (V87[.0-.8],V89.2) <sup>4</sup>	6.4	1.1	0.9	0.9	1.2	11.6	13.4	7.8	6.0	5.7	5.5	9.9	7.3	11.7	18.6
Pedal cyclist, other . . . . . (V10-V11,V12-V14[.0-.2], V15-V18,V19[.0-.3,.8,.9]) <sup>4</sup>	0.1	*	*	*	*	*	*	0.1	0.2	0.2	0.2	0.2	0.2	*	*
Pedestrian, other . . . . . (V01,V02-V04[.0],V05,V06, V09[.0,.1,.3,.9]) <sup>4</sup>	0.6	*	0.7	*	*	0.5	0.8	0.5	0.7	0.7	0.6	0.7	0.6	0.9	*
Other land transport . . . . . (V20-V28[.0-.2], V29-V79[.0-.3],V80[.0-.2,.6-.9],V81-V82[.0,.2-.9], V83-V86[.4-.9],V87.9,V88[.0-.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	0.8	*	*	0.2	0.6	0.9	1.1	0.8	0.8	0.9	0.8	1.1	0.9	1.4	*
Unintentional . . . . . (V20-V28[.0-.2], V29-V79[.0-.3],V80[.0-.2,.6-.9],V81-V82 [.0,.2-.9],V83-V86[.4-.9],V87.9,V88[.0-.9], V89[.0,.1,.3,.9])	0.7	*	*	0.2	0.6	0.8	0.9	0.6	0.7	0.8	0.7	1.0	0.8	1.3	*
Suicide . . . . . (X82)	0.1	...	...	*	*	*	*	*	0.1	*	*	*	*	*	*
Homicide . . . . . (Y03)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y32)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other transport . . . . . (*U01.1,V90-V99,Y36.1) <sup>2</sup>	0.8	*	*	*	*	0.5	0.7	0.8	1.0	1.2	1.4	1.1	1.5	0.8	*
Unintentional . . . . . (V90-V99)	0.8	*	*	*	*	0.5	0.7	0.8	1.0	1.2	1.4	1.1	1.5	0.8	*
Homicide . . . . . (*U01.1) <sup>2</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Natural/environmental . . . . . (W42-W43,W53-W64, W92-W99,X20-X39,X51-X57) <sup>4</sup>	0.7	*	*	*	*	0.2	0.2	0.4	0.7	1.0	1.2	2.2	1.5	2.5	5.5
Overexertion . . . . . (X50) <sup>4</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Poisoning . . . . . (*U01[.6-.7],X40-X49,X60-X69, X85-X90,Y10-Y19,Y35.2)	12.2	1.3	*	*	0.2	4.7	11.7	16.1	25.8	23.0	8.9	5.1	4.3	5.4	9.1
Unintentional . . . . . (X40-X49)	8.5	1.0	*	*	*	3.5	9.1	11.5	18.4	15.9	5.4	2.8	2.5	2.7	5.1
Suicide . . . . . (X60-X69)	2.2	...	...	*	*	0.7	1.1	2.5	4.0	4.4	2.6	2.1	1.6	2.5	3.4
Homicide . . . . . (*U01[.6-.7],X85-X90)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y10-Y19)	1.5	*	*	*	*	0.5	1.5	2.1	3.4	2.7	0.8	0.2	*	*	*
Legal intervention/war . . . . . (Y35.2)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Struck by or against . . . . . (W20-W22,W50-W52, X79,Y00,Y04,Y29,Y35.3)	0.7	*	0.3	*	*	0.4	0.6	0.8	0.9	1.1	0.9	1.1	1.0	1.1	*
Unintentional . . . . . (W20-W22,W50-W52)	0.6	*	*	*	*	0.3	0.4	0.6	0.7	0.8	0.8	0.9	0.9	1.0	*

See footnotes at end of table.



**Table 6. Male death rates due to injury according to mechanism and intent of death, by age: United States, 2002—Con.**

[Crude rates per 100,000 population. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1–4 years	5–9 years	10–14 years	15–19 years	20–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65 years and over	65–74 years	75–84 years	85 years and over
Suicide . . . . . (X79)	*	...	...	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (Y00,Y04)	0.2	*	*	*	*	*	0.2	0.2	0.2	0.3	*	0.1	*	*	*
Undetermined . . . . . (Y29)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Suffocation . . . . . (W75–W84,X70,X91,Y20)	6.2	19.7	1.3	0.3	1.7	5.1	7.1	7.0	6.9	6.0	5.0	13.2	6.7	15.4	43.4
Unintentional . . . . . (W75–W84)	2.2	17.6	1.1	0.2	0.5	0.6	0.7	0.7	1.0	1.3	1.9	10.3	4.2	12.7	38.0
Suicide . . . . . (X70)	3.8	...	...	*	1.1	4.3	6.2	6.0	5.7	4.4	2.9	2.7	2.3	2.7	5.2
Homicide . . . . . (X91)	0.2	*	*	*	*	*	0.2	0.2	0.2	0.2	0.2	0.1	*	*	*
Undetermined . . . . . (Y20)	0.1	1.2	*	*	*	*	*	*	*	*	*	*	*	*	*
Other specified, classifiable . . . . . (*U01[.0,.2,.5], *U03.0,W23,W35–W41,W44,W49,W85–W91,X75,X81,X96,Y02,Y05–Y07,Y25,Y31,Y35[.1,.5], Y36[.0,.2,.4–.8],Y85) <sup>2</sup>	1.1	2.5	0.8	*	*	0.7	1.2	1.2	1.7	1.7	1.3	1.0	0.9	1.2	*
Unintentional . . . . . (W23,W35–W41,W44,W49,W85–W91,Y85)	0.8	*	*	*	*	0.5	0.9	0.9	1.2	1.3	1.0	0.9	0.8	1.0	*
Suicide . . . . . (*U03.0,X75,X81) <sup>2</sup>	0.2	...	...	*	*	0.2	0.3	0.2	0.3	0.3	0.2	*	*	*	*
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05–Y07)	0.1	2.5	0.6	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y25,Y31)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4–.8])	0.0	*	*	*	*	*	*	*	0.1	*	*	*	*	*	*
Other specified, not elsewhere classified . . . . . (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	1.0	*	0.4	*	*	0.4	0.7	0.7	1.1	1.2	1.4	2.9	1.7	3.4	8.6
Unintentional . . . . . (X58,Y86)	0.5	*	*	*	*	*	0.2	0.2	0.3	0.5	0.6	2.2	1.1	2.5	7.5
Suicide . . . . . (X83,Y87.0)	0.1	...	...	*	*	*	*	*	0.2	0.1	*	0.2	*	*	*
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	0.3	*	0.3	*	*	0.2	0.3	0.3	0.4	0.5	0.5	0.3	0.3	0.4	*
Undetermined . . . . . (Y33,Y87.2)	0.1	*	*	*	*	*	*	*	0.1	0.1	*	0.1	*	*	*
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9)	3.0	4.1	1.2	*	*	1.0	1.6	1.4	2.1	2.5	3.0	14.8	5.1	16.2	66.9
Unintentional . . . . . (X59)	2.0	*	*	*	*	0.6	0.6	0.5	0.8	1.1	1.7	13.5	4.0	15.2	64.5
Suicide . . . . . (*U03.9,X84)	0.1	...	...	*	*	*	*	0.1	0.1	0.1	*	*	*	*	*
Homicide . . . . . (*U01.9,Y09)	0.7	3.3	1.1	*	*	0.4	0.8	0.7	0.9	0.9	0.8	0.7	0.7	0.6	*
Undetermined . . . . . (Y34,Y89.9)	0.2	*	*	*	*	*	*	0.2	0.3	0.4	0.4	0.4	0.3	*	*
Legal intervention/war . . . . . (Y35.7,Y36.9)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

... Category not applicable.

\* Figure does not meet standard of reliability or precision; see "Technical Notes."

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>Figures for age not stated are included in "All ages" but not distributed among age groups.

<sup>2</sup>2001 and 2002 figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>3</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.

<sup>4</sup>Intent of death is unintentional.

**Table 7. Female death rates due to injury according to mechanism and intent of death, by age: United States, 2002**

[Crude rates per 100,000 population. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	65-74 years	75-84 years	85 years and over
All injury . . . . . (*U01-U03,V01-Y36,Y85-Y87,Y89) <sup>2</sup>	33.7	29.5	11.0	5.6	6.9	27.4	27.5	24.9	33.9	32.7	26.7	88.5	36.7	87.9	251.1
Unintentional . . . . . (V01-X59,Y85-Y86)	25.6	20.0	8.1	4.7	5.3	21.8	18.4	14.9	20.8	20.5	18.6	82.1	30.6	81.2	244.6
Suicide . . . . . (*U03,X60-X84,Y87.0) <sup>2</sup>	4.3	...	...	*	0.6	2.4	3.5	4.6	6.9	7.4	5.7	4.1	4.1	4.2	3.8
Homicide . . . . . (*U01-U02,X85-Y09,Y87.1) <sup>2</sup>	2.7	7.1	2.5	0.8	0.8	2.9	4.6	4.2	3.8	2.6	1.6	1.6	1.4	1.8	1.7
Undetermined . . . . . (Y10-Y34,Y87.2,Y89.9)	1.2	2.5	0.4	*	*	0.4	1.0	1.2	2.4	2.2	0.8	0.7	0.6	0.6	1.1
Legal intervention/war . . . . . (Y35-Y36,Y89[0,.1])	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Cut/pierce . . . . . (W25-W29,W45,X78,X99,Y28,Y35.4)	0.5	*	*	*	*	0.4	0.6	0.9	0.8	0.5	0.4	0.4	0.4	0.5	*
Unintentional . . . . . (W25-W29,W45)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Suicide . . . . . (X78)	0.1	...	...	*	*	*	*	*	*	0.1	*	0.1	*	*	*
Homicide . . . . . (X99)	0.4	*	*	*	*	0.3	0.5	0.8	0.7	0.4	0.3	0.3	0.3	0.3	*
Undetermined . . . . . (Y28)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.4)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Drowning . . . . . (W65-W74,X71,X92,Y21)	0.6	1.6	2.1	0.4	0.4	0.3	0.3	0.4	0.6	0.5	0.6	0.9	0.6	1.1	1.4
Unintentional . . . . . (W65-W74)	0.5	1.2	1.9	0.3	0.4	0.3	*	0.3	0.4	0.4	0.4	0.6	0.4	0.8	0.9
Suicide . . . . . (X71)	0.1	...	...	*	*	*	*	0.1	0.1	0.1	*	0.2	*	*	*
Homicide . . . . . (X92)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y21)	0.1	*	*	*	*	*	*	*	0.1	*	*	*	*	*	*
Fall . . . . . (W00-W19,X80,Y01,Y30)	5.5	*	*	*	*	0.3	0.4	0.4	0.9	1.5	2.5	33.8	7.8	32.2	118.4
Unintentional . . . . . (W00-W19)	5.3	*	*	*	*	*	*	0.2	0.6	1.2	2.3	33.5	7.7	31.8	118.1
Suicide . . . . . (X80)	0.2	...	...	*	*	*	*	0.2	0.2	0.2	0.2	0.2	*	*	*
Homicide . . . . . (Y01)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y30)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fire/hot object or substance . . . . . (*U01.3,X00-X19, X76-X77,X97-X98,Y26-Y27,Y36.3) <sup>3</sup>	1.0	1.0	1.4	0.8	0.5	0.3	0.5	0.6	0.6	0.9	1.0	2.5	1.6	2.8	4.3
Unintentional . . . . . (X00-X19)	0.9	*	1.3	0.6	0.4	0.3	0.4	0.5	0.5	0.8	0.9	2.4	1.5	2.8	4.2
Suicide . . . . . (X76-X77)	0.0	...	...	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01.3,X97-X98)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y26-Y27)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fire/flame . . . . . (X00-X09,X76,X97,Y26)	0.9	*	1.4	0.8	0.5	0.3	0.5	0.6	0.6	0.8	1.0	2.3	1.5	2.7	4.0
Unintentional . . . . . (X00-X09)	0.8	*	1.2	0.6	0.4	0.3	0.4	0.5	0.5	0.8	0.9	2.2	1.4	2.6	3.9
Suicide . . . . . (X76)	0.0	...	...	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (X97)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y26)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hot object/substance . . . . . (X10-X19,X77,X98,Y27)	0.0	*	*	*	*	*	*	*	*	*	*	0.1	*	*	*
Unintentional . . . . . (X10-X19)	0.0	*	*	*	*	*	*	*	*	*	*	0.1	*	*	*
Suicide . . . . . (X77)	*	...	...	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (X98)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y27)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Firearm . . . . . (*U01.4,W32-W34,X72-X74, X93-X95,Y22-Y24,Y35.0)	2.8	*	0.3	0.3	0.7	2.7	4.2	4.0	4.2	3.6	3.1	2.0	2.3	2.1	1.1
Unintentional . . . . . (W32-W34)	0.1	*	*	*	*	*	*	*	0.1	*	*	*	*	*	*
Suicide . . . . . (X72-X74)	1.4	...	...	*	*	0.7	1.2	1.6	2.2	2.2	2.2	1.4	1.6	1.4	0.8
Homicide . . . . . (*U01.4,X93-X95)	1.3	*	*	0.3	0.5	1.8	2.9	2.3	1.9	1.3	0.8	0.6	0.6	0.7	*
Undetermined . . . . . (Y22-Y24)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.0)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Machinery . . . . . (W24,W30-W31) <sup>4</sup>	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*

See footnotes at end of table.

**Table 7. Female death rates due to injury according to mechanism and intent of death, by age: United States, 2002—Con.**

[Crude rates per 100,000 population. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1-4 years	5-9 years	10-14 years	15-19 years	20-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over	65-74 years	75-84 years	85 years and over
All transport . . . . . (*U01.1,V01-V99,X82,Y03,Y32,Y36.1) <sup>2</sup>	10.0	2.8	3.4	3.1	3.9	19.3	14.6	9.1	9.6	8.9	9.2	16.0	12.5	19.6	18.0
Unintentional . . . . . (V01-V99)	10.0	2.8	3.4	3.0	3.8	19.2	14.5	9.1	9.6	8.8	9.2	15.9	12.5	19.6	18.0
Suicide . . . . . (X82)	0.0	...	...	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01.1,Y03) <sup>2</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y32)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Motor vehicle traffic . . . . . (V02-V04[.1,.9],V09.2, V12-V14[.3-.9],V19[.4-.6],V20-V28[.3-.9], V29-V79[.4-.9],V80[.3-.5],V81.1,V82.1, V83-V86[.0-.3],V87[.0-.8],V89.2) <sup>4</sup>	9.6	2.8	2.9	2.8	3.5	18.6	14.2	8.8	9.1	8.5	8.7	15.4	12.0	19.0	17.2
Occupant . . . . . (V30-V79[.4-.9],V83-V86[.0-.3]) <sup>4</sup>	4.9	1.5	1.3	1.3	1.9	10.7	8.1	4.5	4.5	4.1	4.4	7.5	6.0	9.1	8.4
Motorcyclist . . . . . (V20-V28[.3-.9],V29[.4-.9]) <sup>4</sup>	0.2	*	*	*	*	*	0.3	0.3	0.4	0.3	0.2	*	*	*	*
Pedal cyclist . . . . . (V12-V14[.3-.9],V19[.4-.6]) <sup>4</sup>	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pedestrian . . . . . (V02-V04[.1,.9],V09.2) <sup>4</sup>	1.1	*	0.7	0.7	0.5	0.8	0.6	0.8	1.1	1.0	1.2	2.4	1.8	3.0	2.8
Other . . . . . (V80[.3-.5],V81.1,V82.1) <sup>4</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Unspecified . . . . . (V87[.0-.8],V89.2) <sup>4</sup>	3.3	*	0.9	0.7	1.0	7.0	5.2	3.1	3.0	2.9	2.9	5.4	4.1	6.8	5.9
Pedal cyclist, other . . . . . (V10-V11,V12-V14[.0-.2], V15-V18,V19[.0-.3,.8,.9]) <sup>4</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pedestrian, other . . . . . (V01,V02-V04[.0],V05,V06, V09[.0,.1,.3,.9]) <sup>4</sup>	0.2	*	0.4	*	*	*	*	0.1	0.1	0.1	0.1	0.3	0.2	0.3	*
Other land transport . . . . . (V20-V28[.0-.2], V29-V79[.0-.3],V80[.0-.2,.6-.9],V81-V82[.0,.2-.9], V83-V86[.4-.9],V87.9,V88[.0-.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	0.2	*	*	*	*	0.3	0.2	0.1	0.2	0.2	*	0.2	0.2	0.3	*
Unintentional . . . . . (V20-V28[.0-.2], V29-V79[.0-.3],V80[.0-.2,.6-.9],V81-V82 [.0,.2-.9],V83-V86[.4-.9],V87.9,V88[.0-.9], V89[.0,.1,.3,.9])	0.1	*	*	*	*	*	*	*	0.1	0.1	*	0.2	*	*	*
Suicide . . . . . (X82)	0.0	...	...	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (Y03)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y32)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other transport . . . . . (*U01.1,V90-V99,Y36.1) <sup>2</sup>	0.1	*	*	*	*	0.2	*	*	0.1	0.1	0.2	*	*	*	*
Unintentional . . . . . (V90-V99)	0.1	*	*	*	*	0.2	*	*	0.1	0.1	0.2	*	*	*	*
Homicide . . . . . (*U01.1) <sup>2</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Natural/environmental . . . . . (W42-W43,W53-W64, W92-W99,X20-X39,X51-X57) <sup>4</sup>	0.4	*	*	*	*	*	*	*	0.2	0.3	0.3	1.6	0.6	1.8	4.0
Overexertion . . . . . (X50) <sup>4</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Poisoning . . . . . (*U01[.6-.7],X40-X49,X60-X69, X85-X90,Y10-Y19,Y35.2)	6.3	*	0.4	*	0.2	1.9	4.2	6.6	13.3	12.9	5.8	3.6	3.4	3.5	4.6
Unintentional . . . . . (X40-X49)	3.7	*	*	*	*	1.2	2.6	4.0	8.4	7.6	3.0	2.1	1.7	2.1	3.4
Suicide . . . . . (X60-X69)	1.6	...	...	*	0.4	0.9	1.5	3.0	3.5	2.2	1.3	1.4	1.3	1.0	1.0
Homicide . . . . . (*U01[.6-.7],X85-X90)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y10-Y19)	0.9	*	*	*	*	0.2	0.7	1.0	2.0	1.9	0.6	0.2	0.3	*	*
Legal intervention/war . . . . . (Y35.2)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Struck by or against . . . . . (W20-W22,W50-W52, X79,Y00,Y04,Y29,Y35.3)	0.1	*	*	*	*	*	*	*	0.1	*	*	0.2	*	*	*
Unintentional . . . . . (W20-W22,W50-W52)	0.1	*	*	*	*	*	*	*	*	*	*	0.2	*	*	*

See footnotes at end of table.

**Table 7. Female death rates due to injury according to mechanism and intent of death, by age: United States, 2002—Con.**

[Crude rates per 100,000 population. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All ages <sup>1</sup>	Under 1 year	1–4 years	5–9 years	10–14 years	15–19 years	20–24 years	25–34 years	35–44 years	45–54 years	55–64 years	65 years and over	65–74 years	75–84 years	85 years and over
Suicide . . . . . (X79)	*	...	...	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (Y00,Y04)	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y29)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Suffocation . . . . . (W75–W84,X70,X91,Y20)	2.8	16.1	0.9	0.3	0.6	1.4	1.7	1.7	2.0	1.9	1.7	9.0	3.3	9.0	26.9
Unintentional . . . . . (W75–W84)	1.7	13.8	0.7	*	*	*	*	0.2	0.4	0.6	1.0	8.1	2.6	8.0	25.7
Suicide . . . . . (X70)	0.8	...	...	*	0.3	1.0	1.0	1.0	1.1	1.0	0.6	0.7	0.6	0.8	1.0
Homicide . . . . . (X91)	0.3	*	*	*	*	0.3	0.5	0.4	0.5	0.3	*	0.1	*	*	*
Undetermined . . . . . (Y20)	0.0	1.6	*	*	*	*	*	*	*	*	*	*	*	*	*
Other specified, classifiable . . . . . (*U01[.0,.2,.5], *U03.0,W23,W35–W41,W44,W49,W85–W91,X75,X81,X96,Y02,Y05–Y07,Y25,Y31,Y35[.1,.5], Y36[.0,.2,.4–.8],Y85) <sup>2</sup>	0.3	2.5	0.7	*	*	*	*	0.2	0.3	0.3	0.3	0.4	0.2	0.5	0.7
Unintentional . . . . . (W23,W35–W41,W44,W49,W85–W91,Y85)	0.2	*	*	*	*	*	*	0.1	0.2	0.2	0.2	0.3	*	0.4	*
Suicide . . . . . (*U03.0,X75,X81) <sup>2</sup>	0.0	...	...	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05–Y07)	0.1	2.4	0.6	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y25,Y31)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4–.8])	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other specified, not elsewhere classified . . . . . (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	0.4	*	*	*	*	*	0.2	0.2	0.3	0.3	0.3	1.7	0.6	1.7	5.2
Unintentional . . . . . (X58,Y86)	0.3	*	*	*	*	*	*	*	0.1	0.1	0.2	1.4	0.4	1.4	4.7
Suicide . . . . . (X83,Y87.0)	0.0	...	...	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	0.1	*	*	*	*	*	*	0.1	0.1	0.1	*	0.1	*	*	*
Undetermined . . . . . (Y33,Y87.2)	0.0	*	*	*	*	*	*	*	*	*	*	0.1	*	*	*
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9)	3.0	3.2	1.0	*	*	0.5	0.6	0.6	0.9	0.9	1.3	16.3	3.2	12.6	65.4
Unintentional . . . . . (X59)	2.5	*	*	*	*	0.2	*	0.2	0.4	0.4	1.0	15.7	2.9	12.1	64.3
Suicide . . . . . (*U03.9,X84)	0.0	...	...	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01.9,Y09)	0.4	2.7	0.8	*	*	0.2	0.4	0.4	0.4	0.3	0.2	0.3	0.3	0.3	*
Undetermined . . . . . (Y34,Y89.9)	0.1	*	*	*	*	*	*	*	0.1	*	*	0.2	*	*	*
Legal intervention/war . . . . . (Y35.7,Y36.9)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

... Category not applicable.

\* Figure does not meet standard of reliability or precision; see "Technical Notes."

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>Figures for age not stated are included in "All ages" but not distributed among age groups.

<sup>2</sup>2001 and 2002 figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>3</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.

<sup>4</sup>Intent of death is unintentional.

**Table 8. Deaths due to injury by race and sex, according to mechanism and intent of death: United States, 2002**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All races			White			Black			American Indian or Alaska Native			Asian or Pacific Islander		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All injury . . . . . (*U01–*U03,V01–Y36,Y85–Y87,Y89) <sup>1</sup>	161,269	111,809	49,460	132,516	90,583	41,933	23,613	17,773	5,840	2,136	1,481	655	3,004	1,972	1,032
Unintentional . . . . . (V01–X59,Y85–Y86)	106,742	69,257	37,485	90,866	58,467	32,399	12,513	8,612	3,901	1,488	1,003	485	1,875	1,175	700
Suicide . . . . . (*U03,X60–X84,Y87.0) <sup>1</sup>	31,655	25,409	6,246	28,731	23,049	5,682	1,939	1,633	306	324	258	66	661	469	192
Homicide . . . . . (*U01–*U02,X85–Y09,Y87.1) <sup>1</sup>	17,638	13,640	3,998	8,685	6,282	2,403	8,287	6,896	1,391	267	185	82	399	277	122
Undetermined . . . . . (Y10–Y34,Y87.2,Y89.9)	4,830	3,114	1,716	3,962	2,524	1,438	759	521	238	48	26	22	61	43	18
Legal intervention/war . . . . . (Y35–Y36,Y89[.0,.1])	404	389	15	272	261	11	115	111	4	9	9	–	8	8	–
Cut/pierce . . . . . (W25–W29,W45,X78,X99,Y28,Y35.4)	2,762	2,037	725	1,745	1,312	433	858	621	237	68	47	21	91	57	34
Unintentional . . . . . (W25–W29,W45)	109	93	16	92	77	15	16	15	1	–	–	–	1	1	–
Suicide . . . . . (X78)	566	463	103	503	417	86	29	25	4	8	4	4	26	17	9
Homicide . . . . . (X99)	2,074	1,470	604	1,139	809	330	813	581	232	60	43	17	62	37	25
Undetermined . . . . . (Y28)	13	11	2	11	9	2	–	–	–	–	–	–	2	2	–
Legal intervention/war . . . . . (Y35.4)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Drowning . . . . . (W65–W74,X71,X92,Y21)	4,146	3,215	931	3,162	2,432	730	746	609	137	75	56	19	163	118	45
Unintentional . . . . . (W65–W74)	3,447	2,761	686	2,624	2,093	531	613	509	104	66	53	13	144	106	38
Suicide . . . . . (X71)	368	225	143	296	174	122	56	42	14	3	1	2	13	8	5
Homicide . . . . . (X92)	72	45	27	44	27	17	26	17	9	2	1	1	–	–	–
Undetermined . . . . . (Y21)	259	184	75	198	138	60	51	41	10	4	1	3	6	4	2
Fall . . . . . (W00–W19,X80,Y01,Y30)	17,116	9,060	8,056	15,728	8,187	7,541	922	593	329	103	59	44	363	221	142
Unintentional . . . . . (W00–W19)	16,257	8,463	7,794	15,027	7,699	7,328	838	532	306	97	54	43	295	178	117
Suicide . . . . . (X80)	740	514	226	615	428	187	62	45	17	4	4	–	59	37	22
Homicide . . . . . (Y01)	16	10	6	9	5	4	6	4	2	1	1	–	–	–	–
Undetermined . . . . . (Y30)	103	73	30	77	55	22	16	12	4	1	–	1	9	6	3
Fire/hot object or substance . . . . . (*U01.3,X00–X19, X76–X77,X97–X98,Y26–Y27,Y36.3) <sup>2</sup>	3,645	2,225	1,420	2,627	1,627	1,000	897	531	366	60	37	23	61	30	31
Unintentional . . . . . (X00–X19)	3,261	1,987	1,274	2,354	1,452	902	801	477	324	56	35	21	50	23	27
Suicide . . . . . (X76–X77)	150	111	39	123	93	30	19	13	6	1	1	–	7	4	3
Homicide . . . . . (*U01.3,X97–X98)	134	77	57	72	41	31	59	34	25	2	1	1	1	1	–
Undetermined . . . . . (Y26–Y27)	100	50	50	78	41	37	18	7	11	1	–	1	3	2	1
Legal intervention/war . . . . . (Y36.3)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fire/flame . . . . . (X00–X09,X76,X97,Y26)	3,539	2,172	1,367	2,559	1,594	965	867	514	353	60	37	23	53	27	26
Unintentional . . . . . (X00–X09)	3,159	1,935	1,224	2,287	1,419	868	774	461	313	56	35	21	42	20	22
Suicide . . . . . (X76)	150	111	39	123	93	30	19	13	6	1	1	–	7	4	3
Homicide . . . . . (X97)	131	76	55	72	41	31	56	33	23	2	1	1	1	1	–
Undetermined . . . . . (Y26)	99	50	49	77	41	36	18	7	11	1	–	1	3	2	1
Hot object/substance . . . . . (X10–X19,X77,X98,Y27)	106	53	53	68	33	35	30	17	13	–	–	–	8	3	5
Unintentional . . . . . (X10–X19)	102	52	50	67	33	34	27	16	11	–	–	–	8	3	5
Suicide . . . . . (X77)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Homicide . . . . . (X98)	3	1	2	–	–	–	3	1	2	–	–	–	–	–	–
Undetermined . . . . . (Y27)	1	–	1	1	–	1	–	–	–	–	–	–	–	–	–
Firearm . . . . . (*U01.4,W32–W34,X72–X74, X93–X95,Y22–Y24,Y35.0)	30,242	26,098	4,144	21,902	18,714	3,188	7,623	6,798	825	287	235	52	430	351	79
Unintentional . . . . . (W32–W34)	762	667	95	591	510	81	155	142	13	9	9	–	7	6	1
Suicide . . . . . (X72–X74)	17,108	15,045	2,063	15,733	13,809	1,924	1,059	962	97	146	128	18	170	146	24
Homicide . . . . . (*U01.4,X93–X95)	11,829	9,899	1,930	5,185	4,050	1,135	6,285	5,575	710	117	85	32	242	189	53
Undetermined . . . . . (Y22–Y24)	243	199	44	192	153	39	41	39	2	7	5	2	3	2	1
Legal intervention/war . . . . . (Y35.0)	300	288	12	201	192	9	83	80	3	8	8	–	8	8	–

See footnotes at end of table.

**Table 8. Deaths due to injury by race and sex, according to mechanism and intent of death: United States, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All races			White			Black			American Indian or Alaska Native			Asian or Pacific Islander		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Machinery . . . . . (W24,W30–W31) <sup>3</sup>	652	610	42	607	569	38	34	30	4	6	6	–	5	5	–
All transport . . . . . (*U01.1,V01–V99,X82,Y03,Y32,Y36.1) <sup>1</sup>	47,939	33,207	14,732	40,262	27,857	12,405	5,730	4,102	1,628	901	599	302	1,046	649	397
Unintentional . . . . . (V01–V99)	47,739	33,067	14,672	40,093	27,737	12,356	5,707	4,086	1,621	897	598	299	1,042	646	396
Suicide . . . . . (X82)	112	78	34	100	72	28	8	4	4	1	–	1	3	2	1
Homicide . . . . . (*U01.1,Y03) <sup>1</sup>	61	45	16	46	34	12	11	9	2	3	1	2	1	1	–
Undetermined . . . . . (Y32)	27	17	10	23	14	9	4	3	1	–	–	–	–	–	–
Legal intervention/war . . . . . (Y36.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Motor vehicle traffic . . . . . (V02–V04[.1,.9],V09.2, V12–V14[.3–.9],V19[.4–.6],V20–V28[.3–.9], V29–V79[.4–.9],V80[.3–.5],V81.1,V82.1, V83–V86[.0–.3],V87[.0–.8],V89.2) <sup>3</sup>	44,065	29,989	14,076	36,854	25,014	11,840	5,389	3,821	1,568	845	552	293	977	602	375
Occupant . . . . . (V30–V79[.4–.9],V83–V86[.0–.3]) <sup>3</sup>	21,344	14,119	7,225	18,036	11,889	6,147	2,479	1,705	774	402	255	147	427	270	157
Motorcyclist . . . . . (V20–V28[.3–.9],V29[.4–.9]) <sup>3</sup>	3,153	2,850	303	2,762	2,478	284	324	314	10	21	16	5	46	42	4
Pedal cyclist . . . . . (V12–V14[.3–.9],V19[.4–.6]) <sup>3</sup>	550	491	59	454	404	50	83	77	6	4	2	2	9	8	1
Pedestrian . . . . . (V02–V04[.1,.9],V09.2) <sup>3</sup>	5,041	3,421	1,620	3,775	2,547	1,228	936	666	270	130	100	30	200	108	92
Other . . . . . (V80[.3–.5],V81.1,V82.1) <sup>3</sup>	16	8	8	15	7	8	–	–	–	1	1	–	–	–	–
Unspecified . . . . . (V87[.0–.8],V89.2) <sup>3</sup>	13,961	9,100	4,861	11,812	7,689	4,123	1,567	1,059	508	287	178	109	295	174	121
Pedal cyclist, other . . . . . (V10–V11,V12–V14[.0–.2], V15–V18,V19[.0–.3,.8,.9]) <sup>3</sup>	217	200	17	185	170	15	23	22	1	4	3	1	5	5	–
Pedestrian, other . . . . . (V01,V02–V04[.0],V05,V06, V09[.0,.1,.3,.9]) <sup>3</sup>	1,050	817	233	824	646	178	172	132	40	23	22	1	31	17	14
Other land transport . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82[.0,.2–.9], V83–V86[.4–.9],V87.9,V88[.0–.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	1,333	1,079	254	1,230	998	232	72	59	13	19	13	6	12	9	3
Unintentional . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82 [.0,.2–.9],V83–V86[.4–.9],V87.9,V88[.0–.9], V89[.0,.1,.3,.9])	1,134	940	194	1,061	878	183	50	44	6	15	12	3	8	6	2
Suicide . . . . . (X82)	112	78	34	100	72	28	8	4	4	1	–	1	3	2	1
Homicide . . . . . (Y03)	60	44	16	46	34	12	10	8	2	3	1	2	1	1	–
Undetermined . . . . . (Y32)	27	17	10	23	14	9	4	3	1	–	–	–	–	–	–
Other transport . . . . . (*U01.1,V90–V99,Y36.1) <sup>1</sup>	1,274	1,122	152	1,169	1,029	140	74	68	6	10	9	1	21	16	5
Unintentional . . . . . (V90–V99)	1,273	1,121	152	1,169	1,029	140	73	67	6	10	9	1	21	16	5
Homicide . . . . . (*U01.1) <sup>1</sup>	1	1	–	–	–	–	1	1	–	–	–	–	–	–	–
Legal intervention/war . . . . . (Y36.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Natural/environmental . . . . . (W42–W43,W53–W64, W92–W99,X20–X39,X51–X57) <sup>3</sup>	1,554	1,024	530	1,225	800	425	256	166	90	60	50	10	13	8	5
Overexertion . . . . . (X50) <sup>3</sup>	10	10	–	7	7	–	3	3	–	–	–	–	–	–	–
Poisoning . . . . . (*U01[.6–.7],X40–X49,X60–X69, X85–X90,Y10–Y19,Y35.2)	26,435	17,257	9,178	22,899	14,903	7,996	3,055	2,052	1,003	256	161	95	225	141	84
Unintentional . . . . . (X40–X49)	17,550	12,059	5,491	14,868	10,213	4,655	2,365	1,631	734	188	124	64	129	91	38
Suicide . . . . . (X60–X69)	5,486	3,097	2,389	5,149	2,911	2,238	210	119	91	46	27	19	81	40	41
Homicide . . . . . (*U01[.6–.7],X85–X90)	63	38	25	51	34	17	7	3	4	4	–	4	1	1	–
Undetermined . . . . . (Y10–Y19)	3,336	2,063	1,273	2,831	1,745	1,086	473	299	174	18	10	8	14	9	5
Legal intervention/war . . . . . (Y35.2)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

See footnotes at end of table.

**Table 8. Deaths due to injury by race and sex, according to mechanism and intent of death: United States, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Data for specified races other than white and black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All races			White			Black			American Indian or Alaska Native			Asian or Pacific Islander		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Struck by or against . . . . . (W20–W22,W50–W52, X79,Y00,Y04,Y29,Y35.3)	1,182	1,001	181	972	823	149	184	157	27	12	11	1	14	10	4
Unintentional . . . . . (W20–W22,W50–W52)	890	781	109	775	682	93	99	86	13	7	6	1	9	7	2
Suicide . . . . . (X79)	3	2	1	2	1	1	1	1	–	–	–	–	–	–	–
Homicide . . . . . (Y00,Y04)	287	217	70	194	140	54	84	70	14	4	4	–	5	3	2
Undetermined . . . . . (Y29)	2	1	1	1	–	1	–	–	–	1	1	–	–	–	–
Legal intervention/war . . . . . (Y35.3)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Suffocation . . . . . (W75–W84,X70,X91,Y20)	12,791	8,722	4,069	10,745	7,448	3,297	1,506	902	604	156	119	37	384	253	131
Unintentional . . . . . (W75–W84)	5,517	3,048	2,469	4,576	2,535	2,041	838	452	386	40	26	14	63	35	28
Suicide . . . . . (X70)	6,462	5,355	1,107	5,642	4,696	946	427	368	59	108	89	19	285	202	83
Homicide . . . . . (X91)	679	238	441	427	153	274	216	69	147	4	2	2	32	14	18
Undetermined . . . . . (Y20)	133	81	52	100	64	36	25	13	12	4	2	2	4	2	2
Other specified, classifiable . . . . . (*U01[.0,.2,.5], *U03.0,W23,W35–W41,W44,W49,W85–W91,X75, X81,X96,Y02,Y05–Y07,Y25,Y31,Y35[.1,.5], Y36[.0,.2,.4–.8],Y85) <sup>1</sup>	2,073	1,619	454	1,707	1,345	362	311	234	77	20	12	8	35	28	7
Unintentional . . . . . (W23,W35–W41,W44, W49,W85–W91,Y85)	1,398	1,151	247	1,205	988	217	163	137	26	11	9	2	19	17	2
Suicide . . . . . (*U03.0,X75,X81)1	315	251	64	262	209	53	37	30	7	5	3	2	11	9	2
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05–Y07)	267	133	134	169	85	84	89	46	43	4	–	4	5	2	3
Undetermined . . . . . (Y25,Y31)	26	19	7	22	16	6	4	3	1	–	–	–	–	–	–
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4–.8])	67	65	2	49	47	2	18	18	–	–	–	–	–	–	–
Other specified, not elsewhere classified . . . . . (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	2,066	1,413	653	1,569	1,035	534	421	330	91	33	22	11	43	26	17
Unintentional . . . . . (X58,Y86)	1,046	652	394	899	542	357	118	90	28	8	6	2	21	14	7
Suicide . . . . . (X83,Y87.0)	200	156	44	173	136	37	21	17	4	1	–	1	5	3	2
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	623	460	163	360	262	98	232	180	52	19	13	6	12	5	7
Undetermined . . . . . (Y33,Y87.2)	163	112	51	118	76	42	36	30	6	4	2	2	5	4	1
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	34	33	1	19	19	–	14	13	1	1	1	–	–	–	–
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34, Y35.7,Y36.9,Y89.9)	8,656	4,311	4,345	7,359	3,524	3,835	1,067	645	422	99	67	32	131	75	56
Unintentional . . . . . (X59)	6,550	2,884	3,666	5,923	2,563	3,360	507	256	251	43	27	16	77	38	39
Suicide . . . . . (*U03.9,X84)	145	112	33	133	103	30	10	7	3	1	1	–	1	1	–
Homicide . . . . . (*U01.9,Y09)	1,533	1,008	525	989	642	347	459	308	151	47	34	13	38	24	14
Undetermined . . . . . (Y34,Y89.9)	425	304	121	311	213	98	91	74	17	8	5	3	15	12	3
Legal intervention/war . . . . . (Y35.7,Y36.9)	3	3	–	3	3	–	–	–	–	–	–	–	–	–	–

– Quantity zero.

\* Figure does not meet standard of reliability or precision; see "Technical Notes."

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>2</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.

<sup>3</sup>Intent of death is unintentional.

**Table 9. Deaths due to injury according to mechanism and intent of death by Hispanic origin, race for non-Hispanic population, and sex: United States, 2002**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All origins <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>			Non-Hispanic white			Non-Hispanic black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All injury . . . . . (*U01-*U03,V01-Y36,Y85-Y87,Y89) <sup>3</sup>	161,269	111,809	49,460	15,578	12,294	3,284	144,868	98,861	46,007	116,699	78,096	38,603	23,180	17,417	5,763
Unintentional . . . . . (V01-X59,Y85-Y86)	106,742	69,257	37,485	10,106	7,698	2,408	96,175	61,201	34,974	80,605	50,652	29,953	12,285	8,428	3,857
Suicide . . . . . (*U03,X60-X84,Y87.0) <sup>3</sup>	31,655	25,409	6,246	1,954	1,651	303	29,543	23,623	5,920	26,691	21,323	5,368	1,896	1,595	301
Homicide . . . . . (*U01-*U02,X85-Y09,Y87.1) <sup>3</sup>	17,638	13,640	3,998	3,129	2,635	494	14,346	10,881	3,465	5,571	3,661	1,910	8,147	6,780	1,367
Undetermined . . . . . (Y10-Y34,Y87.2,Y89.9)	4,830	3,114	1,716	320	242	78	4,470	2,836	1,634	3,627	2,265	1,362	738	504	234
Legal intervention/war . . . . . (Y35-Y36,Y89[.0,.1])	404	389	15	69	68	1	334	320	14	205	195	10	114	110	4
Cut/pierce . . . . . (W25-W29,W45,X78,X99,Y28,Y35.4)	2,762	2,037	725	478	382	96	2,262	1,641	621	1,263	927	336	847	613	234
Unintentional . . . . . (W25-W29,W45)	109	93	16	9	9	-	100	84	16	83	68	15	16	15	1
Suicide . . . . . (X78)	566	463	103	47	41	6	511	415	96	451	371	80	27	23	4
Homicide . . . . . (X99)	2,074	1,470	604	420	330	90	1,640	1,133	507	720	481	239	804	575	229
Undetermined . . . . . (Y28)	13	11	2	2	2	-	11	9	2	9	7	2	-	-	-
Legal intervention/war . . . . . (Y35.4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drowning . . . . . (W65-W74,X71,X92,Y21)	4,146	3,215	931	517	447	70	3,583	2,728	855	2,622	1,963	659	730	596	134
Unintentional . . . . . (W65-W74)	3,447	2,761	686	464	409	55	2,952	2,326	626	2,143	1,669	474	604	502	102
Suicide . . . . . (X71)	368	225	143	22	15	7	343	207	136	271	156	115	56	42	14
Homicide . . . . . (X92)	72	45	27	14	9	5	56	34	22	33	20	13	23	14	9
Undetermined . . . . . (Y21)	259	184	75	17	14	3	232	161	71	175	118	57	47	38	9
Fall . . . . . (W00-W19,X80,Y01,Y30)	17,116	9,060	8,056	911	619	292	16,139	8,393	7,746	14,778	7,538	7,240	904	578	326
Unintentional . . . . . (W00-W19)	16,257	8,463	7,794	832	563	269	15,365	7,856	7,509	14,157	7,107	7,050	821	518	303
Suicide . . . . . (X80)	740	514	226	60	43	17	674	467	207	553	384	169	61	44	17
Homicide . . . . . (Y01)	16	10	6	3	1	2	13	9	4	6	4	2	6	4	2
Undetermined . . . . . (Y30)	103	73	30	16	12	4	87	61	26	62	43	19	16	12	4
Fire/hot object or substance . . . . . (*U01.3,X00-X19, X76-X77,X97-X98,Y26-Y27,Y36.3) <sup>4</sup>	3,645	2,225	1,420	271	177	94	3,350	2,031	1,319	2,345	1,442	903	885	523	362
Unintentional . . . . . (X00-X19)	3,261	1,987	1,274	230	149	81	3,013	1,827	1,186	2,115	1,299	816	792	470	322
Suicide . . . . . (X76-X77)	150	111	39	15	13	2	132	95	37	105	77	28	19	13	6
Homicide . . . . . (*U01.3,X97-X98)	134	77	57	16	9	7	115	65	50	55	30	25	57	33	24
Undetermined . . . . . (Y26-Y27)	100	50	50	10	6	4	90	44	46	70	36	34	17	7	10
Legal intervention/war . . . . . (Y36.3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire/flame . . . . . (X00-X09,X76,X97,Y26)	3,539	2,172	1,367	264	172	92	3,251	1,983	1,268	2,284	1,414	870	855	506	349
Unintentional . . . . . (X00-X09)	3,159	1,935	1,224	223	144	79	2,918	1,780	1,138	2,055	1,271	784	765	454	311
Suicide . . . . . (X76)	150	111	39	15	13	2	132	95	37	105	77	28	19	13	6
Homicide . . . . . (X97)	131	76	55	16	9	7	112	64	48	55	30	25	54	32	22
Undetermined . . . . . (Y26)	99	50	49	10	6	4	89	44	45	69	36	33	17	7	10
Hot object/substance . . . . . (X10-X19,X77,X98,Y27)	106	53	53	7	5	2	99	48	51	61	28	33	30	17	13
Unintentional . . . . . (X10-X19)	102	52	50	7	5	2	95	47	48	60	28	32	27	16	11
Suicide . . . . . (X77)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Homicide . . . . . (X98)	3	1	2	-	-	-	3	1	2	-	-	-	3	1	2
Undetermined . . . . . (Y27)	1	-	1	-	-	-	1	-	1	1	-	1	-	-	-
Firearm . . . . . (*U01.4,W32-W34,X72-X74, X93-X95,Y22-Y24,Y35.0)	30,242	26,098	4,144	3,143	2,834	309	26,944	23,127	3,817	18,762	15,881	2,881	7,494	6,681	813
Unintentional . . . . . (W32-W34)	762	667	95	60	51	9	700	614	86	531	459	72	153	140	13

See footnotes at end of table.



**Table 9. Deaths due to injury according to mechanism and intent of death by Hispanic origin, race for non-Hispanic population, and sex: United States, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All origins <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>			Non-Hispanic white			Non-Hispanic black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Suicide . . . . . (X72–X74)	17,108	15,045	2,063	834	763	71	16,213	14,226	1,987	14,865	13,014	1,851	1,041	945	96
Homicide . . . . . (*U01.4,X93–X95)	11,829	9,899	1,930	2,168	1,942	226	9,575	7,884	1,691	3,052	2,139	913	6,181	5,482	699
Undetermined . . . . . (Y22–Y24)	243	199	44	23	21	2	215	173	42	169	132	37	37	35	2
Legal intervention/war . . . . . (Y35.0)	300	288	12	58	57	1	241	230	11	145	137	8	82	79	3
Machinery . . . . . (W24,W30–W31) <sup>5</sup>	652	610	42	88	84	4	564	526	38	520	486	34	33	29	4
All transport . . . . . (*U01.1,V01–V99,X82,Y03,Y32,Y36.1) <sup>3</sup>	47,939	33,207	14,732	5,887	4,451	1,436	41,873	28,611	13,262	34,368	23,396	10,972	5,601	3,999	1,602
Unintentional . . . . . (V01–V99)	47,739	33,067	14,672	5,866	4,434	1,432	41,698	28,489	13,209	34,223	23,294	10,929	5,578	3,983	1,595
Suicide . . . . . (X82)	112	78	34	8	5	3	101	72	29	89	66	23	8	4	4
Homicide . . . . . (*U01.1,Y03) <sup>3</sup>	61	45	16	10	9	1	50	36	14	36	25	11	11	9	2
Undetermined . . . . . (Y32)	27	17	10	3	3	–	24	14	10	20	11	9	4	3	1
Legal intervention/war . . . . . (Y36.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Motor vehicle traffic . . . . . (V02–V04[.1,.9],V09.2, V12–V14[.3–.9],V19[.4–.6],V20–V28[.3–.9],V29–V79[.4–.9], V80[.3–.5],V81.1,V82.1,V83–V86[.0–.3],V87[.0–.8],V89.2) <sup>5</sup>	44,065	29,989	14,076	5,537	4,166	1,371	38,378	25,702	12,676	31,326	20,853	10,473	5,267	3,722	1,545
Occupant . . . . . (V30–V79[.4–.9],V83–V86[.0–.3]) <sup>5</sup>	21,344	14,119	7,225	2,931	2,191	740	18,348	11,880	6,468	15,106	9,700	5,406	2,422	1,661	761
Motorcyclist . . . . . (V20–V28[.3–.9],V29[.4–.9]) <sup>5</sup>	3,153	2,850	303	210	190	20	2,935	2,654	281	2,551	2,288	263	318	309	9
Pedal cyclist . . . . . (V12–V14[.3–.9],V19[.4–.6]) <sup>5</sup>	550	491	59	111	104	7	430	378	52	337	294	43	81	75	6
Pedestrian . . . . . (V02–V04[.1,.9],V09.2) <sup>5</sup>	5,041	3,421	1,620	875	667	208	4,123	2,715	1,408	2,891	1,871	1,020	909	641	268
Other . . . . . (V80[.3–.5],V81.1,V82.1) <sup>5</sup>	16	8	8	–	–	–	16	8	8	15	7	8	–	–	–
Unspecified . . . . . (V87[.0–.8],V89.2) <sup>5</sup>	13,961	9,100	4,861	1,410	1,014	396	12,526	8,067	4,459	10,426	6,693	3,733	1,537	1,036	501
Pedal cyclist, other . . . . . (V10–V11,V12–V14[.0–.2],V15– V18,V19[.0–.3,.8,.9]) <sup>5</sup>	217	200	17	25	22	3	190	176	14	158	146	12	23	22	1
Pedestrian, other . . . . . (V01,V02–V04[.0],V05, V06,V09[.0,.1,.3,.9]) <sup>5</sup>	1,050	817	233	164	134	30	873	672	201	654	506	148	168	130	38
Other land transport . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82[.0,.2–.9], V83–V86[.4–.9],V87.9,V88[.0–.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	1,333	1,079	254	98	76	22	1,229	1,000	229	1,131	922	209	70	58	12
Unintentional . . . . . (V20–V28[.0–.2],V29–V79[.0–.3], V80[.0–.2,.6–.9],V81–V82[.0,.2–.9],V83–V86[.4–.9], V87.9,V88[.0–.9],V89[.0,.1,.3,.9])	1,134	940	194	77	59	18	1,055	879	176	986	820	166	48	43	5
Suicide . . . . . (X82)	112	78	34	8	5	3	101	72	29	89	66	23	8	4	4
Homicide . . . . . (Y03)	60	44	16	10	9	1	49	35	14	36	25	11	10	8	2
Undetermined . . . . . (Y32)	27	17	10	3	3	–	24	14	10	20	11	9	4	3	1
Other transport . . . . . (*U01.1,V90–V99,Y36.1)	1,274	1,122	152	63	53	10	1,203	1,061	142	1,099	969	130	73	67	6
Unintentional . . . . . (V90–V99)	1,273	1,121	152	63	53	10	1,202	1,060	142	1,099	969	130	72	66	6
Homicide . . . . . (*U01.1)	1	1	–	–	–	–	1	1	–	–	–	–	1	1	–
Legal intervention/war . . . . . (Y36.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Natural/environmental . . . . . (W42–W43,W53–W64,W92–W99, X20–X39,X51–X57) <sup>4</sup>	1,554	1,024	530	114	93	21	1,431	925	506	1,106	704	402	254	165	89
Overexertion . . . . . (X50) <sup>4</sup>	10	10	–	–	–	–	10	10	–	7	7	–	3	3	–

See footnotes at end of table.

