



U.S. Department  
Of Transportation



National Highway Traffic Safety Administration

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DOT HS 809 843

June 2005

**Technical Report**

# **Motor Vehicle Traffic Crashes as a Leading Cause of Death in the U.S., 2002 – A Demographic Perspective**

**Published By:  
NHTSA's  
National Center for Statistics and Analysis  
NCSA**



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1. Report No. <b>DOT HS 809 843</b>		2. Government Accession No.		3. Recipients's Catalog No.	
4. Title and Subtitle <b>Motor Vehicle Traffic Crashes as a Leading Cause of Death in the U.S., 2002</b>			5. Report Date <b>June, 2005</b>		
			6. Performing Organization Code <b>NPO-121</b>		