**Table 9. Deaths due to injury according to mechanism and intent of death by Hispanic origin, race for non-Hispanic population, and sex: United States, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All origins <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>			Non-Hispanic white			Non-Hispanic black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Poisoning . . . . . (*U01[.6-.7],X40-X49,X60-X69,X85-X90, Y10-Y19,Y35.2)	26,435	17,257	9,178	2,031	1,566	465	24,262	15,584	8,678	20,800	13,285	7,515	3,006	2,016	990
Unintentional . . . . . (X40-X49)	17,550	12,059	5,491	1,652	1,324	328	15,789	10,649	5,140	13,165	8,849	4,316	2,326	1,601	725
Suicide . . . . . (X60-X69)	5,486	3,097	2,389	218	128	90	5,246	2,957	2,289	4,916	2,774	2,142	208	119	89
Homicide . . . . . (*U01[.6-.7],X85-X90)	63	38	25	10	7	3	53	31	22	41	27	14	7	3	4
Undetermined . . . . . (Y10-Y19)	3,336	2,063	1,273	151	107	44	3,174	1,947	1,227	2,678	1,635	1,043	465	293	172
Legal intervention/war . . . . . (Y35.2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Struck by or against . . . . . (W20-W22,W50-W52,X79, Y00,Y04,Y29,Y35.3)	1,182	1,001	181	156	135	21	1,019	860	159	815	688	127	178	151	27
Unintentional . . . . . (W20-W22,W50-W52)	890	781	109	103	95	8	782	682	100	670	586	84	96	83	13
Suicide . . . . . (X79)	3	2	1	1	1	-	2	1	1	1	-	1	1	1	-
Homicide . . . . . (Y00,Y04)	287	217	70	52	39	13	233	176	57	143	102	41	81	67	14
Undetermined . . . . . (Y29)	2	1	1	-	-	-	2	1	1	1	-	1	-	-	-
Legal intervention/war . . . . . (Y35.3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Suffocation . . . . . (W75-W84,X70,X91,Y20)	12,791	8,722	4,069	1,047	791	256	11,677	7,878	3,799	9,680	6,642	3,038	1,475	878	597
Unintentional . . . . . (W75-W84)	5,517	3,048	2,469	268	166	102	5,233	2,870	2,363	4,303	2,364	1,939	831	446	385
Suicide . . . . . (X70)	6,462	5,355	1,107	683	584	99	5,739	4,734	1,005	4,946	4,100	846	410	353	57
Homicide . . . . . (X91)	679	238	441	87	37	50	582	198	384	340	118	222	210	67	143
Undetermined . . . . . (Y20)	133	81	52	9	4	5	123	76	47	91	60	31	24	12	12
Other specified, classifiable . . . . . (*U01[.0,.2,.5],*U03.0,W23, W35-W41,W44,W49,W85-W91,X75,X81,X96,Y02, Y05-Y07,Y25,Y31,Y35[.1,.5],Y36[.0,.2,.4-.8],Y85) <sup>3</sup>	2,073	1,619	454	247	206	41	1,808	1,396	412	1,453	1,129	324	302	227	75
Unintentional . . . . . (W23,W35-W41,W44,W49,W85-W91,Y85)	1,398	1,151	247	151	136	15	1,242	1,010	232	1,054	852	202	158	132	26
Suicide . . . . . (*U03.0,X75,X81) <sup>3</sup>	315	251	64	41	35	6	266	208	58	216	168	48	35	28	7
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05-Y07)	267	133	134	46	26	20	217	104	113	122	56	66	87	46	41
Undetermined . . . . . (Y25,Y31)	26	19	7	3	3	-	22	15	7	18	12	6	4	3	1
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4-.8])	67	65	2	6	6	-	61	59	2	43	41	2	18	18	-
Other specified, not elsewhere classified . . . . . (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86-Y87,Y89[.0-.1])	2,066	1,413	653	172	142	30	1,872	1,252	620	1,382	881	501	415	324	91
Unintentional . . . . . (X58,Y86)	1,046	652	394	55	46	9	985	603	382	839	494	345	117	89	28
Suicide . . . . . (X83,Y87.0)	200	156	44	12	10	2	185	143	42	159	124	35	20	16	4
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	623	460	163	84	67	17	528	382	146	269	188	81	229	177	52
Undetermined . . . . . (Y33,Y87.2)	163	112	51	16	14	2	145	96	49	101	61	40	35	29	6
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	34	33	1	5	5	-	29	28	1	14	14	-	14	13	1
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34, Y35.7,Y36.9,Y89.9)	8,656	4,311	4,345	516	367	149	8,074	3,899	4,175	6,798	3,127	3,671	1,053	634	419
Unintentional . . . . . (X59)	6,550	2,884	3,666	214	139	75	6,311	2,730	3,581	5,689	2,414	3,275	503	252	251
Suicide . . . . . (*U03.9,X84)	145	112	33	13	13	-	131	98	33	119	89	30	10	7	3
Homicide . . . . . (*U01.9,Y09)	1,533	1,008	525	219	159	60	1,284	829	455	754	471	283	451	303	148
Undetermined . . . . . (Y34,Y89.9)	425	304	121	70	56	14	345	239	106	233	150	83	89	72	17
Legal intervention/war . . . . . (Y35.7,Y36.9)	3	3	-	-	-	-	3	3	-	3	3	-	-	-	-

- Quantity zero. \* Figure does not meet standard of reliability or precision; see "Technical Notes."

<sup>1</sup>Figures for origin not stated are included in "All origins" but are not distributed among specified origins. <sup>2</sup>Includes races other than white and black.

<sup>3</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>4</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total. <sup>5</sup>Intent of death is unintentional.

**Table 10. Death rates due to injury according to mechanism and intent of death, by race and sex: United States, 2002**

[Crude rates per 100,000 population in specified group. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Data for specified races other than white or black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All races			White			Black			American Indian or Alaska Native			Asian or Pacific Islander		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All injury . . . . . (*U01–*U03,V01–Y36,Y85–Y87,Y89) <sup>1</sup>	55.9	78.9	33.7	56.5	78.1	35.3	62.6	98.9	29.5	69.4	96.5	42.5	23.5	31.9	15.6
Unintentional . . . . . (V01–X59,Y85–Y86)	37.0	48.9	25.6	38.7	50.4	27.3	33.1	47.9	19.7	48.4	65.3	31.5	14.7	19.0	10.6
Suicide . . . . . (*U03,X60–X84,Y87.0) <sup>1</sup>	11.0	17.9	4.3	12.2	19.9	4.8	5.1	9.1	1.5	10.5	16.8	4.3	5.2	7.6	2.9
Homicide . . . . . (*U01–*U02,X85–Y09,Y87.1) <sup>1</sup>	6.1	9.6	2.7	3.7	5.4	2.0	22.0	38.4	7.0	8.7	12.0	5.3	3.1	4.5	1.8
Undetermined . . . . . (Y10–Y34,Y87.2,Y89.9)	1.7	2.2	1.2	1.7	2.2	1.2	2.0	2.9	1.2	1.6	1.7	1.4	0.5	0.7	*
Legal intervention/war . . . . . (Y35–Y36,Y89[.0,.1])	0.1	0.3	*	0.1	0.2	*	0.3	0.6	*	*	*	*	*	*	*
Cut/pierce . . . . . (W25–W29,W45,X78,X99,Y28,Y35.4)	1.0	1.4	0.5	0.7	1.1	0.4	2.3	3.5	1.2	2.2	3.1	1.4	0.7	0.9	0.5
Unintentional . . . . . (W25–W29,W45)	0.0	0.1	*	0.0	0.1	*	*	*	*	*	*	*	*	*	*
Suicide . . . . . (X78)	0.2	0.3	0.1	0.2	0.4	0.1	0.1	0.1	*	*	*	*	0.2	*	*
Homicide . . . . . (X99)	0.7	1.0	0.4	0.5	0.7	0.3	2.2	3.2	1.2	2.0	2.8	*	0.5	0.6	0.4
Undetermined . . . . . (Y28)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.4)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Drowning . . . . . (W65–W74,X71,X92,Y21)	1.4	2.3	0.6	1.3	2.1	0.6	2.0	3.4	0.7	2.4	3.6	*	1.3	1.9	0.7
Unintentional . . . . . (W65–W74)	1.2	1.9	0.5	1.1	1.8	0.4	1.6	2.8	0.5	2.1	3.5	*	1.1	1.7	0.6
Suicide . . . . . (X71)	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	*	*	*	*	*	*	*
Homicide . . . . . (X92)	0.0	0.0	0.0	0.0	0.0	*	0.1	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y21)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	*	*	*	*	*	*	*
Fall . . . . . (W00–W19,X80,Y01,Y30)	5.9	6.4	5.5	6.7	7.1	6.3	2.4	3.3	1.7	3.3	3.8	2.9	2.8	3.6	2.1
Unintentional . . . . . (W00–W19)	5.6	6.0	5.3	6.4	6.6	6.2	2.2	3.0	1.5	3.2	3.5	2.8	2.3	2.9	1.8
Suicide . . . . . (X80)	0.3	0.4	0.2	0.3	0.4	0.2	0.2	0.3	*	*	*	*	0.5	0.6	0.3
Homicide . . . . . (Y01)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y30)	0.0	0.1	0.0	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*
Fire/hot object or substance . . . . . (*U01.3,X00–X19,X76–X77,X97–X98,Y26–Y27,Y36.3) <sup>2</sup>	1.3	1.6	1.0	1.1	1.4	0.8	2.4	3.0	1.9	2.0	2.4	1.5	0.5	0.5	0.5
Unintentional . . . . . (X00–X19)	1.1	1.4	0.9	1.0	1.3	0.8	2.1	2.7	1.6	1.8	2.3	1.4	0.4	0.4	0.4
Suicide . . . . . (X76–X77)	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01.3,X97–X98)	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.1	*	*	*	*	*	*
Undetermined . . . . . (Y26–Y27)	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fire/flame . . . . . (X00–X09,X76,X97,Y26)	1.2	1.5	0.9	1.1	1.4	0.8	2.3	2.9	1.8	2.0	2.4	1.5	0.4	0.4	0.4
Unintentional . . . . . (X00–X09)	1.1	1.4	0.8	1.0	1.2	0.7	2.1	2.6	1.6	1.8	2.3	1.4	0.3	0.3	0.3
Suicide . . . . . (X76)	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*	*	*	*	*	*	*
Homicide . . . . . (X97)	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.1	*	*	*	*	*	*
Undetermined . . . . . (Y26)	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*
Hot object/substance . . . . . (X10–X19,X77,X98,Y27)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	*	*	*	*	*	*	*	*
Unintentional . . . . . (X10–X19)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	*	*	*	*	*	*	*	*
Suicide . . . . . (X77)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (X98)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y27)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Firearm . . . . . (*U01.4,W32–W34,X72–X74,X93–X95,Y22–Y24,Y35.0)	10.5	18.4	2.8	9.3	16.1	2.7	20.2	37.8	4.2	9.3	15.3	3.4	3.4	5.7	1.2
Unintentional . . . . . (W32–W34)	0.3	0.5	0.1	0.3	0.4	0.1	0.4	0.8	*	*	*	*	*	*	*

See footnotes at end of table.

**Table 10. Death rates due to injury according to mechanism and intent of death, by race and sex: United States, 2002—Con.**

[Crude rates per 100,000 population in specified group. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Data for specified races other than white or black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All races			White			Black			American Indian or Alaska Native			Asian or Pacific Islander		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Suicide . . . . . (X72–X74)	5.9	10.6	1.4	6.7	11.9	1.6	2.8	5.4	0.5	4.7	8.3	*	1.3	2.4	0.4
Homicide . . . . . (*U01.4,X93–X95)	4.1	7.0	1.3	2.2	3.5	1.0	16.7	31.0	3.6	3.8	5.5	2.1	1.9	3.1	0.8
Undetermined . . . . . (Y22–Y24)	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.2	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.0)	0.1	0.2	*	0.1	0.2	*	0.2	0.4	*	*	*	*	*	*	*
Machinery . . . . . (W24,W30–W31) <sup>3</sup>	0.2	0.4	0.0	0.3	0.5	0.0	0.1	0.2	*	*	*	*	*	*	*
All transport . . . . . (*U01.1,V01–V99,X82,Y03,Y32,Y36.1) <sup>1</sup>	16.6	23.4	10.0	17.2	24.0	10.4	15.2	22.8	8.2	29.3	39.0	19.6	8.2	10.5	6.0
Unintentional . . . . . (V01–V99)	16.6	23.3	10.0	17.1	23.9	10.4	15.1	22.7	8.2	29.2	38.9	19.4	8.1	10.5	6.0
Suicide . . . . . (X82)	0.0	0.1	0.0	0.0	0.1	0.0	*	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01.1,Y03) <sup>1</sup>	0.0	0.0	*	0.0	0.0	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y32)	0.0	*	*	0.0	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Motor vehicle traffic . . . . . (V02–V04[.1,.9],V09.2, V12–V14[.3–.9],V19[.4–.6],V20–V28[.3–.9],V29–V79[.4–.9], V80[.3–.5],V81.1,V82.1,V83–V86[.0–.3],V87[.0–.8],V89.2) <sup>3</sup>	15.3	21.2	9.6	15.7	21.6	10.0	14.3	21.3	7.9	27.5	36.0	19.0	7.6	9.7	5.7
Occupant . . . . . (V30–V79[.4–.9],V83–V86[.0–.3]) <sup>3</sup>	7.4	10.0	4.9	7.7	10.3	5.2	6.6	9.5	3.9	13.1	16.6	9.5	3.3	4.4	2.4
Motorcyclist . . . . . (V20–V28[.3–.9],V29[.4–.9]) <sup>3</sup>	1.1	2.0	0.2	1.2	2.1	0.2	0.9	1.7	*	0.7	*	*	0.4	0.7	*
Pedal cyclist . . . . . (V12–V14[.3–.9],V19[.4–.6]) <sup>3</sup>	0.2	0.3	0.0	0.2	0.3	0.0	0.2	0.4	*	*	*	*	*	*	*
Pedestrian . . . . . (V02–V04[.1,.9],V09.2) <sup>3</sup>	1.7	2.4	1.1	1.6	2.2	1.0	2.5	3.7	1.4	4.2	6.5	1.9	1.6	1.7	1.4
Other . . . . . (V80[.3–.5],V81.1,V82.1) <sup>3</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Unspecified . . . . . (V87[.0–.8],V89.2) <sup>3</sup>	4.8	6.4	3.3	5.0	6.6	3.5	4.2	5.9	2.6	9.3	11.6	7.1	2.3	2.8	1.8
Pedal cyclist, other . . . . . (V10–V11,V12–V14[.0–.2],V15– V18,V19[.0–.3,.8,.9]) <sup>3</sup>	0.1	0.1	*	0.1	0.1	*	0.1	0.1	*	*	*	*	*	*	*
Pedestrian, other . . . . . (V01,V02–V04[.0],V05, V06,V09[.0,.1,.3,.9]) <sup>3</sup>	0.4	0.6	0.2	0.4	0.6	0.1	0.5	0.7	0.2	0.7	1.4	*	0.2	*	*
Other land transport . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82[.0,.2–.9], V83–V86[.4–.9],V87.9,V88[.0–.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	0.5	0.8	0.2	0.5	0.9	0.2	0.2	0.3	*	*	*	*	*	*	*
Unintentional . . . . . (V20–V28[.0–.2],V29–V79[.0–.3], V80[.0–.2,.6–.9],V81–V82[.0,.2–.9],V83–V86[.4–.9], V87.9,V88[.0–.9],V89[.0,.1,.3,.9])	0.4	0.7	0.1	0.5	0.8	0.2	0.1	0.2	*	*	*	*	*	*	*
Suicide . . . . . (X82)	0.0	0.1	0.0	0.0	0.1	0.0	*	*	*	*	*	*	*	*	*
Homicide . . . . . (Y03)	0.0	0.0	*	0.0	0.0	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y32)	0.0	*	*	0.0	*	*	*	*	*	*	*	*	*	*	*
Other transport . . . . . (*U01.1,V90–V99,Y36.1) <sup>1</sup>	0.4	0.8	0.1	0.5	0.9	0.1	0.2	0.4	*	*	*	*	0.2	*	*
Unintentional . . . . . (V90–V99)	0.4	0.8	0.1	0.5	0.9	0.1	0.2	0.4	*	*	*	*	0.2	*	*
Homicide . . . . . (*U01.1) <sup>1</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Natural/environmental . . . . . (W42–W43,W53–W64,W92–W99, X20–X39,X51–X57) <sup>3</sup>	0.5	0.7	0.4	0.5	0.7	0.4	0.7	0.9	0.5	2.0	3.3	*	*	*	*
Overexertion . . . . . (X50) <sup>3</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

See footnotes at end of table.

**Table 10. Death rates due to injury according to mechanism and intent of death, by race and sex: United States, 2002—Con.**

[Crude rates per 100,000 population in specified group. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Data for specified races other than white or black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All races			White			Black			American Indian or Alaska Native			Asian or Pacific Islander		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Poisoning . . . . . (*U01[.6-.7],X40-X49,X60-X69,X85-X90, Y10-Y19,Y35.2)	9.2	12.2	6.3	9.8	12.9	6.7	8.1	11.4	5.1	8.3	10.5	6.2	1.8	2.3	1.3
Unintentional . . . . . (X40-X49)	6.1	8.5	3.7	6.3	8.8	3.9	6.3	9.1	3.7	6.1	8.1	4.2	1.0	1.5	0.6
Suicide . . . . . (X60-X69)	1.9	2.2	1.6	2.2	2.5	1.9	0.6	0.7	0.5	1.5	1.8	*	0.6	0.6	0.6
Homicide . . . . . (*U01[.6-.7],X85-X90)	0.0	0.0	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y10-Y19)	1.2	1.5	0.9	1.2	1.5	0.9	1.3	1.7	0.9	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.2)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Struck by or against . . . . . (W20-W22,W50-W52,X79, Y00,Y04,Y29,Y35.3)	0.4	0.7	0.1	0.4	0.7	0.1	0.5	0.9	0.1	*	*	*	*	*	*
Unintentional . . . . . (W20-W22,W50-W52)	0.3	0.6	0.1	0.3	0.6	0.1	0.3	0.5	*	*	*	*	*	*	*
Suicide . . . . . (X79)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (Y00,Y04)	0.1	0.2	0.0	0.1	0.1	0.0	0.2	0.4	*	*	*	*	*	*	*
Undetermined . . . . . (Y29)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Suffocation . . . . . (W75-W84,X70,X91,Y20)	4.4	6.2	2.8	4.6	6.4	2.8	4.0	5.0	3.1	5.1	7.8	2.4	3.0	4.1	2.0
Unintentional . . . . . (W75-W84)	1.9	2.2	1.7	1.9	2.2	1.7	2.2	2.5	2.0	1.3	1.7	*	0.5	0.6	0.4
Suicide . . . . . (X70)	2.2	3.8	0.8	2.4	4.0	0.8	1.1	2.0	0.3	3.5	5.8	*	2.2	3.3	1.3
Homicide . . . . . (X91)	0.2	0.2	0.3	0.2	0.1	0.2	0.6	0.4	0.7	*	*	*	0.3	*	*
Undetermined . . . . . (Y20)	0.0	0.1	0.0	0.0	0.1	0.0	0.1	*	*	*	*	*	*	*	*
Other specified, classifiable . . . . . (*U01[.0,.2,.5],*U03.0,W23, W35-W41,W44,W49,W85-W91,X75,X81,X96,Y02, Y05-Y07,Y25,Y31,Y35[.1,.5],Y36[.0,.2,.4-.8],Y85) <sup>1</sup>	0.7	1.1	0.3	0.7	1.2	0.3	0.8	1.3	0.4	0.7	*	*	0.3	0.5	*
Unintentional . . . . . (W23,W35-W41,W44,W49,W85-W91,Y85)	0.5	0.8	0.2	0.5	0.9	0.2	0.4	0.8	0.1	*	*	*	*	*	*
Suicide . . . . . (*U03.0,X75,X81) <sup>1</sup>	0.1	0.2	0.0	0.1	0.2	0.0	0.1	0.2	*	*	*	*	*	*	*
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05-Y07)	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	*	*	*	*	*	*
Undetermined . . . . . (Y25,Y31)	0.0	*	*	0.0	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4-.8])	0.0	0.0	*	0.0	0.0	*	*	*	*	*	*	*	*	*	*
Other specified, not elsewhere classified . . . . . (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86-Y87,Y89[.0-.1])	0.7	1.0	0.4	0.7	0.9	0.4	1.1	1.8	0.5	1.1	1.4	*	0.3	0.4	*
Unintentional . . . . . (X58,Y86)	0.4	0.5	0.3	0.4	0.5	0.3	0.3	0.5	0.1	*	*	*	0.2	*	*
Suicide . . . . . (X83,Y87.0)	0.1	0.1	0.0	0.1	0.1	0.0	0.1	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	0.2	0.3	0.1	0.2	0.2	0.1	0.6	1.0	0.3	*	*	*	*	*	*
Undetermined . . . . . (Y33,Y87.2)	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.2	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	0.0	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34, Y35.7,Y36.9,Y89.9)	3.0	3.0	3.0	3.1	3.0	3.2	2.8	3.6	2.1	3.2	4.4	2.1	1.0	1.2	0.8
Unintentional . . . . . (X59)	2.3	2.0	2.5	2.5	2.2	2.8	1.3	1.4	1.3	1.4	1.8	*	0.6	0.6	0.6
Suicide . . . . . (*U03.9,X84)	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01.9,Y09)	0.5	0.7	0.4	0.4	0.6	0.3	1.2	1.7	0.8	1.5	2.2	*	0.3	0.4	*
Undetermined . . . . . (Y34,Y89.9)	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.4	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.7,Y36.9)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

\* Figure does not meet standard of reliability or precision; see "Technical Notes."

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>2</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.

<sup>3</sup>Intent of death is unintentional.

**Table 11. Death rates due to injury according to mechanism and intent of death by Hispanic origin, race for non-Hispanic population, and sex: United States, 2002**

[Crude rates per 100,000 population in specified group. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All origins <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>			Non-Hispanic white			Non-Hispanic black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All injury . . . . . (*U01-*U03,V01-Y36,Y85-Y87,Y89) <sup>3</sup>	55.9	78.9	33.7	40.2	61.5	17.5	58.0	81.3	36.0	58.7	80.2	38.1	64.1	101.3	30.4
Unintentional . . . . . (V01-X59,Y85-Y86)	37.0	48.9	25.6	26.1	38.5	12.8	38.5	50.3	27.3	40.6	52.0	29.6	34.0	49.0	20.3
Suicide . . . . . (*U03,X60-X84,Y87.0) <sup>3</sup>	11.0	17.9	4.3	5.0	8.3	1.6	11.8	19.4	4.6	13.4	21.9	5.3	5.2	9.3	1.6
Homicide . . . . . (*U01-*U02,X85-Y09,Y87.1) <sup>3</sup>	6.1	9.6	2.7	8.1	13.2	2.6	5.7	8.9	2.7	2.8	3.8	1.9	22.5	39.4	7.2
Undetermined . . . . . (Y10-Y34,Y87.2,Y89.9)	1.7	2.2	1.2	0.8	1.2	0.4	1.8	2.3	1.3	1.8	2.3	1.3	2.0	2.9	1.2
Legal intervention/war . . . . . (Y35-Y36,Y89[.0,.1])	0.1	0.3	*	0.2	0.3	*	0.1	0.3	*	0.1	0.2	*	0.3	0.6	*
Cut/pierce . . . . . (W25-W29,W45,X78,X99,Y28,Y35.4)	1.0	1.4	0.5	1.2	1.9	0.5	0.9	1.3	0.5	0.6	1.0	0.3	2.3	3.6	1.2
Unintentional . . . . . (W25-W29,W45)	0.0	0.1	*	*	*	*	0.0	0.1	*	0.0	0.1	*	*	*	*
Suicide . . . . . (X78)	0.2	0.3	0.1	0.1	0.2	*	0.2	0.3	0.1	0.2	0.4	0.1	0.1	0.1	*
Homicide . . . . . (X99)	0.7	1.0	0.4	1.1	1.7	0.5	0.7	0.9	0.4	0.4	0.5	0.2	2.2	3.3	1.2
Undetermined . . . . . (Y28)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.4)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Drowning . . . . . (W65-W74,X71,X92,Y21)	1.4	2.3	0.6	1.3	2.2	0.4	1.4	2.2	0.7	1.3	2.0	0.7	2.0	3.5	0.7
Unintentional . . . . . (W65-W74)	1.2	1.9	0.5	1.2	2.0	0.3	1.2	1.9	0.5	1.1	1.7	0.5	1.7	2.9	0.5
Suicide . . . . . (X71)	0.1	0.2	0.1	0.1	*	*	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	*
Homicide . . . . . (X92)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	*	0.1	*	*
Undetermined . . . . . (Y21)	0.1	0.1	0.1	*	*	*	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	*
Fall . . . . . (W00-W19,X80,Y01,Y30)	5.9	6.4	5.5	2.4	3.1	1.6	6.5	6.9	6.1	7.4	7.7	7.1	2.5	3.4	1.7
Unintentional . . . . . (W00-W19)	5.6	6.0	5.3	2.1	2.8	1.4	6.2	6.5	5.9	7.1	7.3	7.0	2.3	3.0	1.6
Suicide . . . . . (X80)	0.3	0.4	0.2	0.2	0.2	*	0.3	0.4	0.2	0.3	0.4	0.2	0.2	0.3	*
Homicide . . . . . (Y01)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y30)	0.0	0.1	0.0	*	*	*	0.0	0.1	0.0	0.0	0.0	*	*	*	*
Fire/hot object or substance . . . . . (*U01.3,X00-X19,X76-X77,X97-X98,Y26-Y27,Y36.3) <sup>4</sup>	1.3	1.6	1.0	0.7	0.9	0.5	1.3	1.7	1.0	1.2	1.5	0.9	2.4	3.0	1.9
Unintentional . . . . . (X00-X19)	1.1	1.4	0.9	0.6	0.7	0.4	1.2	1.5	0.9	1.1	1.3	0.8	2.2	2.7	1.7
Suicide . . . . . (X76-X77)	0.1	0.1	0.0	*	*	*	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*
Homicide . . . . . (*U01.3,X97-X98)	0.0	0.1	0.0	*	*	*	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.1
Undetermined . . . . . (Y26-Y27)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*
Legal intervention/war . . . . . (Y36.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fire/flame . . . . . (X00-X09,X76,X97,Y26)	1.2	1.5	0.9	0.7	0.9	0.5	1.3	1.6	1.0	1.1	1.5	0.9	2.4	2.9	1.8
Unintentional . . . . . (X00-X09)	1.1	1.4	0.8	0.6	0.7	0.4	1.2	1.5	0.9	1.0	1.3	0.8	2.1	2.6	1.6
Suicide . . . . . (X76)	0.1	0.1	0.0	*	*	*	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*
Homicide . . . . . (X97)	0.0	0.1	0.0	*	*	*	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.1
Undetermined . . . . . (Y26)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*
Hot object/substance . . . . . (X10-X19,X77,X98,Y27)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	*	*
Unintentional . . . . . (X10-X19)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	*	*
Suicide . . . . . (X77)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (X98)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y27)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Firearm . . . . . (*U01.4,W32-W34,X72-X74,X93-X95,Y22-Y24,Y35.0)	10.5	18.4	2.8	8.1	14.2	1.6	10.8	19.0	3.0	9.4	16.3	2.8	20.7	38.9	4.3
Unintentional . . . . . (W32-W34)	0.3	0.5	0.1	0.2	0.3	*	0.3	0.5	0.1	0.3	0.5	0.1	0.4	0.8	*

See footnotes at end of table.

**Table 11. Death rates due to injury according to mechanism and intent of death by Hispanic origin, race for non-Hispanic population, and sex: United States, 2002—Con.**

[Crude rates per 100,000 population in specified group. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All origins <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>			Non-Hispanic white			Non-Hispanic black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Suicide . . . . . (X72–X74)	5.9	10.6	1.4	2.2	3.8	0.4	6.5	11.7	1.6	7.5	13.4	1.8	2.9	5.5	0.5
Homicide . . . . . (*U01.4,X93–X95)	4.1	7.0	1.3	5.6	9.7	1.2	3.8	6.5	1.3	1.5	2.2	0.9	17.1	31.9	3.7
Undetermined . . . . . (Y22–Y24)	0.1	0.1	0.0	0.1	0.1	*	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.2	*
Legal intervention/war . . . . . (Y35.0)	0.1	0.2	*	0.1	0.3	*	0.1	0.2	*	0.1	0.1	*	0.2	0.5	*
Machinery . . . . . (W24,W30–W31) <sup>5</sup>	0.2	0.4	0.0	0.2	0.4	*	0.2	0.4	0.0	0.3	0.5	0.0	0.1	0.2	*
All transport . . . . . (*U01.1,V01–V99,X82,Y03,Y32,Y36.1) <sup>3</sup>	16.6	23.4	10.0	15.2	22.3	7.7	16.8	23.5	10.4	17.3	24.0	10.8	15.5	23.3	8.5
Unintentional . . . . . (V01–V99)	16.6	23.3	10.0	15.1	22.2	7.6	16.7	23.4	10.3	17.2	23.9	10.8	15.4	23.2	8.4
Suicide . . . . . (X82)	0.0	0.1	0.0	*	*	*	0.0	0.1	0.0	0.0	0.1	0.0	*	*	*
Homicide . . . . . (*U01.1,Y03) <sup>3</sup>	0.0	0.0	*	*	*	*	0.0	0.0	*	0.0	0.0	*	*	*	*
Undetermined . . . . . (Y32)	0.0	*	*	*	*	*	0.0	*	*	0.0	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Motor vehicle traffic . . . . . (V02–V04[.1,.9],V09.2, V12–V14[.3–.9],V19[.4–.6],V20–V28[.3–.9],V29–V79[.4–.9], V80[.3–.5],V81.1,V82.1,V83–V86[.0–.3],V87[.0–.8],V89.2) <sup>5</sup>	15.3	21.2	9.6	14.3	20.8	7.3	15.4	21.1	9.9	15.8	21.4	10.3	14.6	21.7	8.2
Occupant . . . . . (V30–V79[.4–.9],V83–V86[.0–.3]) <sup>5</sup>	7.4	10.0	4.9	7.6	11.0	3.9	7.4	9.8	5.1	7.6	10.0	5.3	6.7	9.7	4.0
Motorcyclist . . . . . (V20–V28[.3–.9],V29[.4–.9]) <sup>5</sup>	1.1	2.0	0.2	0.5	1.0	0.1	1.2	2.2	0.2	1.3	2.4	0.3	0.9	1.8	*
Pedal cyclist . . . . . (V12–V14[.3–.9],V19[.4–.6]) <sup>5</sup>	0.2	0.3	0.0	0.3	0.5	*	0.2	0.3	0.0	0.2	0.3	0.0	0.2	0.4	*
Pedestrian . . . . . (V02–V04[.1,.9],V09.2) <sup>5</sup>	1.7	2.4	1.1	2.3	3.3	1.1	1.7	2.2	1.1	1.5	1.9	1.0	2.5	3.7	1.4
Other . . . . . (V80[.3–.5],V81.1,V82.1) <sup>5</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Unspecified . . . . . (V87[.0–.8],V89.2) <sup>5</sup>	4.8	6.4	3.3	3.6	5.1	2.1	5.0	6.6	3.5	5.2	6.9	3.7	4.3	6.0	2.6
Pedal cyclist, other . . . . . (V10–V11,V12–V14[.0–.2],V15– V18,V19[.0–.3,.8,.9]) <sup>5</sup>	0.1	0.1	*	0.1	0.1	*	0.1	0.1	*	0.1	0.2	*	0.1	0.1	*
Pedestrian, other . . . . . (V01,V02–V04[.0],V05, V06,V09[.0,.1,.3,.9]) <sup>5</sup>	0.4	0.6	0.2	0.4	0.7	0.2	0.3	0.6	0.2	0.3	0.5	0.1	0.5	0.8	0.2
Other land transport . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82[.0,.2–.9], V83–V86[.4–.9],V87.9,V88[.0–.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	0.5	0.8	0.2	0.3	0.4	0.1	0.5	0.8	0.2	0.6	0.9	0.2	0.2	0.3	*
Unintentional . . . . . (V20–V28[.0–.2],V29–V79[.0–.3], V80[.0–.2,.6–.9],V81–V82[.0,.2–.9],V83–V86[.4–.9], V87.9,V88[.0–.9],V89[.0,.1,.3,.9])	0.4	0.7	0.1	0.2	0.3	*	0.4	0.7	0.1	0.5	0.8	0.2	0.1	0.3	*
Suicide . . . . . (X82)	0.0	0.1	0.0	*	*	*	0.0	0.1	0.0	0.0	0.1	0.0	*	*	*
Homicide . . . . . (Y03)	0.0	0.0	*	*	*	*	0.0	0.0	*	0.0	0.0	*	*	*	*
Undetermined . . . . . (Y32)	0.0	*	*	*	*	*	0.0	*	*	0.0	*	*	*	*	*
Other transport . . . . . (*U01.1,V90–V99,Y36.1)	0.4	0.8	0.1	0.2	0.3	*	0.5	0.9	0.1	0.6	1.0	0.1	0.2	0.4	*
Unintentional . . . . . (V90–V99)	0.4	0.8	0.1	0.2	0.3	*	0.5	0.9	0.1	0.6	1.0	0.1	0.2	0.4	*
Homicide . . . . . (*U01.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Natural/environmental . . . . . (W42–W43,W53–W64,W92–W99, X20–X39,X51–X57) <sup>5</sup>	0.5	0.7	0.4	0.3	0.5	0.1	0.6	0.8	0.4	0.6	0.7	0.4	0.7	1.0	0.5
Overexertion . . . . . (X50) <sup>5</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

See footnotes at end of table.

**Table 11. Death rates due to injury according to mechanism and intent of death by Hispanic origin, race for non-Hispanic population, and sex: United States, 2002—Con.**

[Crude rates per 100,000 population in specified group. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All origins <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>			Non-Hispanic white			Non-Hispanic black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Poisoning . . . . . (*U01[.6-.7],X40-X49,X60-X69,X85-X90, Y10-Y19,Y35.2)	9.2	12.2	6.3	5.2	7.8	2.5	9.7	12.8	6.8	10.5	13.6	7.4	8.3	11.7	5.2
Unintentional . . . . . (X40-X49)	6.1	8.5	3.7	4.3	6.6	1.7	6.3	8.8	4.0	6.6	9.1	4.3	6.4	9.3	3.8
Suicide . . . . . (X60-X69)	1.9	2.2	1.6	0.6	0.6	0.5	2.1	2.4	1.8	2.5	2.9	2.1	0.6	0.7	0.5
Homicide . . . . . (*U01[.6-.7],X85-X90)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	*	*	*	*
Undetermined . . . . . (Y10-Y19)	1.2	1.5	0.9	0.4	0.5	0.2	1.3	1.6	1.0	1.3	1.7	1.0	1.3	1.7	0.9
Legal intervention/war . . . . . (Y35.2)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Struck by or against . . . . . (W20-W22,W50-W52,X79, Y00,Y04,Y29,Y35.3)	0.4	0.7	0.1	0.4	0.7	0.1	0.4	0.7	0.1	0.4	0.7	0.1	0.5	0.9	0.1
Unintentional . . . . . (W20-W22,W50-W52)	0.3	0.6	0.1	0.3	0.5	*	0.3	0.6	0.1	0.3	0.6	0.1	0.3	0.5	*
Suicide . . . . . (X79)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (Y00,Y04)	0.1	0.2	0.0	0.1	0.2	*	0.1	0.1	0.0	0.1	0.1	0.0	0.2	0.4	*
Undetermined . . . . . (Y29)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Suffocation . . . . . (W75-W84,X70,X91,Y20)	4.4	6.2	2.8	2.7	4.0	1.4	4.7	6.5	3.0	4.9	6.8	3.0	4.1	5.1	3.1
Unintentional . . . . . (W75-W84)	1.9	2.2	1.7	0.7	0.8	0.5	2.1	2.4	1.8	2.2	2.4	1.9	2.3	2.6	2.0
Suicide . . . . . (X70)	2.2	3.8	0.8	1.8	2.9	0.5	2.3	3.9	0.8	2.5	4.2	0.8	1.1	2.1	0.3
Homicide . . . . . (X91)	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.1	0.2	0.6	0.4	0.8
Undetermined . . . . . (Y20)	0.0	0.1	0.0	*	*	*	0.0	0.1	0.0	0.0	0.1	0.0	0.1	*	*
Other specified, classifiable . . . . . (*U01[.0,.2,.5],*U03.0,W23, W35-W41,W44,W49,W85-W91,X75,X81,X96,Y02, Y05-Y07,Y25,Y31,Y35[.1,.5],Y36[.0,.2,.4-.8],Y85) <sup>3</sup>	0.7	1.1	0.3	0.6	1.0	0.2	0.7	1.1	0.3	0.7	1.2	0.3	0.8	1.3	0.4
Unintentional . . . . . (W23,W35-W41,W44,W49,W85-W91,Y85)	0.5	0.8	0.2	0.4	0.7	*	0.5	0.8	0.2	0.5	0.9	0.2	0.4	0.8	0.1
Suicide . . . . . (*U03.0,X75,X81) <sup>3</sup>	0.1	0.2	0.0	0.1	0.2	*	0.1	0.2	0.0	0.1	0.2	0.0	0.1	0.2	*
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05-Y07)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2
Undetermined . . . . . (Y25,Y31)	0.0	*	*	*	*	*	0.0	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4-.8])	0.0	0.0	*	*	*	*	0.0	0.0	*	0.0	0.0	*	*	*	*
Other specified, not elsewhere classified . . . . . (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86-Y87,Y89[.0-.1])	0.7	1.0	0.4	0.4	0.7	0.2	0.7	1.0	0.5	0.7	0.9	0.5	1.1	1.9	0.5
Unintentional . . . . . (X58,Y86)	0.4	0.5	0.3	0.1	0.2	*	0.4	0.5	0.3	0.4	0.5	0.3	0.3	0.5	0.1
Suicide . . . . . (X83,Y87.0)	0.1	0.1	0.0	*	*	*	0.1	0.1	0.0	0.1	0.1	0.0	0.1	*	*
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	0.2	0.3	0.1	0.2	0.3	*	0.2	0.3	0.1	0.1	0.2	0.1	0.6	1.0	0.3
Undetermined . . . . . (Y33,Y87.2)	0.1	0.1	0.0	*	*	*	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.2	*
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	0.0	0.0	*	*	*	*	0.0	0.0	*	*	*	*	*	*	*
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34, Y35.7,Y36.9,Y89.9)	3.0	3.0	3.0	1.3	1.8	0.8	3.2	3.2	3.3	3.4	3.2	3.6	2.9	3.7	2.2
Unintentional . . . . . (X59)	2.3	2.0	2.5	0.6	0.7	0.4	2.5	2.2	2.8	2.9	2.5	3.2	1.4	1.5	1.3
Suicide . . . . . (*U03.9,X84)	0.1	0.1	0.0	*	*	*	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*
Homicide . . . . . (*U01.9,Y09)	0.5	0.7	0.4	0.6	0.8	0.3	0.5	0.7	0.4	0.4	0.5	0.3	1.2	1.8	0.8
Undetermined . . . . . (Y34,Y89.9)	0.1	0.2	0.1	0.2	0.3	*	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.4	*
Legal intervention/war . . . . . (Y35.7,Y36.9)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

\* Figure does not meet standard of reliability or precision; see "Technical Notes." 0.0 Quantity more than zero but less than 0.05. <sup>1</sup>Figures for origin not stated are included in "All origins" but are not distributed among specified origins.

<sup>2</sup>Includes races other than white and black. <sup>3</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>4</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total. <sup>5</sup>Intent of death is unintentional.



**Table 12. Age-adjusted death rates due to injury according to mechanism and intent of death, by race and sex: United States, 2002**

[Age-adjusted rates per 100,000 U.S. standard population, see "Technical Notes." Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Data for specified races other than white or black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All races			White			Black			American Indian or Alaska Native			Asian or Pacific Islander		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All injury . . . . . (*U01–*U03,V01–Y36,Y85–Y87,Y89) <sup>1</sup>	55.7	81.7	31.6	55.0	79.7	32.0	65.6	106.1	31.0	74.3	103.8	46.0	26.7	36.8	18.0
Unintentional . . . . . (V01–X59,Y85–Y86)	36.9	51.5	23.5	37.5	52.0	24.0	36.9	56.2	21.3	53.8	73.6	35.1	17.9	23.7	12.9
Suicide . . . . . (*U03,X60–X84,Y87.0) <sup>1</sup>	10.9	18.4	4.2	12.0	20.0	4.7	5.3	9.8	1.6	10.2	16.4	4.1	5.4	8.0	3.0
Homicide . . . . . (*U01–*U02,X85–Y09,Y87.1) <sup>1</sup>	6.1	9.4	2.8	3.7	5.3	2.0	21.0	36.4	6.9	8.4	11.6	5.2	2.9	4.2	1.8
Undetermined . . . . . (Y10–Y34,Y87.2,Y89.9)	1.7	2.2	1.2	1.7	2.2	1.2	2.1	3.1	1.2	1.6	1.6	1.5	0.5	0.7	*
Legal intervention/war . . . . . (Y35–Y36,Y89[.0,.1])	0.1	0.3	*	0.1	0.2	*	0.3	0.6	*	*	*	*	*	*	*
Cut/pierce . . . . . (W25–W29,W45,X78,X99,Y28,Y35.4)	1.0	1.4	0.5	0.7	1.1	0.4	2.3	3.6	1.2	2.1	2.9	1.4	0.7	0.9	0.5
Unintentional . . . . . (W25–W29,W45)	0.0	0.1	*	0.0	0.1	*	*	*	*	*	*	*	*	*	*
Suicide . . . . . (X78)	0.2	0.3	0.1	0.2	0.4	0.1	0.1	0.1	*	*	*	*	0.2	*	*
Homicide . . . . . (X99)	0.7	1.0	0.4	0.5	0.7	0.3	2.2	3.3	1.2	1.9	2.6	*	0.4	0.6	0.3
Undetermined . . . . . (Y28)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.4)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Drowning . . . . . (W65–W74,X71,X92,Y21)	1.4	2.3	0.6	1.3	2.1	0.6	1.9	3.3	0.7	2.4	3.4	*	1.3	1.9	0.8
Unintentional . . . . . (W65–W74)	1.2	2.0	0.5	1.1	1.8	0.4	1.6	2.7	0.5	2.1	3.2	*	1.2	1.7	0.7
Suicide . . . . . (X71)	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.3	*	*	*	*	*	*	*
Homicide . . . . . (X92)	0.0	0.0	0.0	0.0	0.0	*	0.1	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y21)	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.3	*	*	*	*	*	*	*
Fall . . . . . (W00–W19,X80,Y01,Y30)	5.9	7.8	4.5	6.2	8.1	4.7	3.4	5.2	2.1	5.6	6.1	4.8	4.5	6.0	3.2
Unintentional . . . . . (W00–W19)	5.6	7.4	4.3	5.9	7.6	4.6	3.1	4.9	2.0	5.4	5.7	4.8	3.9	5.3	2.8
Suicide . . . . . (X80)	0.2	0.4	0.1	0.3	0.4	0.1	0.2	0.3	*	*	*	*	0.5	0.6	0.3
Homicide . . . . . (Y01)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y30)	0.0	0.0	0.0	0.0	0.1	0.0	*	*	*	*	*	*	*	*	*
Fire/hot object or substance . . . . . (*U01.3,X00–X19,X76–X77, X97–X98,Y26–Y27,Y36.3) <sup>2</sup>	1.3	1.7	0.9	1.1	1.4	0.8	2.7	3.7	2.0	2.2	3.0	1.5	0.6	0.6	0.5
Unintentional . . . . . (X00–X19)	1.1	1.5	0.8	1.0	1.3	0.7	2.5	3.4	1.8	2.1	2.8	1.4	0.5	0.5	0.5
Suicide . . . . . (X76–X77)	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01.3,X97–X98)	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.1	*	*	*	*	*	*
Undetermined . . . . . (Y26–Y27)	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fire/flame . . . . . (X00–X09,X76,X97,Y26)	1.2	1.6	0.9	1.0	1.4	0.8	2.6	3.6	1.9	2.2	3.0	1.5	0.4	0.5	0.4
Unintentional . . . . . (X00–X09)	1.1	1.4	0.8	0.9	1.3	0.7	2.4	3.3	1.7	2.1	2.8	1.4	0.4	0.4	0.4
Suicide . . . . . (X76)	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*	*	*	*	*	*	*
Homicide . . . . . (X97)	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.1	*	*	*	*	*	*
Undetermined . . . . . (Y26)	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*
Hot object/substance . . . . . (X10–X19,X77,X98,Y27)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	*	*	*	*	*	*	*	*
Unintentional . . . . . (X10–X19)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	*	*	*	*	*	*	*	*
Suicide . . . . . (X77)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (X98)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y27)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Firearm . . . . . (*U01.4,W32–W34,X72–X74,X93–X95, Y22–Y24,Y35.0)	10.4	18.6	2.8	9.2	16.2	2.7	19.3	36.0	4.1	8.9	14.8	3.1	3.2	5.5	1.1
Unintentional . . . . . (W32–W34)	0.3	0.4	0.1	0.2	0.4	0.1	0.4	0.7	*	*	*	*	*	*	*

See footnotes at end of table.

**Table 12. Age-adjusted death rates due to injury according to mechanism and intent of death, by race and sex: United States, 2002—Con.**

[Age-adjusted rates per 100,000 U.S. standard population, see "Technical Notes." Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Data for specified races other than white or black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All races			White			Black			American Indian or Alaska Native			Asian or Pacific Islander		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Suicide . . . . . (X72–X74)	5.9	11.1	1.4	6.5	12.1	1.6	3.0	5.9	0.5	4.7	8.4	*	1.3	2.5	0.3
Homicide . . . . . (*U01.4,X93–X95)	4.1	6.8	1.3	2.2	3.4	1.0	15.6	28.7	3.5	3.5	5.1	1.9	1.8	2.8	0.8
Undetermined . . . . . (Y22–Y24)	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.2	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.0)	0.1	0.2	*	0.1	0.2	*	0.2	0.4	*	*	*	*	*	*	*
Machinery . . . . . (W24,W30–W31) <sup>3</sup>	0.2	0.5	0.0	0.3	0.5	0.0	0.1	0.2	*	*	*	*	*	*	*
All transport . . . . . (*U01.1,V01–V99,X82,Y03,Y32,Y36.1) <sup>1</sup>	16.5	23.6	9.9	17.0	24.0	10.1	15.8	24.6	8.4	30.0	41.0	19.7	8.8	11.4	6.5
Unintentional . . . . . (V01–V99)	16.5	23.5	9.8	16.9	23.9	10.1	15.7	24.5	8.3	29.9	40.9	19.6	8.8	11.3	6.5
Suicide . . . . . (X82)	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01.1,Y03) <sup>1</sup>	0.0	0.0	*	0.0	0.0	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y32)	0.0	*	*	0.0	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Motor vehicle traffic . . . . . (V02–V04[.1,.9],V09.2, V12–V14[.3–.9],V19[.4–.6],V20–V28[.3–.9],V29–V79[.4–.9], V80[.3–.5],V81.1,V82.1,V83–V86[.0–.3],V87[.0–.8],V89.2) <sup>3</sup>	15.2	21.3	9.4	15.5	21.6	9.7	14.8	22.8	8.1	28.1	37.6	19.2	8.2	10.5	6.1
Occupant . . . . . (V30–V79[.4–.9],V83–V86[.0–.3]) <sup>3</sup>	7.4	10.0	4.8	7.6	10.3	5.0	6.7	10.1	4.0	13.2	17.2	9.4	3.4	4.5	2.4
Motorcyclist . . . . . (V20–V28[.3–.9],V29[.4–.9]) <sup>3</sup>	1.1	2.0	0.2	1.2	2.1	0.2	0.8	1.7	*	0.7	*	*	0.3	0.6	*
Pedal cyclist . . . . . (V12–V14[.3–.9],V19[.4–.6]) <sup>3</sup>	0.2	0.3	0.0	0.2	0.3	0.0	0.2	0.4	*	*	*	*	*	*	*
Pedestrian . . . . . (V02–V04[.1,.9],V09.2) <sup>3</sup>	1.7	2.5	1.1	1.6	2.2	1.0	2.7	4.2	1.4	4.8	7.8	2.1	2.0	2.4	1.7
Other . . . . . (V80[.3–.5],V81.1,V82.1) <sup>3</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Unspecified . . . . . (V87[.0–.8],V89.2) <sup>3</sup>	4.8	6.5	3.2	5.0	6.7	3.4	4.3	6.4	2.6	9.3	11.4	7.2	2.4	2.9	1.9
Pedal cyclist, other . . . . . (V10–V11,V12–V14[.0–.2],V15– V18,V19[.0–.3,.8,.9]) <sup>3</sup>	0.1	0.1	*	0.1	0.1	*	0.1	0.1	*	*	*	*	*	*	*
Pedestrian, other . . . . . (V01,V02–V04[.0],V05, V06,V09[.0,.1,.3,.9]) <sup>3</sup>	0.4	0.6	0.1	0.4	0.6	0.1	0.5	0.8	0.2	0.8	1.5	*	0.3	*	*
Other land transport . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82[.0,.2–.9], V83–V86[.4–.9],V87.9,V88[.0–.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	0.4	0.8	0.2	0.5	0.9	0.2	0.2	0.4	*	*	*	*	*	*	*
Unintentional . . . . . (V20–V28[.0–.2],V29–V79[.0–.3], V80[.0–.2,.6–.9],V81–V82[.0,.2–.9],V83–V86[.4–.9], V87.9,V88[.0–.9],V89[.0,.1,.3,.9])	0.4	0.7	0.1	0.4	0.8	0.1	0.1	0.3	*	*	*	*	*	*	*
Suicide . . . . . (X82)	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*	*	*	*	*	*	*
Homicide . . . . . (Y03)	0.0	0.0	*	0.0	0.0	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y32)	0.0	*	*	0.0	*	*	*	*	*	*	*	*	*	*	*
Other transport . . . . . (*U01.1,V90–V99,Y36.1) <sup>1</sup>	0.5	0.8	0.1	0.5	0.9	0.1	0.2	0.5	*	*	*	*	0.2	*	*
Unintentional . . . . . (V90–V99)	0.4	0.8	0.1	0.5	0.9	0.1	0.2	0.4	*	*	*	*	0.2	*	*
Homicide . . . . . (*U01.1) <sup>1</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Natural/environmental . . . . . (W42–W43,W53–W64,W92–W99, X20–X39,X51–X57) <sup>3</sup>	0.5	0.8	0.3	0.5	0.7	0.3	0.9	1.4	0.6	2.5	4.6	*	*	*	*
Overexertion . . . . . (X50) <sup>3</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

See footnotes at end of table.

**Table 12. Age-adjusted death rates due to injury according to mechanism and intent of death, by race and sex: United States, 2002—Con.**

[Age-adjusted rates per 100,000 U.S. standard population, see "Technical Notes." Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Data for specified races other than white or black should be interpreted with caution because of inconsistencies between reporting race on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All races			White			Black			American Indian or Alaska Native			Asian or Pacific Islander		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Poisoning . . . . . (*U01[.6-.7],X40-X49,X60-X69,X85-X90, Y10-Y19,Y35.2)	9.2	12.1	6.2	9.7	12.7	6.7	8.7	12.6	5.3	8.7	10.9	6.5	1.8	2.4	1.3
Unintentional . . . . . (X40-X49)	6.1	8.4	3.7	6.3	8.7	3.9	6.8	10.1	3.9	6.4	8.3	4.4	1.0	1.6	0.6
Suicide . . . . . (X60-X69)	1.9	2.2	1.6	2.1	2.5	1.9	0.6	0.7	0.5	1.6	2.0	*	0.6	0.7	0.6
Homicide . . . . . (*U01[.6-.7],X85-X90)	0.0	0.0	0.0	0.0	0.0	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y10-Y19)	1.2	1.4	0.9	1.2	1.5	0.9	1.3	1.8	0.9	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.2)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Struck by or against . . . . . (W20-W22,W50-W52,X79, Y00,Y04,Y29,Y35.3)	0.4	0.7	0.1	0.4	0.7	0.1	0.5	1.0	0.2	*	*	*	*	*	*
Unintentional . . . . . (W20-W22,W50-W52)	0.3	0.6	0.1	0.3	0.6	0.1	0.3	0.6	*	*	*	*	*	*	*
Suicide . . . . . (X79)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (Y00,Y04)	0.1	0.2	0.1	0.1	0.1	0.0	0.2	0.4	*	*	*	*	*	*	*
Undetermined . . . . . (Y29)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Suffocation . . . . . (W75-W84,X70,X91,Y20)	4.4	6.5	2.6	4.5	6.6	2.4	4.5	6.1	3.2	4.9	7.1	2.6	3.4	4.6	2.3
Unintentional . . . . . (W75-W84)	1.9	2.5	1.5	1.8	2.4	1.4	2.7	3.6	2.2	1.6	1.8	*	0.7	0.9	0.6
Suicide . . . . . (X70)	2.2	3.7	0.8	2.4	4.0	0.8	1.1	2.1	0.3	3.2	5.2	*	2.4	3.5	1.4
Homicide . . . . . (X91)	0.2	0.2	0.3	0.2	0.1	0.2	0.6	0.4	0.7	*	*	*	0.2	*	*
Undetermined . . . . . (Y20)	0.0	0.1	0.0	0.0	0.1	0.0	0.0	*	*	*	*	*	*	*	*
Other specified, classifiable . . . . . (*U01[.0,.2,.5],*U03.0,W23, W35-W41,W44,W49,W85-W91,X75,X81,X96,Y02, Y05-Y07,Y25,Y31,Y35[.1,.5],Y36[.0,.2,.4-.8],Y85) <sup>1</sup>	0.7	1.2	0.3	0.7	1.1	0.3	0.8	1.4	0.4	0.7	*	*	0.3	0.5	*
Unintentional . . . . . (W23,W35-W41,W44,W49,W85-W91,Y85)	0.5	0.8	0.2	0.5	0.8	0.2	0.5	0.9	0.1	*	*	*	*	*	*
Suicide . . . . . (*U03.0,X75,X81) <sup>1</sup>	0.1	0.2	0.0	0.1	0.2	0.1	0.1	0.2	*	*	*	*	*	*	*
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05-Y07)	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	*	*	*	*	*	*
Undetermined . . . . . (Y25,Y31)	0.0	*	*	0.0	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4-.8])	0.0	0.1	*	0.0	0.0	*	*	*	*	*	*	*	*	*	*
Other specified, not elsewhere classified . . . . . (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86-Y87,Y89[.0-.1])	0.7	1.1	0.4	0.6	0.9	0.4	1.3	2.3	0.5	1.3	1.9	*	0.5	0.6	*
Unintentional . . . . . (X58,Y86)	0.4	0.5	0.2	0.4	0.5	0.2	0.4	0.7	0.2	*	*	*	0.2	*	*
Suicide . . . . . (X83,Y87.0)	0.1	0.1	0.0	0.1	0.1	0.0	0.1	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	0.2	0.3	0.1	0.2	0.2	0.1	0.6	1.1	0.3	*	*	*	*	*	*
Undetermined . . . . . (Y33,Y87.2)	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.2	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	0.0	0.0	*	*	*	*	*	*	*	*	*	*	*	*	*
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34, Y35.7,Y36.9,Y89.9)	3.0	3.6	2.5	2.9	3.4	2.4	3.4	4.7	2.4	4.2	5.8	2.8	1.5	1.8	1.2
Unintentional . . . . . (X59)	2.3	2.5	2.0	2.3	2.6	2.1	1.9	2.3	1.6	2.3	2.9	*	1.0	1.1	1.0
Suicide . . . . . (*U03.9,X84)	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*	*	*	*	*	*	*
Homicide . . . . . (*U01.9,Y09)	0.5	0.7	0.4	0.4	0.5	0.3	1.2	1.9	0.7	1.7	2.4	*	0.3	0.4	*
Undetermined . . . . . (Y34,Y89.9)	0.2	0.2	0.1	0.2	0.2	0.1	0.3	0.5	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.7,Y36.9)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

\* Figure does not meet standard of reliability or precision; see "Technical Notes."

0.0 Quantity more than zero but less than 0.05.

<sup>1</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>2</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.

<sup>3</sup>Intent of death is unintentional.

**Table 13. Age-adjusted death rates due to injury according to mechanism and intent of death, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2002**

[Age-adjusted rates per 100,000 U.S. standard population, see "Technical Notes." Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All origins <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>			Non-Hispanic white			Non-Hispanic black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All injury . . . . . (*U01-*U03,V01-Y36,Y85-Y87,Y89) <sup>3</sup>	55.7	81.7	31.6	44.7	68.6	20.9	56.6	82.8	32.7	55.6	79.9	33.1	67.0	108.3	31.8
Unintentional . . . . . (V01-X59,Y85-Y86)	36.9	51.5	23.5	30.7	45.6	16.1	37.3	51.8	24.2	38.0	52.3	24.8	37.6	57.2	21.8
Suicide . . . . . (*U03,X60-X84,Y87.0) <sup>3</sup>	10.9	18.4	4.2	5.7	9.9	1.8	11.6	19.5	4.5	12.9	21.4	5.1	5.4	10.0	1.6
Homicide . . . . . (*U01-*U02,X85-Y09,Y87.1) <sup>3</sup>	6.1	9.4	2.8	7.3	11.6	2.5	5.8	8.9	2.8	2.8	3.7	1.9	21.6	37.4	7.0
Undetermined . . . . . (Y10-Y34,Y87.2,Y89.9)	1.7	2.2	1.2	0.8	1.3	0.4	1.8	2.3	1.3	1.8	2.3	1.3	2.1	3.1	1.3
Legal intervention/war . . . . . (Y35-Y36,Y89[.0,.1])	0.1	0.3	*	0.2	0.3	*	0.1	0.3	*	0.1	0.2	*	0.3	0.6	*
Cut/pierce . . . . . (W25-W29,W45,X78,X99,Y28,Y35.4)	1.0	1.4	0.5	1.2	1.9	0.5	0.9	1.3	0.5	0.6	0.9	0.3	2.4	3.7	1.3
Unintentional . . . . . (W25-W29,W45)	0.0	0.1	*	*	*	*	0.0	0.0	*	0.0	0.0	*	*	*	*
Suicide . . . . . (X78)	0.2	0.3	0.1	0.1	0.2	*	0.2	0.3	0.1	0.2	0.4	0.1	0.1	0.1	*
Homicide . . . . . (X99)	0.7	1.0	0.4	1.1	1.6	0.5	0.7	0.9	0.4	0.4	0.5	0.2	2.3	3.4	1.2
Undetermined . . . . . (Y28)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.4)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Drowning . . . . . (W65-W74,X71,X92,Y21)	1.4	2.3	0.6	1.3	2.1	0.4	1.4	2.2	0.7	1.3	2.0	0.6	2.0	3.4	0.7
Unintentional . . . . . (W65-W74)	1.2	2.0	0.5	1.1	1.9	0.3	1.2	1.9	0.5	1.1	1.7	0.5	1.6	2.8	0.5
Suicide . . . . . (X71)	0.1	0.2	0.1	0.1	*	*	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.3	*
Homicide . . . . . (X92)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	*	0.1	*	*
Undetermined . . . . . (Y21)	0.1	0.1	0.0	*	*	*	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.3	*
Fall . . . . . (W00-W19,X80,Y01,Y30)	5.9	7.8	4.5	4.6	6.5	3.0	5.9	7.8	4.5	6.2	8.1	4.8	3.4	5.3	2.1
Unintentional . . . . . (W00-W19)	5.6	7.4	4.3	4.3	6.1	2.9	5.6	7.4	4.4	5.9	7.6	4.6	3.1	4.9	2.0
Suicide . . . . . (X80)	0.2	0.4	0.1	0.2	0.3	*	0.3	0.4	0.1	0.3	0.4	0.2	0.2	0.3	*
Homicide . . . . . (Y01)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y30)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	*	*	*	*
Fire/hot object or substance . . . . . (*U01.3,X00-X19,X76-X77,X97-X98,Y26-Y27,Y36.3) <sup>4</sup>	1.3	1.7	0.9	0.9	1.3	0.6	1.3	1.7	1.0	1.1	1.5	0.8	2.8	3.8	2.1
Unintentional . . . . . (X00-X19)	1.1	1.5	0.8	0.8	1.1	0.5	1.2	1.5	0.8	1.0	1.3	0.7	2.5	3.5	1.8
Suicide . . . . . (X76-X77)	0.1	0.1	0.0	*	*	*	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*
Homicide . . . . . (*U01.3,X97-X98)	0.0	0.1	0.0	*	*	*	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.2	0.1
Undetermined . . . . . (Y26-Y27)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*
Legal intervention/war . . . . . (Y36.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Fire/flame . . . . . (X00-X09,X76,X97,Y26)	1.2	1.6	0.9	0.9	1.2	0.6	1.2	1.7	0.9	1.1	1.4	0.8	2.7	3.7	2.0
Unintentional . . . . . (X00-X09)	1.1	1.4	0.8	0.8	1.0	0.5	1.2	1.5	0.8	1.0	1.3	0.7	2.5	3.3	1.8
Suicide . . . . . (X76)	0.1	0.1	0.0	*	*	*	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*
Homicide . . . . . (X97)	0.0	0.1	0.0	*	*	*	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.2	0.1
Undetermined . . . . . (Y26)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	0.0	*	*	*
Hot object/substance . . . . . (X10-X19,X77,X98,Y27)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	*	*
Unintentional . . . . . (X10-X19)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	*	*
Suicide . . . . . (X77)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (X98)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Undetermined . . . . . (Y27)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Firearm . . . . . (*U01.4,W32-W34,X72-X74,X93-X95,Y22-Y24,Y35.0)	10.4	18.6	2.8	7.6	13.4	1.6	10.7	19.1	3.0	9.0	16.0	2.8	19.8	37.0	4.2
Unintentional . . . . . (W32-W34)	0.3	0.4	0.1	0.2	0.2	*	0.3	0.5	0.1	0.3	0.5	0.1	0.4	0.8	*

See footnotes at end of table.

**Table 13. Age-adjusted death rates due to injury according to mechanism and intent of death, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2002—Con.**

[Age-adjusted rates per 100,000 U.S. standard population, see "Technical Notes." Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All origins <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>			Non-Hispanic white			Non-Hispanic black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Suicide . . . . . (X72–X74)	5.9	11.1	1.4	2.5	4.8	0.4	6.3	11.8	1.5	7.0	13.0	1.8	3.0	6.0	0.5
Homicide . . . . . (*U01.4,X93–X95)	4.1	6.8	1.3	4.8	8.1	1.2	3.9	6.5	1.3	1.6	2.2	0.9	16.1	29.5	3.6
Undetermined . . . . . (Y22–Y24)	0.1	0.1	0.0	0.1	0.1	*	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.2	*
Legal intervention/war . . . . . (Y35.0)	0.1	0.2	*	0.1	0.3	*	0.1	0.2	*	0.1	0.1	*	0.2	0.4	*
Machinery . . . . . (W24,W30–W31) <sup>5</sup>	0.2	0.5	0.0	0.3	0.5	*	0.2	0.4	0.0	0.3	0.5	0.0	0.1	0.2	*
All transport . . . . . (*U01.1,V01–V99,X82,Y03,Y32,Y36.1) <sup>5</sup>	16.5	23.6	9.9	15.8	23.2	8.3	16.6	23.6	10.1	17.0	23.9	10.4	16.0	25.0	8.6
Unintentional . . . . . (V01–V99)	16.5	23.5	9.8	15.8	23.1	8.3	16.5	23.5	10.0	16.9	23.8	10.4	16.0	24.9	8.5
Suicide . . . . . (X82)	0.1	0.1	0.0	*	*	*	0.0	0.1	0.0	0.0	0.1	0.0	*	*	*
Homicide . . . . . (*U01.1,Y03) <sup>3</sup>	0.0	0.0	*	*	*	*	0.0	0.0	*	0.0	0.0	*	*	*	*
Undetermined . . . . . (Y32)	0.0	*	*	*	*	*	0.0	*	*	0.0	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Motor vehicle traffic . . . . . (V02–V04[.1,.9],V09.2, V12–V14[.3–.9],V19[.4–.6],V20–V28[.3–.9],V29–V79[.4–.9], V80[.3–.5],V81.1,V82.1,V83–V86[.0–.3],V87[.0–.8],V89.2) <sup>5</sup>	15.2	21.3	9.4	14.9	21.7	8.0	15.2	21.2	9.6	15.4	21.3	9.9	15.1	23.2	8.3
Occupant . . . . . (V30–V79[.4–.9],V83–V86[.0–.3]) <sup>5</sup>	7.4	10.0	4.8	7.5	10.7	4.1	7.3	9.8	4.9	7.5	10.0	5.1	6.9	10.2	4.1
Motorcyclist . . . . . (V20–V28[.3–.9],V29[.4–.9]) <sup>5</sup>	1.1	2.0	0.2	0.5	0.9	0.1	1.2	2.2	0.2	1.3	2.3	0.2	0.9	1.8	*
Pedal cyclist . . . . . (V12–V14[.3–.9],V19[.4–.6]) <sup>5</sup>	0.2	0.3	0.0	0.3	0.6	*	0.2	0.3	0.0	0.2	0.3	0.0	0.2	0.4	*
Pedestrian . . . . . (V02–V04[.1,.9],V09.2) <sup>5</sup>	1.7	2.5	1.1	3.0	4.6	1.5	1.6	2.3	1.0	1.4	1.9	0.9	2.7	4.2	1.5
Other . . . . . (V80[.3–.5],V81.1,V82.1) <sup>5</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Unspecified . . . . . (V87[.0–.8],V89.2) <sup>5</sup>	4.8	6.5	3.2	3.7	5.0	2.2	5.0	6.7	3.4	5.1	6.9	3.5	4.4	6.6	2.7
Pedal cyclist, other . . . . . (V10–V11,V12–V14[.0–.2],V15– V18,V19[.0–.3,.8,.9]) <sup>5</sup>	0.1	0.1	*	0.1	0.1	*	0.1	0.1	*	0.1	0.1	*	0.1	0.1	*
Pedestrian, other . . . . . (V01,V02–V04[.0],V05, V06,V09[.0,.1,.3,.9]) <sup>5</sup>	0.4	0.6	0.1	0.4	0.8	0.2	0.3	0.6	0.2	0.3	0.5	0.1	0.5	0.9	0.2
Other land transport . . . . . (V20–V28[.0–.2], V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82[.0,.2–.9], V83–V86[.4–.9],V87.9,V88[.0–.9],V89[.0,.1,.3,.9], X82,Y03,Y32)	0.4	0.8	0.2	0.3	0.4	0.1	0.5	0.8	0.2	0.6	0.9	0.2	0.2	0.4	*
Unintentional . . . . . (V20–V28[.0–.2],V29–V79[.0–.3], V80[.0–.2,.6–.9],V81–V82[.0,.2–.9],V83–V86[.4–.9], V87.9,V88[.0–.9],V89[.0,.1,.3,.9])	0.4	0.7	0.1	0.2	0.3	*	0.4	0.7	0.1	0.5	0.8	0.2	0.2	0.3	*
Suicide . . . . . (X82)	0.1	0.1	0.0	*	*	*	0.0	0.1	0.0	0.0	0.1	0.0	*	*	*
Homicide . . . . . (Y03)	0.0	0.0	*	*	*	*	0.0	0.0	*	0.0	0.0	*	*	*	*
Undetermined . . . . . (Y32)	0.0	*	*	*	*	*	0.0	*	*	0.0	*	*	*	*	*
Other transport . . . . . (*U01.1,V90–V99,Y36.1)	0.5	0.8	0.1	0.2	0.3	*	0.5	0.9	0.1	0.5	1.0	0.1	0.2	0.5	*
Unintentional . . . . . (V90–V99)	0.4	0.8	0.1	0.2	0.3	*	0.5	0.9	0.1	0.5	1.0	0.1	0.2	0.5	*
Homicide . . . . . (*U01.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y36.1)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Natural/environmental . . . . . (W42–W43,W53–W64,W92–W99, X20–X39,X51–X57) <sup>5</sup>	0.5	0.8	0.3	0.4	0.6	0.2	0.5	0.8	0.3	0.5	0.7	0.3	0.9	1.4	0.6
Overexertion . . . . . (X50) <sup>5</sup>	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

See footnotes at end of table.

**Table 13. Age-adjusted death rates due to injury according to mechanism and intent of death, by Hispanic origin, race for non-Hispanic population, and sex: United States, 2002—Con.**

[Age-adjusted rates per 100,000 U.S. standard population, see "Technical Notes." Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes." Race and Hispanic origin are reported separately on the death certificate. Persons of Hispanic origin may be of any race. Data for Hispanic persons are not tabulated separately by race; data for non-Hispanic persons are tabulated by race. Data for Hispanic origin should be interpreted with caution because of inconsistencies between reporting Hispanic origin on death certificates and on censuses and surveys; see "Technical Notes"]

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	All origins <sup>1</sup>			Hispanic			Non-Hispanic <sup>2</sup>			Non-Hispanic white			Non-Hispanic black		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Poisoning . . . . . (*U01[.6-.7],X40-X49,X60-X69,X85-X90, Y10-Y19,Y35.2)	9.2	12.1	6.2	5.8	8.7	2.9	9.6	12.6	6.7	10.3	13.4	7.2	8.9	12.9	5.4
Unintentional . . . . . (X40-X49)	6.1	8.4	3.7	4.7	7.3	2.0	6.3	8.6	4.0	6.6	9.0	4.2	6.9	10.3	4.0
Suicide . . . . . (X60-X69)	1.9	2.2	1.6	0.7	0.8	0.6	2.0	2.4	1.7	2.4	2.7	2.0	0.6	0.7	0.5
Homicide . . . . . (*U01[.6-.7],X85-X90)	0.0	0.0	0.0	*	*	*	0.0	0.0	0.0	0.0	0.0	*	*	*	*
Undetermined . . . . . (Y10-Y19)	1.2	1.4	0.9	0.4	0.6	0.3	1.3	1.6	1.0	1.3	1.6	1.0	1.3	1.8	0.9
Legal intervention/war . . . . . (Y35.2)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Struck by or against . . . . . (W20-W22,W50-W52,X79, Y00,Y04,Y29,Y35.3)	0.4	0.7	0.1	0.4	0.8	0.1	0.4	0.7	0.1	0.4	0.7	0.1	0.5	1.0	0.2
Unintentional . . . . . (W20-W22,W50-W52)	0.3	0.6	0.1	0.3	0.5	*	0.3	0.5	0.1	0.3	0.6	0.1	0.3	0.6	*
Suicide . . . . . (X79)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Homicide . . . . . (Y00,Y04)	0.1	0.2	0.1	0.1	0.2	*	0.1	0.1	0.0	0.1	0.1	0.0	0.2	0.4	*
Undetermined . . . . . (Y29)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35.3)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Suffocation . . . . . (W75-W84,X70,X91,Y20)	4.4	6.5	2.6	3.1	4.8	1.6	4.6	6.7	2.6	4.6	6.9	2.5	4.6	6.2	3.3
Unintentional . . . . . (W75-W84)	1.9	2.5	1.5	1.0	1.4	0.8	2.0	2.6	1.5	1.9	2.5	1.4	2.8	3.7	2.2
Suicide . . . . . (X70)	2.2	3.7	0.8	1.9	3.2	0.5	2.3	3.9	0.8	2.5	4.2	0.8	1.1	2.0	0.3
Homicide . . . . . (X91)	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.6	0.4	0.7
Undetermined . . . . . (Y20)	0.0	0.1	0.0	*	*	*	0.0	0.1	0.0	0.1	0.1	0.0	0.0	*	*
Other specified, classifiable . . . . . (*U01[.0,.2,.5],*U03.0,W23, W35-W41,W44,W49,W85-W91,X75,X81,X96,Y02, Y05-Y07,Y25,Y31,Y35[.1,.5],Y36[.0,.2,.4-.8],Y85) <sup>3</sup>	0.7	1.2	0.3	0.7	1.1	0.2	0.7	1.2	0.3	0.7	1.1	0.3	0.8	1.4	0.4
Unintentional . . . . . (W23,W35-W41,W44,W49,W85-W91,Y85)	0.5	0.8	0.2	0.4	0.8	*	0.5	0.8	0.2	0.5	0.9	0.2	0.5	0.9	0.1
Suicide . . . . . (*U03.0,X75,X81) <sup>3</sup>	0.1	0.2	0.0	0.1	0.2	*	0.1	0.2	0.0	0.1	0.2	0.1	0.1	0.2	*
Homicide . . . . . (*U01[.0,.2,.5],X96,Y02,Y05-Y07)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.2	0.2	0.2
Undetermined . . . . . (Y25,Y31)	0.0	*	*	*	*	*	0.0	*	*	*	*	*	*	*	*
Legal intervention/war . . . . . (Y35[.1,.5],Y36[.0,.2,.4-.8])	0.0	0.1	*	*	*	*	0.0	0.1	*	0.0	0.0	*	*	*	*
Other specified, not elsewhere classified . . . . . (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86-Y87,Y89[.0-.1])	0.7	1.1	0.4	0.5	0.9	0.2	0.7	1.1	0.4	0.6	0.9	0.4	1.3	2.3	0.5
Unintentional . . . . . (X58,Y86)	0.4	0.5	0.2	0.2	0.4	*	0.4	0.5	0.2	0.4	0.5	0.2	0.4	0.7	0.2
Suicide . . . . . (X83,Y87.0)	0.1	0.1	0.0	*	*	*	0.1	0.1	0.0	0.1	0.1	0.0	0.1	*	*
Homicide . . . . . (*U01.8,*U02,Y08,Y87.1)	0.2	0.3	0.1	0.2	0.4	*	0.2	0.3	0.1	0.1	0.2	0.1	0.7	1.1	0.3
Undetermined . . . . . (Y33,Y87.2)	0.1	0.1	0.0	*	*	*	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.2	*
Legal intervention/war . . . . . (Y35.6,Y89[.0,.1])	0.0	0.0	*	*	*	*	0.0	0.0	*	*	*	*	*	*	*
Unspecified . . . . . (*U01.9,*U03.9,X59,X84,Y09,Y34, Y35.7,Y36.9,Y89.9)	3.0	3.6	2.5	2.0	2.9	1.2	3.0	3.6	2.5	2.9	3.4	2.5	3.5	4.8	2.5
Unintentional . . . . . (X59)	2.3	2.5	2.0	1.1	1.6	0.8	2.3	2.6	2.1	2.4	2.6	2.1	1.9	2.4	1.6
Suicide . . . . . (*U03.9,X84)	0.1	0.1	0.0	*	*	*	0.1	0.1	0.0	0.1	0.1	0.0	*	*	*
Homicide . . . . . (*U01.9,Y09)	0.5	0.7	0.4	0.6	0.9	0.3	0.5	0.7	0.4	0.4	0.5	0.3	1.3	1.9	0.7
Undetermined . . . . . (Y34,Y89.9)	0.2	0.2	0.1	0.2	0.4	*	0.2	0.2	0.1	0.1	0.2	0.1	0.3	0.5	*
Legal intervention/war . . . . . (Y35.7,Y36.9)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

\* Figure does not meet standard of reliability or precision; see "Technical Notes." 0.0 Quantity more than zero but less than 0.05. <sup>1</sup>Figures for origin not stated are included in "All origins" but are not distributed among specified origins.

<sup>2</sup>Includes races other than white and black. <sup>3</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>4</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total. <sup>5</sup>Intent of death is unintentional.

**Table 14. Deaths due to injury for single years of age by intent of death and sex: United States, 2002**

[For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Age	Intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> ) and sex											
	All injury (*U01-*U03,V01-Y36,Y85-Y87,Y89) <sup>1</sup>			Unintentional (V01-X59,Y85-Y86)			Suicide (*U03,X60-X84,Y87.0) <sup>1</sup>			Homicide (*U01-*U02,X85-Y09,Y87.1) <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All ages	161,269	111,809	49,460	106,742	69,257	37,485	31,655	25,409	6,246	17,638	13,640	3,998
Under 1 year	1,350	769	581	946	553	393	...	...	...	303	164	139
1	733	422	311	529	314	215	...	...	...	177	95	82
2	572	353	219	437	278	159	...	...	...	120	68	52
3	440	272	168	364	231	133	...	...	...	69	39	30
4	376	239	137	311	201	110	...	...	...	57	32	25
5	293	179	114	257	158	99	-	-	-	32	18	14
6	259	146	113	230	134	96	-	-	-	27	12	15
7	252	149	103	227	141	86	-	-	-	18	6	12
8	279	175	104	245	161	84	3	2	1	26	9	17
9	263	149	114	217	126	91	1	1	-	37	19	18
10	281	174	107	238	144	94	16	16	-	24	12	12
11	295	188	107	236	150	86	22	19	3	29	15	14
12	371	256	115	285	196	89	43	31	12	35	24	11
13	466	308	158	330	212	118	76	56	20	49	32	17
14	650	426	224	453	291	162	103	74	29	79	50	29
15	960	655	305	636	412	224	164	123	41	147	108	39
16	1,781	1,235	546	1,285	832	453	241	200	41	233	189	44
17	2,162	1,530	632	1,480	985	495	305	239	66	353	290	63
18	2,748	2,118	630	1,818	1,305	513	357	312	45	530	464	66
19	3,058	2,458	600	1,918	1,447	471	446	406	40	629	553	76
20	2,992	2,414	578	1,784	1,385	399	461	393	68	677	580	97
21	3,160	2,529	631	1,854	1,400	454	508	438	70	710	626	84
22	2,910	2,370	540	1,629	1,281	348	518	442	76	666	570	96
23	2,791	2,313	478	1,569	1,256	313	498	435	63	651	567	84
24	2,657	2,167	490	1,439	1,135	304	512	444	68	623	527	96
25	2,416	1,958	458	1,288	1,016	272	480	399	81	568	480	88
26	2,375	1,920	455	1,318	1,024	294	442	380	62	541	460	81
27	2,274	1,843	431	1,196	946	250	480	397	83	510	433	77
28	2,142	1,705	437	1,115	865	250	517	410	107	430	369	61
29	2,255	1,773	482	1,205	917	288	504	417	87	465	379	86
30	2,257	1,776	481	1,233	940	293	506	416	90	429	355	74
31	2,410	1,877	533	1,332	1,014	318	577	475	102	389	305	84
32	2,256	1,750	506	1,309	1,010	299	469	375	94	375	296	79
33	2,357	1,787	570	1,313	966	347	541	437	104	407	311	96
34	2,293	1,735	558	1,260	937	323	530	429	101	375	281	94
35	2,405	1,806	599	1,336	984	352	540	433	107	372	278	94
36	2,473	1,855	618	1,420	1,044	376	569	452	117	348	269	79
37	2,612	1,951	661	1,468	1,079	389	639	515	124	328	239	89
38	2,885	2,122	763	1,689	1,200	489	683	546	137	347	253	94
39	2,933	2,127	806	1,729	1,228	501	710	538	172	339	249	90
40	2,995	2,210	785	1,798	1,312	486	732	561	171	318	241	77
41	3,132	2,238	894	1,816	1,293	523	780	599	181	344	240	104
42	3,010	2,231	779	1,822	1,321	501	715	554	161	315	241	74

See footnotes at end of table.

**Table 14. Deaths due to injury for single years of age by intent of death and sex: United States, 2002—Con.**

[For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Age	Intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> ) and sex											
	All injury (*U01–*U03,V01–Y36,Y85–Y87,Y89) <sup>1</sup>			Unintentional (V01–X59,Y85–Y86)			Suicide (*U03,X60–X84,Y87.0) <sup>1</sup>			Homicide (*U01–*U02,X85–Y09,Y87.1) <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
43	3,024	2,128	896	1,849	1,278	571	735	556	179	274	191	83
44	2,957	2,122	835	1,783	1,273	510	748	551	197	254	185	69
45	2,894	2,066	828	1,776	1,262	514	727	540	187	244	171	73
46	2,880	2,103	777	1,762	1,284	478	711	536	175	251	186	65
47	2,755	1,998	757	1,636	1,184	452	719	545	174	249	177	72
48	2,648	1,896	752	1,605	1,133	472	667	500	167	216	164	52
49	2,445	1,799	646	1,462	1,077	385	649	487	162	195	143	52
50	2,336	1,707	629	1,431	1,034	397	642	498	144	161	116	45
51	2,206	1,596	610	1,314	939	375	614	467	147	179	129	50
52	2,032	1,506	526	1,249	902	347	527	417	110	153	115	38
53	1,972	1,394	578	1,259	868	391	508	385	123	132	95	37
54	1,927	1,366	561	1,181	809	372	544	421	123	135	98	37
55	1,820	1,331	489	1,124	802	322	499	381	118	135	110	25
56	1,502	1,116	386	895	659	236	450	346	104	114	84	30
57	1,369	1,013	356	832	592	240	412	330	82	89	69	20
58	1,379	983	396	855	574	281	392	319	73	98	65	33
59	1,415	1,046	369	851	628	223	433	332	101	87	55	32
60	1,242	873	369	822	543	279	331	266	65	66	48	18
61	1,118	789	329	724	494	230	300	224	76	63	50	13
62	1,127	811	316	745	517	228	291	233	58	67	46	21
63	1,156	809	347	793	521	272	274	226	48	69	50	19
64	1,015	683	332	704	451	253	236	180	56	53	37	16
65	1,047	740	307	722	494	228	258	199	59	47	35	12
66	1,008	709	299	726	487	239	219	187	32	43	26	17
67	1,030	717	313	725	480	245	250	201	49	45	29	16
68	1,062	698	364	754	457	297	232	188	44	57	38	19
69	1,037	684	353	745	451	294	238	200	38	37	24	13
70	1,102	757	345	801	503	298	253	222	31	32	20	12
71	1,084	723	361	795	493	302	243	202	41	40	25	15
72	1,296	857	439	965	583	382	270	231	39	45	33	12
73	1,212	793	419	904	541	363	263	225	38	35	21	14
74	1,240	775	465	949	542	407	237	198	39	40	26	14
75	1,388	846	542	1,097	607	490	251	216	35	34	19	15
76	1,463	927	536	1,143	663	480	272	232	40	38	26	12
77	1,427	879	548	1,148	655	493	239	202	37	33	17	16
78	1,574	909	665	1,302	690	612	232	198	34	23	13	10
79	1,534	889	645	1,248	653	595	237	206	31	41	25	16
80	1,643	927	716	1,368	703	665	242	206	36	20	9	11
81	1,636	888	748	1,373	679	694	218	190	28	33	12	21
82	1,728	928	800	1,472	722	750	224	189	35	25	13	12
83	1,551	815	736	1,342	655	687	168	141	27	29	16	13
84	1,621	832	789	1,411	660	751	176	158	18	20	8	12
85 years and over	13,638	5,594	8,044	12,651	4,817	7,834	826	704	122	95	41	54
Age not stated	150	129	21	85	74	11	10	10	–	41	32	9

... Category not applicable.

– Quantity zero.

<sup>1</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."



**Table 15. Death rates due to injury for single years of age by intent of death and sex: United States, 2002**

[Rates per 100,000 population in specified group. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Age	Intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> ) and sex											
	All injury (*U01-*U03,V01-Y36,Y85-Y87,Y89) <sup>1</sup>			Unintentional (V01-X59,Y85-Y86)			Suicide (*U03,X60-X84,Y87.0) <sup>1</sup>			Homicide (*U01-*U02,X85-Y09,Y87.1) <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
All ages <sup>2</sup> . . . . .	55.9	78.9	33.7	37.0	48.9	25.6	11.0	17.9	4.3	6.1	9.6	2.7
Under 1 year <sup>3</sup> . . . . .	33.5	37.3	29.5	23.5	26.8	20.0	...	...	...	7.5	7.9	7.1
1 . . . . .	18.1	20.4	15.7	13.1	15.2	10.9	...	...	...	4.4	4.6	4.1
2 . . . . .	14.8	17.8	11.6	11.3	14.0	8.4	...	...	...	3.1	3.4	2.8
3 . . . . .	11.5	13.9	9.0	9.5	11.8	7.1	...	...	...	1.8	2.0	1.6
4 . . . . .	9.8	12.2	7.3	8.1	10.2	5.9	...	...	...	1.5	1.6	1.3
5 . . . . .	7.6	9.1	6.1	6.7	8.1	5.3	*	*	*	0.8	*	*
6 . . . . .	6.6	7.2	5.9	5.8	6.7	5.0	*	*	*	0.7	*	*
7 . . . . .	6.3	7.3	5.3	5.7	6.9	4.4	*	*	*	*	*	*
8 . . . . .	6.9	8.5	5.3	6.1	7.8	4.3	*	*	*	0.6	*	*
9 . . . . .	6.4	7.1	5.7	5.3	6.0	4.5	*	*	*	0.9	*	*
10 . . . . .	6.7	8.1	5.2	5.7	6.7	4.6	*	*	*	0.6	*	*
11 . . . . .	6.9	8.6	5.1	5.5	6.8	4.1	0.5	*	*	0.7	*	*
12 . . . . .	8.6	11.6	5.5	6.6	8.9	4.2	1.0	1.4	*	0.8	1.1	*
13 . . . . .	11.1	14.3	7.7	7.8	9.8	5.7	1.8	2.6	1.0	1.2	1.5	*
14 . . . . .	15.8	20.2	11.2	11.0	13.8	8.1	2.5	3.5	1.4	1.9	2.4	1.4
15 . . . . .	23.5	31.3	15.3	15.5	19.7	11.2	4.0	5.9	2.1	3.6	5.2	2.0
16 . . . . .	43.6	59.0	27.5	31.5	39.8	22.8	5.9	9.6	2.1	5.7	9.0	2.2
17 . . . . .	53.1	73.1	31.9	36.3	47.1	25.0	7.5	11.4	3.3	8.7	13.9	3.2
18 . . . . .	67.9	101.6	32.1	44.9	62.6	26.1	8.8	15.0	2.3	13.1	22.3	3.4
19 . . . . .	75.0	116.7	30.4	47.0	68.7	23.9	10.9	19.3	2.0	15.4	26.3	3.9
20 . . . . .	72.8	114.3	28.9	43.4	65.6	19.9	11.2	18.6	3.4	16.5	27.5	4.8
21 . . . . .	76.1	119.1	31.1	44.7	65.9	22.4	12.2	20.6	3.5	17.1	29.5	4.1
22 . . . . .	70.5	112.2	26.8	39.4	60.6	17.3	12.5	20.9	3.8	16.1	27.0	4.8
23 . . . . .	70.6	114.2	24.8	39.7	62.0	16.2	12.6	21.5	3.3	16.5	28.0	4.4
24 . . . . .	68.7	109.6	25.9	37.2	57.4	16.1	13.2	22.5	3.6	16.1	26.7	5.1
25 . . . . .	64.1	101.8	24.8	34.2	52.8	14.7	12.7	20.7	4.4	15.1	25.0	4.8
26 . . . . .	63.1	100.2	24.7	35.0	53.4	15.9	11.8	19.8	3.4	14.4	24.0	4.4
27 . . . . .	59.6	94.9	23.0	31.3	48.7	13.3	12.6	20.5	4.4	13.4	22.3	4.1
28 . . . . .	56.7	89.1	23.5	29.5	45.2	13.4	13.7	21.4	5.7	11.4	19.3	3.3
29 . . . . .	58.6	91.2	25.3	31.3	47.2	15.1	13.1	21.4	4.6	12.1	19.5	4.5
30 . . . . .	55.5	86.5	23.9	30.3	45.8	14.6	12.4	20.3	4.5	10.5	17.3	3.7
31 . . . . .	56.7	87.7	25.2	31.3	47.4	15.0	13.6	22.2	4.8	9.1	14.3	4.0
32 . . . . .	51.4	79.0	23.3	29.9	45.6	13.8	10.7	16.9	4.3	8.6	13.4	3.6
33 . . . . .	56.6	85.1	27.6	31.5	46.0	16.8	13.0	20.8	5.0	9.8	14.8	4.6
34 . . . . .	56.1	84.5	27.5	30.9	45.6	15.9	13.0	20.9	5.0	9.2	13.7	4.6
35 . . . . .	58.9	88.3	29.4	32.7	48.1	17.3	13.2	21.2	5.3	9.1	13.6	4.6
36 . . . . .	58.6	87.7	29.4	33.7	49.4	17.9	13.5	21.4	5.6	8.2	12.7	3.8
37 . . . . .	58.1	86.6	29.5	32.7	47.9	17.4	14.2	22.8	5.5	7.3	10.6	4.0
38 . . . . .	63.2	93.2	33.3	37.0	52.7	21.3	15.0	24.0	6.0	7.6	11.1	4.1
39 . . . . .	64.4	94.0	35.2	38.0	54.2	21.9	15.6	23.8	7.5	7.4	11.0	3.9
40 . . . . .	65.2	96.7	34.0	39.2	57.4	21.1	15.9	24.6	7.4	6.9	10.5	3.3
41 . . . . .	67.9	97.9	38.5	39.4	56.6	22.5	16.9	26.2	7.8	7.5	10.5	4.5
42 . . . . .	63.8	95.0	32.8	38.6	56.2	21.1	15.1	23.6	6.8	6.7	10.3	3.1

See footnotes at end of table.

**Table 15. Death rates due to injury for single years of age by intent of death and sex: United States, 2002—Con.**

[Rates per 100,000 population in specified group. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Age	Intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> ) and sex											
	All injury (*U01--*U03,V01-Y36,Y85-Y87,Y89) <sup>1</sup>			Unintentional (V01-X59,Y85-Y86)			Suicide (*U03,X60-X84,Y87.0) <sup>1</sup>			Homicide (*U01--*U02,X85-Y09,Y87.1) <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
43	66.7	94.8	39.2	40.8	56.9	25.0	16.2	24.8	7.8	6.0	8.5	3.6
44	65.1	94.3	36.4	39.2	56.6	22.2	16.5	24.5	8.6	5.6	8.2	3.0
45	65.1	94.1	36.8	39.9	57.5	22.8	16.3	24.6	8.3	5.5	7.8	3.2
46	66.2	98.1	35.2	40.5	59.9	21.7	16.3	25.0	7.9	5.8	8.7	2.9
47	63.7	93.6	34.6	37.8	55.5	20.6	16.6	25.5	7.9	5.8	8.3	3.3
48	63.7	92.8	35.6	38.6	55.4	22.3	16.0	24.5	7.9	5.2	8.0	2.5
49	60.8	91.2	31.5	36.3	54.6	18.8	16.1	24.7	7.9	4.8	7.2	2.5
50	59.5	88.7	31.4	36.4	53.7	19.8	16.3	25.9	7.2	4.1	6.0	2.2
51	58.7	86.8	31.8	35.0	51.1	19.5	16.3	25.4	7.7	4.8	7.0	2.6
52	53.8	81.4	27.3	33.0	48.7	18.0	13.9	22.5	5.7	4.0	6.2	2.0
53	54.3	78.6	31.1	34.7	49.0	21.0	14.0	21.7	6.6	3.6	5.4	2.0
54	52.3	76.0	29.8	32.1	45.0	19.7	14.8	23.4	6.5	3.7	5.5	2.0
55	51.7	77.6	27.1	32.0	46.8	17.9	14.2	22.2	6.5	3.8	6.4	1.4
56	48.7	74.5	24.3	29.0	44.0	14.9	14.6	23.1	6.6	3.7	5.6	1.9
57	48.8	74.6	24.6	29.6	43.6	16.6	14.7	24.3	5.7	3.2	5.1	1.4
58	49.0	72.4	27.2	30.4	42.3	19.3	13.9	23.5	5.0	3.5	4.8	2.3
59	51.1	78.6	25.7	30.7	47.2	15.5	15.6	24.9	7.0	3.1	4.1	2.2
60	47.1	69.1	26.9	31.2	43.0	20.3	12.6	21.1	4.7	2.5	3.8	*
61	47.3	70.0	26.6	30.6	43.8	18.6	12.7	19.9	6.1	2.7	4.4	*
62	49.3	74.6	26.3	32.6	47.5	19.0	12.7	21.4	4.8	2.9	4.2	1.7
63	52.8	77.9	30.1	36.2	50.2	23.6	12.5	21.8	4.2	3.2	4.8	*
64	47.6	67.8	29.5	33.0	44.7	22.5	11.1	17.9	5.0	2.5	3.7	*
65	51.8	78.0	28.7	35.7	52.1	21.3	12.8	21.0	5.5	2.3	3.7	*
66	50.9	76.8	28.3	36.7	52.8	22.6	11.1	20.3	3.0	2.2	2.8	*
67	52.9	79.4	30.0	37.2	53.1	23.5	12.8	22.3	4.7	2.3	3.2	*
68	57.9	82.8	36.7	41.1	54.2	30.0	12.6	22.3	4.4	3.1	4.5	*
69	57.6	83.3	36.1	41.4	54.9	30.1	13.2	24.3	3.9	2.1	2.9	*
70	61.4	93.1	35.2	44.6	61.9	30.4	14.1	27.3	3.2	1.8	2.5	*
71	61.2	90.9	37.0	44.9	62.0	30.9	13.7	25.4	4.2	2.3	3.1	*
72	73.4	109.3	44.7	54.7	74.3	38.9	15.3	29.5	4.0	2.5	4.2	*
73	71.7	106.7	44.2	53.5	72.8	38.3	15.6	30.3	4.0	2.1	2.8	*
74	74.2	106.7	49.2	56.8	74.6	43.1	14.2	27.3	4.1	2.4	3.6	*
75	86.1	122.8	58.8	68.1	88.1	53.1	15.6	31.3	3.8	2.1	*	*
76	94.8	143.1	59.8	74.0	102.3	53.6	17.6	35.8	4.5	2.5	4.0	*
77	94.4	141.0	61.7	75.9	105.0	55.5	15.8	32.4	4.2	2.2	*	*
78	110.0	156.2	78.3	91.0	118.6	72.0	16.2	34.0	4.0	1.6	*	*
79	116.1	168.0	81.4	94.4	123.4	75.1	17.9	38.9	3.9	3.1	4.7	*
80	129.1	185.3	92.7	107.5	140.5	86.1	19.0	41.2	4.7	1.6	*	*
81	137.0	192.7	102.0	115.0	147.4	94.6	18.3	41.2	3.8	2.8	*	2.9
82	166.6	238.5	123.4	141.9	185.6	115.7	21.6	48.6	5.4	2.4	*	*
83	160.5	228.8	120.6	138.8	183.9	112.5	17.4	39.6	4.4	3.0	*	*
84	192.1	274.3	146.0	167.2	217.6	139.0	20.9	52.1	*	2.4	*	*
85 years and over	296.9	402.5	251.1	275.4	346.6	244.6	18.0	50.7	3.8	2.1	3.0	1.7

... Category not applicable.

\* Figure does not meet standard of reliability or precision; see "Technical Notes."

<sup>1</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>2</sup>Figures for age not stated included in "All ages" but not distributed among age groups.

<sup>3</sup>Death rates for "Under 1 year" (based on population estimates differ from infant mortality rates (based on live births)).

**Table 16. Deaths due to injury according to sex, age, selected mechanisms, and intent of death: United States, 1999–2002**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

		Intent and mechanism (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )														
Sex and age	Year	All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89) <sup>1</sup>	Unintentional				Suicide				Homicide				Undetermined intent (Y10–Y34, Y87.2, Y89.9)	Legal intervention/ war (Y35–Y36, Y89[.0..1])
			Total (V01–X59, Y85–Y86)	Motor vehicle traffic <sup>2</sup>	Fall (W00–W19)	Poisoning (X40–X49)	Total (*U03, X60–X84, Y87.0) <sup>1</sup>	Firearm (X72–X74)	Poisoning (X60–X69)	Suffocation (X70)	Total (*U01–*U02, X85–Y09, Y87.1) <sup>1</sup>	Firearm (*U01.4, X93–X95)	Cut/pierce (X99)	Suffocation (X91)		
Both sexes, all ages <sup>3</sup>	1999	148,286	97,860	40,965	13,162	12,186	29,199	16,599	4,893	5,427	16,889	10,828	1,879	708	3,917	421
	2000	148,209	97,900	41,994	13,322	12,757	29,350	16,586	4,859	5,688	16,765	10,801	1,805	658	3,819	375
	2001	157,078	101,537	42,443	15,019	14,078	30,622	16,869	5,191	6,198	20,308	11,348	1,971	690	4,198	413
	2002	161,269	106,742	44,065	16,257	17,550	31,655	17,108	5,486	6,462	17,638	11,829	2,074	679	4,830	404
Males, all ages <sup>3</sup>	1999	102,884	63,535	27,380	7,109	8,887	23,458	14,479	2,827	4,490	12,785	8,944	1,350	238	2,692	414
	2000	103,254	63,817	28,352	7,122	9,138	23,618	14,454	2,792	4,733	12,820	9,006	1,283	224	2,635	364
	2001	109,516	66,060	28,961	8,089	9,885	24,672	14,758	2,972	5,210	15,555	9,532	1,375	244	2,833	396
	2002	111,809	69,257	29,989	8,463	12,059	25,409	15,045	3,097	5,355	13,640	9,899	1,470	238	3,114	389
Females, all ages <sup>3</sup>	1999	45,402	34,325	13,585	6,053	3,299	5,741	2,120	2,066	937	4,104	1,884	529	470	1,225	7
	2000	44,955	34,083	13,642	6,200	3,619	5,732	2,132	2,067	955	3,945	1,795	522	434	1,184	11
	2001	47,562	35,477	13,482	6,930	4,193	5,950	2,111	2,219	988	4,753	1,816	596	446	1,365	17
	2002	49,460	37,485	14,076	7,794	5,491	6,246	2,063	2,389	1,107	3,998	1,930	604	441	1,716	15
Both sexes, 0–14 years old <sup>4</sup>	1999	7,365	5,834	2,398	120	86	242	103	6	125	1,139	282	54	88	147	1
	2000	7,236	5,686	2,372	81	91	300	110	15	168	1,076	227	52	84	164	3
	2001	7,056	5,526	2,241	121	96	272	90	10	163	1,073	246	36	74	178	–
	2002	6,880	5,305	2,148	95	100	260	86	11	154	1,082	263	51	88	226	3
Males, 0–14 years old <sup>4</sup>	1999	4,513	3,595	1,383	85	53	192	80	3	103	631	186	22	46	92	1
	2000	4,438	3,460	1,359	59	59	238	90	8	135	628	164	26	38	103	3
	2001	4,337	3,389	1,296	86	52	207	69	2	130	628	159	17	37	106	–
	2002	4,205	3,290	1,243	64	63	196	68	0	120	595	160	33	35	118	3
Females, 0–14 years old <sup>4</sup>	1999	2,852	2,239	1,015	35	33	50	23	3	22	508	96	32	42	55	–
	2000	2,798	2,226	1,013	22	32	62	20	7	33	448	63	26	46	61	–
	2001	2,719	2,137	945	35	44	65	21	8	33	445	87	19	37	72	–
	2002	2,675	2,015	905	31	37	64	18	11	34	487	103	18	53	108	–
Both sexes, 15–24 years old	1999	23,052	13,656	9,893	242	964	3,901	2,315	328	966	4,998	4,038	411	114	430	67
	2000	23,489	14,113	10,323	237	1,160	3,994	2,267	304	1,134	4,939	3,963	409	119	370	73
	2001	24,180	14,411	10,513	256	1,362	3,971	2,130	337	1,235	5,297	4,200	481	115	412	89
	2002	25,219	15,412	11,234	247	1,679	4,010	2,088	325	1,281	5,219	4,317	425	116	487	91
Males, 15–24 years old	1999	17,969	10,040	6,933	209	754	3,326	2,083	209	803	4,191	3,569	311	24	345	67
	2000	18,443	10,460	7,320	203	920	3,424	2,043	198	962	4,203	3,548	324	26	285	71
	2001	19,183	10,832	7,590	232	1,080	3,409	1,935	206	1,053	4,541	3,796	375	32	316	85
	2002	19,789	11,438	7,987	211	1,306	3,432	1,897	191	1,090	4,474	3,851	341	37	358	87
Females, 15–24 years old	1999	5,083	3,616	2,960	33	210	575	232	119	163	807	469	100	90	85	–
	2000	5,046	3,653	3,003	34	240	570	224	106	172	736	415	85	93	85	2
	2001	4,997	3,579	2,923	24	282	562	195	131	182	756	404	106	83	96	4
	2002	5,430	3,974	3,247	36	373	578	191	134	191	745	466	84	79	129	4
Both sexes, 25–44 years old	1999	48,426	27,121	13,135	988	6,904	11,572	5,718	2,241	2,675	7,437	4,916	937	324	2,038	258
	2000	48,095	27,182	13,473	911	7,043	11,354	5,644	2,211	2,633	7,383	4,980	886	273	1,965	211
	2001	51,308	27,784	13,650	987	7,543	11,705	5,594	2,294	2,907	9,472	5,286	930	277	2,124	223
	2002	51,461	29,279	13,816	971	9,123	11,897	5,556	2,363	2,936	7,728	5,507	1,006	276	2,344	213

See footnotes at end of table.

**Table 16. Deaths due to injury according to sex, age, selected mechanisms, and intent of death: United States, 1999–2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

		Intent and mechanism (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )														
Sex and age	Year	All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89) <sup>1</sup>	Unintentional				Suicide				Homicide				Undetermined intent (Y10–Y34, Y87.2, Y89.9)	Legal intervention/ war (Y35–Y36, Y89[.0–.1])
			Total (V01–X59, Y85–Y86)	Motor vehicle traffic <sup>2</sup>	Fall (W00–W19)	Poisoning (X40–X49)	Total (*U03, X60–X84, Y87.0) <sup>1</sup>	Firearm (X72–X74)	Poisoning (X60–X69)	Suffocation (X70)	Total (*U01–*U02, X85–Y09, Y87.1) <sup>1</sup>	Firearm (*U01.4, X93–X95)	Cut/pierce (X99)	Suffocation (X91)		
Males, 25–44 years old	1999	36,874	20,345	9,401	822	5,177	9,213	4,856	1,350	2,303	5,653	4,023	691	92	1,410	253
	2000	36,813	20,503	9,780	768	5,204	9,052	4,780	1,316	2,276	5,680	4,137	616	89	1,374	204
	2001	39,021	20,704	9,940	839	5,384	9,379	4,797	1,406	2,493	7,279	4,392	641	78	1,446	213
	2002	38,914	21,647	10,024	791	6,441	9,440	4,750	1,404	2,497	6,055	4,640	684	76	1,566	206
Females, 25–44 years old	1999	11,552	6,776	3,734	166	1,727	2,359	862	891	372	1,784	893	246	232	628	5
	2000	11,282	6,679	3,693	143	1,839	2,302	864	895	357	1,703	843	270	184	591	7
	2001	12,287	7,080	3,710	148	2,159	2,326	797	888	414	2,193	894	289	199	678	10
	2002	12,547	7,632	3,792	180	2,682	2,457	806	959	439	1,673	867	322	200	778	7
Both sexes, 45–64 years old	1999	30,379	18,924	8,041	1,711	3,512	7,977	4,537	1,746	1,060	2,390	1,266	356	91	1,015	73
	2000	31,795	19,783	8,582	1,820	3,749	8,382	4,691	1,834	1,186	2,493	1,326	321	113	1,069	68
	2001	35,038	21,002	8,750	2,028	4,345	9,259	5,106	2,017	1,344	3,485	1,298	378	133	1,215	77
	2002	37,238	23,020	9,412	2,106	5,780	9,926	5,370	2,212	1,523	2,756	1,434	442	147	1,460	76
Males, 45–64 years old	1999	22,248	13,617	5,405	1,311	2,554	6,109	3,845	945	865	1,770	970	256	39	680	72
	2000	23,219	14,196	5,838	1,370	2,624	6,414	3,977	997	960	1,821	996	227	47	722	66
	2001	25,476	14,971	6,008	1,539	3,003	7,067	4,322	1,054	1,118	2,555	990	272	61	808	75
	2002	26,885	16,273	6,482	1,543	3,826	7,633	4,607	1,194	1,236	2,008	1,062	325	68	899	72
Females, 45–64 years old	1999	8,131	5,307	2,636	400	958	1,868	692	801	195	620	296	100	52	335	1
	2000	8,576	5,587	2,744	450	1,125	1,968	714	837	226	672	330	94	66	347	2
	2001	9,562	6,031	2,742	489	1,342	2,192	784	963	226	930	308	106	72	407	2
	2002	10,353	6,747	2,930	563	1,954	2,293	763	1,018	287	748	372	117	79	561	4
Both sexes, 65 years and over	1999	38,874	32,219	7,468	10,097	708	5,489	3,921	571	595	876	311	117	84	268	22
	2000	37,461	31,051	7,218	10,273	707	5,306	3,869	495	560	844	293	133	66	240	20
	2001	39,311	32,694	7,256	11,623	722	5,393	3,943	530	543	949	307	143	87	251	24
	2002	40,321	33,641	7,420	12,837	859	5,548	4,006	575	558	812	295	145	50	299	21
Males, 65 years and over	1999	21,124	15,844	4,231	4,678	341	4,600	3,610	319	410	507	182	68	34	152	21
	2000	20,225	15,115	4,029	4,722	325	4,477	3,559	273	394	473	154	87	23	140	20
	2001	21,342	16,060	4,100	5,390	356	4,589	3,629	301	410	529	184	67	35	141	23
	2002	21,887	16,535	4,220	5,854	416	4,695	3,721	308	403	476	174	84	20	160	21
Females, 65 years and over	1999	17,750	16,375	3,237	5,419	367	889	311	252	185	369	129	49	50	116	1
	2000	17,236	15,936	3,189	5,551	382	829	310	222	166	371	139	46	43	100	–
	2001	17,969	16,634	3,156	6,233	366	804	314	229	133	420	123	76	52	110	1
	2002	18,434	17,106	3,200	6,983	443	853	285	267	155	336	121	61	30	139	–

– Quantity zero.

<sup>1</sup>2001 and 2002 figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>2</sup>ICD-10 codes for motor vehicle traffic accidents are V02–V04[.1–.9], V09.2, V12–V14[.3–.9], V19[.4–.6], V20–V28[.3–.9], V29–V79[.4–.9], V80[.3–.5], V81.1, V82.1, V83–V86[.0–.3], V87[.0–.8], V89.2.

<sup>3</sup>Figures for age not stated included in "All ages" but not distributed among age groups.

<sup>4</sup>Numbers of suicides are for those 10–14 years of age.

**Table 17. Death rates for injury according to sex, age, selected mechanisms, and intent of death: United States, 1999–2002**

[Rates per 100,000 population in specified group. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

		Intent and mechanism (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )														
Sex and age	Year	All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89) <sup>1</sup>	Unintentional				Suicide				Homicide				Undetermined intent (Y10–Y34, Y87.2, Y89.9)	Legal intervention/ war (Y35–Y36, Y89[0..1])
			Total (V01–X59, Y85–Y86)	Motor vehicle traffic <sup>2</sup>	Fall (W00–W19)	Poisoning (X40–X49)	Total (*U03, X60–X84, Y87.0) <sup>1</sup>	Firearm (X72–X74)	Poisoning (X60–X69)	Suffocation (X70)	Total (*U01–*U02, X85–Y09, Y87.1) <sup>1</sup>	Firearm (*U01.4, X93–X95)	Cut/pierce (X99)	Suffocation (X91)		
Both sexes, all ages <sup>3</sup>	1999	53.1	35.1	14.7	4.7	4.4	10.5	5.9	1.8	1.9	6.1	3.9	0.7	0.3	1.4	0.2
	2000	52.7	34.8	14.9	4.7	4.5	10.4	5.9	1.7	2.0	6.0	3.8	0.6	0.2	1.4	0.1
	2001	55.2	35.7	14.9	5.3	4.9	10.8	5.9	1.8	2.2	7.1	4.0	0.7	0.2	1.5	0.1
	2002	55.9	37.0	15.3	5.6	6.1	11.0	5.9	1.9	2.2	6.1	4.1	0.7	0.2	1.7	0.1
Males, all ages <sup>3</sup>	1999	75.2	46.4	20.0	5.2	6.5	17.1	10.6	2.1	3.3	9.3	6.5	1.0	0.2	2.0	0.3
	2000	74.8	46.2	20.5	5.2	6.6	17.1	10.5	2.0	3.4	9.3	6.5	0.9	0.2	1.9	0.3
	2001	78.3	47.2	20.7	5.8	7.1	17.6	10.6	2.1	3.7	11.1	6.8	1.0	0.2	2.0	0.3
	2002	78.9	48.9	21.2	6.0	8.5	17.9	10.6	2.2	3.8	9.6	7.0	1.0	0.2	2.2	0.3
Females, all ages <sup>3</sup>	1999	31.9	24.1	9.6	4.3	2.3	4.0	1.5	1.5	0.7	2.9	1.3	0.4	0.3	0.9	*
	2000	31.4	23.8	9.5	4.3	2.5	4.0	1.5	1.4	0.7	2.8	1.3	0.4	0.3	0.8	*
	2001	32.8	24.5	9.3	4.8	2.9	4.1	1.5	1.5	0.7	3.3	1.3	0.4	0.3	0.9	*
	2002	33.7	25.6	9.6	5.3	3.7	4.3	1.4	1.6	0.8	2.7	1.3	0.4	0.3	1.2	*
Both sexes, 0–14 years old <sup>4</sup>	1999	12.3	9.7	4.0	0.2	0.1	1.2	0.5	*	0.6	1.9	0.5	0.1	0.1	0.2	*
	2000	12.0	9.4	3.9	0.1	0.2	1.5	0.5	*	0.8	1.8	0.4	0.1	0.1	0.3	*
	2001	11.7	9.1	3.7	0.2	0.2	1.3	0.4	*	0.8	1.8	0.4	0.1	0.1	0.3	*
	2002	11.3	8.7	3.5	0.2	0.2	1.2	0.4	*	0.7	1.8	0.4	0.1	0.1	0.4	*
Males, 0–14 years old <sup>4</sup>	1999	14.7	11.7	4.5	0.3	0.2	1.9	0.8	*	1.0	2.1	0.6	0.1	0.1	0.3	*
	2000	14.4	11.2	4.4	0.2	0.2	2.3	0.9	*	1.3	2.0	0.5	0.1	0.1	0.3	*
	2001	14.0	11.0	4.2	0.3	0.2	1.9	0.6	*	1.2	2.0	0.5	*	0.1	0.3	*
	2002	13.5	10.6	4.0	0.2	0.2	1.8	0.6	*	1.1	1.9	0.5	0.1	0.1	0.4	*
Females, 0–14 years old <sup>4</sup>	1999	9.7	7.7	3.5	0.1	0.1	0.5	0.2	*	0.2	1.7	0.3	0.1	0.1	0.2	*
	2000	9.5	7.6	3.4	0.1	0.1	0.6	0.2	*	0.3	1.5	0.2	0.1	0.2	0.2	*
	2001	9.2	7.2	3.2	0.1	0.1	0.6	0.2	*	0.3	1.5	0.3	*	0.1	0.2	*
	2002	9.0	6.8	3.1	0.1	0.1	0.6	*	*	0.3	1.6	0.3	*	0.2	0.4	*
Both sexes, 15–24 years old	1999	59.6	35.3	25.6	0.6	2.5	10.1	6.0	0.8	2.5	12.9	10.4	1.1	0.3	1.1	0.2
	2000	59.9	36.0	26.3	0.6	3.0	10.2	5.8	0.8	2.9	12.6	10.1	1.0	0.3	0.9	0.2
	2001	60.5	36.1	26.3	0.6	3.4	9.9	5.3	0.8	3.1	13.3	10.5	1.2	0.3	1.0	0.2
	2002	62.1	38.0	27.7	0.6	4.1	9.9	5.1	0.8	3.2	12.9	10.6	1.0	0.3	1.2	0.2
Males, 15–24 years old	1999	90.7	50.7	35.0	1.1	3.8	16.8	10.5	1.1	4.1	21.1	18.0	1.6	0.1	1.7	0.3
	2000	91.9	52.1	36.5	1.0	4.6	17.1	10.2	1.0	4.8	20.9	17.7	1.6	0.1	1.4	0.4
	2001	93.6	52.9	37.1	1.1	5.3	16.6	9.4	1.0	5.1	22.2	18.5	1.8	0.2	1.5	0.4
	2002	95.0	54.9	38.4	1.0	6.3	16.5	9.1	0.9	5.2	21.5	18.5	1.6	0.2	1.7	0.4
Females, 15–24 years old	1999	27.0	19.2	15.7	0.2	1.1	3.0	1.2	0.6	0.9	4.3	2.5	0.5	0.5	0.5	*
	2000	26.4	19.1	15.7	0.2	1.3	3.0	1.2	0.6	0.9	3.9	2.2	0.4	0.5	0.4	*
	2001	25.7	18.4	15.0	0.1	1.4	2.9	1.0	0.7	0.9	3.9	2.1	0.5	0.4	0.5	*
	2002	27.5	20.1	16.4	0.2	1.9	2.9	1.0	0.7	1.0	3.8	2.4	0.4	0.4	0.7	*
Both sexes, 25–44 years old	1999	56.8	31.8	15.4	1.2	8.1	13.6	6.7	2.6	3.1	8.7	5.8	1.1	0.4	2.4	0.3
	2000	56.6	32.0	15.8	1.1	8.3	13.4	6.6	2.6	3.1	8.7	5.9	1.0	0.3	2.3	0.2
	2001	60.6	32.8	16.1	1.2	8.9	13.8	6.6	2.7	3.4	11.2	6.2	1.1	0.3	2.5	0.3
	2002	60.7	34.5	16.3	1.1	10.8	14.0	6.5	2.8	3.5	9.1	6.5	1.2	0.3	2.8	0.3

See footnotes at end of table.

**Table 17. Death rates for injury according to sex, age, selected mechanisms, and intent of death: United States, 1999–2002—Con.**

[Rates per 100,000 population in specified group. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

		Intent and mechanism (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )														
Sex and age	Year	All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89) <sup>1</sup>	Unintentional				Suicide				Homicide				Undetermined intent (Y10–Y34, Y87.2, Y89.9)	Legal intervention/ war (Y35–Y36, Y89[.0..1])
			Total (V01–X59, Y85–Y86)	Motor vehicle traffic <sup>2</sup>	Fall (W00–W19)	Poisoning (X40–X49)	Total (*U03, X60–X84, Y87.0) <sup>1</sup>	Firearm (X72–X74)	Poisoning (X60–X69)	Suffocation (X70)	Total (*U01–*U02, X85–Y09, Y87.1) <sup>1</sup>	Firearm (*U01.4, X93–X95)	Cut/pierce (X99)	Suffocation (X91)		
Males, 25–44 years old	1999	86.5	47.7	22.0	1.9	12.1	21.6	11.4	3.2	5.4	13.3	9.4	1.6	0.2	3.3	0.6
	2000	86.5	48.2	23.0	1.8	12.2	21.3	11.2	3.1	5.3	13.3	9.7	1.4	0.2	3.2	0.5
	2001	92.0	48.8	23.4	2.0	12.7	22.1	11.3	3.3	5.9	17.2	10.4	1.5	0.2	3.4	0.5
	2002	91.4	50.9	23.5	1.9	15.1	22.2	11.2	3.3	5.9	14.2	10.9	1.6	0.2	3.7	0.5
Females, 25–44 years old	1999	27.1	15.9	8.8	0.4	4.1	5.5	2.0	2.1	0.9	4.2	2.1	0.6	0.5	1.5	*
	2000	26.6	15.7	8.7	0.3	4.3	5.4	2.0	2.1	0.8	4.0	2.0	0.6	0.4	1.4	*
	2001	29.1	16.8	8.8	0.4	5.1	5.5	1.9	2.1	1.0	5.2	2.1	0.7	0.5	1.6	*
	2002	29.7	18.1	9.0	0.4	6.3	5.8	1.9	2.3	1.0	4.0	2.1	0.8	0.5	1.8	*
Both sexes, 45–64 years old	1999	50.3	31.4	13.3	2.8	5.8	13.2	7.5	2.9	1.8	4.0	2.1	0.6	0.2	1.7	0.1
	2000	51.3	31.9	13.9	2.9	6.1	13.5	7.6	3.0	1.9	4.0	2.1	0.5	0.2	1.7	0.1
	2001	54.3	32.6	13.6	3.1	6.7	14.4	7.9	3.1	2.1	5.4	2.0	0.6	0.2	1.9	0.1
	2002	55.8	34.5	14.1	3.2	8.7	14.9	8.1	3.3	2.3	4.1	2.2	0.7	0.2	2.2	0.1
Males, 45–64 years old	1999	75.8	46.4	18.4	4.5	8.7	20.8	13.1	3.2	2.9	6.0	3.3	0.9	0.1	2.3	0.2
	2000	77.0	47.1	19.4	4.5	8.7	21.3	13.2	3.3	3.2	6.0	3.3	0.8	0.2	2.4	0.2
	2001	81.2	47.7	19.1	4.9	9.6	22.5	13.8	3.4	3.6	8.1	3.2	0.9	0.2	2.6	0.2
	2002	82.8	50.1	20.0	4.8	11.8	23.5	14.2	3.7	3.8	6.2	3.3	1.0	0.2	2.8	0.2
Females, 45–64 years old	1999	26.2	17.1	8.5	1.3	3.1	6.0	2.2	2.6	0.6	2.0	1.0	0.3	0.2	1.1	*
	2000	27.0	17.6	8.6	1.4	3.5	6.2	2.2	2.6	0.7	2.1	1.0	0.3	0.2	1.1	*
	2001	28.9	18.2	8.3	1.5	4.1	6.6	2.4	2.9	0.7	2.8	0.9	0.3	0.2	1.2	*
	2002	30.2	19.7	8.6	1.6	5.7	6.7	2.2	3.0	0.8	2.2	1.1	0.3	0.2	1.6	*
Both sexes, 65 years and over	1999	111.7	92.6	21.5	29.0	2.0	15.8	11.3	1.6	1.7	2.5	0.9	0.3	0.2	0.8	0.1
	2000	107.1	88.7	20.6	29.4	2.0	15.2	11.1	1.4	1.6	2.4	0.8	0.4	0.2	0.7	0.1
	2001	111.4	92.6	20.6	32.9	2.0	15.3	11.2	1.5	1.5	2.7	0.9	0.4	0.2	0.7	0.1
	2002	113.3	94.5	20.8	36.1	2.4	15.6	11.3	1.6	1.6	2.3	0.8	0.4	0.1	0.8	0.1
Males, 65 years and over	1999	147.7	110.8	29.6	32.7	2.4	32.2	25.2	2.2	2.9	3.5	1.3	0.5	0.2	1.1	0.1
	2000	140.4	104.9	28.0	32.8	2.3	31.1	24.7	1.9	2.7	3.3	1.1	0.6	0.2	1.0	0.1
	2001	146.3	110.1	28.1	37.0	2.4	31.5	24.9	2.1	2.8	3.6	1.3	0.5	0.2	1.0	0.2
	2002	148.2	111.9	28.6	39.6	2.8	31.8	25.2	2.1	2.7	3.2	1.2	0.6	0.1	1.1	0.1
Females, 65 years and over	1999	86.6	79.9	15.8	26.4	1.8	4.3	1.5	1.2	0.9	1.8	0.6	0.2	0.2	0.6	*
	2000	83.7	77.4	15.5	27.0	1.9	4.0	1.5	1.1	0.8	1.8	0.7	0.2	0.2	0.5	*
	2001	86.8	80.3	15.2	30.1	1.8	3.9	1.5	1.1	0.6	2.0	0.6	0.4	0.3	0.5	*
	2002	88.5	82.1	15.4	33.5	2.1	4.1	1.4	1.3	0.7	1.6	0.6	0.3	0.1	0.7	*

\* Figure does not meet standard of reliability or precision; see "Technical Notes."

<sup>1</sup>2001 and 2002 figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>2</sup>ICD-10 codes for motor vehicle traffic accidents are V02–V04[.1,.9], V09.2, V12–V14[.3–.9], V19[.4–.6], V20–V28[.3–.9], V29–V79[.4–.9], V80[.3–.5], V81.1, V82.1, V83–V86[.0–.3], V87[.0–.8], V89.2.

<sup>3</sup>Figures for age not stated included in "All ages" but not distributed among age groups.

<sup>4</sup>Suicide rates are calculated for the population 10–14 years.

**Table 18. Deaths due to injury according to sex, age, and mechanism of death: United States, 1999–2002**

[Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks ( \* ) preceding cause-of-death codes, see “Technical Notes”]

		Mechanism of injury (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )										
Sex and age	Year	All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89) <sup>1</sup>	Cut/pierce (W25–W29, W45,X78, X99,Y28,Y35.4)	Drowning (W65–W74, X71,X92,Y21)	Fall (W00–W19, X80,Y01,Y30)	Fire/flare (X00–X09, X76,X97,Y26)	Hot object/ substance (X10–X19, X77,X98,Y27)	Firearm (*U01.4, W32–W34, X72–X74, X93–X95, Y22–Y24,Y35.0)	Machinery (W24,W30–W31)	Motor vehicle traffic <sup>2</sup>	Pedal cyclist, other (V10–V11, V12–V14[.0–.2], V15– V18, V19[.0–.3,.8,.9])	Pedestrian, other (V01, V02–V04[.0], V05,V06, V09[.0,.1,.3,.9])
		Both sexes, all ages <sup>5</sup>	1999	148,286	2,369	4,153	13,931	3,779	131	28,874	622	40,965
	2000	148,209	2,288	4,073	14,002	3,789	118	28,663	676	41,994	168	1,272
	2001	157,078	2,532	3,923	15,764	3,673	123	29,573	648	42,443	207	1,249
	2002	161,269	2,762	4,146	17,116	3,539	106	30,242	652	44,065	217	1,050
Males, all ages <sup>5</sup>	1999	102,884	1,752	3,214	7,673	2,282	63	24,700	588	27,380	171	1,108
	2000	103,254	1,674	3,127	7,607	2,258	64	24,582	648	28,352	138	946
	2001	109,516	1,839	2,980	8,598	2,227	62	25,480	618	28,961	177	919
	2002	111,809	2,037	3,215	9,060	2,172	53	26,098	610	29,989	200	817
Females, all ages <sup>5</sup>	1999	45,402	617	939	6,258	1,497	68	4,174	34	13,585	14	394
	2000	44,955	614	946	6,395	1,531	54	4,081	28	13,642	30	326
	2001	47,562	693	943	7,166	1,446	61	4,093	30	13,482	30	330
	2002	49,460	725	931	8,056	1,367	53	4,144	42	14,076	17	233
Both sexes, 0–14 years old	1999	7,365	56	971	127	670	16	489	22	2,398	30	200
	2000	7,236	58	982	90	646	14	436	18	2,372	32	172
	2001	7,056	42	918	133	580	7	414	24	2,241	30	148
	2002	6,880	58	904	113	571	12	419	24	2,148	25	139
Males, 0–14 years old	1999	4,513	24	650	89	371	8	349	14	1,383	25	125
	2000	4,438	31	642	64	368	9	339	12	1,359	25	103
	2001	4,337	23	591	92	351	2	295	17	1,296	24	98
	2002	4,205	39	633	76	320	6	284	20	1,243	23	91
Females, 0–14 years old	1999	2,852	32	321	38	299	8	140	8	1,015	5	75
	2000	2,798	27	340	26	278	5	97	6	1,013	7	69
	2001	2,719	19	327	41	229	5	119	7	945	6	50
	2002	2,675	19	271	37	251	6	135	4	905	2	48
Both sexes, 15–24 years old	1999	23,052	435	703	364	244	2	6,795	53	9,893	21	190
	2000	23,489	431	715	351	237	1	6,575	62	10,323	26	175
	2001	24,180	512	672	353	230	7	6,687	50	10,513	21	139
	2002	25,219	467	696	375	229	3	6,780	40	11,234	17	154
Males, 15–24 years old	1999	17,969	333	634	305	155	2	6,056	51	6,933	21	156
	2000	18,443	346	636	287	144	–	5,906	62	7,320	19	142
	2001	19,183	401	602	306	149	4	6,066	49	7,590	18	111
	2002	19,789	375	631	312	156	2	6,096	40	7,987	15	131
Females, 15–24 years old	1999	5,083	102	69	59	89	–	739	2	2,960	–	34
	2000	5,046	85	79	64	93	1	669	–	3,003	7	33
	2001	4,997	111	70	47	81	3	621	1	2,923	3	28
	2002	5,430	92	65	63	73	1	684	–	3,247	2	23

See footnotes at end of table.

**Table 18. Deaths due to injury according to sex, age, and mechanism of death: United States, 1999–2002—Con.**

[Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks ( \* ) preceding cause-of-death codes, see "Technical Notes"]

		Mechanism of injury (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )										
Sex and age	Year	All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89) <sup>1</sup>	Cut/pierce (W25–W29, W45,X78, X99,Y28,Y35.4)	Drowning (W65–W74, X71,X92,Y21)	Fall (W00–W19, X80,Y01,Y30)	Fire/flare (X00–X09, X76,X97,Y26)	Hot object/ substance (X10–X19, X77,X98,Y27)	Firearm (*U01.4, W32–W34, X72–X74, X93–X95, Y22–Y24,Y35.0)	Machinery (W24,W30–W31)	Motor vehicle traffic <sup>2</sup>	Pedal cyclist, other (V10–V11, V12–V14[.0–.2], V15– V18, V19[.0–.3,.8,.9])	Pedestrian, other (V01, V02–V04[.0], V05,V06, V09[.0,.1,.3,.9])
		Both sexes, 25–44 years old	1999	48,426	1,108	1,163	1,308	856	16	11,209	243	13,135
	2000	48,095	1,075	1,088	1,174	809	12	11,147	241	13,473	35	425
	2001	51,308	1,124	1,055	1,275	830	11	11,425	194	13,650	58	398
	2002	51,461	1,248	1,226	1,333	761	10	11,586	170	13,816	69	325
Males, 25–44 years old	1999	36,874	832	967	1,068	587	11	9,385	232	9,401	48	401
	2000	36,813	776	907	966	524	7	9,366	232	9,780	30	349
	2001	39,021	810	850	1,044	565	10	9,659	190	9,940	54	329
	2002	38,914	890	1,001	1,053	504	7	9,850	158	10,024	60	268
Females, 25–44 years old	1999	11,552	276	196	240	269	5	1,824	11	3,734	3	106
	2000	11,282	299	181	208	285	5	1,781	9	3,693	5	76
	2001	12,287	314	205	231	265	1	1,766	4	3,710	4	69
	2002	12,547	358	225	280	257	3	1,736	12	3,792	9	57
Both sexes, 45–64 years old	1999	30,379	545	740	1,899	802	24	6,028	201	8,041	55	320
	2000	31,795	491	737	2,003	908	19	6,223	224	8,582	40	269
	2001	35,038	584	750	2,252	908	33	6,664	223	8,750	73	309
	2002	37,238	685	765	2,333	895	23	7,040	232	9,412	71	262
Males, 45–64 years old	1999	22,248	406	585	1,442	532	15	5,008	196	5,405	49	252
	2000	23,219	359	589	1,499	596	16	5,154	219	5,838	33	210
	2001	25,476	436	574	1,686	595	19	5,532	211	6,008	59	232
	2002	26,885	522	580	1,694	591	11	5,875	221	6,482	68	220
Females, 45–64 years old	1999	8,131	139	155	457	270	9	1,020	5	2,636	6	68
	2000	8,576	132	148	504	312	3	1,069	5	2,744	7	59
	2001	9,562	148	176	566	313	14	1,132	12	2,742	14	77
	2002	10,353	163	185	639	304	12	1,165	11	2,930	3	42
Both sexes, 65 years and over	1999	38,874	220	530	10,227	1,199	73	4,333	102	7,468	28	279
	2000	37,461	227	523	10,384	1,184	72	4,264	131	7,218	34	226
	2001	39,311	267	485	11,746	1,119	65	4,364	157	7,256	25	245
	2002	40,321	299	529	12,961	1,077	58	4,402	186	7,420	35	167
Males, 65 years and over	1999	21,124	154	337	4,763	631	27	3,883	94	4,231	28	168
	2000	20,225	157	326	4,791	621	32	3,804	123	4,029	30	137
	2001	21,342	166	327	5,467	562	27	3,910	151	4,100	22	139
	2002	21,887	208	346	5,925	595	27	3,979	171	4,220	34	104
Females, 65 years and over	1999	17,750	66	193	5,464	568	46	450	8	3,237	–	111
	2000	17,236	70	197	5,593	563	40	460	8	3,189	4	89
	2001	17,969	101	158	6,279	557	38	454	6	3,156	3	106
	2002	18,434	91	183	7,036	482	31	423	15	3,200	1	63

See footnotes at end of table.



**Table 18. Deaths due to injury according to sex, age, and mechanism of death: United States, 1999–2002—Con.**

[Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks (\*) preceding cause-of-death codes, see "Technical Notes"]

Sex and age	Year	Mechanism of injury (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )									
		Other land transport <sup>3</sup>	Other transport (*U01.1,V90–V99,Y36.1) <sup>1</sup>	Natural/environmental (W42–W43,W53–W64,W92–W99,X20–X39,X51–X57)	Overexertion (X50)	Poisoning (*U01[.6–.7],X40–X49,X60–X69,X85–X90,Y10–Y19,Y35.2)	Struck by or against (W20–W22,W50–W52,X79,Y00,Y04,Y29,Y35.3)	Suffocation (W75–W84,X70,X91,Y20)	Other specified, classifiable <sup>1,4</sup>	Other specified, not elsewhere classified (*U01.8,*U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	Unspecified (*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9)
Both sexes, all ages <sup>5</sup>	1999	2,090	1,408	1,923	21	19,741	1,309	11,748	2,047	2,230	9,258
	2000	1,662	1,413	1,643	13	20,230	1,292	12,098	1,970	2,261	8,584
	2001	1,493	4,435	1,427	8	22,242	1,244	12,574	2,061	2,299	9,160
	2002	1,333	1,274	1,554	10	26,435	1,182	12,791	2,073	2,066	8,656
Males, all ages <sup>5</sup>	1999	1,587	1,177	1,171	17	13,445	1,087	7,766	1,581	1,519	4,603
	2000	1,301	1,222	1,061	10	13,695	1,101	8,110	1,570	1,536	4,252
	2001	1,210	3,443	938	7	14,799	1,043	8,584	1,636	1,599	4,396
	2002	1,079	1,122	1,024	10	17,257	1,001	8,722	1,619	1,413	4,311
Females, all ages <sup>5</sup>	1999	503	231	752	4	6,296	222	3,982	466	711	4,655
	2000	361	191	582	3	6,535	191	3,988	400	725	4,332
	2001	283	992	489	1	7,443	201	3,990	425	700	4,764
	2002	254	152	530	–	9,178	181	4,069	454	653	4,345
Both sexes, 0–14 years old	1999	174	84	96	–	130	114	1,037	262	132	357
	2000	160	56	83	–	141	89	1,113	256	137	381
	2001	155	79	94	–	150	96	1,180	270	118	377
	2002	129	48	65	–	156	92	1,214	275	100	388
Males, 0–14 years old	1999	123	57	63	–	75	64	666	147	78	202
	2000	102	37	51	–	91	57	701	155	77	215
	2001	106	51	58	–	85	60	737	163	67	221
	2002	95	29	42	–	85	54	733	147	64	221
Females, 0–14 years old	1999	51	27	33	–	55	50	371	115	54	155
	2000	58	19	32	–	50	32	412	101	60	166
	2001	49	28	36	–	65	36	443	107	51	156
	2002	34	19	23	–	71	38	481	128	36	167
Both sexes, 15–24 years old	1999	436	155	70	2	1,505	150	1,235	241	191	367
	2000	334	187	65	2	1,667	147	1,410	236	191	354
	2001	297	288	54	1	1,944	124	1,511	226	170	381
	2002	257	152	57	–	2,308	122	1,566	232	149	381
Males, 15–24 years old	1999	324	125	58	2	1,114	129	954	195	146	276
	2000	260	154	52	2	1,265	132	1,116	197	140	263
	2001	251	214	47	1	1,463	108	1,209	201	120	273
	2002	206	124	46	–	1,707	107	1,264	203	115	272
Females, 15–24 years old	1999	112	30	12	–	391	21	281	46	45	91
	2000	74	33	13	–	402	15	294	39	51	91
	2001	46	74	7	–	481	16	302	25	50	108
	2002	51	28	11	–	601	15	302	29	34	109

See footnotes at end of table.

**Table 18. Deaths due to injury according to sex, age, and mechanism of death: United States, 1999–2002—Con.**

[Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks (\*) preceding cause-of-death codes, see "Technical Notes"]

Sex and age	Year	Mechanism of injury (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )									
		Other land transport <sup>3</sup>	Other transport (*U01.1,V90–V99,Y36.1) <sup>1</sup>	Natural/environmental (W42–W43,W53–W64,W92–W99,X20–X39,X51–X57)	Overexertion (X50)	Poisoning (*U01[.6–.7],X40–X49,X60–X69,X85–X90,Y10–Y19,Y35.2)	Struck by or against (W20–W22,W50–W52,X79,Y00,Y04,Y29,Y35.3)	Suffocation (W75–W84,X70,X91,Y20)	Other specified, classifiable <sup>1,4</sup>	Other specified, not elsewhere classified (*U01.8,*U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	Unspecified (*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9)
Both sexes, 25–44 years old	1999	644	552	338	6	10,741	468	3,502	781	708	1,090
	2000	512	534	300	1	10,801	443	3,474	761	663	1,127
	2001	455	2,451	257	1	11,525	427	3,712	753	628	1,079
	2002	403	435	312	5	13,333	395	3,733	722	497	1,082
Males, 25–44 years old	1999	502	454	246	5	7,600	403	2,783	656	533	760
	2000	421	479	245	1	7,586	395	2,796	653	492	808
	2001	366	1,928	196	1	7,896	362	2,971	652	479	719
	2002	340	393	248	5	9,036	352	2,957	624	387	757
Females, 25–44 years old	1999	142	98	92	1	3,141	65	719	125	175	330
	2000	91	55	55	–	3,215	48	678	108	171	319
	2001	89	523	61	–	3,629	65	741	101	149	360
	2002	63	42	64	–	4,297	43	776	98	110	325
Both sexes, 45–64 years old	1999	450	462	458	4	5,975	375	1,884	500	498	1,118
	2000	378	473	420	4	6,343	413	2,115	489	552	1,112
	2001	324	1,389	382	4	7,274	403	2,329	523	610	1,254
	2002	323	466	453	4	9,106	364	2,443	606	532	1,223
Males, 45–64 years old	1999	362	413	345	4	3,945	341	1,379	408	394	767
	2000	296	412	309	4	4,115	381	1,544	409	433	803
	2001	277	1,064	294	4	4,647	364	1,722	445	480	827
	2002	271	413	352	4	5,659	330	1,816	493	413	870
Females, 45–64 years old	1999	88	49	113	–	2,030	34	505	92	104	351
	2000	82	61	111	–	2,228	32	571	80	119	309
	2001	47	325	88	–	2,627	39	607	78	130	427
	2002	52	53	101	–	3,447	34	627	113	119	353
Both sexes, 65 years and over	1999	385	155	954	9	1,371	200	4,079	260	695	6,307
	2000	277	163	764	6	1,266	199	3,983	227	717	5,596
	2001	262	228	621	2	1,333	193	3,838	283	773	6,049
	2002	219	173	655	1	1,519	208	3,826	237	784	5,565
Males, 65 years and over	1999	275	128	452	6	698	149	1,977	172	364	2,587
	2000	221	140	393	3	627	135	1,952	155	394	2,155
	2001	210	186	327	1	692	148	1,944	169	453	2,341
	2002	167	163	327	1	760	157	1,943	151	430	2,179
Females, 65 years and over	1999	110	27	502	3	673	51	2,102	88	331	3,720
	2000	56	23	371	3	639	64	2,031	72	323	3,441
	2001	52	42	294	1	641	45	1,894	114	320	3,708
	2002	52	10	328	–	759	51	1,883	86	354	3,386

– Quantity zero. <sup>1</sup>2001 and 2002 figures include September 11, 2001, related deaths for which death certificates were filed as of 10–24–2002; see "Technical Notes."

<sup>2</sup>ICD–10 codes for "Motor vehicle traffic" accidents are V02–V04[.1,.9], V09.2, V12–V14[.3–.9], V19[.4–.6], V20–V28[.3–.9], V29–V79[.4–.9], V80[.3–.5], V81.1, V82.1, V83–V86[.0–.3], V87[.0–.8], V89.2.

<sup>3</sup>ICD–10 codes for "Other land transport" are

(V20–V28[.0–.2],V29–V79[.0–.3],V80[.0–.2,.6–.9],V81–V82[.0,.2–.9],V83–V86[.4–.9],V87.9,V88[.0–.9],V89[.0,.1,.3,.9],X82,Y03,Y32).

<sup>4</sup>ICD–10 codes for "Other specified, classifiable" are

(\*U01[.0,.2,.5],\*U03.0,W23,W35–W41,W44,W49,W85–W91,X75,X81,X96,Y02,Y05–Y07,Y25,Y31,Y35[.1,.5],Y36[.0,.2,.4–.8],Y85).

<sup>5</sup>Figures for age not stated included in "All ages" but not distributed among age groups.

**Table 19. Death rates for injury according to sex, age, and mechanism of death: United States, 1999–2002**

[Rates per 100,000 population in specified group. Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks (\*) preceding cause-of-death codes, see "Technical Notes"]

		Mechanism of injury (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )										
Sex and age	Year	All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89) <sup>1</sup>	Cut/pierce (W25–W29, W45,X78, X99,Y28,Y35.4)	Drowning (W65–W74, X71,X92,Y21)	Fall (W00–W19, X80,Y01,Y30)	Fire/flame (X00–X09, X76,X97,Y26)	Hot object/ substance (X10–X19, X77,X98,Y27)	Firearm (*U01.4, W32–W34,X72–X74, X93–X95, Y22–Y24,Y35.0)	Machinery (W24,W30–W31)	Motor vehicle traffic <sup>2</sup>	Pedal cyclist, other (V10–V11, V12–V14[.0–.2], V15–V18, V19[.0–.3,.8,.9])	Pedestrian, other (V01, V02–V04[.0], V05,V06, V09[.0,.1,.3,.9])
		Both sexes, all ages <sup>5</sup>	1999	53.1	0.8	1.5	5.0	1.4	0.0	10.3	0.2	14.7
2000	52.7		0.8	1.4	5.0	1.3	0.0	10.2	0.2	14.9	0.1	0.5
2001	55.2		0.9	1.4	5.5	1.3	0.0	10.4	0.2	14.9	0.1	0.4
2002	55.9		1.0	1.4	5.9	1.2	0.0	10.5	0.2	15.3	0.1	0.4
Males, all ages <sup>5</sup>	1999	75.2	1.3	2.3	5.6	1.7	0.0	18.1	0.4	20.0	0.1	0.8
	2000	74.8	1.2	2.3	5.5	1.6	0.0	17.8	0.5	20.5	0.1	0.7
	2001	78.3	1.3	2.1	6.1	1.6	0.0	18.2	0.4	20.7	0.1	0.7
	2002	78.9	1.4	2.3	6.4	1.5	0.0	18.4	0.4	21.2	0.1	0.6
Females, all ages <sup>5</sup>	1999	31.9	0.4	0.7	4.4	1.1	0.0	2.9	0.0	9.6	*	0.3
	2000	31.4	0.4	0.7	4.5	1.1	0.0	2.8	0.0	9.5	0.0	0.2
	2001	32.8	0.5	0.7	4.9	1.0	0.0	2.8	0.0	9.3	0.0	0.2
	2002	33.7	0.5	0.6	5.5	0.9	0.0	2.8	0.0	9.6	*	0.2
Both sexes, 0–14 years old	1999	12.3	0.1	1.6	0.2	1.1	*	0.8	0.0	4.0	0.1	0.3
	2000	12.0	0.1	1.6	0.1	1.1	*	0.7	*	3.9	0.1	0.3
	2001	11.7	0.1	1.5	0.2	1.0	*	0.7	0.0	3.7	0.0	0.2
	2002	11.3	0.1	1.5	0.2	0.9	*	0.7	0.0	3.5	0.0	0.2
Males, 0–14 years old	1999	14.7	0.1	2.1	0.3	1.2	*	1.1	*	4.5	0.1	0.4
	2000	14.4	0.1	2.1	0.2	1.2	*	1.1	*	4.4	0.1	0.3
	2001	14.0	0.1	1.9	0.3	1.1	*	1.0	*	4.2	0.1	0.3
	2002	13.5	0.1	2.0	0.2	1.0	*	0.9	*	4.0	0.1	0.3
Females, 0–14 years old	1999	9.7	0.1	1.1	0.1	1.0	*	0.5	*	3.5	*	0.3
	2000	9.5	0.1	1.2	0.1	0.9	*	0.3	*	3.4	*	0.2
	2001	9.2	*	1.1	0.1	0.8	*	0.4	*	3.2	*	0.2
	2002	9.0	*	0.9	0.1	0.8	*	0.5	*	3.1	*	0.2
Both sexes, 15–24 years old	1999	59.6	1.1	1.8	0.9	0.6	*	17.6	0.1	25.6	0.1	0.5
	2000	59.9	1.1	1.8	0.9	0.6	*	16.8	0.2	26.3	0.1	0.4
	2001	60.5	1.3	1.7	0.9	0.6	*	16.7	0.1	26.3	0.1	0.3
	2002	62.1	1.2	1.7	0.9	0.6	*	16.7	0.1	27.7	*	0.4
Males, 15–24 years old	1999	90.7	1.7	3.2	1.5	0.8	*	30.6	0.3	35.0	0.1	0.8
	2000	91.9	1.7	3.2	1.4	0.7	*	29.4	0.3	36.5	*	0.7
	2001	93.6	2.0	2.9	1.5	0.7	*	29.6	0.2	37.1	*	0.5
	2002	95.0	1.8	3.0	1.5	0.7	*	29.3	0.2	38.4	*	0.6
Females, 15–24 years old	1999	27.0	0.5	0.4	0.3	0.5	*	3.9	*	15.7	*	0.2
	2000	26.4	0.4	0.4	0.3	0.5	*	3.5	*	15.7	*	0.2
	2001	25.7	0.6	0.4	0.2	0.4	*	3.2	*	15.0	*	0.1
	2002	27.5	0.5	0.3	0.3	0.4	*	3.5	*	16.4	*	0.1

See footnotes at end of table.

**Table 19. Death rates for injury according to sex, age, and mechanism of death: United States, 1999–2002—Con.**

[Rates per 100,000 population in specified group. Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks (\*) preceding cause-of-death codes, see "Technical Notes"]

		Mechanism of injury (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )										
Sex and age	Year	All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89) <sup>1</sup>	Cut/pierce (W25–W29, W45,X78, X99,Y28,Y35.4)	Drowning (W65–W74, X71,X92,Y21)	Fall (W00–W19, X80,Y01,Y30)	Fire/flare (X00–X09, X76,X97,Y26)	Hot object/ substance (X10–X19, X77,X98,Y27)	Firearm (*U01.4, W32–W34,X72–X74, X93–X95, Y22–Y24,Y35.0)	Machinery (W24,W30–W31)	Motor vehicle traffic <sup>2</sup>	Pedal cyclist, other (V10–V11, V12–V14[.0–.2], V15–V18, V19[.0–.3,.8,.9])	Pedestrian, other (V01, V02–V04[.0], V05,V06, V09[.0,.1,.3,.9])
		Both sexes, 25–44 years old	1999	56.8	1.3	1.4	1.5	1.0	*	13.1	0.3	15.4
2000	56.6		1.3	1.3	1.4	1.0	*	13.1	0.3	15.8	0.0	0.5
2001	60.6		1.3	1.2	1.5	1.0	*	13.5	0.2	16.1	0.1	0.5
2002	60.7		1.5	1.4	1.6	0.9	*	13.7	0.2	16.3	0.1	0.4
Males, 25–44 years old	1999	86.5	2.0	2.3	2.5	1.4	*	22.0	0.5	22.0	0.1	0.9
	2000	86.5	1.8	2.1	2.3	1.2	*	22.0	0.5	23.0	0.1	0.8
	2001	92.0	1.9	2.0	2.5	1.3	*	22.8	0.4	23.4	0.1	0.8
	2002	91.4	2.1	2.4	2.5	1.2	*	23.1	0.4	23.5	0.1	0.6
Females, 25–44 years old	1999	27.1	0.6	0.5	0.6	0.6	*	4.3	*	8.8	*	0.2
	2000	26.6	0.7	0.4	0.5	0.7	*	4.2	*	8.7	*	0.2
	2001	29.1	0.7	0.5	0.5	0.6	*	4.2	*	8.8	*	0.2
	2002	29.7	0.8	0.5	0.7	0.6	*	4.1	*	9.0	*	0.1
Both sexes, 45–64 years old	1999	50.3	0.9	1.2	3.1	1.3	0.0	10.0	0.3	13.3	0.1	0.5
	2000	51.3	0.8	1.2	3.2	1.5	*	10.0	0.4	13.9	0.1	0.4
	2001	54.3	0.9	1.2	3.5	1.4	0.1	10.3	0.3	13.6	0.1	0.5
	2002	55.8	1.0	1.1	3.5	1.3	0.0	10.6	0.3	14.1	0.1	0.4
Males, 45–64 years old	1999	75.8	1.4	2.0	4.9	1.8	*	17.1	0.7	18.4	0.2	0.9
	2000	77.0	1.2	2.0	5.0	2.0	*	17.1	0.7	19.4	0.1	0.7
	2001	81.2	1.4	1.8	5.4	1.9	*	17.6	0.7	19.1	0.2	0.7
	2002	82.8	1.6	1.8	5.2	1.8	*	18.1	0.7	20.0	0.2	0.7
Females, 45–64 years old	1999	26.2	0.4	0.5	1.5	0.9	*	3.3	*	8.5	*	0.2
	2000	27.0	0.4	0.5	1.6	1.0	*	3.4	*	8.6	*	0.2
	2001	28.9	0.4	0.5	1.7	0.9	*	3.4	*	8.3	*	0.2
	2002	30.2	0.5	0.5	1.9	0.9	*	3.4	*	8.6	*	0.1
Both sexes, 65 years and over	1999	111.7	0.6	1.5	29.4	3.4	0.2	12.5	0.3	21.5	0.1	0.8
	2000	107.1	0.6	1.5	29.7	3.4	0.2	12.2	0.4	20.6	0.1	0.6
	2001	111.4	0.8	1.4	33.3	3.2	0.2	12.4	0.4	20.6	0.1	0.7
	2002	113.3	0.8	1.5	36.4	3.0	0.2	12.4	0.5	20.8	0.1	0.5
Males, 65 years and over	1999	147.7	1.1	2.4	33.3	4.4	0.2	27.2	0.7	29.6	0.2	1.2
	2000	140.4	1.1	2.3	33.2	4.3	0.2	26.4	0.9	28.0	0.2	1.0
	2001	146.3	1.1	2.2	37.5	3.9	0.2	26.8	1.0	28.1	0.2	1.0
	2002	148.2	1.4	2.3	40.1	4.0	0.2	26.9	1.2	28.6	0.2	0.7
Females, 65 years and over	1999	86.6	0.3	0.9	26.7	2.8	0.2	2.2	*	15.8	*	0.5
	2000	83.7	0.3	1.0	27.2	2.7	0.2	2.2	*	15.5	*	0.4
	2001	86.8	0.5	0.8	30.3	2.7	0.2	2.2	*	15.2	*	0.5
	2002	88.5	0.4	0.9	33.8	2.3	0.1	2.0	*	15.4	*	0.3

See footnotes at end of table.

**Table 19. Death rates for injury according to sex, age, and mechanism of death: United States, 1999–2002—Con.**

[Rates per 100,000 population in specified group. Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks (\*) preceding cause-of-death codes, see "Technical Notes"]

Sex and age	Year	Mechanism of injury (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )									
		Other land transport <sup>3</sup>	Other transport (*U01.1,V90–V99,Y36.1) <sup>1</sup>	Natural/environmental (W42–W43,W53–W64,W92–W99,X20–X39,X51–X57)	Overexertion (X50)	Poisoning (*U01[.6–.7],X40–X49,X60–X69,X85–X90,Y10–Y19,Y35.2)	Struck by or against (W20–W22,W50–W52,X79,Y00,Y04,Y29,Y35.3)	Suffocation (W75–W84,X70,X91,Y20)	Other specified, classifiable <sup>1,4</sup>	Other specified, not elsewhere classified (*U01.8,*U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	Unspecified (*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9)
Both sexes, all ages <sup>5</sup>	1999	0.7	0.5	0.7	0.0	7.1	0.5	4.2	0.7	0.8	3.3
	2000	0.6	0.5	0.6	*	7.2	0.5	4.3	0.7	0.8	3.1
	2001	0.5	1.6	0.5	*	7.8	0.4	4.4	0.7	0.8	3.2
	2002	0.5	0.4	0.5	*	9.2	0.4	4.4	0.7	0.7	3.0
Males, all ages <sup>5</sup>	1999	1.2	0.9	0.9	*	9.8	0.8	5.7	1.2	1.1	3.4
	2000	0.9	0.9	0.8	*	9.9	0.8	5.9	1.1	1.1	3.1
	2001	0.9	2.5	0.7	*	10.6	0.7	6.1	1.2	1.1	3.1
	2002	0.8	0.8	0.7	*	12.2	0.7	6.2	1.1	1.0	3.0
Females, all ages <sup>5</sup>	1999	0.4	0.2	0.5	*	4.4	0.2	2.8	0.3	0.5	3.3
	2000	0.3	0.1	0.4	*	4.6	0.1	2.8	0.3	0.5	3.0
	2001	0.2	0.7	0.3	*	5.1	0.1	2.8	0.3	0.5	3.3
	2002	0.2	0.1	0.4	*	6.3	0.1	2.8	0.3	0.4	3.0
Both sexes, 0–14 years old	1999	0.3	0.1	0.2	*	0.2	0.2	1.7	0.4	0.2	0.6
	2000	0.3	0.1	0.1	*	0.2	0.1	1.8	0.4	0.2	0.6
	2001	0.3	0.1	0.2	*	0.2	0.2	2.0	0.4	0.2	0.6
	2002	0.2	0.1	0.1	*	0.3	0.2	2.0	0.5	0.2	0.6
Males, 0–14 years old	1999	0.4	0.2	0.2	*	0.2	0.2	2.2	0.5	0.3	0.7
	2000	0.3	0.1	0.2	*	0.3	0.2	2.3	0.5	0.2	0.7
	2001	0.3	0.2	0.2	*	0.3	0.2	2.4	0.5	0.2	0.7
	2002	0.3	0.1	0.1	*	0.3	0.2	2.4	0.5	0.2	0.7
Females, 0–14 years old	1999	0.2	0.1	0.1	*	0.2	0.2	1.3	0.4	0.2	0.5
	2000	0.2	*	0.1	*	0.2	0.1	1.4	0.3	0.2	0.6
	2001	0.2	0.1	0.1	*	0.2	0.1	1.5	0.4	0.2	0.5
	2002	0.1	*	0.1	*	0.2	0.1	1.6	0.4	0.1	0.6
Both sexes, 15–24 years old	1999	1.1	0.4	0.2	*	3.9	0.4	3.2	0.6	0.5	0.9
	2000	0.9	0.5	0.2	*	4.3	0.4	3.6	0.6	0.5	0.9
	2001	0.7	0.7	0.1	*	4.9	0.3	3.8	0.6	0.4	1.0
	2002	0.6	0.4	0.1	*	5.7	0.3	3.9	0.6	0.4	0.9
Males, 15–24 years old	1999	1.6	0.6	0.3	*	5.6	0.7	4.8	1.0	0.7	1.4
	2000	1.3	0.8	0.3	*	6.3	0.7	5.6	1.0	0.7	1.3
	2001	1.2	1.0	0.2	*	7.1	0.5	5.9	1.0	0.6	1.3
	2002	1.0	0.6	0.2	*	8.2	0.5	6.1	1.0	0.6	1.3
Females, 15–24 years old	1999	0.6	0.2	*	*	2.1	0.1	1.5	0.2	0.2	0.5
	2000	0.4	0.2	*	*	2.1	*	1.5	0.2	0.3	0.5
	2001	0.2	0.4	*	*	2.5	*	1.6	0.1	0.3	0.6
	2002	0.3	0.1	*	*	3.0	*	1.5	0.1	0.2	0.6

See footnotes at end of table.

**Table 19. Death rates for injury according to sex, age, and mechanism of death: United States, 1999–2002—Con.**

[Rates per 100,000 population in specified group. Figure(s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks (\*) preceding cause-of-death codes, see "Technical Notes"]

		Mechanism of injury (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )									
Sex and age	Year	Other land transport <sup>3</sup>	Other transport (*U01.1,V90–V99,Y36.1) <sup>1</sup>	Natural/environmental (W42–W43,W53–W64,W92–W99,X20–X39,X51–X57)	Overexertion (X50)	Poisoning (*U01[.6–.7], X40–X49,X60–X69,X85–X90,Y10–Y19,Y35.2)	Struck by or against (W20–W22,W50–W52,X79,Y00,Y04,Y29,Y35.3)	Suffocation (W75–W84,X70,X91,Y20)	Other specified, classifiable <sup>1,4</sup>	Other specified, not elsewhere classified (*U01.8, *U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87,Y89[.0–.1])	Unspecified (*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9)
Both sexes, 25–44 years old	1999	0.8	0.6	0.4	*	12.6	0.5	4.1	0.9	0.8	1.3
	2000	0.6	0.6	0.4	*	12.7	0.5	4.1	0.9	0.8	1.3
	2001	0.5	2.9	0.3	*	13.6	0.5	4.4	0.9	0.7	1.3
	2002	0.5	0.5	0.4	*	15.7	0.5	4.4	0.9	0.6	1.3
Males, 25–44 years old	1999	1.2	1.1	0.6	*	17.8	0.9	6.5	1.5	1.2	1.8
	2000	1.0	1.1	0.6	*	17.8	0.9	6.6	1.5	1.2	1.9
	2001	0.9	4.5	0.5	*	18.6	0.9	7.0	1.5	1.1	1.7
	2002	0.8	0.9	0.6	*	21.2	0.8	6.9	1.5	0.9	1.8
Females, 25–44 years old	1999	0.3	0.2	0.2	*	7.4	0.2	1.7	0.3	0.4	0.8
	2000	0.2	0.1	0.1	*	7.6	0.1	1.6	0.3	0.4	0.8
	2001	0.2	1.2	0.1	*	8.6	0.2	1.8	0.2	0.4	0.9
	2002	0.1	0.1	0.2	*	10.2	0.1	1.8	0.2	0.3	0.8
Both sexes, 45–64 years old	1999	0.7	0.8	0.8	*	9.9	0.6	3.1	0.8	0.8	1.9
	2000	0.6	0.8	0.7	*	10.2	0.7	3.4	0.8	0.9	1.8
	2001	0.5	2.2	0.6	*	11.3	0.6	3.6	0.8	0.9	1.9
	2002	0.5	0.7	0.7	*	13.7	0.5	3.7	0.9	0.8	1.8
Males, 45–64 years old	1999	1.2	1.4	1.2	*	13.4	1.2	4.7	1.4	1.3	2.6
	2000	1.0	1.4	1.0	*	13.7	1.3	5.1	1.4	1.4	2.7
	2001	0.9	3.4	0.9	*	14.8	1.2	5.5	1.4	1.5	2.6
	2002	0.8	1.3	1.1	*	17.4	1.0	5.6	1.5	1.3	2.7
Females, 45–64 years old	1999	0.3	0.2	0.4	*	6.5	0.1	1.6	0.3	0.3	1.1
	2000	0.3	0.2	0.3	*	7.0	0.1	1.8	0.3	0.4	1.0
	2001	0.1	1.0	0.3	*	7.9	0.1	1.8	0.2	0.4	1.3
	2002	0.2	0.2	0.3	*	10.1	0.1	1.8	0.3	0.3	1.0
Both sexes, 65 years and over	1999	1.1	0.4	2.7	*	3.9	0.6	11.7	0.7	2.0	18.1
	2000	0.8	0.5	2.2	*	3.6	0.6	11.4	0.6	2.0	16.0
	2001	0.7	0.6	1.8	*	3.8	0.5	10.9	0.8	2.2	17.1
	2002	0.6	0.5	1.8	*	4.3	0.6	10.7	0.7	2.2	15.6
Males, 65 years and over	1999	1.9	0.9	3.2	*	4.9	1.0	13.8	1.2	2.5	18.1
	2000	1.5	1.0	2.7	*	4.4	0.9	13.5	1.1	2.7	15.0
	2001	1.4	1.3	2.2	*	4.7	1.0	13.3	1.2	3.1	16.1
	2002	1.1	1.1	2.2	*	5.1	1.1	13.2	1.0	2.9	14.8
Females, 65 years and over	1999	0.5	0.1	2.4	*	3.3	0.2	10.3	0.4	1.6	18.1
	2000	0.3	0.1	1.8	*	3.1	0.3	9.9	0.3	1.6	16.7
	2001	0.3	0.2	1.4	*	3.1	0.2	9.1	0.6	1.5	17.9
	2002	0.2	*	1.6	*	3.6	0.2	9.0	0.4	1.7	16.3

\* Figure does not meet standard of reliability or precision; see "Technical Notes." 0.0 Quantity more than zero but less than 0.05. <sup>1</sup>2001 and 2002 figures include September 11, 2001 related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes." <sup>2</sup>ICD-10 codes for "Motor vehicle traffic" accidents are V02–V04[.1–.9], V09.2, V12–V14[.3–.9], V19[.4–.6], V20–V28[.3–.9], V29–V79[.4–.9], V80[.3–.5], V81.1, V82.1, V83–V86[.0–.3], V87[.0–.8], V89.2. ICD-10 codes for "Other land transport" are (V20–V28[.0–.2], V29–V79[.0–.3], V80[.0–.2,.6–.9], V81–V82[.0,.2–.9], V83–V86[.4–.9], V87.9, V88[.0–.9], V89[.0,.1,.3,.9], X82, Y03, Y32). <sup>3</sup>ICD-10 codes for "Other specified, classifiable" are (\*U01[.0,.2,.5], \*U03.0, W23, W35–W41, W44, W49, W85–W91, X75, X81, X96, Y02, Y05–Y07, Y25, Y31, Y35[.1,.5], Y36[.0,.2,.4–.8], Y85). <sup>4</sup>Figures for age not stated included in "All ages" but not distributed among age groups.

**Table 20. Deaths due to injury according to selected mechanisms and intent of death: United States, each State, and the District of Columbia, 2002**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

State	Intent and mechanism (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )														
	All injury (*U01-*U03, V01-Y36, Y85-Y87, Y89) <sup>1</sup>	Unintentional				Suicide				Homicide				Undetermined intent (Y10-Y34, Y87.2, Y89.9)	Legal intervention/ war (Y35-Y36, Y89[.0,.1])
		Total (V01-X59, Y85-Y86)	Motor vehicle traffic <sup>2</sup>	Fall (W00-W19)	Poisoning (X40-X49)	Total (*U03, X60-X84, Y87.0) <sup>1</sup>	Firearm (X72-X74)	Poisoning (X60-X69)	Suffocation (X70)	Total (*U01-*U02, X85-Y09, Y87.1) <sup>1</sup>	Firearm (*U01.4, X93-X95)	Cut/pierce (X99)	Suffocation (X91)		
United States . . . . .	161,269	106,742	44,065	16,257	17,550	31,655	17,108	5,486	6,462	17,638	11,829	2,074	679	4,830	404
Alabama . . . . .	3,198	2,228	1,090	159	209	514	381	39	66	416	292	53	13	36	4
Alaska . . . . .	538	346	99	20	77	132	92	15	22	40	26	6	2	17	3
Arizona . . . . .	4,082	2,577	1,074	465	488	886	559	147	144	504	355	57	7	100	15
Arkansas . . . . .	2,005	1,311	673	169	76	377	257	48	59	194	146	14	6	119	4
California . . . . .	16,193	10,107	4,146	1,470	2,408	3,228	1,490	630	734	2,485	1,810	254	65	320	53
Colorado . . . . .	2,828	1,812	763	310	323	727	380	163	146	184	116	19	7	95	10
Connecticut . . . . .	1,577	1,182	339	176	307	260	85	44	103	98	57	17	7	36	1
Delaware . . . . .	418	292	118	40	68	74	38	12	15	38	28	3	-	12	2
District of Columbia . . . . .	473	200	58	40	57	31	13	4	9	229	176	21	1	13	-
Florida . . . . .	10,910	7,396	3,148	1,197	1,534	2,338	1,205	489	417	1,008	635	116	47	147	21
Georgia . . . . .	5,021	3,333	1,487	441	493	909	614	117	141	672	477	64	21	88	19
Hawaii . . . . .	584	393	118	70	57	120	21	16	63	38	15	4	4	33	-
Idaho . . . . .	875	611	281	113	80	202	137	34	23	32	15	3	3	28	2
Illinois . . . . .	6,521	4,222	1,533	561	860	1,145	466	222	345	1,016	728	88	45	130	8
Indiana . . . . .	3,403	2,148	937	254	174	743	448	113	142	385	242	37	22	119	8
Iowa . . . . .	1,482	1,093	408	274	68	314	157	57	81	56	30	7	2	13	6
Kansas . . . . .	1,640	1,139	553	180	118	345	184	69	75	129	74	20	10	26	1
Kentucky . . . . .	2,871	2,090	884	203	371	540	364	74	79	195	127	23	8	44	2
Louisiana . . . . .	3,308	2,115	927	151	289	499	349	46	74	607	467	50	16	79	8
Maine . . . . .	694	511	203	86	109	166	79	39	32	11	8	2	-	5	1
Maryland . . . . .	3,035	1,332	707	253	47	477	233	84	114	540	365	64	17	677	9
Massachusetts . . . . .	2,650	1,413	537	221	67	436	99	96	162	185	94	48	8	612	4
Michigan . . . . .	5,380	3,285	1,321	510	435	1,106	578	211	252	696	489	78	24	285	8
Minnesota . . . . .	2,594	1,928	697	518	167	497	238	99	106	127	55	15	3	39	3
Mississippi . . . . .	2,341	1,642	854	180	133	343	254	40	35	305	208	40	9	43	8
Missouri . . . . .	3,770	2,641	1,191	430	341	693	423	114	117	366	253	45	17	63	7
Montana . . . . .	760	524	242	112	43	184	115	37	26	23	9	7	1	27	2
Nebraska . . . . .	1,047	762	319	186	36	201	105	39	45	50	27	7	5	33	1
Nevada . . . . .	1,527	860	381	91	208	423	245	94	62	175	114	22	12	63	6
New Hampshire . . . . .	523	357	118	63	76	132	66	25	32	9	5	2	-	22	3
New Jersey . . . . .	3,567	2,599	750	286	703	553	176	128	159	333	208	62	13	79	3
New Mexico . . . . .	1,624	1,105	414	227	250	349	211	60	63	161	81	28	9	4	5
New York . . . . .	6,994	4,663	1,629	948	802	1,228	411	145	373	929	550	174	43	160	14
North Carolina . . . . .	5,379	3,700	1,663	467	560	986	630	157	144	644	467	68	21	38	11
North Dakota . . . . .	351	246	104	53	14	91	53	15	16	7	3	-	1	7	-
Ohio . . . . .	6,100	4,146	1,547	646	755	1,287	675	249	262	549	353	54	24	105	13
Oklahoma . . . . .	2,315	1,580	757	165	200	501	312	75	84	196	113	35	2	25	13
Oregon . . . . .	2,129	1,397	447	358	203	518	291	100	86	106	64	14	7	100	8
Pennsylvania . . . . .	6,827	4,728	1,702	769	968	1,341	720	209	311	640	456	55	28	105	13
Rhode Island . . . . .	499	277	93	90	9	86	30	14	37	43	25	7	1	93	-

See footnotes at end of table.

**Table 20. Deaths due to injury according to selected mechanisms and intent of death: United States, each State, and the District of Columbia, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

State	Intent and mechanism (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )														
	All injury (*U01-*U03, V01–Y36, Y85–Y87, Y89) <sup>1</sup>	Unintentional				Suicide				Homicide				Undetermined intent (Y10–Y34, Y87.2, Y89.9)	Legal intervention/ war (Y35–Y36, Y89[.0,.1])
		Total (V01–X59, Y85–Y86)	Motor vehicle traffic <sup>2</sup>	Fall (W00–W19)	Poisoning (X40–X49)	Total (*U03, X60–X84, Y87.0) <sup>1</sup>	Firearm (X72–X74)	Poisoning (X60–X69)	Suffocation (X70)	Total (*U01-*U02, X85–Y09, Y87.1) <sup>1</sup>	Firearm (*U01.4, X93–X95)	Cut/pierce (X99)	Suffocation (X91)		
South Carolina . . . . .	2,765	1,972	1,013	171	204	440	304	47	60	326	227	43	9	24	3
South Dakota . . . . .	475	348	171	73	17	94	50	14	30	22	5	3	2	11	–
Tennessee . . . . .	4,083	2,744	1,209	337	387	778	521	114	93	467	323	48	16	91	3
Texas . . . . .	12,204	8,232	3,918	861	1,257	2,311	1,315	400	461	1,421	889	187	67	175	65
Utah . . . . .	1,283	714	313	114	73	340	174	86	71	54	27	7	3	169	6
Vermont . . . . .	354	240	77	72	34	92	54	13	19	8	3	3	–	13	1
Virginia . . . . .	3,747	2,479	940	312	442	799	491	111	135	397	286	32	23	63	9
Washington . . . . .	3,341	2,203	730	483	498	811	437	171	137	213	110	37	11	105	9
West Virginia . . . . .	1,407	956	403	115	156	276	188	31	40	95	66	8	6	79	1
Wisconsin . . . . .	3,152	2,274	831	735	271	627	308	120	150	191	122	18	11	52	8
Wyoming . . . . .	425	289	148	32	28	105	82	10	10	23	8	5	–	8	–

– Quantity zero.

<sup>1</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>2</sup>ICD-10 codes for "Motor vehicle traffic" accidents are V02–V04[.1,.9], V09.2, V12–V14[.3–.9], V19[.4–.6], V20–V28[.3–.9], V29–V79[.4–.9], V80[.3–.5], V81.1, V82.1, V83–V86[.0–.3], V87[.0–.8], V89.2.



**Table 21. Death rates due to injury according to selected mechanisms and intent of death: United States, each State, and the District of Columbia, 2002**

[Crude rates per 100,000 population in each area. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

State	Intent and mechanism (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )														
	All injury (*U01-*U03, V01-Y36, Y85-Y87, Y89) <sup>1</sup>	Unintentional				Suicide				Homicide				Undetermined intent (Y10-Y34, Y87.2, Y89.9)	Legal intervention/ war (Y35-Y36, Y89[.0,.1])
		Total (V01-X59, Y85-Y86)	Motor vehicle traffic <sup>2</sup>	Fall (W00-W19)	Poisoning (X40-X49)	Total (*U03, X60-X84, Y87.0) <sup>1</sup>	Firearm (X72-X74)	Poisoning (X60-X69)	Suffocation (X70)	Total (*U01-*U02, X85-Y09, Y87.1) <sup>1</sup>	Firearm (*U01.4, X93-X95)	Cut/pierce (X99)	Suffocation (X91)		
United States . . . . .	55.9	37.0	15.3	5.6	6.1	11.0	5.9	1.9	2.2	6.1	4.1	0.7	0.2	1.7	0.1
Alabama . . . . .	71.3	49.7	24.3	3.5	4.7	11.5	8.5	0.9	1.5	9.3	6.5	1.2	*	0.8	*
Alaska . . . . .	83.6	53.7	15.4	3.1	12.0	20.5	14.3	*	3.4	6.2	4.0	*	*	*	*
Arizona . . . . .	74.8	47.2	19.7	8.5	8.9	16.2	10.2	2.7	2.6	9.2	6.5	1.0	*	1.8	*
Arkansas . . . . .	74.0	48.4	24.8	6.2	2.8	13.9	9.5	1.8	2.2	7.2	5.4	*	*	4.4	*
California . . . . .	46.1	28.8	11.8	4.2	6.9	9.2	4.2	1.8	2.1	7.1	5.2	0.7	0.2	0.9	0.2
Colorado . . . . .	62.8	40.2	16.9	6.9	7.2	16.1	8.4	3.6	3.2	4.1	2.6	*	*	2.1	*
Connecticut . . . . .	45.6	34.2	9.8	5.1	8.9	7.5	2.5	1.3	3.0	2.8	1.6	*	*	1.0	*
Delaware . . . . .	51.8	36.2	14.6	5.0	8.4	9.2	4.7	*	*	4.7	3.5	*	*	*	*
District of Columbia . . . . .	82.9	35.0	10.2	7.0	10.0	5.4	*	*	*	40.1	30.8	3.7	*	*	*
Florida . . . . .	65.3	44.3	18.8	7.2	9.2	14.0	7.2	2.9	2.5	6.0	3.8	0.7	0.3	0.9	0.1
Georgia . . . . .	58.7	38.9	17.4	5.2	5.8	10.6	7.2	1.4	1.6	7.9	5.6	0.7	0.2	1.0	*
Hawaii . . . . .	46.9	31.6	9.5	5.6	4.6	9.6	1.7	*	5.1	3.1	*	*	*	2.7	*
Idaho . . . . .	65.2	45.6	21.0	8.4	6.0	15.1	10.2	2.5	1.7	2.4	*	*	*	2.1	*
Illinois . . . . .	51.8	33.5	12.2	4.5	6.8	9.1	3.7	1.8	2.7	8.1	5.8	0.7	0.4	1.0	*
Indiana . . . . .	55.3	34.9	15.2	4.1	2.8	12.1	7.3	1.8	2.3	6.3	3.9	0.6	0.4	1.9	*
Iowa . . . . .	50.5	37.2	13.9	9.3	2.3	10.7	5.3	1.9	2.8	1.9	1.0	*	*	*	*
Kansas . . . . .	60.4	41.9	20.4	6.6	4.3	12.7	6.8	2.5	2.8	4.7	2.7	0.7	*	1.0	*
Kentucky . . . . .	70.1	51.1	21.6	5.0	9.1	13.2	8.9	1.8	1.9	4.8	3.1	0.6	*	1.1	*
Louisiana . . . . .	73.8	47.2	20.7	3.4	6.4	11.1	7.8	1.0	1.7	13.5	10.4	1.1	*	1.8	*
Maine . . . . .	53.6	39.5	15.7	6.6	8.4	12.8	6.1	3.0	2.5	*	*	*	*	*	*
Maryland . . . . .	55.6	24.4	13.0	4.6	0.9	8.7	4.3	1.5	2.1	9.9	6.7	1.2	*	12.4	*
Massachusetts . . . . .	41.2	22.0	8.4	3.4	1.0	6.8	1.5	1.5	2.5	2.9	1.5	0.7	*	9.5	*
Michigan . . . . .	53.5	32.7	13.1	5.1	4.3	11.0	5.8	2.1	2.5	6.9	4.9	0.8	0.2	2.8	*
Minnesota . . . . .	51.7	38.4	13.9	10.3	3.3	9.9	4.7	2.0	2.1	2.5	1.1	*	*	0.8	*
Mississippi . . . . .	81.5	57.2	29.7	6.3	4.6	11.9	8.8	1.4	1.2	10.6	7.2	1.4	*	1.5	*
Missouri . . . . .	66.5	46.6	21.0	7.6	6.0	12.2	7.5	2.0	2.1	6.5	4.5	0.8	*	1.1	*
Montana . . . . .	83.6	57.6	26.6	12.3	4.7	20.2	12.6	4.1	2.9	2.5	*	*	*	3.0	*
Nebraska . . . . .	60.5	44.1	18.4	10.8	2.1	11.6	6.1	2.3	2.6	2.9	1.6	*	*	1.9	*
Nevada . . . . .	70.3	39.6	17.5	4.2	9.6	19.5	11.3	4.3	2.9	8.1	5.2	1.0	*	2.9	*
New Hampshire . . . . .	41.0	28.0	9.3	4.9	6.0	10.4	5.2	2.0	2.5	*	*	*	*	1.7	*
New Jersey . . . . .	41.5	30.3	8.7	3.3	8.2	6.4	2.0	1.5	1.9	3.9	2.4	0.7	*	0.9	*
New Mexico . . . . .	87.5	59.6	22.3	12.2	13.5	18.8	11.4	3.2	3.4	8.7	4.4	1.5	*	*	*
New York . . . . .	36.5	24.3	8.5	4.9	4.2	6.4	2.1	0.8	1.9	4.8	2.9	0.9	0.2	0.8	*
North Carolina . . . . .	64.7	44.5	20.0	5.6	6.7	11.9	7.6	1.9	1.7	7.7	5.6	0.8	0.3	0.5	*
North Dakota . . . . .	55.4	38.8	16.4	8.4	*	14.4	8.4	*	*	*	*	*	*	*	*
Ohio . . . . .	53.4	36.3	13.5	5.7	6.6	11.3	5.9	2.2	2.3	4.8	3.1	0.5	0.2	0.9	*
Oklahoma . . . . .	66.3	45.2	21.7	4.7	5.7	14.3	8.9	2.1	2.4	5.6	3.2	1.0	*	0.7	*
Oregon . . . . .	60.5	39.7	12.7	10.2	5.8	14.7	8.3	2.8	2.4	3.0	1.8	*	*	2.8	*
Pennsylvania . . . . .	55.3	38.3	13.8	6.2	7.8	10.9	5.8	1.7	2.5	5.2	3.7	0.4	0.2	0.9	*
Rhode Island . . . . .	46.6	25.9	8.7	8.4	*	8.0	2.8	*	3.5	4.0	2.3	*	*	8.7	*

See footnotes at end of table.

**Table 21. Death rates due to injury according to selected mechanisms and intent of death: United States, each State, and the District of Columbia, 2002—Con.**

[Crude rates per 100,000 population in each area. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

State	Intent and mechanism (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )														
	All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89) <sup>1</sup>	Unintentional				Suicide				Homicide				Undetermined intent (Y10–Y34, Y87.2, Y89.9)	Legal intervention/ war (Y35–Y36, Y89[.0,.1])
		Total (V01–X59, Y85–Y86)	Motor vehicle traffic <sup>2</sup>	Fall (W00–W19)	Poisoning (X40–X49)	Total (*U03, X60–X84, Y87.0) <sup>1</sup>	Firearm (X72–X74)	Poisoning (X60–X69)	Suffocation (X70)	Total (*U01–*U02, X85–Y09, Y87.1) <sup>1</sup>	Firearm (*U01.4, X93–X95)	Cut/pierce (X99)	Suffocation (X91)		
South Carolina . . . . .	67.3	48.0	24.7	4.2	5.0	10.7	7.4	1.1	1.5	7.9	5.5	1.0	*	0.6	*
South Dakota . . . . .	62.4	45.7	22.5	9.6	*	12.4	6.6	*	3.9	2.9	*	*	*	*	*
Tennessee . . . . .	70.4	47.3	20.9	5.8	6.7	13.4	9.0	2.0	1.6	8.1	5.6	0.8	*	1.6	*
Texas . . . . .	56.0	37.8	18.0	4.0	5.8	10.6	6.0	1.8	2.1	6.5	4.1	0.9	0.3	0.8	0.3
Utah . . . . .	55.4	30.8	13.5	4.9	3.2	14.7	7.5	3.7	3.1	2.3	1.2	*	*	7.3	*
Vermont . . . . .	57.4	38.9	12.5	11.7	5.5	14.9	8.8	*	*	*	*	*	*	*	*
Virginia . . . . .	51.4	34.0	12.9	4.3	6.1	11.0	6.7	1.5	1.9	5.4	3.9	0.4	0.3	0.9	*
Washington . . . . .	55.1	36.3	12.0	8.0	8.2	13.4	7.2	2.8	2.3	3.5	1.8	0.6	*	1.7	*
West Virginia . . . . .	78.1	53.1	22.4	6.4	8.7	15.3	10.4	1.7	2.2	5.3	3.7	*	*	4.4	*
Wisconsin . . . . .	57.9	41.8	15.3	13.5	5.0	11.5	5.7	2.2	2.8	3.5	2.2	*	*	1.0	*
Wyoming . . . . .	85.2	58.0	29.7	6.4	5.6	21.1	16.4	*	*	4.6	*	*	*	*	*

\* Figure does not meet standard of reliability or precision; see "Technical Notes."

<sup>1</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>2</sup>ICD-10 codes for "Motor vehicle traffic" accidents are V02–V04[.1,.9], V09.2, V12–V14[.3–.9], V19[.4–.6], V20–V28[.3–.9], V29–V79[.4–.9], V80[.3–.5], V81.1, V82.1, V83–V86[.0–.3], V87[.0–.8], V89.2.

**Table 22. Age-adjusted death rates due to injury according to selected mechanisms and intent of death: United States, each State, and the District of Columbia, 2002**

[Age-adjusted rates per 100,000 U.S. standard population in each area. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

State	Intent and mechanism (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )														
	All injury (*U01-*U03, V01-Y36, Y85-Y87, Y89) <sup>1</sup>	Unintentional				Suicide				Homicide				Undetermined intent (Y10-Y34, Y87.2, Y89.9)	Legal intervention/ war (Y35-Y36, Y89[.0,.1])
		Total (V01-X59, Y85-Y86)	Motor vehicle traffic <sup>2</sup>	Fall (W00-W19)	Poisoning (X40-X49)	Total (*U03, X60-X84, Y87.0) <sup>1</sup>	Firearm (X72-X74)	Poisoning (X60-X69)	Suffocation (X70)	Total (*U01-*U02, X85-Y09, Y87.1) <sup>1</sup>	Firearm (*U01.4, X93-X95)	Cut/pierce (X99)	Suffocation (X91)		
United States . . . . .	55.7	36.9	15.2	5.6	6.1	10.9	5.9	1.9	2.2	6.1	4.1	0.7	0.2	1.7	0.1
Alabama . . . . .	70.7	49.2	24.1	3.5	4.7	11.4	8.4	0.9	1.5	9.2	6.5	1.2	*	0.8	*
Alaska . . . . .	89.1	59.0	16.9	3.9	11.1	21.0	14.8	*	3.6	6.0	3.9	*	*	*	*
Arizona . . . . .	75.9	48.1	19.9	8.8	9.3	16.5	10.4	2.8	2.7	9.2	6.5	1.1	*	1.8	*
Arkansas . . . . .	73.2	47.3	24.6	5.7	2.9	14.0	9.4	1.8	2.3	7.2	5.5	*	*	4.6	*
California . . . . .	47.3	29.9	12.0	4.7	7.0	9.6	4.5	1.9	2.1	6.8	4.9	0.7	0.2	0.9	0.1
Colorado . . . . .	65.2	42.8	17.0	8.5	7.0	16.2	8.5	3.6	3.3	4.0	2.5	*	*	2.1	*
Connecticut . . . . .	44.0	32.5	9.9	4.4	9.0	7.4	2.4	1.3	2.9	3.0	1.8	*	*	1.1	*
Delaware . . . . .	51.3	35.9	14.4	5.0	8.3	9.0	4.6	*	*	4.7	3.4	*	*	*	*
District of Columbia . . . . .	79.0	34.5	9.4	6.9	10.2	5.1	*	*	*	37.2	28.2	3.7	*	*	*
Florida . . . . .	62.7	41.9	18.6	5.4	9.5	13.4	6.7	2.8	2.5	6.3	4.1	0.7	0.3	0.9	0.1
Georgia . . . . .	61.6	41.8	17.7	6.6	5.7	11.0	7.6	1.4	1.6	7.5	5.3	0.7	0.2	1.0	*
Hawaii . . . . .	45.5	30.4	9.3	5.3	4.6	9.5	1.6	*	5.0	3.1	*	*	*	2.6	*
Idaho . . . . .	66.9	46.8	21.1	9.0	6.2	15.5	10.5	2.6	1.7	2.4	*	*	*	2.2	*
Illinois . . . . .	51.7	33.5	12.2	4.5	6.8	9.1	3.7	1.8	2.7	7.9	5.7	0.7	0.4	1.0	*
Indiana . . . . .	55.2	34.8	15.1	4.1	2.9	12.1	7.3	1.9	2.3	6.2	3.9	0.6	0.4	2.0	*
Iowa . . . . .	46.4	33.3	13.3	7.4	2.3	10.5	5.2	1.9	2.8	1.9	1.0	*	*	*	*
Kansas . . . . .	58.9	40.6	20.0	6.0	4.4	12.6	6.7	2.6	2.7	4.7	2.7	0.7	*	1.0	*
Kentucky . . . . .	69.0	50.5	21.2	5.0	8.9	12.8	8.6	1.8	1.9	4.7	3.0	0.6	*	1.1	*
Louisiana . . . . .	74.6	48.0	20.6	3.6	6.5	11.2	7.9	1.1	1.7	13.3	10.2	1.1	*	1.8	*
Maine . . . . .	51.2	37.6	15.1	5.7	8.5	12.3	5.8	2.8	2.5	*	*	*	*	*	*
Maryland . . . . .	56.0	25.1	13.1	5.0	0.9	8.7	4.3	1.5	2.1	10.0	6.8	1.2	*	12.0	*
Massachusetts . . . . .	39.2	20.5	8.1	3.1	1.0	6.5	1.5	1.4	2.4	2.9	1.5	0.7	*	9.2	*
Michigan . . . . .	53.5	32.7	13.1	5.1	4.3	11.0	5.7	2.1	2.5	7.0	4.9	0.8	0.3	2.8	*
Minnesota . . . . .	50.4	37.3	13.7	9.8	3.3	9.7	4.7	1.9	2.1	2.5	1.1	*	*	0.8	*
Mississippi . . . . .	82.5	57.9	29.7	6.5	4.8	12.1	8.9	1.5	1.2	10.7	7.2	1.4	*	1.5	*
Missouri . . . . .	65.1	45.3	20.7	7.0	6.1	12.1	7.3	2.0	2.1	6.5	4.5	0.8	*	1.1	*
Montana . . . . .	80.8	55.2	26.1	11.0	4.7	19.9	12.4	4.0	2.8	2.5	*	*	*	3.0	*
Nebraska . . . . .	58.0	41.4	17.9	9.3	2.1	11.7	6.0	2.3	2.7	2.9	1.6	*	*	1.9	*
Nevada . . . . .	72.9	41.9	18.1	5.2	9.6	19.8	11.5	4.4	2.9	8.1	5.3	1.0	*	2.8	*
New Hampshire . . . . .	40.9	28.1	9.3	5.0	5.9	10.2	5.1	1.9	2.5	*	*	*	*	1.7	*
New Jersey . . . . .	40.7	29.5	8.7	3.1	8.0	6.3	2.0	1.4	1.8	4.0	2.5	0.7	*	0.9	*
New Mexico . . . . .	89.4	61.1	22.2	13.1	14.0	19.1	11.6	3.3	3.4	8.7	4.3	1.6	*	*	*
New York . . . . .	35.7	23.7	8.4	4.7	4.1	6.3	2.1	0.7	1.9	4.8	2.9	0.9	0.2	0.8	*
North Carolina . . . . .	65.2	45.2	19.9	6.0	6.7	11.8	7.6	1.9	1.7	7.6	5.5	0.8	0.3	0.4	*
North Dakota . . . . .	51.5	35.0	15.3	6.4	*	14.2	8.3	*	*	*	*	*	*	*	*
Ohio . . . . .	52.7	35.6	13.5	5.3	6.7	11.2	5.8	2.2	2.3	4.9	3.1	0.5	0.2	0.9	*
Oklahoma . . . . .	65.7	44.6	21.4	4.6	5.8	14.3	8.8	2.2	2.4	5.6	3.2	1.0	*	0.7	*
Oregon . . . . .	58.6	38.1	12.4	9.4	5.7	14.4	8.1	2.8	2.4	3.1	1.9	*	*	2.8	*
Pennsylvania . . . . .	52.6	35.6	13.5	5.0	8.0	10.7	5.7	1.7	2.5	5.4	3.9	0.5	0.2	0.9	*
Rhode Island . . . . .	43.5	23.1	8.3	6.8	*	7.9	2.7	*	3.4	4.0	2.3	*	*	8.6	*

See footnotes at end of table.

**Table 22. Age-adjusted death rates due to injury according to selected mechanisms and intent of death: United States, each State, and the District of Columbia, 2002—Con.**

[Age-adjusted rates per 100,000 U.S. standard population in each area. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

State	Intent and mechanism (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )														
	All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89) <sup>1</sup>	Unintentional				Suicide				Homicide				Undetermined intent (Y10–Y34, Y87.2, Y89.9)	Legal intervention/ war (Y35–Y36, Y89[.0,.1])
		Total (V01–X59, Y85–Y86)	Motor vehicle traffic <sup>2</sup>	Fall (W00–W19)	Poisoning (X40–X49)	Total (*U03, X60–X84, Y87.0) <sup>1</sup>	Firearm (X72–X74)	Poisoning (X60–X69)	Suffocation (X70)	Total (*U01–*U02, X85–Y09, Y87.1) <sup>1</sup>	Firearm (*U01.4, X93–X95)	Cut/pierce (X99)	Suffocation (X91)		
South Carolina . . . . .	67.3	48.2	24.3	4.3	4.9	10.6	7.3	1.2	1.4	7.8	5.4	1.0	*	0.6	*
South Dakota . . . . .	60.0	43.3	22.0	7.7	*	12.2	6.4	*	3.9	3.0	*	*	*	*	*
Tennessee . . . . .	70.2	47.4	20.8	5.9	6.6	13.2	8.9	2.0	1.6	8.0	5.5	0.8	*	1.5	*
Texas . . . . .	58.6	40.1	18.2	4.9	5.9	11.0	6.4	1.9	2.1	6.4	3.9	0.9	0.3	0.8	0.3
Utah . . . . .	62.1	35.6	14.0	6.8	3.6	16.1	8.2	4.3	3.1	2.3	1.2	*	*	8.0	*
Vermont . . . . .	55.0	37.2	12.3	10.7	5.3	14.1	8.3	*	*	*	*	*	*	*	*
Virginia . . . . .	52.2	35.0	12.8	4.8	5.9	10.9	6.8	1.5	1.8	5.4	3.9	0.4	0.3	0.9	*
Washington . . . . .	55.1	36.5	12.0	8.3	8.0	13.3	7.2	2.8	2.2	3.5	1.8	0.6	*	1.7	*
West Virginia . . . . .	75.5	50.7	21.8	5.4	8.9	14.8	10.0	1.6	2.2	5.5	3.8	*	*	4.4	*
Wisconsin . . . . .	55.6	39.7	14.9	12.0	4.9	11.3	5.5	2.2	2.7	3.5	2.2	*	*	1.0	*
Wyoming . . . . .	85.0	57.9	29.5	6.7	5.6	20.7	16.2	*	*	4.7	*	*	*	*	*

\* Figure does not meet standard of reliability or precision; see "Technical Notes."

<sup>1</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>2</sup>ICD-10 codes for "Motor vehicle traffic" accidents are V02–V04[.1,.9], V09.2, V12–V14[.3–.9], V19[.4–.6], V20–V28[.3–.9], V29–V79[.4–.9], V80[.3–.5], V81.1, V82.1, V83–V86[.0–.3], V87[.0–.8], V89.2.

**Table 23. Deaths, death rates and age-adjusted death rates due to injury according to selected mechanisms: United States, each State, and the District of Columbia, 2002**

[Crude rates per 100,000 population in each area. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

	Motor vehicle traffic <sup>1</sup> Deaths	Firearm <sup>2</sup> Deaths	Poisoning <sup>3</sup> Deaths	Fall <sup>4</sup> Deaths	Motor vehicle traffic <sup>1</sup> Death rate	Firearm <sup>2</sup> Death rate	Poisoning <sup>3</sup> Death rate	Fall <sup>4</sup> Death rate	Motor vehicle traffic <sup>1</sup> Age-adjusted death rate	Firearm <sup>2</sup> Age-adjusted death rate	Poisoning <sup>3</sup> Age-adjusted death rate	Fall <sup>4</sup> Age-adjusted death rate
United States . . . . .	44,065	30,242	26,435	17,116	15.3	10.5	9.2	5.9	15.2	10.4	9.2	5.9
Alabama . . . . .	1,090	724	260	165	24.3	16.1	5.8	3.7	24.1	16.0	5.8	3.6
Alaska . . . . .	99	127	96	20	15.4	19.7	14.9	3.1	16.9	20.0	13.8	3.9
Arizona . . . . .	1,074	968	690	474	19.7	17.7	12.6	8.7	19.9	17.9	13.2	8.9
Arkansas . . . . .	673	441	205	174	24.8	16.3	7.6	6.4	24.6	16.3	7.8	5.9
California . . . . .	4,146	3,410	3,199	1,624	11.8	9.7	9.1	4.6	11.9	9.7	9.3	5.2
Colorado . . . . .	763	517	552	320	16.9	11.5	12.2	7.1	17.0	11.5	12.0	8.8
Connecticut . . . . .	339	147	380	180	9.8	4.2	11.0	5.2	9.9	4.3	11.1	4.5
Delaware . . . . .	118	74	93	40	14.6	9.2	11.5	5.0	14.4	9.0	11.4	5.0
District of Columbia . . . . .	58	195	66	41	10.2	34.2	11.6	7.2	9.4	31.3	11.7	7.1
Florida . . . . .	3,148	1,886	2,113	1,268	18.8	11.3	12.6	7.6	18.6	11.1	13.0	5.9
Georgia . . . . .	1,487	1,133	646	450	17.4	13.2	7.5	5.3	17.7	13.4	7.4	6.7
Hawaii . . . . .	118	36	96	91	9.5	2.9	7.7	7.3	9.3	2.8	7.6	7.0
Idaho . . . . .	281	163	135	118	21.0	12.2	10.1	8.8	21.1	12.3	10.5	9.4
Illinois . . . . .	1,533	1,231	1,129	601	12.2	9.8	9.0	4.8	12.2	9.7	9.0	4.8
Indiana . . . . .	937	723	382	264	15.2	11.7	6.2	4.3	15.1	11.7	6.3	4.3
Iowa . . . . .	408	201	131	276	13.9	6.8	4.5	9.4	13.3	6.7	4.4	7.4
Kansas . . . . .	553	268	203	183	20.4	9.9	7.5	6.7	20.0	9.7	7.6	6.1
Kentucky . . . . .	884	544	466	211	21.6	13.3	11.4	5.2	21.2	12.9	11.1	5.2
Louisiana . . . . .	927	876	391	155	20.7	19.5	8.7	3.5	20.6	19.4	8.8	3.7
Maine . . . . .	203	88	151	87	15.7	6.8	11.7	6.7	15.1	6.5	11.6	5.8
Maryland . . . . .	707	615	760	273	13.0	11.3	13.9	5.0	13.1	11.4	13.5	5.4
Massachusetts . . . . .	537	204	743	250	8.4	3.2	11.6	3.9	8.1	3.1	11.2	3.5
Michigan . . . . .	1,321	1,092	884	521	13.1	10.9	8.8	5.2	13.1	10.9	8.8	5.2
Minnesota . . . . .	697	306	281	533	13.9	6.1	5.6	10.6	13.7	6.0	5.5	10.1
Mississippi . . . . .	854	492	198	183	29.7	17.1	6.9	6.4	29.7	17.2	7.1	6.6
Missouri . . . . .	1,191	696	490	435	21.0	12.3	8.6	7.7	20.7	12.2	8.7	7.1
Montana . . . . .	242	134	96	115	26.6	14.7	10.6	12.6	26.1	14.5	10.5	11.3
Nebraska . . . . .	319	140	94	191	18.4	8.1	5.4	11.0	17.9	8.0	5.6	9.6
Nevada . . . . .	381	370	338	100	17.5	17.0	15.6	4.6	18.1	17.3	15.6	5.7
New Hampshire . . . . .	118	76	121	66	9.3	6.0	9.5	5.2	9.3	5.8	9.3	5.2
New Jersey . . . . .	750	415	882	316	8.7	4.8	10.3	3.7	8.7	4.9	10.0	3.5
New Mexico . . . . .	414	304	312	228	22.3	16.4	16.8	12.3	22.2	16.6	17.5	13.1
New York . . . . .	1,629	994	1,014	1,080	8.5	5.2	5.3	5.6	8.4	5.1	5.2	5.4
North Carolina . . . . .	1,663	1,136	737	474	20.0	13.7	8.9	5.7	19.9	13.6	8.8	6.1
North Dakota . . . . .	104	58	33	55	16.4	9.1	5.2	8.7	15.3	9.0	5.1	6.6
Ohio . . . . .	1,547	1,069	1,062	673	13.5	9.4	9.3	5.9	13.5	9.3	9.4	5.6
Oklahoma . . . . .	757	452	284	171	21.7	12.9	8.1	4.9	21.4	12.8	8.3	4.7
Oregon . . . . .	447	374	365	374	12.7	10.6	10.4	10.6	12.4	10.5	10.2	9.9
Pennsylvania . . . . .	1,702	1,220	1,235	805	13.8	9.9	10.0	6.5	13.5	9.9	10.1	5.3
Rhode Island . . . . .	93	55	106	91	8.7	5.1	9.9	8.5	8.2	5.0	9.8	6.9

See footnotes at end of table.

**Table 23. Deaths, death rates and age-adjusted death rates due to injury according to selected mechanisms: United States, each State, and the District of Columbia, 2002—Con.**

[Crude rates per 100,000 population in each area. Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

	Motor vehicle traffic <sup>1</sup> Deaths	Firearm <sup>2</sup> Deaths	Poisoning <sup>3</sup> Deaths	Fall <sup>4</sup> Deaths	Motor vehicle traffic <sup>1</sup> Death rate	Firearm <sup>2</sup> Death rate	Poisoning <sup>3</sup> Death rate	Fall <sup>4</sup> Death rate	Motor vehicle traffic <sup>1</sup> Age-adjusted death rate	Firearm <sup>2</sup> Age-adjusted death rate	Poisoning <sup>3</sup> Age-adjusted death rate	Fall <sup>4</sup> Age-adjusted death rate
South Carolina . . . . .	1,013	566	260	180	24.7	13.8	6.3	4.4	24.3	13.6	6.3	4.5
South Dakota . . . . .	171	61	36	73	22.5	8.0	4.7	9.6	22.0	7.9	4.9	7.8
Tennessee . . . . .	1,209	905	562	345	20.9	15.6	9.7	6.0	20.8	15.4	9.6	6.1
Texas . . . . .	3,918	2,301	1,759	898	18.0	10.6	8.1	4.1	18.2	10.8	8.2	5.0
Utah . . . . .	313	207	319	117	13.5	8.9	13.8	5.1	14.0	9.6	15.5	7.0
Vermont . . . . .	77	62	56	74	12.5	10.1	9.1	12.0	12.3	9.6	8.7	11.0
Virginia . . . . .	940	806	574	334	12.9	11.1	7.9	4.6	12.9	11.0	7.7	5.0
Washington . . . . .	730	568	736	511	12.0	9.4	12.1	8.4	12.0	9.3	11.8	8.8
West Virginia . . . . .	403	271	249	125	22.4	15.0	13.8	6.9	21.8	14.7	14.0	5.9
Wisconsin . . . . .	831	446	421	750	15.3	8.2	7.7	13.8	14.9	8.0	7.6	12.3
Wyoming . . . . .	148	95	44	33	29.7	19.0	8.8	6.6	29.5	18.8	8.9	7.0

<sup>1</sup>ICD-10 codes for "Motor vehicle traffic" accidents are V02-V04[.1,.9], V09.2, V12-V14[.3-.9], V19[.4-.6], V20-V28[.3-.9], V29-V79[.4-.9], V80[.3-.5], V81.1, V82.1, V83-V86[.0-.3], V87[.0-.8], V89.2.

<sup>2</sup>ICD-10 codes for "Firearm" are \*U01.4,W32-W34,X72-X74,X93-X95,Y22-Y24,Y53.0.

<sup>3</sup>ICD-10 codes for "Poisoning" are \*U01[.6-.7],X40-X49,X60-X69,X85-X90,Y10-Y19,Y35.2.

<sup>4</sup>ICD-10 codes for "Fall" are W00-W19, X80,Y01,Y30.

**Table 24. Total mentions of injuries and percent of injuries classified by the ICD-10 injury mortality diagnosis matrix among all deaths with an underlying cause of injury: United States, 2002**

Body region of injury	Nature of injury																
	All	Fracture	Dislocation	Internal organ injury	Open wound	Amputation	Blood vessel	Superficial and contusion	Crushing	Burn	Foreign body <sup>1</sup>	Other effects of external causes	Poisoning	Toxic effects	Multiple injuries	Other specified injury <sup>2</sup>	Unspecified injury
Total mentions of injuries																	
Head and Neck . . . . .	74,527	5,705	7	17,276	20,751	88	205	174	308	71	66	1	...	...	1,165	1,027	27,683
Traumatic brain injury . . . . .	66,601	3,592	...	17,276	19,011	...	...	...	273	...	...	...	...	...	999	755	24,695
Other head <sup>3</sup> . . . . .	349	92	7	...	9	6	7	146	...	-	9	1	...	...	...	47	25
Neck . . . . .	7,507	2,021	-	...	1,731	82	198	28	35	1	57	-	...	...	166	225	2,963
Head and neck, other . . . . .	70	...	...	...	...	...	...	...	...	70	...	-	...	...	...	...	...
Spine and upper back . . . . .	3,468	1,287	477	1,649	...	...	33	...	...	...	...	...	...	...	...	22	...
Spinal cord . . . . .	1,648	...	...	1,648	...	...	...	...	...	...	...	...	...	...	...	...	...
Vertebral column . . . . .	1,820	1,287	477	1	...	...	33	...	...	...	...	...	...	...	...	22	...
Torso . . . . .	41,980	3,130	-	7,329	9,873	5	1,754	140	550	337	4,660	-	...	...	496	2,287	11,419
Thorax . . . . .	22,826	2,021	-	3,060	7,025	2	1,510	61	405	1	10	-	...	...	479	1,033	7,219
Abdomen . . . . .	4,842	...	...	3,160	1,483	...	176	12	...	...	11	...	...	...	...	...	...
Pelvis and lower back . . . . .	1,439	1,033	-	243	98	1	52	10	1	-	1	...	...	...	...	-	...
Abdomen, lower back, and pelvis . . . . .	3,418	38	...	866	60	2	16	37	87	...	...	-	...	...	-	462	1,850
Other trunk . . . . .	9,455	38	...	...	1,207	-	...	20	57	336	4,638	...	...	...	17	792	2,350
Extremities . . . . .	12,284	9,528	44	...	1,382	71	182	70	23	85	...	2	...	...	22	238	637
Upper extremity . . . . .	2,123	771	7	...	934	24	76	20	5	39	...	1	...	...	7	44	195
Hip . . . . .	6,601	6,533	30	...	31	-	...	6	-	...	...	...	...	...	...	1	...
Other lower extremity . . . . .	3,560	2,224	7	...	417	47	106	44	18	46	...	1	...	...	15	193	442
Unclassifiable by body region . . . . .	114,936	1,015	...	...	10,289	13	301	304	44	2,719	4	18,073	41,323	8,709	533	1,298	30,311
Multiple body regions . . . . .	22,229	551	...	...	3,751	13	16	60	44	6	...	-	...	...	85	91	17,612
System wide . . . . .	69,232	...	...	...	...	...	...	...	...	...	...	18,070	41,323	8,709	...	1,130	...
Unspecified . . . . .	23,475	464	...	...	6,538	...	285	244	...	2,713	4	3	...	...	448	77	12,699
<b>Total injuries . . . . .</b>	<b>247,195</b>	<b>20,665</b>	<b>528</b>	<b>26,254</b>	<b>42,295</b>	<b>177</b>	<b>2,475</b>	<b>688</b>	<b>925</b>	<b>3,212</b>	<b>4,730</b>	<b>18,076</b>	<b>41,323</b>	<b>8,709</b>	<b>2,216</b>	<b>4,872</b>	<b>70,050</b>
Percent of all injuries mentioned																	
Head and Neck . . . . .	30.1	2.3	0.0	7.0	8.4	0.0	0.1	0.1	0.1	0.0	0.0	0.0	...	...	0.5	0.4	11.2
Traumatic brain injury . . . . .	26.9	1.5	...	7.0	7.7	...	...	...	0.1	...	...	...	...	...	0.4	0.3	10.0
Other head <sup>3</sup> . . . . .	0.1	0.0	0.0	...	0.0	0.0	0.0	0.1	...	-	0.0	0.0	...	...	...	0.0	0.0
Neck . . . . .	3.0	0.8	-	...	0.7	0.0	0.1	0.0	0.0	0.0	0.0	-	...	...	0.1	0.1	1.2
Head and Neck . . . . .	0.0	...	...	...	...	...	...	...	...	0.0	...	-	...	...	...	...	...
Spine and upper back . . . . .	1.4	0.5	0.2	0.7	...	...	0.0	...	...	...	...	...	...	...	...	0.0	...
Spinal cord . . . . .	0.7	...	...	0.7	...	...	...	...	...	...	...	...	...	...	...	...	...
Vertebral column . . . . .	0.7	0.5	0.2	0.0	...	...	0.0	...	...	...	...	...	...	...	...	0.0	...

See footnotes at end of table.

**Table 24. Total mentions of injuries and percent of injuries classified by the ICD-10 injury mortality diagnosis matrix among all deaths with an underlying cause of injury: United States, 2002—Con.**

Body region of injury	Nature of injury																
	All	Fracture	Dislocation	Internal organ injury	Open wound	Amputation	Blood vessel	Superficial and contusion	Crushing	Burn	Foreign body <sup>1</sup>	Other effects of external causes	Poisoning	Toxic effects	Multiple injuries	Other specified injury <sup>2</sup>	Unspecified injury
	Percent of all injuries mentioned																
Torso . . . . .	17.0	1.3	—	3.0	4.0	0.0	0.7	0.1	0.2	0.1	1.9	—	...	...	0.2	0.9	4.6
Thorax . . . . .	9.2	0.8	—	1.2	2.8	0.0	0.6	0.0	0.2	—	0.0	—	...	...	0.2	0.4	2.9
Abdomen . . . . .	2.0	...	...	1.3	0.6	...	0.1	0.0	...	...	0.0	...	...	...	...	...	...
Pelvis and lower back . . . . .	0.6	0.4	—	0.1	0.0	0.0	0.0	0.0	0.0	—	0.0	...	...	...	...	—	...
Abdomen, lower back, and pelvis . . . . .	1.4	0.0	...	0.4	0.0	0.0	0.0	0.0	0.0	...	...	—	...	...	—	0.2	0.7
Other trunk . . . . .	3.8	0.0	...	...	0.5	...	...	0.0	—	0.1	1.9	...	...	...	0.0	0.3	1.0
Extremities . . . . .	5.0	3.9	0.0	...	0.6	0.0	0.1	0.0	0.0	0.0	...	0.0	...	...	0.0	0.1	0.3
Upper extremity . . . . .	0.9	0.3	0.0	...	0.4	0.0	0.0	0.0	0.0	0.0	...	0.0	...	...	0.0	0.0	0.1
Hip . . . . .	2.7	2.6	0.0	...	0.0	...	...	0.0	—	...	...	...	...	...	...	0.0	0.0
Other lower extremity . . . . .	1.4	0.9	0.0	...	0.2	0.0	0.0	0.0	0.0	0.0	...	0.0	...	...	0.0	0.1	0.2
Unclassifiable by body region . . . . .	46.5	0.4	...	...	4.2	0.0	0.1	0.1	0.0	1.1	0.0	7.3	16.7	3.5	0.2	0.5	12.3
Multiple body regions . . . . .	9.0	0.2	...	...	1.5	0.0	0.0	0.0	0.0	0.0	...	—	...	...	0.0	0.0	7.1
System wide . . . . .	28.0	...	...	...	...	...	...	...	...	...	...	7.3	16.7	3.5	...	0.5	...
Unspecified . . . . .	9.5	0.2	...	...	2.6	...	0.1	0.1	...	1.1	0.0	0.0	...	...	0.2	0.0	5.1
<b>Total injuries . . . . .</b>	<b>100.0</b>	<b>8.4</b>	<b>0.2</b>	<b>10.6</b>	<b>17.1</b>	<b>0.1</b>	<b>1.0</b>	<b>0.3</b>	<b>0.4</b>	<b>1.3</b>	<b>1.9</b>	<b>7.3</b>	<b>16.7</b>	<b>3.5</b>	<b>0.9</b>	<b>2.0</b>	<b>28.3</b>

... Category not applicable.  
 — Quantity is zero.  
 0.0 Quantity more than zero but less than 0.05.  
<sup>1</sup>Effect of foreign bodies entering orifice.  
<sup>2</sup>"Other specified" includes injuries to nerves, muscles and tendons, sprains and strains as well as all other specified.  
<sup>3</sup>"Other head" includes injuries to face and eye, as well as other head.



**Table 25. Total number of injury deaths by mechanism and intent of death and total mentions of body regions affected as classified in the ICD-10 mortality diagnosis matrix: United States, 2002**

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total injury deaths	Total mentions of injury	Traumatic brain injury	Other head <sup>1</sup>	Neck	Head and neck	Spinal cord	Vertebral column	Thorax	Abdomen	Pelvis and lower back	Abdomen, lower back and pelvis	Other trunk	Upper extremity	Hip	Other lower extremity	Multiple body regions	System wide	Unspecified
All injury . . . . . (*U01–*U03,V01–Y36, Y85–Y87,Y89) <sup>2</sup>	161,269	247,195	66,601	349	7,507	70	1,648	1,820	22,826	4,842	1,439	3,418	9,455	2,123	6,601	3,560	22,229	69,232	23,475
Unintentional . . . . . (V01–X59, Y85–Y86)	106,742	163,997	40,181	264	5,139	56	1,392	1,723	12,935	2,448	1,200	2,992	7,724	1,085	6,558	3,148	17,245	45,098	14,809
Suicide . . . . . (*U03,X60–X84, Y87.0) <sup>2</sup>	31,655	45,181	17,675	22	687	9	50	36	3,167	509	42	97	396	422	4	62	799	16,648	4,556
Homicide . . . . . (*U01–*U02, X85–Y09,Y87.1) <sup>2</sup>	17,638	29,877	7,824	54	1,618	3	185	48	6,426	1,763	177	276	1,214	573	26	314	3,970	1,601	3,805
Undetermined . . . . . (Y10–Y34, Y87.2,Y89.9)	4,830	7,523	830	9	41	2	17	13	153	61	13	48	82	17	13	22	115	5,826	261
Legal intervention/ war . . . . . (Y35–Y36,Y89[0..1])	404	617	91	–	22	–	4	–	145	61	7	5	39	26	–	14	100	59	44
Cut/pierce . . . . . (W25–W29, W45,X78,X99,Y28,Y35.4)	2,762	6,492	234	7	711	–	6	9	1,629	315	16	36	188	454	2	89	650	127	2,019
Unintentional . . . . . (W25–W29, W45)	109	183	11	–	12	–	2	4	19	5	2	3	3	41	–	13	8	23	37
Suicide . . . . . (X78)	566	1,234	18	–	189	–	–	–	161	65	1	9	18	335	–	31	54	36	317
Homicide . . . . . (X99)	2,074	5,053	204	7	509	–	4	5	1,442	242	12	24	167	75	2	44	588	68	1,660
Undetermined . . . . . (Y28)	13	22	1	–	1	–	–	–	7	3	1	–	–	3	–	1	–	–	5
Legal intervention/war . . . . . (Y35.4)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Drowning . . . . . (W65–W74,X71, X92,Y21)	4,146	4,642	93	6	30	–	5	3	23	6	–	1	19	5	–	1	15	4,394	41
Unintentional . . . . . (W65–W74)	3,447	3,749	67	4	23	–	3	2	11	2	–	–	12	2	–	–	8	3,596	19
Suicide . . . . . (X71)	368	484	9	–	2	–	1	1	8	4	–	–	3	1	–	1	6	433	15
Homicide . . . . . (X92)	72	110	14	2	4	–	1	–	3	–	–	–	1	–	–	–	1	79	5
Undetermined . . . . . (Y21)	259	299	3	–	1	–	–	–	1	–	–	1	3	2	–	–	–	286	2
Fall . . . . . (W00–W19,X80, Y01,Y30)	17,116	25,005	12,437	77	860	1	290	399	1,166	340	359	192	443	371	3,806	1,189	945	510	1,620
Unintentional . . . . . (W00–W19)	16,257	23,453	12,075	77	824	1	284	383	1,034	276	341	147	302	364	3,805	1,180	513	455	1,392
Suicide . . . . . (X80)	740	1,356	295	–	31	–	5	14	111	60	14	38	130	5	–	5	397	45	206
Homicide . . . . . (Y01)	16	32	13	–	–	–	–	2	3	1	1	–	3	1	–	–	4	1	3
Undetermined . . . . . (Y30)	103	164	54	–	5	–	1	–	18	3	3	7	8	1	1	4	31	9	19
Fire/hot object or substance . . . . . (*U01.3,X00–X19, X76–X77,X97–X98,Y26–Y27, Y36.3) <sup>3</sup>	3,645	5,349	27	3	3	49	2	–	10	4	1	–	231	29	1	37	11	3,103	1,838
Unintentional . . . . . (X00–X19)	3,261	4,773	19	2	2	42	2	–	9	4	1	–	197	24	1	32	8	2,826	1,604
Suicide . . . . . (X76–X77)	150	219	–	1	–	6	–	–	–	–	–	–	18	3	–	2	–	69	120
Homicide . . . . . (*U01.3,X97–X98)	134	211	7	–	1	1	–	–	1	–	–	–	10	1	–	1	3	118	68
Undetermined . . . . . (Y26–Y27)	100	146	1	–	–	–	–	–	–	–	–	–	6	1	–	2	–	90	46
Legal intervention/war . . . . . (Y36.3)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Fire/flame . . . . . (X00–X09, X76,X97,Y26)	3,539	5,187	25	3	3	45	2	–	9	3	1	–	220	27	1	28	11	3,088	1,721
Unintentional . . . . . (X00–X09)	3,159	4,616	17	2	2	38	2	–	8	3	1	–	186	22	1	24	8	2,812	1,490
Suicide . . . . . (X76)	150	219	–	1	–	6	–	–	–	–	–	–	18	3	–	2	–	69	120
Homicide . . . . . (X97)	131	206	7	–	1	1	–	–	1	–	–	–	10	1	–	–	3	117	65
Undetermined . . . . . (Y26)	99	146	1	–	–	–	–	–	–	–	–	–	6	1	–	2	–	90	46

See footnotes at end of table.

**Table 25. Total number of injury deaths by mechanism and intent of death and total mentions of body regions affected as classified in the ICD-10 mortality diagnosis matrix: United States, 2002—Con.**

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total injury deaths	Total mentions of injury	Traumatic brain injury	Other head <sup>1</sup>	Neck	Head and neck	Spinal cord	Vertebral column	Thorax	Abdomen	Pelvis and lower back	Abdomen, lower back and pelvis	Other trunk	Upper extremity	Hip	Other lower extremity	Multiple body regions	System wide	Unspecified
Hot object/substance . . . . .(X10–X19,X77,X98,Y27)	106	162	2	–	–	4	–	–	1	1	–	–	11	2	–	9	–	15	117
Unintentional . . . . .(X10–X19)	102	157	2	–	–	4	–	–	1	1	–	–	11	2	–	8	–	14	114
Suicide . . . . .(X77)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Homicide . . . . .(X98)	3	5	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	3
Undetermined . . . . .(Y27)	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Firearm . . . . .(*U01.4,W32–W34,X72–X74,X93–X95,Y22–Y24,Y35.0)	30,242	45,012	22,887	31	1,206	1	161	15	7,987	1,924	192	154	1,102	536	17	310	3,094	266	5,129
Unintentional . . . . .(W32–W34)	762	1,110	514	1	30	–	7	–	236	65	11	8	19	17	1	37	19	17	128
Suicide . . . . .(X72–X74)	17,108	24,526	17,031	11	323	–	35	3	2,806	352	17	24	125	28	1	12	49	123	3,586
Homicide . . . . .(*U01.4,X93–X95)	11,829	18,485	5,059	17	823	1	117	12	4,743	1,426	156	112	910	465	15	247	2,929	115	1,338
Undetermined . . . . .(Y22–Y24)	243	375	206	2	9	–	2	–	57	20	1	5	10	1	–	2	3	6	51
Legal intervention/war . . . . .(Y35.0)	300	516	77	–	21	–	–	–	145	61	7	5	38	25	–	12	94	5	26
Machinery . . . . .(W24,W30–W31) <sup>4</sup>	652	1,143	239	–	30	1	8	15	218	13	14	76	51	23	1	26	108	118	202
All transport . . . . .(*U01.1,V01–V99,X82,Y03,Y32,Y36.1) <sup>2</sup>	47,939	77,177	23,825	137	3,836	8	531	963	10,452	1,763	553	2,530	2,594	385	81	933	16,037	2,566	9,983
Unintentional . . . . .(V01–V99)	47,739	76,852	23,749	136	3,822	8	531	956	10,404	1,754	550	2,518	2,583	385	81	929	15,962	2,542	9,942
Suicide . . . . .(X82)	112	191	40	–	11	–	–	6	29	2	1	6	9	–	–	1	43	14	29
Homicide . . . . .(*U01.1,Y03) <sup>2</sup>	61	99	28	1	3	–	–	1	16	4	2	3	2	–	–	3	24	7	5
Undetermined . . . . .(Y32)	27	35	8	–	–	–	–	–	3	3	–	3	–	–	–	–	8	3	7
Legal intervention/war . . . . .(Y36.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Motor vehicle traffic . . . . .(V02–V04[.1,.9],V09.2,V12–V14[.3–.9],V19[.4–.6],V20–V28[.3–.9],V29–V79[.4–.9],V80[.3–.5],V81.1,V82.1,V83–V86[.0–.3],V87[.0–.8],V89.2) <sup>4</sup>	44,065	71,062	22,044	131	3,602	8	504	887	9,820	1,631	520	2,335	2,389	355	71	852	14,990	1,827	9,096
Occupant . . . . .(V30–V79[.4–.9],V83–V86[.0–.3]) <sup>4</sup>	21,344	34,390	10,662	86	1,856	5	241	416	5,112	779	248	1,163	1,069	165	27	340	6,638	1,051	4,532
Motorcyclist . . . . .(V20–V28[.3–.9],V29[.4–.9]) <sup>4</sup>	3,153	5,190	1,872	9	242	–	29	54	603	113	49	146	187	25	1	70	1,122	48	620
Pedal cyclist . . . . .(V12–V14[.3–.9],V19[.4–.6]) <sup>4</sup>	550	899	390	2	34	–	9	18	65	14	4	28	23	1	1	6	200	6	98
Pedestrian . . . . .(V02–V04[.1,.9],V09.2) <sup>4</sup>	5,041	8,201	2,480	11	276	–	48	105	741	166	83	274	336	41	13	183	2,257	82	1,105
Other . . . . .(V80[.3–.5],V81.1,V82.1) <sup>4</sup>	16	28	9	2	3	–	1	–	1	–	–	1	–	1	–	–	7	1	2
Unspecified . . . . .(V87[.0–.8],V89.2) <sup>4</sup>	13,961	22,354	6,631	21	1,191	3	176	294	3,298	559	136	723	774	122	29	253	4,766	639	2,739
Pedal cyclist, other . . . . .(V10–V11,V12–V14[.0–.2],V15–V18,V19[.0–.3,.8,.9]) <sup>4</sup>	217	362	214	1	21	–	6	5	20	8	3	6	7	4	2	4	32	3	26
Pedestrian, other . . . . .(V01,V02–V04[.0],V05,V06,V09[.0,.1,.3,.9]) <sup>4</sup>	1,050	1,732	516	–	46	–	6	13	163	48	16	64	87	7	1	41	404	48	272

See footnotes at end of table.

**Table 25. Total number of injury deaths by mechanism and intent of death and total mentions of body regions affected as classified in the ICD-10 mortality diagnosis matrix: United States, 2002—Con.**

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total injury deaths	Total mentions of injury	Traumatic brain injury	Other head <sup>1</sup>	Neck	Head and neck	Spinal cord	Vertebral column	Thorax	Abdomen	Pelvis and lower back	Abdomen, lower back and pelvis	Other trunk	Upper extremity	Hip	Other lower extremity	Multiple body regions	System wide	Unspecified
Other land transport . . . (V20–V28 [.0–.2],V29–V79[.0–.3],V80[.0–.2, .6–.9],V81–V82[.0,.2–.9],V83–V86 [.4–.9],V87.9,V88[.0–.9],V89 [.0,.1,.3,.9],X82,Y03,Y32)	1,333	2,155	776	3	121	–	10	38	294	51	10	73	53	12	7	23	264	149	271
Unintentional . . . . . (V20–V28 [.0–.2],V29–V79[.0–.3],V80 (.0–.2,.6–.9),V81–V82[.0,.2–.9], V83–V86[.4–.9],V87.9, V88[.0–.9],V89[.0,.1,.3,.9])	1,134	1,832	702	2	107	–	10	31	246	42	7	61	42	12	7	19	189	125	230
Suicide . . . . . (X82)	112	191	40	–	11	–	–	6	29	2	1	6	9	–	–	1	43	14	29
Homicide . . . . . (Y03)	60	97	26	1	3	–	–	1	16	4	2	3	2	–	–	3	24	7	5
Undetermined . . . . . (Y32)	27	35	8	–	–	–	–	–	3	3	–	3	–	–	–	–	8	3	7
Other transport . . . . . (*U01.1, V90–V99,Y36.1) <sup>2</sup>	1,274	1,866	275	2	46	–	5	20	155	25	4	52	58	7	–	13	347	539	318
Unintentional . . . . . (V90–V99)	1,273	1,864	273	2	46	–	5	20	155	25	4	52	58	7	–	13	347	539	318
Homicide . . . . . (*U01.1) <sup>2</sup>	1	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Legal intervention/war . . . (Y36.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Natural/environmental . . . (W42–W43, W53–W64,W92–W99,X20–X39, X51–X57) <sup>4</sup>	1,554	2,076	90	3	14	–	2	2	57	17	4	19	10	3	4	6	29	1,720	96
Overexertion . . . . . (X50) <sup>4</sup>	10	12	2	–	–	–	–	–	–	–	–	–	–	–	–	3	–	6	1
Poisoning . . . . . (*U01[.6–.7],X40–X49, X60–X69,X85–X90,Y10–Y19,Y35.2)	26,435	46,554	143	6	16	5	16	6	31	25	2	6	205	24	5	26	28	45,848	162
Unintentional . . . . . (X40–X49)	17,550	31,775	113	2	4	2	12	5	24	20	1	5	168	9	5	21	20	31,252	112
Suicide . . . . . (X60–X69)	5,486	9,391	8	4	8	2	3	1	3	4	1	–	27	13	–	2	5	9,273	37
Homicide . . . . . (*U01[.6–.7], X85–X90)	63	93	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	89	3
Undetermined . . . . . (Y10–Y19)	3,336	5,295	22	–	4	1	1	–	4	1	–	1	10	2	–	3	2	5,234	10
Legal intervention/war . . . (Y35.2)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Struck by or against . . . (W20–W22, W50–W52,X79,Y00,Y04,Y29,Y35.3)	1,182	2,095	876	5	96	–	18	17	311	34	13	59	48	13	13	40	131	163	258
Unintentional . . . . . (W20–W22, W50–W52)	890	1,587	559	1	63	–	18	16	289	29	13	51	44	11	9	36	103	141	204
Suicide . . . . . (X79)	3	6	2	–	3	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Homicide . . . . . (Y00,Y04)	287	497	311	4	30	–	–	1	22	5	–	8	4	2	4	4	28	22	52
Undetermined . . . . . (Y29)	2	5	4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Legal intervention/war . . . (Y35.3)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Suffocation . . . . . (W75–W84, X70,X91,Y20)	12,791	13,780	138	10	211	–	10	10	94	43	3	14	4,120	14	18	3	25	8,913	154
Unintentional . . . . . (W75–W84)	5,517	5,943	52	3	81	–	8	5	71	37	2	8	4,095	3	18	1	7	1,519	33
Suicide . . . . . (X70)	6,462	6,747	10	5	72	–	2	3	5	4	1	–	9	8	–	1	–	6,570	57
Homicide . . . . . (X91)	679	947	74	2	54	–	–	2	16	2	–	6	15	3	–	1	17	693	62
Undetermined . . . . . (Y20)	133	143	2	–	4	–	–	–	2	–	–	–	1	–	–	–	1	131	2

See footnotes at end of table.

**Table 25. Total number of injury deaths by mechanism and intent of death and total mentions of body regions affected as classified in the ICD-10 mortality diagnosis matrix: United States, 2002—Con.**

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total injury deaths	Total mentions of injury	Traumatic brain injury	Other head <sup>1</sup>	Neck	Head and neck	Spinal cord	Vertebral column	Thorax	Abdomen	Pelvis and lower back	Abdomen, lower back and pelvis	Other trunk	Upper extremity	Hip	Other lower extremity	Multiple body regions	System wide	Unspecified
Other specified, classifiable . . (*U01 [0,2,5],*U03.0,W23,W35-W41, W44,W49,W85-W91,X75,X81,X96, Y02,Y05-Y07,Y25,Y31,Y35[1,5], Y36[0,2,4-8],Y85) <sup>2</sup>	2,073	3,008	691	10	55	1	190	39	125	44	16	70	102	27	-	54	382	744	458
Unintentional . . . . . (W23,W35-W41,W44,W49,W85-W91,Y85)	1,398	1,872	376	2	21	1	187	33	75	19	7	31	61	23	-	48	174	498	316
Suicide . . . . . (*U03.0,X75,X81) <sup>2</sup>	315	516	121	1	25	-	-	4	33	14	7	15	33	-	-	3	166	2	92
Homicide . . . . . (*U01[0,2,5],X96, Y02,Y05-Y07)	267	522	180	7	8	-	2	2	13	10	1	19	6	4	-	1	32	201	36
Undetermined . . . . . (Y25,Y31)	26	52	14	-	1	-	1	-	4	1	1	5	2	-	-	2	10	-	11
Legal intervention/war . . . . . (Y35 [1,5],Y36[0,2,4-8])	67	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43	3
Other specified, not elsewhere classified . . (*U01.8,*U02,X58,X83, Y08,Y33,Y35.6,Y86-Y87,Y89[0-1])	2,066	3,076	1,150	16	59	2	227	94	70	25	6	33	102	24	18	204	328	248	470
Unintentional . . . . . (X58,Y86)	1,046	1,373	432	9	7	-	161	77	18	1	2	10	58	9	10	195	95	74	215
Suicide . . . . . (X83,Y87.0)	200	298	94	-	10	-	3	3	6	3	-	3	16	3	2	1	45	56	53
Homicide . . . . . (*U01.8, *U02,Y08,Y87.1)	623	1,105	512	6	39	1	51	11	34	16	2	16	19	8	2	3	166	64	155
Undetermined . . . . . (Y33,Y87.2)	163	248	99	1	2	1	8	3	12	5	2	4	8	3	4	3	16	43	34
Legal intervention/war . . . . . (Y35.6, Y89[0,1])	34	52	13	-	1	-	4	-	-	-	-	-	1	1	-	2	6	11	13
Unspecified . . . . . (*U01.9,*U03.9,X59, X84,Y09,Y34,Y35.7,Y36.9,Y89.9)	8,656	11,774	3,769	38	380	2	182	248	653	289	260	228	240	215	2,635	639	446	506	1,044
Unintentional . . . . . (X59)	6,550	8,096	1,883	24	206	1	167	225	470	206	252	116	121	171	2,623	621	191	311	508
Suicide . . . . . (*U03.9,X84)	145	213	47	-	13	1	1	1	5	1	-	2	8	26	1	3	34	27	43
Homicide . . . . . (*U01.9,Y09)	1,533	2,723	1,422	8	147	-	10	12	133	57	3	88	77	14	3	10	177	144	418
Undetermined . . . . . (Y34,Y89.9)	425	739	416	6	14	-	4	10	45	25	5	22	34	4	8	5	44	24	73
Legal intervention/war . . . . . (Y35.7, Y36.9)	3	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2

- Quantity zero.  
<sup>1</sup>"Other head" includes face and eye injuries in addition to injuries to other parts of the head other than TBI.  
<sup>2</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."  
<sup>3</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.  
<sup>4</sup>Intent of death is unintentional.

**Table 26. Total number of injury deaths by mechanism and intent of death and total mentions of nature of injury as classified in ICD-10 mortality diagnosis matrix: United States, 2002**

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total injury deaths	Total mentions of injury	Fracture	Dislocation	Internal organ injury	Open wound	Amputation	Blood vessel	Superficial and contusion	Crushing	Burn	Foreign body <sup>1</sup>	Other effects of external causes	Poisoning	Toxic effects	Multiple injuries	Other specified <sup>2</sup> injury	Unspecified injury
All injury . . . . . (*U01-U03,V01-Y36, Y85-Y87,Y89) <sup>3</sup>	161,269	247,195	20,665	528	26,254	42,295	177	2,475	688	925	3,212	4,730	18,076	41,323	8,709	2,216	4,872	70,050
Unintentional . . . . . (V01-X59, Y85-Y86)	106,742	163,997	19,564	507	19,868	1,899	141	1,466	591	898	2,801	4,625	9,381	28,780	6,043	1,915	3,622	61,896
Suicide . . . . . (*U03,X60-X84, Y87.0) <sup>3</sup>	31,655	45,181	555	8	2,664	21,214	24	206	22	13	188	47	7,014	7,419	2,131	73	440	3,163
Homicide . . . . . (*U01-U02, X85-Y09,Y87.1) <sup>3</sup>	17,638	29,877	418	9	3,266	18,482	8	771	58	9	154	42	1,202	117	152	208	728	4,253
Undetermined . . . . . (Y10-Y34, Y87.2,Y89.9)	4,830	7,523	128	4	379	305	4	14	17	5	68	15	468	4,962	383	17	64	690
Legal intervention/ war . . . . . (Y35-Y36,Y89[.0,.1])	404	617	-	-	77	395	-	18	-	-	1	1	11	45	-	3	18	48
Cut/pierce . . . . . (W25-W29, W45,X78,X99,Y28,Y35.4)	2,762	6,492	24	1	353	4,657	5	297	6	-	17	10	53	22	6	18	227	796
Unintentional . . . . . (W25-W29,W45)	109	183	9	1	17	47	1	26	1	-	4	1	18	1	1	3	4	49
Suicide . . . . . (X78)	566	1,234	1	-	29	851	1	77	-	-	2	3	5	20	2	1	45	197
Homicide . . . . . (X99)	2,074	5,053	14	-	307	3,742	3	193	5	-	11	6	30	1	3	14	178	546
Undetermined . . . . . (Y28)	13	22	-	-	-	17	-	1	-	-	-	-	-	-	-	-	-	4
Legal intervention/war . . . . . (Y35.4)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drowning . . . . . (W65-W74,X71, X92,Y21)	4,146	4,642	17	-	41	21	-	-	8	-	3	17	4,201	159	30	2	10	133
Unintentional . . . . . (W65-W74)	3,447	3,749	12	-	28	8	-	-	4	-	3	12	3,489	83	20	-	7	83
Suicide . . . . . (X71)	368	484	4	-	8	10	-	-	1	-	-	1	376	51	6	1	2	24
Homicide . . . . . (X92)	72	110	-	-	5	2	-	-	3	-	-	1	77	2	-	-	1	19
Undetermined . . . . . (Y21)	259	299	1	-	-	1	-	-	-	-	-	3	259	23	4	1	-	7
Fall . . . . . (W00-W19,X80, Y01,Y30)	17,116	25,005	7,355	61	7,448	158	4	88	146	14	18	79	292	55	9	82	583	8,613
Unintentional . . . . . (W00-W19)	16,257	23,453	7,202	57	7,252	135	4	73	144	11	17	79	249	46	8	70	480	7,626
Suicide . . . . . (X80)	740	1,356	125	4	161	22	-	15	2	1	1	-	39	4	-	11	94	877
Homicide . . . . . (Y01)	16	32	9	-	5	-	-	-	-	1	-	-	1	-	-	-	1	15
Undetermined . . . . . (Y30)	103	164	19	-	30	1	-	-	-	1	-	-	3	5	1	1	8	95
Fire/hot object or substance . . . . . (*U01.3,X00-X19, X76-X77,X97-X98,Y26-Y27, Y36.3) <sup>4</sup>	3,645	5,349	12	-	26	12	-	-	-	-	2,089	5	36	36	3,009	1	24	99
Unintentional . . . . . (X00-X19)	3,261	4,773	10	-	24	6	-	-	-	-	1,820	5	32	29	2,746	1	20	80
Suicide . . . . . (X76-X77)	150	219	-	-	-	-	-	-	-	-	145	-	2	2	65	-	1	4
Homicide . . . . . (*U01.3,X97-X98)	134	211	2	-	2	5	-	-	-	-	74	-	2	1	113	-	2	10
Undetermined . . . . . (Y26-Y27)	100	146	-	-	-	1	-	-	-	-	50	-	-	4	85	-	1	5
Legal intervention/war . . . . . (Y36.3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire/flame . . . . . (X00-X09, X76,X97,Y26)	3,539	5,187	12	-	22	12	-	-	-	-	1,948	5	32	33	3,005	1	20	97
Unintentional . . . . . (X00-X09)	3,159	4,616	10	-	20	6	-	-	-	-	1,682	5	29	26	2,742	1	16	79
Suicide . . . . . (X76)	150	219	-	-	-	-	-	-	-	-	145	-	2	2	65	-	1	4
Homicide . . . . . (X97)	131	206	2	-	2	5	-	-	-	-	71	-	1	1	113	-	2	9
Undetermined . . . . . (Y26)	99	146	-	-	-	1	-	-	-	-	50	-	-	4	85	-	1	5

See footnotes at end of table.

**Table 26. Total number of injury deaths by mechanism and intent of death and total mentions of nature of injury as classified in ICD-10 mortality diagnosis matrix: United States, 2002—Con.**

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total injury deaths	Total mentions of injury	Fracture	Dislocation	Internal organ injury	Open wound	Amputation	Blood vessel	Superficial and contusion	Crushing	Burn	Foreign body <sup>1</sup>	Other effects of external causes	Poisoning	Toxic effects	Multiple injuries	Other specified <sup>2</sup> injury	Unspecified injury
Hot object/substance . . . . .(X10–X19,X77,X98,Y27)	106	162	–	–	4	–	–	–	–	–	141	–	4	3	4	–	4	2
Unintentional . . . . .(X10–X19)	102	157	–	–	4	–	–	–	–	–	138	–	3	3	4	–	4	1
Suicide . . . . .(X77)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Homicide . . . . .(X98)	3	5	–	–	–	–	–	–	–	–	3	–	1	–	–	–	–	1
Undetermined . . . . .(Y27)	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Firearm . . . . .(*U01.4,W32–W34,X72–X74,X93–X95,Y22–Y24,Y35.0)	30,242	45,012	432	1	4,658	36,050	4	691	27	1	33	23	40	47	20	63	631	2,291
Unintentional . . . . .(W32–W34)	762	1,110	10	–	132	811	–	29	–	1	–	4	3	1	–	–	31	88
Suicide . . . . .(X72–X74)	17,108	24,526	303	–	2,334	20,197	1	92	13	–	5	7	20	28	13	29	219	1,265
Homicide . . . . .(*U01.4,X93–X95)	11,829	18,485	116	1	2,081	14,378	3	543	10	–	28	10	14	14	7	33	365	882
Undetermined . . . . .(Y22–Y24)	243	375	3	–	44	270	–	9	4	–	–	1	1	3	–	–	5	35
Legal intervention/war . . . . .(Y35.0)	300	516	–	–	67	394	–	18	–	–	–	1	2	1	–	1	11	21
Machinery . . . . .(W24,W30–W31) <sup>5</sup>	652	1,143	99	2	99	15	8	11	1	97	12	2	102	–	2	96	50	547
All transport . . . . .(*U01.1,V01–V99,X82,Y03,Y32,Y36.1) <sup>3</sup>	47,939	77,177	7,487	412	9,518	509	124	1,194	268	622	678	76	1,674	120	361	1,574	2,386	50,174
Unintentional . . . . .(V01–V99)	47,739	76,852	7,452	410	9,481	508	121	1,190	267	617	673	76	1,661	117	354	1,571	2,379	49,975
Suicide . . . . .(X82)	112	191	18	2	15	–	3	4	–	3	4	–	8	2	4	1	4	123
Homicide . . . . .(*U01.1,Y03) <sup>3</sup>	61	99	16	–	17	1	–	–	1	2	1	–	4	–	2	2	3	50
Undetermined . . . . .(Y32)	27	35	1	–	5	–	–	–	–	–	–	–	1	1	1	–	–	26
Legal intervention/war . . . . .(Y36.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Motor vehicle traffic . . . . .(V02–V04[.1,.9],V09.2,V12–V14[.3–.9],V19[.4–.6],V20–V28[.3–.9],V29–V79[.4–.9],V80[.3–.5],V81.1,V82.1,V83–V86[.0–.3],V87[.0–.8],V89.2) <sup>5</sup>	44,065	71,062	6,972	385	8,811	446	96	1,112	251	501	580	74	1,035	108	306	1,460	2,228	46,697
Occupant . . . . .(V30–V79[.4–.9],V83–V86[.0–.3]) <sup>5</sup>	21,344	34,390	3,377	172	4,213	204	36	530	115	286	382	42	617	60	201	726	904	22,525
Motorcyclist . . . . .(V20–V28[.3–.9],V29[.4–.9]) <sup>5</sup>	3,153	5,190	519	19	732	50	16	77	22	21	7	3	13	9	–	97	172	3,433
Pedal cyclist . . . . .(V12–V14[.3–.9],V19[.4–.6]) <sup>5</sup>	550	899	92	9	144	6	–	7	3	9	–	2	1	–	–	8	25	593
Pedestrian . . . . .(V02–V04[.1,.9],V09.2) <sup>5</sup>	5,041	8,201	830	48	1,019	43	12	93	23	73	3	5	31	12	2	133	267	5,607
Other . . . . .(V80[.3–.5],V81.1,V82.1) <sup>5</sup>	16	28	3	–	4	–	–	–	4	1	–	–	–	–	–	–	2	14
Unspecified . . . . .(V87[.0–.8],V89.2) <sup>5</sup>	13,961	22,354	2,151	137	2,699	143	32	405	84	111	188	22	373	27	103	496	858	14,525
Pedal cyclist, other . . . . .(V10–V11,V12–V14[.0–.2],V15–V18,V19[.0–.3,.8,.9]) <sup>5</sup>	217	362	47	1	87	1	–	5	2	1	–	–	2	–	–	–	6	210
Pedestrian, other . . . . .(V01,V02–V04[.0],V05,V06,V09[.0,.1,.3,.9]) <sup>5</sup>	1,050	1,732	143	5	204	22	19	13	3	72	1	1	29	7	1	55	40	1,117

See footnotes at end of table.

**Table 26. Total number of injury deaths by mechanism and intent of death and total mentions of nature of injury as classified in ICD-10 mortality diagnosis matrix: United States, 2002—Con.**

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total injury deaths	Total mentions of injury	Fracture	Dislocation	Internal organ injury	Open wound	Amputation	Blood vessel	Superficial and contusion	Crushing	Burn	Foreign body <sup>1</sup>	Other effects of external causes	Poisoning	Toxic effects	Multiple injuries	Other specified <sup>2</sup> injury	Unspecified injury
Other land transport . . . (V20–V28 [.0–.2],V29–V79[.0–.3],V80[.0–.2, .6–.9],V81–V82[.0,.2–.9],V83–V86 [.4–.9],V87.9,V88[.0–.9],V89 [.0,.1,.3,.9],X82,Y03,Y32)	1,333	2,155	228	14	300	14	5	32	6	42	33	1	116	3	17	45	70	1,229
Unintentional . . . . . (V20–V28 [.0–.2],V29–V79[.0–.3],V80 (.0–.2,.6–.9),V81–V82[.0,.2–.9], V83–V86[.4–.9],V87.9, V88[.0–.9],V89[.0,.1,.3,.9])	1,134	1,832	193	12	264	13	2	28	5	37	28	1	103	–	10	42	63	1,031
Suicide . . . . . (X82)	112	191	18	2	15	–	3	4	–	3	4	–	8	2	4	1	4	123
Homicide . . . . . (Y03)	60	97	16	–	16	1	–	–	1	2	1	–	4	–	2	2	3	49
Undetermined . . . . . (Y32)	27	35	1	–	5	–	–	–	–	–	–	–	1	1	1	–	–	26
Other transport . . . . . (*U01.1, V90–V99,Y36.1) <sup>3</sup>	1,274	1,866	97	7	116	26	4	32	6	6	64	–	492	2	37	14	42	921
Unintentional . . . . . (V90–V99)	1,273	1,864	97	7	115	26	4	32	6	6	64	–	492	2	37	14	42	920
Homicide . . . . . (*U01.1) <sup>3</sup>	1	2	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	1
Legal intervention/war . . (Y36.1)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Natural/environmental . . (W42–W43, W53–W64,W92–W99,X20–X39, X51–X57) <sup>5</sup>	1,554	2,076	27	–	57	24	–	6	12	4	15	4	1,594	30	84	10	26	183
Overexertion . . . . . (X50) <sup>5</sup>	10	12	–	–	1	–	–	–	–	–	–	–	6	–	–	–	2	3
Poisoning . . . (*U01[.6–.7],X40–X49, X60–X69,X85–X90,Y10–Y19,Y35.2)	26,435	46,554	37	–	155	44	5	4	9	1	108	194	244	40,482	5,104	3	31	133
Unintentional . . . . . (X40–X49)	17,550	31,775	30	–	129	10	3	4	8	1	76	161	131	28,330	2,780	2	20	90
Suicide . . . . . (X60–X69)	5,486	9,391	3	–	10	27	2	–	–	–	25	25	70	7,185	2,015	1	6	22
Homicide (*U01[.6–.7],X85–X90)	63	93	–	–	–	2	–	–	–	–	1	–	2	65	21	–	1	1
Undetermined . . . . . (Y10–Y19)	3,336	5,295	4	–	16	5	–	–	–	–	6	8	41	4,902	288	–	4	20
Legal intervention/war . . (Y35.2)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Struck by or against . . (W20–W22, W50–W52,X79,Y00,Y04,Y29,Y35.3)	1,182	2,095	206	4	323	52	1	24	6	113	3	1	146	6	–	98	71	1,041
Unintentional . . . . . (W20–W22, W50–W52)	890	1,587	183	3	229	16	1	20	4	113	2	–	130	2	–	86	58	740
Suicide . . . . . (X79)	3	6	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–	4
Homicide . . . . . (Y00,Y04)	287	497	23	1	92	34	–	4	2	–	1	1	16	4	–	11	13	295
Undetermined . . . . . (Y29)	2	5	–	–	2	–	–	–	–	–	–	–	–	–	–	1	–	2
Legal intervention/war . . (Y35.3)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Suffocation . . . . . (W75–W84, X70,X91,Y20)	12,791	13,780	81	1	106	74	3	12	12	3	14	4,170	8,698	181	23	15	66	321
Unintentional . . . . . (W75–W84)	5,517	5,943	39	–	91	9	–	7	3	1	1	4,153	1,441	61	8	6	27	96
Suicide . . . . . (X70)	6,462	6,747	30	1	6	20	2	5	5	2	–	11	6,450	105	13	1	18	78
Homicide . . . . . (X91)	679	947	10	–	9	45	1	–	4	–	13	5	680	11	2	8	19	140
Undetermined . . . . . (Y20)	133	143	2	–	–	–	–	–	–	–	–	1	127	4	–	–	2	7

See footnotes at end of table.

**Table 26. Total number of injury deaths by mechanism and intent of death and total mentions of nature of injury as classified in ICD-10 mortality diagnosis matrix: United States, 2002—Con.**

Mechanism and intent of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total injury deaths	Total mentions of injury	Fracture	Dislocation	Internal organ injury	Open wound	Amputation	Blood vessel	Superficial and contusion	Crushing	Burn	Foreign body <sup>1</sup>	Other effects of external causes	Poisoning	Toxic effects	Multiple injuries	Other specified <sup>2</sup>	Unspecified injury
Other specified, classifiable . . . (*U01[.0,.2,.5],*U03.0,W23,W35-W41, W44,W49,W85-W91,X75,X81,X96, Y02,Y05-Y07,Y25,Y31,Y35[.1,.5], Y36[.0,.2,.4-8],Y85) <sup>3</sup>	2,073	3,008	166	1	491	60	16	18	10	43	154	35	667	51	17	47	112	1,120
Unintentional . . . . . (W23,W35-W41,W44,W49,W85-W91,Y85)	1,398	1,872	89	1	348	45	-	14	2	37	150	34	465	9	16	24	82	556
Suicide . . . (*U03.0,X75,X81) <sup>5</sup>	315	516	46	-	55	7	12	3	-	3	2	-	1	-	1	19	18	349
Homicide . . (*U01[.0,.2,.5],X96, Y02,Y05-Y07)	267	522	24	-	81	8	-	1	7	-	2	1	199	1	-	3	11	184
Undetermined . . . . . (Y25,Y31)	26	52	7	-	7	-	4	-	1	3	-	-	-	-	-	1	1	28
Legal intervention/war . . . (Y35[.1,.5],Y36[.0,.2,.4-8])	67	46	-	-	-	-	-	-	-	-	-	-	2	41	-	-	-	3
Other specified, not elsewhere classified . . (*U01.8,*U02,X58,X83, Y08,Y33,Y35.6,Y86-Y87,Y89[.0-.1])	2,066	3,076	375	6	696	167	1	14	21	3	39	41	133	68	33	101	165	1,213
Unintentional . . . . . (X58,Y86)	1,046	1,373	297	-	398	19	-	1	11	-	17	34	10	39	17	10	80	440
Suicide . . . . . (X83,Y87.0)	200	298	14	1	30	33	1	3	1	-	3	-	32	9	12	9	22	128
Homicide . . . . . (*U01.8, *U02,Y08,Y87.1)	623	1,105	47	5	206	110	-	8	7	2	12	6	54	7	1	75	49	516
Undetermined . . . . . (Y33,Y87.2)	163	248	17	-	53	4	-	2	2	1	6	1	30	10	3	5	7	107
Legal intervention/war . . (Y35.6, Y89[.0,.1])	34	52	-	-	9	1	-	-	-	-	1	-	7	3	-	2	7	22
Unspecified . . . (*U01.9,*U03.9,X59, X84,Y09,Y34,Y35.7,Y36.9,Y89.9)	8,656	11,774	4,347	39	2,282	452	6	116	162	24	29	73	190	66	11	106	488	3,383
Unintentional . . . . . (X59)	6,550	8,096	4,105	33	1,582	246	3	85	134	16	11	60	50	32	7	36	356	1,340
Suicide . . . . . (*U03.9,X84)	145	213	11	-	16	45	2	7	-	4	1	-	11	13	-	-	11	92
Homicide . . . . . (*U01.9,Y09)	1,533	2,723	157	2	461	155	1	22	19	4	11	12	123	11	3	62	85	1,595
Undetermined . . . . . (Y34,Y89.9)	425	739	74	4	222	6	-	2	9	-	6	1	6	10	1	8	36	354
Legal intervention/war . . (Y35.7, Y36.9)	3	3	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2

- Quantity zero.

<sup>1</sup>Effect of foreign bodies entering orifice.

<sup>2</sup>"Other specified" includes injuries to nerves, sprains, and strains, and muscle and tendon injuries that were too few to enumerate separately in addition to other specified injuries (see Table II for all included codes).

<sup>3</sup>Figures include September 11, 2001-related deaths for which death certificates were filed as of October 24, 2002; see "Technical Notes."

<sup>4</sup>Codes \*U01.3 and Y36.3 cannot be divided separately into the subcategories shown below; therefore, subcategories may not add to the total.

<sup>5</sup>Intent of death is unintentional.



**Table 27. Number of deaths with any mention and total mentions of specified poisoning or toxic effects by intent of death: United States, 2002**

Poisoning and toxic effect substances	Intent of death							
	Any mention				Total mentions			
	All intents <sup>1</sup>	Unintentional	Suicide	Undetermined intent	All intents <sup>1</sup>	Unintentional	Suicide	Undetermined intent
All poisonings and toxic effects . . . . . (T36–T65, T96–T97)	30,050	20,613	5,739	3,454	50,032	34,823	9,550	5,345
Poisoning by drugs, medicaments, and biological substances . . . . . (T36–T50, T96)	24,283	16,789	4,116	3,260	41,323	28,780	7,419	4,962
Antibiotics, anti-infectives, and antiparasitics . . . . . (T36–37)	36	28	5	3	36	28	5	3
Hormones and their synthetic substitutes and antagonists, not elsewhere classified . . . . . (T38)	98	24	62	8	98	24	62	8
Non-opioid analgesics, antipyretics, and antirheumatics . . . . . (T39)	998	438	460	97	1,041	450	487	101
Salicylates (aspirin) . . . . . (T39.0)	159	37	112	9	159	37	112	9
4-Aminophenol derivatives (acetaminophen/paracetamol) . . . . . (T39.1)	640	273	306	60	640	273	306	60
Other non-opioid analgesics, antipyretics, and antirheumatics . . . . . (T39.2–T39.9)	240	138	69	32	242	140	69	32
Narcotics and psychodysleptics . . . . . (T40)	14,468	10,958	1,232	2,226	18,240	14,081	1,411	2,692
Heroin . . . . . (T40.1)	2,101	1,950	34	115	2,101	1,950	34	115
Other specified opioids . . . . . (T40.0, T40.2)	4,484	3,303	651	515	4,484	3,303	651	515
Methadone . . . . . (T40.3)	2,376	1,924	151	295	2,376	1,924	151	295
Cocaine . . . . . (T40.5)	4,737	3,988	142	584	4,737	3,988	142	584
Other and unspecified narcotics and psychodysleptics . . . . . (T40.4, T40.6–T40.9)	4,496	2,882	429	1,175	4,542	2,916	433	1,183
Anesthetics and therapeutic gases . . . . . (T41)	201	143	18	28	202	143	19	28
Antiepileptic, sedative-hypnotic, and antiparkinsonism drugs . . . . . (T42)	2,845	1,772	764	307	3,129	1,934	857	336
Barbiturates . . . . . (T42.3)	289	126	132	30	289	126	132	30
Benzodiazepines . . . . . (T42.4)	2,079	1,416	437	225	2,079	1,416	437	225
Other antiepileptic, sedative-hypnotic, and antiparkinsonism drugs . . . . . (T42.0–T42.2, T42.5–T42.8)	733	377	277	79	761	392	288	81
Psychotropic drugs, not elsewhere classified . . . . . (T43)	3,826	2,235	1,136	439	4,371	2,535	1,315	505
Antidepressants . . . . . (T43.0–T43.2)	2,422	1,171	939	308	2,629	1,274	1,011	340
Other psychotropic drugs, not elsewhere classified . . . . . (T43.3–T43.9)	1,707	1,239	293	163	1,742	1,261	304	165
Other specified and unspecified drugs, medicaments, and biological substances . . . . . (T44–T50)	13,467	9,217	2,961	1,235	14,145	9,535	3,258	1,284
Sequelae of poisoning by drugs, medicaments, and biological substances . . . . . (T96)	61	50	5	5	61	50	5	5
Toxic effects of substances chiefly nonmedicinal as to source . . . . . (T51–T65, T97)	7,801	5,337	1,993	343	8,709	6,043	2,131	383
Alcohol . . . . . (T51)	2,219	1,767	301	151	2,382	1,899	322	161
Ethanol . . . . . (T51.0)	1,448	1,175	193	80	1,448	1,175	193	80
Other and unspecified alcohol . . . . . (T51.1–T51.9)	932	722	129	81	934	724	129	81
Organic solvents . . . . . (T52)	146	56	72	17	151	60	73	17
Soaps and detergents . . . . . (T55)	1	1	–	–	1	1	–	–
Metals . . . . . (T56)	42	27	10	5	42	27	10	5
Lead . . . . . (T56.0)	1	1	–	–	1	1	–	–
Mercury . . . . . (T56.1)	–	–	–	–	–	–	–	–
Other and unspecified metals . . . . . (T56.2–T56.9)	41	26	10	5	41	26	10	5
Carbon monoxide . . . . . (T58)	2,660	1,141	1,393	83	2,660	1,141	1,393	83
Other gases, fumes, and vapors . . . . . (T59)	2,921	2,576	169	78	3,006	2,653	171	80
Pesticides . . . . . (T60)	30	8	18	3	32	8	20	3
Insecticides . . . . . (T60.0–T60.2)	7	1	4	2	7	1	4	2
Herbicides and fungicides . . . . . (T60.3)	6	2	4	–	6	2	4	–
Other and unspecified pesticides . . . . . (T60.4–T60.9)	19	5	12	1	19	5	12	1
Noxious substances eaten as seafood and other foods . . . . . (T61–T62)	8	6	2	–	8	6	2	–
Contact with venomous animals . . . . . (T63)	79	78	1	–	79	78	1	–
Other specified and unspecified substances . . . . . (T53–T54, T57, T64–T65)	307	148	124	30	323	150	135	33
Sequelae of toxic effects . . . . . (T97)	25	20	4	1	25	20	4	1

–Quantity zero. <sup>1</sup>Includes intent categories homicide and legal intervention.

**Table 28. Deaths due to natural underlying causes with any mention of external cause of injury, 2002**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Natural causes of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total deaths	Unintentional											Undetermined intent (Y10–Y34, Y87.2, Y89.9)		
		All injury (*U01–*U03, Y85–Y87, Y89)	Total (V01–X59, Y85–Y86)	Drowning (W65–W74)	Fall (W00–W19)	Fire/hot object or substance (X00–X09)	Firearms (W32–W34)	Motor vehicle traffic <sup>1</sup>	Poisoning (X40–X49)	Suffocation (W75–W84)	Other unintentional injuries			Suicide (*U03, X60–X84, Y87.0)	Homicide (*U01–*U02, X85–Y09, Y87.1)
											Exposure to unspecified factor (X59)	Other and unspecified unintentional injuries			
All natural causes . . . . .	2,279,275	36,884	36,223	104	4,525	144	38	717	2,434	16,274	10,789	1,558	153	143	332
Salmonella infections . . . . . (A01–A02)	21	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Shigellosis and amebiasis . . . . . (A03,A06)	8	1	1	–	–	–	–	–	–	1	–	–	–	–	–
Certain other intestinal infections . . . . . (A04,A07–A09)	2,465	96	95	–	12	1	–	3	2	24	50	4	–	–	1
Tuberculosis . . . . . (A16–A19)	784	12	12	–	1	–	–	1	3	5	1	1	–	–	–
Respiratory tuberculosis . . . . . (A16)	626	9	9	–	–	–	–	1	3	4	1	–	–	–	–
Other tuberculosis . . . . . (A17–A19)	158	3	3	–	1	–	–	–	–	1	–	1	–	–	–
Whooping cough . . . . . (A37)	18	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Scarlet fever and erysipelas . . . . . (A38,A46)	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Meningococcal infection . . . . . (A39)	161	3	3	–	–	–	–	1	1	–	1	–	–	–	–
Septicemia . . . . . (A40–A41)	33,865	411	403	–	38	–	1	17	18	133	174	22	4	1	2
Syphilis . . . . . (A50–A53)	41	1	1	–	–	–	–	–	–	1	–	–	–	–	–
Acute poliomyelitis . . . . . (A80)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Arthropod-borne viral encephalitis . . . . . (A83–A84,A85.2)	9	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Measles . . . . . (B05)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Viral hepatitis . . . . . (B15–B19)	5,793	52	47	–	7	–	–	–	10	11	15	4	–	1	2
Human immunodeficiency virus (HIV) disease . . . . . (B20–B24)	14,095	61	60	–	4	–	1	1	11	24	9	10	–	–	1
Malaria . . . . . (B50–B54)	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Other and unspecified infectious and parasitic diseases and their sequelae . . . . . (A00,A05,A20–A36, A42–A44,A48–A49,A54–A79,A81–A82, A85.0–A85.1,A85.8,A86–B04,B06–B09, B25–B49,B55–B99)	6,707	133	130	1	14	1	1	3	9	49	38	16	–	–	3
Malignant neoplasms . . . . . (C00–C97)	557,271	2,511	2,476	1	218	13	7	20	79	937	1,106	100	15	11	2
Malignant neoplasms of lip, oral cavity, and pharynx . . . . . (C00– C14)	7,737	115	115	–	3	–	1	–	2	94	15	2	–	–	–
Malignant neoplasm of esophagus . . . . . (C15)	12,701	94	93	–	–	–	–	1	–	76	12	5	–	–	1
Malignant neoplasm of stomach . . . . . (C16)	12,198	47	47	–	3	–	–	1	2	29	12	–	–	–	–
Malignant neoplasms of colon, rectum, and anus . . . . . (C18– C21)	56,741	232	228	–	28	–	–	1	5	100	89	5	–	4	–
Malignant neoplasms of liver and intrahepatic bile ducts . . . . . (C22)	14,047	42	42	–	7	–	–	1	3	8	21	2	–	–	–
Malignant neoplasm of pancreas . . . . . (C25)	30,264	83	81	1	5	2	–	2	–	30	38	3	2	–	–
Malignant neoplasm of larynx . . . . . (C32)	3,723	57	56	–	2	1	–	–	1	41	9	2	–	–	–

See footnotes at end of table.

**Table 28. Deaths due to natural underlying causes with any mention of external cause of injury, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Natural causes of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total deaths	Unintentional										Other unintentional injuries		Suicide (*U03, X60–X84, Y87.0)	Homicide (*U01–*U02, X85–Y09, Y87.1)	Undetermined intent (Y10–Y34, Y87.2, Y89.9)
		All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89)	Total (V01–X59, Y85–Y86)	Drowning (W65–W74)	Fall (W00–W19)	Fire/hot object or substance (X00–X09)	Firearms (W32–W34)	Motor vehicle traffic <sup>1</sup>	Poisoning (X40–X49)	Suffocation (W75–W84)	Exposure to unspecified factor (X59)	Other and unspecified unintentional injuries				
Malignant neoplasms of trachea, bronchus, and lung . . . . (C33–C34)	157,713	555	544	–	49	5	2	1	30	170	267	20	7	1	–	
Malignant melanoma of skin . . . (C43)	7,514	26	25	–	–	1	–	–	1	3	16	4	–	–	–	
Malignant neoplasm of breast . . (C50)	41,883	177	174	–	19	–	–	1	2	37	106	9	2	–	1	
Malignant neoplasm of cervix uteri . . . . . (C53)	3,952	10	10	–	1	–	–	–	1	2	5	1	–	–	–	
Malignant neoplasms of corpus uteri and uterus, part unspecified . . . . . (C54–C55)	6,853	21	21	–	–	–	–	–	–	6	15	–	–	–	–	
Malignant neoplasm of ovary . . (C56)	14,682	50	49	–	5	–	1	–	1	17	24	1	1	–	–	
Malignant neoplasm of prostate . . . . . (C61)	30,446	169	167	–	15	–	–	2	3	49	91	7	–	1	–	
Malignant neoplasms of kidney and renal pelvis . . . . . (C64–C65)	12,165	41	41	–	7	1	–	–	2	7	20	4	–	–	–	
Malignant neoplasm of bladder . . (C67)	12,628	67	66	–	5	–	–	1	1	19	35	6	–	–	–	
Malignant neoplasms of meninges, brain, and other parts of central nervous system . . . . . (C70–C72)	12,830	49	47	–	5	–	–	2	2	28	10	–	2	–	–	
Malignant neoplasms of lymphoid, hematopoietic, and related tissue . . . . . (C81–C96)	56,225	316	315	–	39	2	3	3	11	71	177	10	–	1	–	
Hodgkin's disease . . . . . (C81)	1,352	13	13	–	1	–	–	1	7	3	1	–	–	–	–	
Non-Hodgkin's lymphoma . . . . . (C82–C85)	21,910	109	108	–	10	–	–	1	2	34	57	5	–	1	–	
Leukemia . . . . . (C91–C95)	21,498	95	95	–	18	1	1	–	2	18	52	3	–	–	–	
Multiple myeloma and immunoproliferative neoplasms. . . . . (C88,C90)	11,392	98	98	–	10	1	2	1	–	16	66	2	–	–	–	
Other and unspecified malignant neoplasms of lymphoid, hematopoietic, and related tissue . . . . . (C96)	73	1	1	–	–	–	–	–	–	–	1	–	–	–	–	
All other and unspecified malignant neoplasms . . . . . (C17,C23– C24, C26–C31,C37–C41,C44–C49,C51–C52,C57–C60,C62–C63,C66,C68–C69,C73–C80,C97)	62,969	360	355	–	25	1	–	4	12	150	144	19	1	4	–	
In situ neoplasms, benign neoplasms, and neoplasms of uncertain or unknown behavior . . . . . (D00–D48)	13,299	153	150	–	20	–	–	6	5	61	51	8	2	–	–	
Anemias . . . . . (D50–D64)	4,614	64	64	–	10	–	–	1	4	15	26	8	–	–	–	
Diabetes mellitus . . . . . (E10–E14)	73,249	768	755	–	93	8	1	10	43	246	316	45	3	4	6	
Nutritional deficiencies . . . . . (E40–E64)	3,779	123	120	–	14	–	3	3	–	50	48	6	–	1	1	

See footnotes at end of table.

**Table 28. Deaths due to natural underlying causes with any mention of external cause of injury, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Natural causes of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total deaths	Unintentional										Other unintentional injuries		Suicide (*U03, X60–X84, Y87.0)	Homicide (*U01–*U02, X85–Y09, Y87.1)	Undetermined intent (Y10–Y34, Y87.2, Y89.9)
		All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89)	Total (V01–X59, Y85–Y86)	Drowning (W65–W74)	Fall (W00–W19)	Fire/hot object or substance (X00–X09)	Firearms (W32–W34)	Motor vehicle traffic <sup>1</sup>	Poisoning (X40–X49)	Suffocation (W75–W84)	Exposure to unspecified factor (X59)	Other and unspecified unintentional injuries				
Malnutrition . . . . . (E40–E46)	3,510	113	110	–	12	–	3	3	–	44	46	6	–	1	1	
Other nutritional deficiencies . . . . . (E50–E64)	269	10	10	–	2	–	–	–	–	6	2	–	–	–	–	
Meningitis . . . . . (G00,G03)	700	11	11	–	–	–	–	1	2	4	1	4	–	–	–	
Parkinson's disease . . . . . (G20–G21)	16,959	840	839	–	36	–	–	–	2	679	122	11	1	–	–	
Alzheimer's disease . . . . . (G30)	58,866	2,055	2,051	–	159	1	1	2	6	1,219	618	61	–	2	1	
Major cardiovascular diseases . . . . . (I00–I78)	918,628	15,689	15,425	49	2,881	66	15	444	1,207	4,946	5,162	764	55	63	135	
Diseases of heart . . . . . (I00–I09,I11, I13,I20–I51)	696,947	10,192	9,983	45	2,540	57	12	386	1,017	1,352	4,012	617	30	54	117	
Acute rheumatic fever and chronic rheumatic heart diseases (I00–I09)	3,579	52	51	–	6	–	–	3	1	13	25	3	–	–	–	
Hypertensive heart disease . . . (I11)	26,551	648	631	6	183	7	3	21	167	47	152	49	3	5	8	
Hypertensive heart and renal disease . . . . . (I13)	2,895	57	56	–	14	3	–	1	9	4	23	2	–	1	–	
Ischemic heart diseases . . . (I20–I25)	494,382	7,042	6,901	34	1,948	35	8	285	570	823	2,792	443	20	38	79	
Acute myocardial infarction . . . . . (I21–I22)	179,514	1,726	1,705	5	307	8	4	113	111	226	851	89	3	7	10	
Other acute ischemic heart diseases . . . . . (I24)	3,407	50	50	–	4	1	1	1	4	9	26	4	–	–	–	
Other forms of chronic ischemic heart disease . . . . . (I20,I25)	311,461	5,266	5,146	29	1,637	26	3	171	455	588	1,915	350	17	31	69	
Atherosclerotic cardiovascular disease, so described . . (I25.0)	68,129	1,890	1,835	14	824	12	2	88	213	125	372	196	3	15	36	
All other forms of chronic ischemic heart disease . . . . (I20,I25.1–I25.9)	243,332	3,376	3,311	15	813	14	1	83	242	463	1,543	154	14	16	33	
Other heart diseases . . . . . (I26–I51)	169,540	2,393	2,344	5	389	12	1	76	270	465	1,020	120	7	10	30	
Acute and subacute endocarditis . . . . . (I33)	1,154	9	9	–	1	–	–	2	2	2	2	1	–	–	–	
Diseases of pericardium and acute myocarditis . . (I30–I31,I40)	848	9	9	–	1	–	–	–	4	1	2	1	–	–	–	
Heart failure . . . . . (I50)	56,494	657	653	–	122	1	–	10	21	142	335	26	2	1	1	
All other forms of heart disease . . . . (I26–I28,I34–I38,I42–I49,I51)	111,044	1,718	1,673	5	265	11	1	64	243	320	681	92	5	9	29	
Essential (primary) hypertension and hypertensive renal disease . . . . . (I10,I12)	20,261	293	289	1	40	2	–	3	12	45	161	25	1	–	2	
Cerebrovascular diseases . . . (I60–I69)	162,672	4,803	4,759	2	261	7	1	40	128	3,447	821	104	21	8	13	
Atherosclerosis . . . . . (I70)	13,821	182	180	1	20	–	–	4	7	37	103	6	1	–	1	
Other diseases of circulatory system . . . . . (I71–I78)	24,927	219	214	–	20	–	–	11	43	65	65	12	2	1	2	

See footnotes at end of table.

**Table 28. Deaths due to natural underlying causes with any mention of external cause of injury, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Natural causes of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total deaths	Unintentional											Undetermined intent (Y10–Y34, Y87.2, Y89.9)		
		All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89)	Total (V01–X59, Y85–Y86)	Drowning (W65–W74)	Fall (W00–W19)	Fire/hot object or substance (X00–X09)	Firearms (W32–W34)	Motor vehicle traffic <sup>1</sup>	Poisoning (X40–X49)	Suffocation (W75–W84)	Other unintentional injuries			Suicide (*U03, X60–X84, Y87.0)	Homicide (*U01–*U02, X85–Y09, Y87.1)
											Exposure to unspecified factor (X59)	Other and unspecified unintentional injuries			
Aortic aneurysm and dissection . . . . . (I71)	14,818	101	97	–	8	–	–	10	33	23	22	2	1	1	2
Other diseases of arteries, arterioles, and capillaries . . . . . (I72–I78)	10,109	118	117	–	12	–	–	1	10	42	43	10	1	–	–
Other disorders of circulatory system . . . . . (I80–I99)	4,711	95	87	–	18	1	–	7	3	20	29	9	–	1	6
Influenza and pneumonia . . . . . (J10–J18)	65,681	309	303	1	31	2	–	7	23	172	54	14	3	1	2
Influenza . . . . . (J10–J11)	727	12	12	–	1	–	–	–	–	8	2	1	–	–	–
Pneumonia . . . . . (J12–J18)	64,954	297	291	1	30	2	–	7	23	164	52	13	3	1	2
Other acute lower respiratory infections . . . . . (J20–J22)	386	18	18	–	1	–	–	–	3	11	3	–	–	–	–
Acute bronchitis and bronchiolitis . . . . . (J20–J21)	279	13	13	–	1	–	–	–	3	7	2	–	–	–	–
Unspecified acute lower respiratory infection . . . . . (J22)	107	5	5	–	–	–	–	–	–	4	1	–	–	–	–
Chronic lower respiratory diseases . . . . . (J40–J47)	124,816	2,132	2,091	1	294	22	3	43	136	624	874	108	6	7	23
Bronchitis, chronic and unspecified . . . . . (J40–J42)	955	43	41	–	3	–	–	4	3	18	9	5	–	–	2
Emphysema . . . . . (J43)	15,489	183	179	–	22	3	1	6	17	38	88	6	–	1	3
Asthma . . . . . (J45–J46)	4,261	144	133	–	5	2	–	4	55	40	23	5	–	1	10
Other chronic lower respiratory diseases . . . . . (J44, J47)	104,111	1,762	1,738	1	264	17	2	29	61	528	754	92	6	5	8
Pneumoconioses and chemical effects . . . . . (J60–J66, J68)	1,114	26	26	–	1	2	1	–	2	10	8	2	–	1	–
Pneumonitis due to solids and liquids . . . . . (J69)	17,593	2,708	2,706	–	62	1	1	5	13	2,435	263	24	–	1	–
Other diseases of respiratory system . . . . . (J00–J06, J30–J39, J67, J70–J98)	25,039	399	391	1	43	5	–	23	31	170	102	19	2	2	4
Peptic ulcer . . . . . (K25–K28)	4,079	98	96	–	3	–	–	5	4	51	32	2	–	–	1
Diseases of appendix . . . . . (K35–K38)	480	9	9	–	1	–	–	–	1	5	2	–	–	–	–
Hernia . . . . . (K40–K46)	1,595	100	99	–	5	–	–	3	1	76	14	1	–	1	–
Chronic liver disease and cirrhosis . . . . . (K70, K73–K74)	27,257	299	290	2	42	2	–	9	35	79	99	23	–	1	8
Alcoholic liver disease . . . . . (K70)	12,121	141	136	2	18	1	–	4	17	44	37	13	–	–	5
Other chronic liver disease and cirrhosis . . . . . (K73–K74)	15,136	158	154	–	24	1	–	5	18	35	62	10	–	1	3
Cholelithiasis and other disorders of gallbladder . . . . . (K80–K82)	2,979	49	49	–	2	–	–	3	3	29	10	2	–	–	–
Nephritis, nephrotic syndrome, and nephrosis . . . . . (N00–N07, N17–N19, N25–N27)	40,974	427	423	1	46	3	–	9	28	117	202	18	3	–	–

See footnotes at end of table.

**Table 28. Deaths due to natural underlying causes with any mention of external cause of injury, 2002—Con.**

[Figure (s) in brackets [ ] applies to the code or range of codes preceding it. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Natural causes of death (Based on the <i>International Classification of Diseases, Tenth Revision, 1992</i> )	Total deaths	Unintentional											Undetermined intent (Y10–Y34, Y87.2, Y89.9)		
		All injury (*U01–*U03, V01–Y36, Y85–Y87, Y89)	Total (V01–X59, Y85–Y86)	Drowning (W65–W74)	Fall (W00–W19)	Fire/hot object or substance (X00–X09)	Firearms (W32–W34)	Motor vehicle traffic <sup>1</sup>	Poisoning (X40–X49)	Suffocation (W75–W84)	Other unintentional injuries			Suicide (*U03, X60–X84, Y87.0)	Homicide (*U01–*U02, X85–Y09, Y87.1)
											Exposure to unspecified factor (X59)	Other and unspecified unintentional injuries			
Acute and rapidly progressive nephritic and nephrotic syndrome . . . . . (N00–N01,N04)	166	2	2	–	–	–	–	–	–	–	2	–	–	–	
Chronic glomerulonephritis, nephritis, and nephropathy not specified as acute or chronic, adrenal sclerosis unspecified . . . . . (N02–N03, N05–N07,N26)	553	4	4	–	1	–	–	–	–	–	2	1	–	–	
Renal failure . . . . . (N17–N19)	40,222	420	416	1	45	3	–	9	28	117	198	16	3	–	
Other disorders of kidney . . . . . (N25,N27)	33	1	1	–	–	–	–	–	–	–	–	1	–	–	
Infections of kidney . . . . . (N10–N12, N13.6,N15.1)	788	15	14	–	3	–	–	–	–	6	4	1	–	1	
Hyperplasia of prostate . . . . . (N40)	437	5	5	–	1	–	–	–	–	–	3	1	–	–	
Inflammatory diseases of female pelvic organs . . . . . (N70–N76)	114	2	2	–	1	–	–	–	–	–	1	–	–	–	
Pregnancy, childbirth, and the puerperium . . . . . (O00–O99)	379	5	3	–	–	–	–	–	3	–	–	–	–	1	
Pregnancy with abortive outcome . . . . . (O00–O07)	22	1	1	–	–	–	–	–	1	–	–	–	–	–	
Other complications of pregnancy, childbirth, and the puerperium . . . . . (O10–O99)	357	4	2	–	–	–	–	–	2	–	–	–	–	1	
Certain conditions originating in the perinatal period . . . . . (P00–P96)	14,254	51	39	1	2	–	–	6	3	19	7	1	–	9	
Congenital malformations, deformations, and chromosomal abnormalities . . . . . (Q00–Q99)	10,687	165	161	1	4	–	–	4	8	116	24	5	2	1	
Symptoms, signs, and abnormal clinical and laboratory findings, not elsewhere classified . . . . . (R00–R99)	29,975	27	12	–	1	–	–	–	–	6	3	2	–	–	
All other diseases . . . . . (Residual)	194,591	6,961	6,756	45	457	16	3	80	735	3,923	1,317	262	57	33	

– Quantity zero.

<sup>1</sup>ICD-10 codes for "Motor vehicle traffic" accidents are V02–V04[.1,.9], V09.2, V12–V14[.3–.9], V19[.4–.6], V20–V28[.3–.9], V29–V79[.4–.9], V80[.3–.5], V81.1, V82.1, V83–V86[.0–.3], V87[.0–.8], V89.2.

## Technical Notes

### Nature and sources of data

Data in this report are based on information from all death certificates filed in the 50 States and the District of Columbia. The U.S. Standard Certificate of Death—which is used as a model by the States—was last revised in 1989; for additional details see the 1989 revision of the U.S. standard certificates and reports (43) and *Technical Appendix of Vital Statistics of the United States, 1989, Volume II, Mortality, part A* (44).

Mortality statistics are based on information coded by the States and provided to the National Center for Health Statistics (NCHS) through the Vital Statistics Cooperative Program (VSCP) and from copies of the original certificates received by NCHS from the State registration offices. In 2002 all the States and the District of Columbia participated in this program and submitted part or all of the mortality data for 2002 in electronic data files to NCHS.

Data for the entire United States refer to events occurring within the United States. Data shown for geographic areas are by place of residence. Beginning with 1970, mortality statistics for the United States exclude deaths of nonresidents of the United States. All data exclude fetal deaths.

### Cause-of-death classification

The mortality statistics presented in this report were compiled in accordance with World Health Organization (WHO) regulations, which specify that member nations classify and code causes of death in accordance with the current revision of the *International Classification of Diseases* (ICD). The ICD provides the basic guidance used in virtually all countries to classify and code causes of death. Effective with deaths occurring in 1999, the United States began using the Tenth Revision of this classification (ICD-10) (11). For earlier years, causes of death were classified according to the revisions then in use—1979–98, Ninth Revision; 1968–78, Eighth Revision, adapted for use in the United States; 1958–67, Seventh Revision; and 1949–57, Sixth Revision.

Changes in classification of causes of death due to these revisions may result in discontinuities in cause-of-death trends. Consequently, cause-of-death comparisons across revisions require consideration of comparability ratios and, where available, estimates of their standard errors. Comparability ratios describing the differences between the Sixth and Seventh Revisions, the Seventh and Eighth Revisions, the Eighth and Ninth Revisions, and the Ninth and Tenth Revisions may be found in other NCHS reports and the NCHS Web site (45–49). The Ninth and Tenth Revision comparability ratios based on the external cause of death matrix are provided in “Technical Notes” in [table I](#). Readers of the previous edition of this report should note that [table I](#) has been slightly modified from the previous year’s report (19).

The ICD not only details disease classification but also provides definitions, tabulation lists, the format of the death certificate, and the rules for coding cause of death. Cause-of-death data presented in this publication were coded by procedures outlined in annual issues of the *NCHS Instruction Manual* (50,51). It includes rules for selecting the underlying cause of death for tabulation purposes, definitions, tabulation lists, and regulations on the use of the ICD.

In this report most of the tabulations showing cause-of-death statistics are based on the underlying cause of death. The underlying cause is defined by the ICD as “the disease or injury which initiated the train of events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury” (11). It is selected from the conditions entered by the physician in the cause-of-death section of the death certificate. Generally, more medical information is reported on death certificates than is directly reflected in the underlying cause of death. The set of causes or conditions listed on the death certificate are referred to as multiple causes of death. Coding of the underlying cause of death requires first coding multiple causes of death. The underlying cause is then selected from among the multiple causes according to the sequence of the multiple-cause coded conditions as listed on the certificate, provisions of the ICD, and associated selection and modification rules.

Prior to the 1968 data year, mortality medical data were based on manual coding of an underlying cause of death for each certificate in accordance with the ICD rules. Effective with data year 1968, NCHS converted to computerized coding of the underlying cause and manual coding of all causes (multiple causes) on the death certificate. In this system, called “Automated Classification of Medical Entities” or ACME (52), multiple cause codes serve as inputs to the computer software that employs the ICD rules to select the underlying cause. The ACME system is used to select the underlying cause of death for all death certificates in the United States.

Beginning with 1990 data, the Mortality Medical Indexing, Classification, and Retrieval system (MICAR) (53,54) was introduced to automate coding multiple causes of death which are used as inputs to ACME. In addition, MICAR provides more detailed information on the conditions reported on death certificates than is available through the ICD code structure. Beginning with data year 1993, SuperMICAR, an enhancement of the MICAR system, was introduced. SuperMICAR allows for literal entry of the multiple-cause-of-death text as reported by the certifier. This information is then automatically processed by the MICAR and ACME computer systems. Records that cannot be automatically processed by MICAR or SuperMICAR are manually multiple-cause coded and then further processed through ACME.

For 2002 approximately 77 percent of the Nation’s death records were multiple-cause coded using SuperMICAR and 23 percent, using MICAR only. This represents data from 41 States, New York City, and the District of Columbia that were coded by SuperMICAR and data from 9 States that were coded by MICAR.

Recognizing the value of and need for data that draws upon the complete medical certification, NCHS developed a system for classifying multiple causes of death on a condition-by-condition basis (55,56). The codes produced by MICAR (used as inputs to ACME) are referred to as entity-axis codes and are coded within the framework of the intent of the certifier. That is, they contain information on both the cause or condition as reported by the certifier and the position or line on which the certifier reported the cause or condition. While entity-axis codes form the foundation for a multiple-cause-of-death data set, they are limited in their utility. Entity-axis codes are useful in etiological studies and in evaluating the reporting of cause of death, but they typically lack consistency with underlying cause data, standardization, and compatibility of codes within the certification required for statistical tabulations and analysis. To provide this consistency, NCHS developed an automated system called TRANSAX designed to translate the entity-axis

**Table I. ICD-10 and ICD-9 comparability ratios for underlying cause of death according to mechanism of injury and intent of death**

[Figures in brackets [ ] apply to the code or range of codes preceding them. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death	ICD-10 codes	ICD-9 codes <sup>1</sup>	Comparability ratio
All injury	*U01-*U03,V01-Y36,Y85-Y87,Y89	E800-E869,E880-E929,E950-E999	1.0159
Unintentional	V01-X59,Y85-Y86	E800-E869,E880-E929	1.0251
Suicide	*U03,X60-X84,Y87.0	E950-E959	1.0022
Homicide	*U01-*U02,X85-Y09,Y87.1	E960-E969	1.0020
Undetermined	Y10-Y34,Y87.2,Y89.9	E980-E989	0.9867
Legal intervention/war	Y35-Y36,Y89[.0,.1]	E970-E978,E990-E999	0.9235
Cut/pierce	W25-W29,W45,X78,X99,Y28,Y35.4	E920,E956,E966,E974,E986	0.9428
Unintentional	W25-W29,W45	E920	0.8049
Suicide	X78	E956	0.8708
Homicide	X99	E966	0.9587
Undetermined	Y28	E986	*
Legal intervention/war	Y35.4	E974	*
Drowning	W65-W74,X71,X92,Y21	E910,E954,E964,E984	1.0269
Unintentional	W65-W74	E910	1.0297
Suicide	X71	E954	1.0149
Homicide	X92	E964	1.0159
Undetermined	Y21	E984	1.0047
Fall	W00-W19,X80,Y01,Y30	E880-E886,E888,E957,E968.1,E987	1.0015
Unintentional	W00-W19	E880-E886,E888	0.9991
Suicide	X80	E957	1.0409
Homicide	Y01	E968.1	1.0833
Undetermined	Y30	E987	0.9857
Fire/hot object or substance	*U01.3,X00-X19,X76-X77,X97-X98,Y26-Y27,Y36.3	E890-E899,E924,E958[.1,.2,.7],E961,E968[.0,.3],E988[.1,.2,.7],E990	0.9969
Unintentional	X00-X19	E890-E899,E924	0.9987
Suicide	X76-X77	E958[.1,.2,.7]	0.9675
Homicide	*U01.3,X97-X98	E961,E968[.0,.3]	1.0048
Undetermined	Y26-Y27	E988[.1,.2,.7]	0.9420
Legal intervention/war	Y36.3	E990	*
Fire/flame	X00-X09,X76,X97,Y26	E890-E899,E958.1,E968.0,E988.1	0.9975
Unintentional	X00-X09	E890-E899	0.9995
Suicide	X76	E958.1	0.9675
Homicide	X97	E968.0	0.9951
Undetermined	Y26	E988.1	0.9692
Hot object/substance	X10-X19,X77,X98,Y27	E924,E958[.2,.7],E961,E968.3,E988[.2,.7]	0.9720
Unintentional	X10-X19	E924	0.9694
Suicide	X77	E958[.2,.7]	*
Homicide	X98	E961,E968.3	*
Undetermined	Y27	E988[.2,.7]	*
Firearm	*U01.4,W32-W34,X72-X74,X93-X95,Y22-Y24,Y35.0	E922,E955[.0-.4],E965[.0-.4],E985[.0-.4],E970	1.0012
Unintentional	W32-W34	E922	1.0165
Suicide	X72-X74	E955[.0-.4]	1.0012
Homicide	*U01.4,X93-X95	E965[.0-.4]	1.0019
Undetermined	Y22-Y24	E985[.0-.4]	1.0000
Legal intervention/war	Y35.0	E970	0.9196
Machinery <sup>2</sup>	W24,W30-W31	E919	0.8813
All transport	*U01.1,V01-V99,X82,Y03,Y32,Y36.1	E800-E848,E958.5,E988.5,E994	0.9930
Unintentional	V01-V99	E800-E848	0.9929
Suicide	X82	E958.5	0.9437
Homicide	*U01.1,Y03	...	*
Undetermined	Y32	E988.5	*
Legal intervention/war	Y36.1	E994	*
Motor vehicle traffic <sup>2</sup>	V02-V04[.1,.9],V09.2,V12-V14[.3-.9],V19[.4-.6],V20-V28[.3-.9],V29-V79[.4-.9],V80[.3-.5],V81.1,V82.1,V83-V86[.0-.3],V87[.0-.8],V89.2	E810-E819	0.9545
Occupant <sup>2</sup>	V30-V79[.4-.9],V83-V86[.0-.3]	E810-E819[.0,.1]	0.6191
Motorcyclist <sup>2</sup>	V20-V28[.3-.9],V29[.4-.9]	E810-E819[.2,.3]	1.1520
Pedal cyclist <sup>2</sup>	V12-V14[.3-.9],V19[.4-.6]	E810-E819[.6]	0.8038
Pedestrian <sup>2</sup>	V02-V04[.1,.9],V09.2	E810-E819[.7]	0.9535
Other, specified <sup>2</sup>	V80[.3-.5],V81.1,V82.1	E810-E819[.4,.5,.8]	*
Unspecified <sup>2</sup>	V87[.0-.8],V89.2	E810-E819[.9]	1.8753
Pedal cyclist, other <sup>2</sup>	V10-V11,V12-V14[.0-.2],V15-V18,V19[.0-.3,.8,.9]	E800-E807[.3],E820-E825[.6],E826[1,.9]	1.7477
Pedestrian, other <sup>2</sup>	V01,V02-V04[.0],V05,V06,V09[.0,.1,.3,.9]	E800-E807[.2],E820-E825[.7],E826-E829[.0]	1.2057

See footnotes at end of table.



**Table I. ICD-10 and ICD-9 comparability ratios for underlying cause of death according to mechanism of injury and intent of death—Con.**

[Figures in brackets [ ] apply to the code or range of codes preceding them. For explanation of asterisks preceding cause-of-death codes, see "Technical Notes"]

Mechanism and intent of death	ICD-10 codes	ICD-9 codes <sup>1</sup>	Comparability ratio
Other land transport . . . . .	V20–V28[.0–.2],V29–V79[.0–.3],V80[.0–.2,.6–.9], V81–V82[.0,.2–.9],V83–V86[.4–.9],V87.9,V88[.0–.9], V89[.0,.1,.3,.9],X82,Y03,Y32	E800–E807[.0,.1,.8,.9],E820–E825[.0–.5,.8,.9],E826[.2–.8], E827–E829[.2–.9],E846,E958.5,E988.5	2.6292
Unintentional . . . . .	V20–V28[.0–.2],V29–V79[.0–.3],V80.0–.2,.6–.9, V81–V82[.0,.2–.9],V83–V86[.4–.9],V87.9,V88 [.0–.9],V89[.0,.1,.3,.9]	E800–E807[.0,.1,.8,.9],E820–E825[.0–.5,.8,.9],E826[.2–.8], E827–E829[.2–.9],E846	2.7630
Suicide . . . . .	X82	E958.5	0.9437
Homicide . . . . .	Y03	...	*
Undetermined . . . . .	Y32	E988.5	*
Other transport . . . . .	*U01.1,V90–V99,Y36.1	E830–E845, E847–E848, E994	0.9098
Unintentional . . . . .	V90–V99	E830–E845, E847–E848	0.9098
Homicide . . . . .	*U01.1	...	*
Legal intervention/war . . . . .	Y36.1	E994	*
Natural/environmental <sup>2</sup> . . . . .	W42–W43,W53–W64,W92–W99,X20–X39,X51–X57	E900–E909,E928[.0–.2]	1.0390
Overexertion <sup>2</sup> . . . . .	X50	E927	*
Poisoning . . . . .	*U01[.6–.7],X40–X49,X60–X69,X85–X90,Y10–Y19, Y35.2	E850–E869,E950–E952,E962,E972,E980–E982	1.0192
Unintentional . . . . .	X40–X49	E850–E869	1.0365
Suicide . . . . .	X60–X69	E950–E952	1.0013
Homicide . . . . .	*U01[.6–.7],X85–X90	E962	1.0417
Undetermined . . . . .	Y10–Y19	E980–E982	0.9870
Legal intervention/war . . . . .	Y35.2	E972	*
Struck by or against . . . . .	W20–W22,W50–W52,X79,Y00,Y04,Y29,Y35.3	E916–E917,E960.0,E968.2,E973,E975	1.0852
Unintentional . . . . .	W20–W22,W50–W52	E916–E917	1.0549
Suicide . . . . .	X79	...	*
Homicide . . . . .	Y00,Y04	E960.0,E968.2	1.1765
Undetermined . . . . .	Y29	...	*
Legal intervention/war . . . . .	Y35.3	E973,E975	*
Suffocation . . . . .	W75–W84,X70,X91,Y20	E911–E913,E953,E963,E983	1.0974
Unintentional . . . . .	W75–W84	E911–E913	1.2320
Suicide . . . . .	X70	E953	1.0025
Homicide . . . . .	X91	E963	1.0840
Undetermined . . . . .	Y20	E983	0.9016
Other specified, classifiable . . . . .	*U01[.0,.2,.5],*U03.0,W23,W35–W41,W44,W49, W85–W91,X75,X81,X96,Y02,Y05–Y07,Y25,Y31, Y35[.1,.5],Y36[.0,.2,.4–.8],Y85	E914–E915,E918,E921,E923,E925–E926, E929[.0–.5],E955[.5,.9],E958[.0,.3,.4],E960.1, E965[.5–.9],E967,E968.4,E971,E978,E985.5, E988[.0,.3,.4],E991–E993,E996,E997[.0–.2]	0.8956
Unintentional . . . . .	W23,W35–W41,W44,W49,W85–W91,Y85	E914–E915,E918,E921,E923,E925–E926, E929[.0–.5]	0.8789
Suicide . . . . .	*U03.0,X75,X81	E955[.5,.9],E958[.0,.3,.4]	0.9010
Homicide . . . . .	*U01[.0,.2,.5],X96,Y02,Y05–Y07	E960.1,E965[.5–.9],E967,E968.4	0.9730
Undetermined . . . . .	Y25,Y31	E985.5,E988[.0,.3,.4]	*
Legal intervention/war . . . . .	Y35[.1,.5],Y36[.0,.2,.4–.8]	E971,E978,E991–E993,E996,E997[.0–.2]	1.2000
Other specified, not elsewhere classified . . . . .	*U01.8,*U02,X58,X83,Y08,Y33,Y35.6,Y86–Y87, Y89[.0–.1]	E928.8,E929.8,E958[.6,.8],E959,E968.8,E969,E977, E988[.6,.8],E989,E995,E997.8,E998,E999	1.5667
Unintentional . . . . .	X58,Y86	E928.8,E929.8	9.0920
Suicide . . . . .	X83,Y87.0	E958[.6,.8],E959	1.1878
Homicide . . . . .	*U01.8,*U02,Y08,Y87.1	E968.8,E969	0.9605
Undetermined . . . . .	Y33,Y87.2	E988[.6,.8],E989	1.0800
Legal intervention/war . . . . .	Y35.6,Y89[.0,.1]	E977,E995,E997.8,E998,E999	*
Unspecified . . . . .	*U01.9,*U03.9,X59,X84,Y09,Y34,Y35.7,Y36.9,Y89.9	E887,E928.9,E929.9,E958.9,E968.9,E976,E988.9,E997.9	1.1124
Unintentional . . . . .	X59	E887,E928.9,E929.9	1.1293
Suicide . . . . .	*U03.9,X84	E958.9	1.7368
Homicide . . . . .	*U01.9,Y09	E968.9	1.0177
Undetermined . . . . .	Y34,Y89.9	E988.9	0.9960
Legal intervention/war . . . . .	Y35.7,Y36.9	E976,E997.9	*

... Category not applicable.

\* Figure does not meet standard of reliability or precision.

<sup>1</sup>ICD-9 categories in this table are not all consistent with the ICD-9 external cause of injury death matrix. The following ICD-9 codes have been allocated to different categories of the injury matrix so that the ICD-9 definition conforms more closely to that dictated by the ICD-10 version of this instrument.

ICD-9 codes	were placed under:
E990	Fire/hot object or substance, legal intervention
E800–E807[.0,.1,.8,.9],E820–E825[.0–.5,.8,.9],E826[.2–.8],E827–E829[.2–.9], E846	Other land transport, unintentional
E958.5	Other land transport, suicide
E988.5	Other land transport, undetermined
E830,E832,E847–E848	Other transport, unintentional
E994	Other transport, legal intervention
E958[.3]	Other specified classifiable, suicide
E958[.6]	Other specified, not elsewhere classified, suicide
E988[.3]	Other specified classifiable, undetermined
E988[.6]	Other specified, not elsewhere classified, undetermined

<sup>2</sup>Intent of death is unintentional.

**Table II. ICD-10 codes used to define cells of the injury mortality diagnosis matrix for use with multiple cause-of-death data**

[Figures in brackets [ ] apply to the code or range of codes preceding them]

Body region of injury	Nature of injury															
	Fracture	Dis- location	Internal organ injury	Open wound	Amputation	Blood vessel	Superficial and contusion	Crushing	Burn	Effect of Foreign Bodies entering orifice	Other effects of external causes	Poisoning	Toxic effects	Multiple injuries	Other specified injury	Un- specified injury
All head and neck																
Traumatic brain injury (TBI) . . . . .	S02[.0- .1,.3,.7- .9],T90.2	...	S06, T90.5	S01, T90.1	...	...	...	S07	...	...	...	...	...	S09.7	S04.0,S09.8, T90[.4, .8]	S09.9, T90.9
Other head . . . . .	S02[.2, .4-.6]	S03[.0-.3]	...	S05[.2-.7], S08.0, S09.2	S08 [.1-.9]	S09.0	S00, S05 [.0-.1], T90.0	...	T26	T15-T16, T17[.0-.1], T18.0	T33.0, T34.0	...	...	...	S03[.4-5], S04[.1-.9], S05.8, S09.1, T90.3	S05.9
Neck . . . . .	S12 [.8-.9]	S13 [.2-.3]	...	S11	S18	S15 [.0, .2-.9]	S10	S17	T27.0, T27.4	T17 [.2-.4]	T33.1, T34.1	...	...	S19.7	S13[.5-.6], S14[.3-.6], S16, S19.8	S19.9
Head and neck, other . . . . .	...	...	...	...	...	...	...	...	T20, T28.0, T28.5, T95.0	...	T35.2	...	...	...	...	...
Spine and upper back																
Spinal cord . . . . .	...	...	S14[.0-.1], S24[.0-.1], S34[.0-.1, .3], T09.3, T91.3	...	...	...	...	...	...	...	...	...	...	...	...	...
Vertebral column . . . . .	S12[.0-.7], S22[.0-.1], S32[.0-.2], T08, T91.1	S13[.0-.1], S23[.0-.1], S33[.0-.2]	S14.2	...	...	S15.1	...	...	...	...	...	...	...	...	S13.4, S23.3, S24.2, S33[.5-.7] S34[.2, .4], T09.4	...
Torso																
Thorax . . . . .	S22[.2-.9]	S23.2	S26.0, S27 [.0-.6, .8-.9], T91.4	S21	S28.1	S25	S20	S28.0	T28[.1, .6]	T17.5	T33.2, T34.2	...	...	S27.7, S29.7	S23[.4-5], S24[.3-6], S26.8, S29[.0, .8]	S26.9, S29.9
Abdomen . . . . .	...	...	S36	S31[.1,.8]	...	S35[.0-.4]	S30.1	...	...	T18[.2-.4]	...	...	...	...	...	...
Pelvis and lower back . . . . .	S32[.3-.8]	S33[.3-.4]	S37	S31[.0, .2-.5]	S38.2	S35.5	S30 [.0, .2]	S38.0	T28[.3, .8]	T18.5, T19	...	...	...	...	S34.5	...

See footnotes at end of table.

**Table II. ICD-10 codes used to define cells of the injury mortality diagnosis matrix for use with multiple cause-of-death data—Con.**

[Figures in brackets [ ] apply to the code or range of codes preceding them]

Body region of injury	Nature of injury																
	Fracture	Dis- location	Internal organ injury	Open wound	Amputation	Blood vessel	Superficial and contusion	Crushing	Burn	Effect of Foreign Bodies entering orifice	Other effects of external causes	Poisoning	Toxic effects	Multiple injuries	Other specified injury	Un- specified injury	
<b>Torso—Con</b>																	
Abdomen, lower back & pelvis . . . . .	T02.1	...	S39[.6-.7], T06.5, T91.5	S31.7	S38.3	S35[.7-.9]	S30[.7-.9]	S38.1	...	...	T33.3, T34.3, T35.3	...	...	T03.1	S34[.6, .8], S39[.0, .8]	S39.9	
Other trunk . . . . .	T91.2	...	...	T09.1	T09.6	...	T09.0	T04.1	...	T21, T27 [.2-.3, .6-.7], T28[.2, .7], T95.1	T17[.8-.9], T18 [.1, .8-.9]	...	...	T09.2	T09[.5, .8]	T09.9	
<b>Extremities</b>																	
Upper extremity . . . . .	S42, S52, S62, T02 [.2, .4], T10, T92 [.1-.2]	S43[.0-.3], S53[.0-.1], S63[.0-.2]	...	S41, S51, S61, T01.2, T11.1, T92.0	S48, S58, S68 T05 [.0, .2], T11.6	S45, S55, S65, T11.4	S40, S50, S60, T00.2, T11.0	S47, S57, S67, T04.2	...	...	T22-T23, T95.2	...	...	T33[.4-.5], T34[.4-.5], T35.4	S49.7, S59.7, S69.7, T03.2, T11.2, T92[.3, .6]	S43[.4-.7], S44, S46, S49.8, S53[.2-.4], S54, S56, S59.8, S63[.3-.7], S64, S66, S69.8, T11[.3, .5, .8], T92[.4-.5, .8]	S49.9, S59.9, S69.9, T11.9, T92.9
Hip . . . . .	S72[.0-.2]	S73.0	...	S71.0	S78.0	...	S70.0	S77.0	...	...	...	...	...	...	S73.1, S76.0	...	
Other lower extremity . . . . .	S72[.3-.9], S82, S92, T02[.3, .5], T12, T93 [.1-.2]	S83[.0-.1], S93 [.0-.1, .3]	...	S71[.1-.8], S81, S91, T01.3, T13.1, T93.0	S78[.1-.9], S88, S98, T05[.3, .5], T13.6	S75, S85, S95, T13.4	S70 [.1-.9], S80, S90, T00.3, T13.0	S77 [.1-.2], S87, S97, T04.3	...	...	T24-T25, T95.3	...	...	T33[.6-.8], T34[.6-.8], T35.5	S74, S76[.1-.7], S79.8, S83[.2-.6], S84, S86, S89.8, S93[.2, .4-.6], S94, S96, S99.8, T13[.3, .5, .8], T93[.4-.5, .8]	S79.9, S83.7, S89.9, S99.9, T13.9, T93.9	
<b>Unclassifiable by body region</b>																	
Multiple body regions . . . . .	T02[.8-.9]	...	...	T01.9	T05[.8-.9]	T06.3	T00[.8-.9]	T04 [.8-.9]	T27.1, T27.5, T28.9	...	T35 [.0-.1, .6]	...	...	T03[.8-.9], T91.0	T06[.2, .4], T91.8	T07, T91.9, T94.0	

See footnotes at end of table.

**Table II. ICD-10 codes used to define cells of the injury mortality diagnosis matrix for use with multiple cause-of-death data—Con.**

[Figures in brackets [ ] apply to the code or range of codes preceding them]

Body region of injury	Nature of injury																
	Fracture	Dis- location	Internal organ injury	Open wound	Amputation	Blood vessel	Superficial and contusion	Crushing	Burn	Effect of Foreign Bodies entering orifice	Other effects of external causes	Poisoning	Toxic effects	Multiple injuries	Other specified injury	Un- specified injury	
Unclassifiable by body region—Con.																	
System wide . . . . .	...	...	...	...	...	...	...	...	...	...	T66-T75	T36-T50, T96	T51- T65, T97	...	T79[.0-.9], T98.2	...	
Unspecified . . . . .	T14.2	...	...	T14.1	...	T14.5	T14.0	...	T28.4, T30-T32, T95 [.4, .8-.9]	T98.0	...	T33.9, T34.9, T35.7	...	...	T14.3, T14.7	T14[.4, .6]	T14 [.8-.9], T94.1, T98.1

... Category not applicable.

NOTES: The matrix excludes the following codes that are not valid in the U.S.: T00[.0-.1, .6], T01[.0-.1, .6, .8], T02[.0, .6-.7], T03[.0, .4], T04[.0, .4, .7], T05[.1, .4, .6], T06[.0, .1, .8], T29. Also excluded are codes T78, T80-T88, T98.3 for adverse effects, not elsewhere classified and complications of surgical and medical not elsewhere classified.

codes, employing linkage and other provisions in the ICD, into a form amenable to the tabulation and analysis of multiple-cause-of-death statistics (55). The translated entity-axis codes are referred to as record-axis codes. Multiple-cause-of-death statistics presented in this report are based on record-axis data. Multiple cause data allow up to 20 different ICD codes (including the underlying cause) on both the entity and record axes. Most death certificates for which injury is the underlying cause of death have no more than two injury diagnoses (23).

## Changing injury mortality classifications from ICD-9 to ICD-10

Fundamental changes in the classification of injury occurred with the introduction of ICD-10, implemented beginning with 1999 mortality data. In ICD-9, codes were numeric with external causes of injury classified to a supplementary chapter in which codes were given the prefix "E," hence the use of the term "E-codes" to denote those used for external causes (57). Nature of injury codes were often referred to as "N-codes." In ICD-10, the terms "E-code" and "N-code" are no longer appropriate to describe injury mortality because all ICD-10 codes are alphanumeric, each beginning with a letter of the alphabet followed by numbers ("E-codes" in ICD-10 would include endocrine, nutritional and metabolic diseases found in Chapter IV of the ICD; "N-codes" would refer to diseases of the genitourinary system found in Chapter XIV). External cause-of-death codes in ICD-10 begin with letters "V," "W," "X" or "Y." Nature-of-injury and poisoning codes begin with letters "S" or "T" (11).

Another important difference in the classification of injury mortality introduced with ICD-10 involves changes in the way the codes are organized. In ICD-10, transport accidents are grouped by the characteristics of the injured person, e.g., pedestrian (V01-V09), pedal cyclist (V10-V19), car occupant (V40-V49). In ICD-9, transport accidents were grouped by the type of vehicle involved in the accident, e.g., railway accidents (E800-E807), motor vehicle traffic (E810-E819), and water transport accidents (E830-E838). Nature-of-injury codes are also organized differently in ICD-10 and are grouped according to the site of the injury, e.g., head (S00-S09), neck (S10-S19), and ankle and foot (S90-S99). In ICD-9, nature-of-injury codes were grouped according to the type of injury, e.g., fractures (800-829), intracranial injury (850-854), and open wound (870-897).

Although ICD-10 is generally more detailed, some external cause categories have less specificity in ICD-10. ICD-10 codes for unintentional poisonings (X40-X49) are substantially less detailed than in ICD-9 (E850-E869). For example, ICD-10 code X41 (accidental poisoning by and exposure to antiepileptic, sedative-hypnotic, anti-Parkinsonism and psychotropic drugs) would be roughly comparable to ICD-9 codes E851 (barbiturates), E852.0-E852.9 (various other sedatives and hypnotics), E853.0-E853.9 (various tranquilizers), E854.0 (antidepressants), E854.2 (psychostimulants), E854.3 (central nervous system stimulants), and E855.0 (anticonvulsant and anti-Parkinsonism drugs). In ICD-10, carbon monoxide cannot be uniquely identified using the assigned external cause code X47 (accidental poisoning by and exposure to other gases and vapors). In ICD-9, codes E868.0-E868.9 involve categories of carbon monoxide poisoning. Fortunately, much of the poisoning detail lost in the external cause codes in ICD-10 can be regained by using multiple-cause poisoning codes

(in "Injury and Poisoning" chapter) in combination with the external cause codes. For example, an underlying cause coded to X47 with T58 in the multiple cause data would indicate poisoning by carbon monoxide. Unintentional firearm categories (W32-W34) are also somewhat less detailed in ICD-10 than in ICD-9 (E922.0-E922.9).

In some cases, comparable ICD-10 codes do not exist for categories in ICD-9. For example, E887 (fracture, cause unspecified) is assigned in ICD-9 when a fracture is specified on the death certificate without specificity regarding the external cause of the fracture. This category was often grouped in ICD-9 with unintentional falls, assuming that the unspecified external cause would be, in most instances, a fall. In ICD-10, no such category exists and these deaths would be classified to X59 (exposure to unspecified factor), a much less specific category and one not amenable to grouping with unintentional falls.

More detailed analysis of changes in injury mortality coding between ICD-9 and ICD-10 is possible using the comparability data file published by NCHS and available on the NCHS website (45). This data file contains individual 1996 mortality records coded by both ICD-9 and ICD-10.

## Classification of terrorism-related deaths

A new set of codes and guidelines were developed by NCHS to classify deaths that occurred as the result of the terrorist attacks on September 11, 2001 (58,59). The codes were developed within the framework of ICD-10 and include \*U01-\*U02 for terrorism involving an assault (homicide) and \*U03 for terrorism involving intentional self-harm (suicide). More detail regarding the structure of the codes and inclusion terms is available at <http://www.cdc.gov/nchs/about/otheract/icd9/appendix1.htm>. The asterisk (\*) preceding these codes indicates that the code was introduced by the United States, but is not officially part of the ICD. The codes were placed in the "U" Chapter of ICD-10 as this chapter was reserved specifically for "future additions and changes and for possible interim classifications to solve difficulties arising at the national and international levels between revisions (11)." To maintain international comparability in reporting homicide and suicide rates, terrorist assaults/homicides (\*U01-\*U02) are included in general tabulations with other homicides (\*U01-\*U02, X85-Y09, Y87.1) and terrorist intentional self-harm/suicides (\*U03) are included with suicides (\*U03, X60-X84, Y87.0).

## Ranking leading mechanisms of injury death

Leading mechanisms of injury death are ranked according to the number of deaths assigned to rankable mechanisms in the external cause of injury mortality matrix (see [table C](#)—rankable mechanisms are indicated by the symbol "#") using a procedure consistent with that used to rank leading causes of death (7,60). Vaguely defined categories were summarily excluded from selection as rankable mechanisms. These included all categories beginning with the words "other" or "unspecified." Among the remaining mechanism categories, decisions were made to select as rankable the mechanisms of injury death considered most useful from a public health perspective, with the following condition: the rankable mechanisms must be mutually exclusive. If a category representing a subtotal (such as Fire/hot object or substance or motor vehicle traffic) is selected as a rankable mechanism, its component parts are not selected as rankable.

## Race and Hispanic origin

Race and Hispanic origin are reported separately on the death certificate. Therefore, data shown by race include persons of Hispanic or non-Hispanic origin, and data for Hispanic origin include persons of any race. In this report, unless otherwise specified, deaths of Hispanic origin are included in the totals for each race group—white, black, American Indian, and Asian or Pacific Islander (API)—according to the decedent's race as reported on the death certificate. Data shown for Hispanic persons include all persons of Hispanic origin of any race.

Mortality data for the Hispanic-origin population are based on deaths to residents of all 50 States and the District of Columbia. Data year 1997 was the first year that mortality data for the Hispanic population were available for the entire United States.

*Quality of race and Hispanic origin data*—Death rates for Hispanic, American Indian, and API persons should be interpreted with caution because of inconsistencies in reporting race and ethnicity on the death certificate as compared with race and ethnicity on censuses, surveys, and birth certificates. Studies have shown underreporting on death certificates of American Indians, API, and Hispanic decedents; and undercounts of these groups in the censuses (61,62).

A number of studies have been conducted on the reliability of race and ethnicity reported on the death certificate by comparing race on the death certificate with that reported on another data collection instrument, such as the census or a survey. Differences may arise because of differences in who provides race information on the compared records. Race information on the death certificate is reported by the funeral director as provided by an informant or in the absence of an informant, on the basis of observation. In contrast, race on the census or on the Current Population Survey (CPS) is obtained while the individual is alive and is self-reported or reported by another member of the household familiar with the individual and, therefore, may be considered more valid. A high level of agreement between the death certificate and the census or survey report is essential to assure unbiased death rates by race.

Studies (62,63) show that a person self-reported as American Indian or Asian on census or survey records is sometimes reported as white on the death certificate. The net effect of misclassification is an underestimation of deaths and death rates for races other than white and black. In addition, undercoverage of minority groups in the census and resultant population estimates, introduces biases into death rates by race (61,64). Estimates of the approximate effect of the combined bias due to race misclassification on death certificates and underenumeration on the 1990 census are as follows: white, -1.0 percent; black, -5.0; American Indian, +20.6; Asian or Pacific Islander, +10.7 (61).

The National Longitudinal Mortality Study (NLMS) examined the reliability of Hispanic origin reported on 43,520 death certificates with that reported on a total of 12 Current Population Surveys conducted by the U.S. Bureau of the Census for the years 1979–85 (61). In this study, agreement—on a record-by-record basis—was 89.7 percent for any report of Hispanic origin. The ratio of deaths for CPS divided by deaths for death certificate was 1.07 indicating net underreporting of Hispanic origin on death certificates by 7 percent as compared with self-reports on the surveys. Death rates for the Hispanic-origin population are also affected by undercoverage of this population group in

the census and resultant population estimates; the estimated net correction, taking into account both sources of bias, is 1.6 percent (61,64).

*Other races and race not stated*—Beginning in 1992 all records coded as “Other races” (0.04 percent of the total deaths in 2002) were assigned to the specified race of the previous record. Records for which race was unknown, not stated, or not classifiable (0.08 percent) were assigned the racial designation of the previous record.

## Population bases for computing rates

Population estimates represent the population at risk of dying in a specified group. The populations used for computing death rates in this report are estimates for July 1, 2002, and were produced under a collaborative arrangement with the U.S. Census Bureau (65). Reflecting the new standards for the classification of race and ethnicity issued in 1997 by the U.S. Office of Management and Budget (OMB), Census 2000 included an option for individuals to report more than one race, as appropriate, for themselves and household members (66). In addition, the standards specified five minimum race categories to be used for tabulation (American Indian or Alaska Native, Asian, black or African American, Native Hawaiian or Other Pacific Islander, and white). This is a modification of the previous 1977 OMB standards in which only four race categories were specified (Asian and Pacific Islander persons were treated as a single group) and respondents were classified as only one of the four (67). Death certificates currently collect only one race for the decedent according to the 1977 OMB guidelines and are thus incompatible with population data based on the 2000 Census for calculating death rates.

In order to produce 2000 populations with race categories comparable to those used on the death certificate, the enumerated population data with multiple race categories was “bridged” back to single race categories. In addition, the 2000 census counts were modified to be consistent with the old OMB racial categories, i.e., data for Asian persons and Native Hawaiians or other Pacific Islanders were combined into a single category: Asian or Pacific Islanders. The procedures used to produce the “bridged” populations are described in separate publications (68,69). It is anticipated that “bridged” population data will be used over the next few years for computing population-based rates. Beginning with deaths occurring in 2003, a few States will collect multiple race data on the death certificate. Once all States begin collecting data on race according to the new OMB standards, it is expected that the use of “bridged” populations will be discontinued.

It is important to emphasize that the population data used to calculate the race-specific mortality statistics presented in this report are based on special estimation procedures and are not true counts. The estimation procedures used to develop these populations are subject to error. Smaller populations, e.g., American Indians, are likely to be affected much more than larger populations (68). While the nature and magnitude of these errors is unknown, the potential for error should be kept in mind when evaluating trends and differentials. Over the next several years, additional information will be incorporated in the estimation procedures, resulting in more robust race-specific population estimates.

Population estimates by race, sex, and the age categories presented in this report are shown in [table III](#). Population estimates by Hispanic origin, race for the non-Hispanic population, sex, and age are shown in [table IV](#). Population estimates for each State are shown in [table V](#) (70).

## Computing rates

Death rates in this report are on an annual basis per 100,000 estimated population residing in the specified area or in a specified group. Comparisons made in the text among rates, unless otherwise specified, are statistically significant at the 0.05 level of significance.

Age-adjusted rates ( $R'$ ) are used to compare relative mortality risks among groups and over time. However, they should be viewed as relative indexes rather than as actual measures of mortality risk. They were computed by the direct method, that is, by applying age-specific death rates ( $R_i$ ) to the U.S. standard population ( $w_i$ ) ([table VI](#)).

$$R' = \sum_i w_i R_i$$

Beginning with the 1999 data year, a new population standard was adopted by NCHS for use in age-adjusting death rates. Based on the projected year 2000 population of the United States, the new standard replaces the 1940 standard population that had been used for over 50 years. The new population standard affects levels of mortality and to some extent trends and group comparisons. Of particular note are the effects on race comparison of mortality. For detailed discussion, see "Age Standardization of Death Rates: Implementation of the Year 2000 Standard" (71).

All age-adjusted rates shown in this report are based on the year 2000 standard population. The year 2000 standard population and corresponding weights used for computing age-adjusted rates and standard errors are shown in [table VI](#).

## Random variation

The mortality data presented in this report are not subject to sampling error. Mortality data, even based on complete counts, may be affected by random variation. That is, the number of deaths that actually occurred may be considered as one of a large series of possible results that could have arisen under the same circumstances (72,73). When the number of deaths is small (perhaps fewer than 100), random variation tends to be relatively large. Therefore, considerable caution must be observed in interpreting statistics based on small numbers of deaths.

*Measuring random variability*—To quantify the random variation associated with mortality statistics, one must make an assumption regarding the appropriate underlying distribution. Deaths, as infrequent events, can be viewed as deriving from a Poisson probability distribution. The Poisson distribution is simple conceptually and computationally, and provides reasonable, conservative variance estimates for mortality statistics when the probability of dying is relatively low (72). Using the properties of the Poisson distribution, the standard error (SE) associated with the number of deaths ( $D$ ) is

$$1. \quad SE(D) = \sqrt{\text{var}(D)} = \sqrt{D}$$

where  $\text{var}(D)$  denotes the variance of  $D$ .

The standard error associated with crude and age-specific death rates ( $R$ ) assumes that the population denominator ( $P$ ) is a constant and is

$$2. \quad SE(R) = \sqrt{\text{var}\left(\frac{D}{P}\right)} = \sqrt{\frac{1}{P^2} \text{var}(D)} = \sqrt{\frac{D}{P^2}} = \frac{R}{\sqrt{D}}$$

The coefficient of variation or relative standard error (RSE) is a useful measure of relative variation. The RSE is calculated by dividing the statistic (e.g., number of deaths, death rate) into its standard error and multiplying by 100. For the number of deaths

$$RSE(D) = 100 \frac{SE(D)}{D} = 100 \frac{\sqrt{D}}{D} = 100 \sqrt{\frac{1}{D}}$$

For crude and age-specific death rates

$$RSE(R) = 100 \frac{SE(R)}{R} = 100 \frac{R/\sqrt{D}}{R} = 100 \sqrt{\frac{1}{D}}$$

Thus,

$$3. \quad RSE(D) = RSE(R) = 100 \sqrt{\frac{1}{D}}$$

The standard error of the age-adjusted death rate ( $R'$ ) is

$$4. \quad SE(R') = \sqrt{\sum_i w_i^2 \text{var}(R_i)} = \sqrt{\sum_i \left\{ w_i^2 \left( \frac{R_i^2}{D_i} \right) \right\}}$$

where

$R_i$  = age-specific rate for the  $i$ th age group

$w_i$  = age-specific standard weight for the  $i$ th age group from the U.S. standard population such that  $\sum w_i = 1.0$  (see [table VI](#) and section titled "Computing rates" in "Technical Notes")

$D_i$  = number of deaths for the  $i$ th age group

The RSE for the age-adjusted rate,  $RSE(R')$ , can easily be calculated by dividing  $SE(R')$  from formula 4 by the age-adjusted death rate,  $R'$ , and multiplying by 100.

$$RSE(R') = 100 \frac{SE(R')}{R'}$$

*Suppression of unreliable rates*—Beginning with 1989 data, an asterisk is shown in place of a crude or age-specific death rate based on fewer than 20 deaths, the equivalent of an RSE of 23 percent or more. The limit of 20 deaths is a convenient, if somewhat arbitrary, benchmark, below which rates are considered to be too statistically unreliable for presentation. For age-adjusted death rates the suppression criterion is based on the sum of the age-specific deaths; i.e., if the sum of the age-specific deaths is less than 20, an asterisk is presented in place of the rate.

*Confidence intervals and statistical tests based on 100 deaths or more*—When the number of deaths is large, a normal approximation may be used in the calculation of confidence intervals and statistical tests. How large is to some extent a subjective judgment. In general, for crude and age-specific death rates, the normal approximation performs quite well when the number of deaths is 100 or greater. For age-adjusted rates, the criterion for use of the normal approximation is somewhat more complicated (44,71,74). Formula 5 is used to calculate lower and upper limits of the 95-percent confidence interval for the death rate when the normal approximation is appropriate.

**Table III. Estimated population by age, race, and sex: United States, July 1, 2002**

Age	All races			White			Black			American Indian			Asian or Pacific Islander		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total . . . . .	288,368,706	141,660,980	146,707,726	234,746,440	115,966,453	118,779,987	37,747,692	17,978,612	19,769,080	3,076,095	1,535,463	1,540,632	12,798,479	6,180,452	6,618,027
Less than 1 year . . . . .	4,033,719	2,063,824	1,969,895	3,130,730	1,602,846	1,527,884	674,576	344,210	330,366	41,724	21,297	20,427	186,689	95,471	91,218
1–4 years . . . . .	15,575,428	7,961,545	7,613,883	12,126,969	6,212,014	5,914,955	2,539,378	1,290,224	1,249,154	199,139	101,419	97,720	709,942	357,888	352,054
5–9 years . . . . .	19,900,837	10,187,663	9,713,174	15,456,522	7,932,180	7,524,342	3,291,067	1,671,470	1,619,597	276,708	140,297	136,411	876,540	443,716	432,824
10–14 years . . . . .	21,136,449	10,824,896	10,311,553	16,426,008	8,431,022	7,994,986	3,513,744	1,782,740	1,731,004	305,909	155,034	150,875	890,788	456,100	434,688
15–19 years . . . . .	20,376,151	10,471,128	9,905,023	16,019,451	8,254,924	7,764,527	3,172,349	1,612,894	1,559,455	292,760	149,492	143,268	891,591	453,818	437,773
20–24 years . . . . .	20,213,632	10,350,141	9,863,491	15,933,490	8,226,899	7,706,591	3,025,875	1,494,112	1,531,763	264,526	137,125	127,401	989,741	492,005	497,736
25–34 years . . . . .	39,928,304	20,202,776	19,725,528	31,626,394	16,214,420	15,411,974	5,444,534	2,589,128	2,855,406	459,579	236,699	222,880	2,397,797	1,162,529	1,235,268
35–44 years . . . . .	44,916,606	22,366,506	22,550,100	36,482,845	18,367,816	18,115,029	5,805,202	2,725,753	3,079,449	470,480	232,958	237,522	2,158,079	1,039,979	1,118,100
45–54 years . . . . .	40,083,937	19,676,321	20,407,616	33,347,010	16,552,991	16,794,019	4,651,519	2,148,656	2,502,863	373,524	181,328	192,196	1,711,884	793,346	918,538
55–64 years . . . . .	26,601,726	12,784,311	13,817,415	22,761,178	11,045,418	11,715,760	2,640,870	1,176,912	1,463,958	210,022	101,396	108,626	989,656	460,585	529,071
65 years and over . . . . .	35,601,917	14,771,869	20,830,048	31,435,843	13,125,923	18,309,920	2,988,578	1,142,513	1,846,065	181,724	78,418	103,306	995,772	425,015	570,757
65–74 years . . . . .	18,274,215	8,301,005	9,973,210	15,878,159	7,288,211	8,589,948	1,687,536	700,654	986,882	110,349	50,750	59,599	598,171	261,390	336,781
75–84 years . . . . .	12,734,633	5,081,056	7,653,577	11,405,718	4,580,254	6,825,464	964,301	348,584	615,717	53,892	22,071	31,821	310,722	130,147	180,575
85 years and over . . . . .	4,593,069	1,389,808	3,203,261	4,151,966	1,257,458	2,894,508	336,741	93,275	243,466	17,483	5,597	11,886	86,879	33,478	53,401

NOTE: These population estimates are based on the 2000 Census; see "Technical Notes."

SOURCE: U.S. Census Bureau.

**Table IV. Estimated population by age, Hispanic origin, race for non-Hispanic population, and sex: United States, July 1, 2002**

Age	All origins			Hispanic			Non-Hispanic			Non-Hispanic white			Non-Hispanic black		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Total . . . . .	288,368,706	141,660,980	146,707,726	38,761,304	19,991,226	18,770,078	249,607,402	121,669,754	127,937,648	198,691,529	97,328,705	101,362,824	36,145,193	17,191,516	18,953,677
Less than 1 year . . . . .	4,033,719	2,063,824	1,969,895	833,933	426,383	407,550	3,199,786	1,637,441	1,562,345	2,337,889	1,197,524	1,140,365	647,046	330,090	316,956
1–4 years . . . . .	15,575,428	7,961,545	7,613,883	3,127,779	1,598,115	1,529,664	12,447,649	6,363,430	6,084,219	9,224,405	4,728,800	4,495,605	2,402,138	1,220,181	1,181,957
5–9 years . . . . .	19,900,837	10,187,663	9,713,174	3,729,897	1,910,015	1,819,882	16,170,940	8,277,648	7,893,292	12,028,891	6,176,261	5,852,630	3,112,035	1,580,131	1,531,904
10–14 years . . . . .	21,136,449	10,824,896	10,311,553	3,535,140	1,810,519	1,724,621	17,601,309	9,014,377	8,586,932	13,174,392	6,764,493	6,409,899	3,348,133	1,698,583	1,649,550
15–19 years . . . . .	20,376,151	10,471,128	9,905,023	3,197,168	1,664,488	1,532,680	17,178,983	8,806,640	8,372,343	13,066,442	6,715,438	6,351,004	3,033,725	1,541,764	1,491,961
20–24 years . . . . .	20,213,632	10,350,141	9,863,491	3,606,505	1,991,936	1,614,569	16,607,127	8,358,205	8,248,922	12,587,099	6,370,712	6,216,387	2,874,571	1,417,125	1,457,446
25–34 years . . . . .	39,928,304	20,202,776	19,725,528	7,332,062	3,978,236	3,353,826	32,596,242	16,224,540	16,371,702	24,775,910	12,480,105	12,295,805	5,160,980	2,451,380	2,709,600
35–44 years . . . . .	44,916,606	22,366,506	22,550,100	5,808,458	3,026,851	2,781,607	39,108,148	19,339,655	19,768,493	31,065,197	15,533,926	15,531,271	5,576,646	2,616,049	2,960,597
45–54 years . . . . .	40,083,937	19,676,321	20,407,616	3,654,900	1,823,307	1,831,593	36,429,037	17,853,014	18,576,023	29,942,672	14,851,443	15,091,229	4,502,817	2,077,847	2,424,970
55–64 years . . . . .	26,601,726	12,784,311	13,817,415	1,974,793	934,703	1,040,090	24,626,933	11,849,608	12,777,325	20,908,117	10,167,732	10,740,385	2,566,235	1,142,737	1,423,498
65 years and over . . . . .	35,601,917	14,771,869	20,830,048	1,960,669	826,673	1,133,996	33,641,248	13,945,196	19,696,052	29,580,515	12,342,271	17,238,244	2,920,867	1,115,629	1,805,238
65–74 years . . . . .	18,274,215	8,301,005	9,973,210	1,180,765	523,210	657,555	17,093,450	7,777,795	9,315,655	14,762,715	6,793,121	7,969,594	1,645,906	683,007	962,899
75–84 years . . . . .	12,734,633	5,081,056	7,653,577	599,503	243,698	355,805	12,135,130	4,837,358	7,297,772	10,836,937	4,348,361	6,488,576	944,343	341,210	603,133
85 years and over . . . . .	4,593,069	1,389,808	3,203,261	180,401	59,765	120,636	4,412,668	1,330,043	3,082,625	3,980,863	1,200,789	2,780,074	330,618	91,412	239,206

NOTE: These population estimates are based on the 2000 Census; see "Technical Notes."

SOURCE: U.S. Census Bureau.



5.  $L(R) = R - 1.96(SE(R))$  and  $U(R) = R + 1.96(SE(R))$

where  $L(R)$  and  $U(R)$  are the lower and upper limits of the confidence interval, respectively. The resulting 95 percent confidence interval can be interpreted to mean that the chances are 95 in 100 that the "true" death rate falls between  $L(R)$  and  $U(R)$ . For example, suppose that the crude death rate for all injuries is 55.2 per 100,000 population based on 157,078 deaths. Lower and upper limits of the 95 percent confidence intervals using formula 5 are calculated as

$L(55.2) = 55.2 - 1.96(.14) = 54.9$  and  
 $U(55.2) = 55.2 + 1.96(.14) = 55.5$

Thus, the chances are 95 in 100 that the true death rate for all injuries is between 54.9 and 55.5. Formula 5 can also be used to calculate 95-percent confidence intervals for the number of deaths, age-adjusted death rates, and other mortality statistics when the normal approximation is appropriate by replacing  $R$  with  $D$ ,  $R'$ , etc.

When testing the difference between two rates,  $R_1$  and  $R_2$  (each based on 100 or more deaths), the normal approximation may be used to calculate a test statistic,  $z$ , such that

6. 
$$z = \frac{R_1 - R_2}{\sqrt{SE(R_1)^2 + SE(R_2)^2}}$$

If  $|z| \geq 1.96$  then the difference between the rates is statistically significant at the 0.05-level. If  $|z| < 1.96$  then the difference is not statistically significant. Formula 6 can also be used to perform tests

**Table VI. United States standard population by age: Numbers and proportions (weights)**

Age	Number	Weights (w)
All ages . . . . .	1,000,000	1.000000
Under 1 year . . . . .	13,818	0.013818
1-4 years . . . . .	55,317	0.055317
5-14 years . . . . .	145,565	0.145565
15-24 years . . . . .	138,646	0.138646
25-34 years . . . . .	135,573	0.135573
35-44 years . . . . .	162,613	0.162613
45-54 years . . . . .	134,834	0.134834
55-64 years . . . . .	87,247	0.087247
65-74 years . . . . .	66,037	0.066037
75-84 years . . . . .	44,842	0.044842
85 years and over . . . . .	15,508	0.015508

for other mortality statistics when the normal approximation is appropriate (when both statistics being compared meet the normal criteria) by replacing  $R_1$  and  $R_2$  with  $D_1$  and  $D_2$ ,  $R'_1$  and  $R'_2$ , etc. Suppose that the age-adjusted death rate for firearm is 10.3 per 100,000 U.S. standard population in year 1 ( $R'_1$ ) and 10.2 per 100,000 U.S. standard population in year 2 ( $R'_2$ ). The standard error for each of these figures,  $SE(R'_1)$  and  $SE(R'_2)$ , is calculated using formula 4. Using formula 6, one can test if the decrease in the age-adjusted rate is statistically significant.

$$z = \frac{10.3 - 10.2}{\sqrt{(0.06)^2 + (0.06)^2}} = 1.18$$

**Table V. Estimated population for the United States and each State, 2002**

[Populations for the United States are postcensal estimates produced in 2002 based on the 2000 census estimated as of July 1, 2002. Populations for each State are postcensal estimates in 2003 based on the 2000 census estimated as of July 1, 2002. State populations do not add to U.S. total]

Area	Total	Area	Total
United States . . . . .	288,368,706		
Alabama . . . . .	4,486,508	Montana . . . . .	909,453
Alaska . . . . .	643,786	Nebraska . . . . .	1,729,180
Arizona . . . . .	5,456,453	Nevada . . . . .	2,173,491
Arkansas . . . . .	2,710,079	New Hampshire . . . . .	1,275,056
California . . . . .	35,116,033	New Jersey . . . . .	8,590,303
Colorado . . . . .	4,506,542	New Mexico . . . . .	1,855,059
Connecticut . . . . .	3,460,503	New York . . . . .	19,157,532
Delaware . . . . .	807,385	North Carolina . . . . .	8,320,146
District of Columbia . . . . .	570,898	North Dakota . . . . .	634,110
Florida . . . . .	16,713,149	Ohio . . . . .	11,421,268
Georgia . . . . .	8,560,310	Oklahoma . . . . .	3,493,714
Hawaii . . . . .	1,244,898	Oregon . . . . .	3,521,515
Idaho . . . . .	1,341,131	Pennsylvania . . . . .	12,335,091
Illinois . . . . .	12,600,620	Rhode Island . . . . .	1,069,725
Indiana . . . . .	6,159,068	South Carolina . . . . .	4,107,183
Iowa . . . . .	2,936,760	South Dakota . . . . .	761,063
Kansas . . . . .	2,715,884	Tennessee . . . . .	5,797,289
Kentucky . . . . .	4,092,891	Texas . . . . .	21,779,893
Louisiana . . . . .	4,482,646	Utah . . . . .	2,316,256
Maine . . . . .	1,294,466	Vermont . . . . .	616,592
Maryland . . . . .	5,458,137	Virginia . . . . .	7,293,542
Massachusetts . . . . .	6,427,803	Washington . . . . .	6,068,996
Michigan . . . . .	10,050,446	West Virginia . . . . .	1,801,873
Minnesota . . . . .	5,019,720	Wisconsin . . . . .	5,441,196
Mississippi . . . . .	2,871,782	Wyoming . . . . .	498,703
Missouri . . . . .	5,672,579		

SOURCE: U.S. Census Bureau; see "Technical Notes."

Because  $z = 1.18 < 1.96$ , the increase from year 1 to year 2 in the age-adjusted death rate for firearm injuries is not statistically significant.

*Confidence intervals and statistical tests based on fewer than 100 deaths*—When the number of deaths is not large (less than 100), the Poisson distribution cannot be approximated by the normal distribution. The normal distribution is a symmetric distribution with a range from  $-\infty$  to  $+\infty$ . As a result, confidence intervals based on the normal distribution also have this range. The number of deaths or the death rate, however, cannot be less than zero. When the number of deaths is very small, approximating confidence intervals for deaths and death rates using the normal distribution will sometimes produce lower confidence limits that are negative. The Poisson distribution, in contrast, is an asymmetric distribution with zero as a lower bound. Thus, confidence limits based on this distribution will never be less than zero. A simple method based on the more general family of gamma distributions, of which the Poisson is a member, can be used to approximate confidence intervals for deaths and death rates when the number of deaths is small (44,71,74). For more information regarding how the gamma method is derived, see “Derivation of the gamma method” at the end of this section.

Calculations using the gamma method can be made using commonly available spreadsheet programs or statistical software (e.g., Excel, SAS) that include an inverse gamma function. In Excel, the function “*gammainv* (probability, alpha, beta)” returns values associated with the inverse gamma function for a given probability between 0 and 1. For a 95-percent confidence interval, the probability associated with the lower limit is  $.05/2 = .025$  and the probability associated with the upper limit is  $1 - (.05/2) = .975$ . Alpha and beta are parameters associated with the gamma distribution. For the number of deaths and crude and age-specific death rates,  $\alpha = D$  (the number of deaths) and  $\beta = 1$ . In Excel, the following formulas can be used to calculate lower and upper limits of the 95-percent confidence interval for the number of deaths and crude and age-specific death rates

$$L(D) = \text{GAMMAINV}(.025, D, 1) \text{ and } U(D) = \text{GAMMAINV}(.975, D + 1, 1)$$

Confidence limits for the death rate are then calculated by dividing  $L(D)$  and  $U(D)$  by the population ( $P$ ) at risk of dying (see formula 13).

Alternatively, limits for the 95-percent confidence interval can be estimated using the lower and upper confidence limit factors shown in [table VII](#). For the number of deaths,  $D$ , and the death rate,  $R$ ,

$$7. L(D) = L \times D \text{ and } U(D) = U \times D$$

$$8. L(R) = L \times R \text{ and } U(R) = U \times R$$

where  $L$  and  $U$  in formulas 7 and 8 are the lower and upper confidence limit factors which correspond to the appropriate number of deaths,  $D$ , in [table VII](#). For example, suppose that the suicide rate for males aged 14 is 4.2 per 100,000 and based on 88 deaths. Applying formula 8, values for  $L$  and  $U$  from [table VII](#) for 88 deaths are multiplied by the death rate, 4.2, such that

$$L(R) = L(4.2) = 0.802029 \times 4.2 = 3.4 \text{ and}$$

$$U(R) = U(4.2) = 1.232028 \times 4.2 = 5.2$$

These confidence limits indicate that the chances are 95 out of 100 that the actual suicide rate for males aged 14 years is between 3.4 and 5.2 per 100,000.

Although the calculations are similar, confidence intervals based on small numbers for age-adjusted death rates are somewhat more complicated (44,71). Refer to the most recent version of the “Mortality Technical Appendix” for more details (44).

When comparing the difference between two rates,  $R_1$  and  $R_2$ , where one or both of the rates are based on fewer than 100 deaths, a comparison of 95 percent confidence intervals may be used as a statistical test. If the 95 percent confidence intervals do not overlap, then the difference can be said to be statistically significant at the 0.05-level. A simple rule of thumb is: if  $R_1 > R_2$  then test if  $L(R_1) > U(R_2)$  or if  $R_2 > R_1$  then test if  $L(R_2) > U(R_1)$ . Positive tests denote statistical significance at the 0.05 level. For example, suppose that males aged 14 years have a suicide rate ( $R_1$ ) of 4.2 based on 88 deaths and females aged 14 years have a suicide rate ( $R_2$ ) of 1.7 per 100,000 based on 34 deaths. The upper and lower limits of the 95-percent confidence limits for  $R_1$  and  $R_2$  calculated using formula 8 would be

$$L(R_1) = L(4.2) = 0.802029 \times 4.2 = 3.4 \text{ and}$$

$$U(R_1) = U(4.2) = 1.232028 \times 4.2 = 5.2$$

$$L(R_2) = L(1.7) = 0.692529 \times 1.7 = 1.2 \text{ and}$$

$$U(R_2) = U(1.7) = 1.397400 \times 1.7 = 2.4$$

Because  $R_1 > R_2$  and  $L(R_1) > U(R_2)$ , it can be concluded that the difference between the suicide rates for males aged 14 years and females of the same age is statistically significant at the 0.05 level. That is, taking into account random variability, females aged 14 years have a suicide rate that is significantly lower than that for males 14 years of age.

This test may also be used to perform tests for other statistics when the normal approximation is not appropriate for one or both of the statistics being compared by replacing the  $R_1$  and  $R_2$  with  $D_1$  and  $D_2$ ,  $R'_1$  and  $R'_2$ , etc.

Users of the method of comparing confidence intervals should be aware that this method is a conservative test for statistical significance. That is, the difference between two rates may, in fact, be statistically significant even though confidence intervals for the two rates overlap (75). Thus, caution should be observed when interpreting a nonsignificant difference between two rates, especially when the lower and upper limits being compared overlap only slightly.

*Derivation of the gamma method*—For a random variable  $X$  that follows a gamma distribution  $\Gamma(y, z)$ , where  $y$  and  $z$  are the parameters that determine the shape of the distribution,  $E(X) = yz$  and  $\text{Var}(X) = yz^2$  (76). For the number of deaths,  $D$ ,  $E(D) = D$  and  $\text{Var}(D) = D$ . It follows that  $y = D$  and  $z = 1$  and thus,

$$9. D \sim \Gamma(D, 1)$$

From equation 9, it is clear that the shape of the distribution of deaths depends only on the number of deaths.

For the death rate,  $R$ ,  $E(R) = R$  and  $\text{Var}(R) = D/P^2$ . It follows, in this case, that  $y = D$  and  $z = P^{-1}$  and thus,

$$10. R \sim \Gamma(D, P^{-1}).$$

A useful property of the gamma distribution is that for  $X \sim \Gamma(y, z)$ , one can divide  $X$  by  $z$  such that  $X/z \sim \Gamma(y, 1)$ . This converts the gamma distribution into a simplified, standard form dependent only on parameter  $y$ . Expressing equation 10 in its simplified form gives

**Table VII. Lower and upper 95-percent confidence limit factors for the number of deaths and death rate when the number of deaths is less than 100**

Number of deaths (D)	Lower confidence limit (L)	Upper confidence limit (U)	Number of deaths (D)	Lower confidence limit (L)	Upper confidence limit (U)
1	0.025318	5.571643	51	0.744566	1.314815
2	0.121105	3.612344	52	0.746848	1.311367
3	0.206224	2.922424	53	0.749069	1.308025
4	0.272466	2.560397	54	0.751231	1.304783
5	0.324697	2.333666	55	0.753337	1.301637
6	0.366982	2.176579	56	0.755389	1.298583
7	0.402052	2.060382	57	0.757390	1.295616
8	0.431729	1.970399	58	0.759342	1.292732
9	0.457264	1.898311	59	0.761246	1.289927
10	0.479539	1.839036	60	0.763105	1.287198
11	0.499196	1.789276	61	0.764921	1.284542
12	0.516715	1.746799	62	0.766694	1.281955
13	0.532458	1.710030	63	0.768427	1.279434
14	0.546709	1.677830	64	0.770122	1.276978
15	0.559692	1.649348	65	0.771779	1.274582
16	0.571586	1.623937	66	0.773400	1.272245
17	0.582537	1.601097	67	0.774986	1.269965
18	0.592663	1.580431	68	0.776539	1.267738
19	0.602065	1.561624	69	0.778060	1.265564
20	0.610826	1.544419	70	0.779549	1.263440
21	0.619016	1.528606	71	0.781008	1.261364
22	0.626695	1.514012	72	0.782438	1.259335
23	0.633914	1.500491	73	0.783840	1.257350
24	0.640719	1.487921	74	0.785215	1.255408
25	0.647147	1.476197	75	0.786563	1.253509
26	0.653233	1.465232	76	0.787886	1.251649
27	0.659006	1.454947	77	0.789184	1.249828
28	0.664493	1.445278	78	0.790459	1.248045
29	0.669716	1.436167	79	0.791709	1.246298
30	0.674696	1.427562	80	0.792938	1.244587
31	0.679451	1.419420	81	0.794144	1.242909
32	0.683999	1.411702	82	0.795330	1.241264
33	0.688354	1.404372	83	0.796494	1.239650
34	0.692529	1.397400	84	0.797639	1.238068
35	0.696537	1.390758	85	0.798764	1.236515
36	0.700388	1.384422	86	0.799871	1.234992
37	0.704092	1.378368	87	0.800959	1.233496
38	0.707660	1.372578	88	0.802029	1.232028
39	0.711098	1.367033	89	0.803082	1.230586
40	0.714415	1.361716	90	0.804118	1.229170
41	0.717617	1.356613	91	0.805138	1.227778
42	0.720712	1.351709	92	0.806141	1.226411
43	0.723705	1.346993	93	0.807129	1.225068
44	0.726602	1.342453	94	0.808102	1.223747
45	0.729407	1.338079	95	0.809060	1.222448
46	0.732126	1.333860	96	0.810003	1.221171
47	0.734762	1.329788	97	0.810933	1.219915
48	0.737321	1.325855	98	0.811848	1.218680
49	0.739806	1.322053	99	0.812751	1.217464
50	0.742219	1.318375			

11.  $\frac{R}{P^{-1}} = D \sim \Gamma(D, 1)$

From equation 11, it is clear that the shape of the distribution of the death rate is also dependent solely on the number of deaths.

Using the results of equations 9 and 11, one can use the inverse gamma distribution to calculate upper and lower confidence limits. Lower and upper  $100(1 - \alpha)$  percent confidence limits for the number of deaths,  $L(D)$  and  $U(D)$ , are estimated as

12.  $L(D) = \Gamma^{-1}_{(D,1)}(\alpha / 2)$  and  $U(D) = \Gamma^{-1}_{(D+1,1)}(1 - \alpha / 2)$

where  $\Gamma^{-1}$  represents the inverse of the gamma distribution and  $D + 1$  in the formula for  $U(D)$  reflects a continuity correction made

necessary by the fact that  $D$  is a discrete random variable and the gamma distribution is a continuous distribution. For a 95-percent confidence interval,  $\alpha = .05$ . For the death rate, it can be shown that

13.  $L(R) = \frac{L(D)}{P}$  and  $U(R) = \frac{U(D)}{P}$

For more detail regarding the derivation of the gamma method and its application to age-adjusted death rates and other mortality statistics, see references (44,71,74).

## SAS statements

Suppose that one wanted to know the number of unintentional falls with any mention of a head injury. One could use the following SAS statements to obtain this information from the multiple cause mortality file:

```

ARRAY RECAX(20) $ RECAX1-RECAX20; /*RECAX1-RECAX20 CORRESPOND TO THE 20
                                RECORD AXIS FIELDS IN THE MORTALITY FILE*/

HEAD=0;
DO I=1 TO 20;
  IF RECAX(I) >='S000' AND RECAX(I) < 'S099' THEN HEAD = 1; / *FLAG HEAD INJURIES*/
END;
/*SELECT ALL UNDERLYING CAUSE OF DEATH DUE TO FALLS*/
IF UC >='W00' AND UC <='W19'; / *UC IS THE UNDERLYING CAUSE OF DEATH*/
PROC FREQ;
  TABLES HEAD; /*RETURNS A FREQUENCY DISTRIBUTION FOR THE VARIABLE "HEAD"
                WHERE 1=HEAD INJURIES*/
RUN;

```

If one were interested in the total number of mentions of head injury (more than one head injury could be listed on the death certificate, e.g., skull fracture and intracranial injury), then the DO loop in the previous example would be modified as below:

```

DO I=1 TO 20;
  IF RECAX(I) >='S000' AND RECAX(I) < 'S099' THEN HEAD=HEAD+1;
END;

```

---

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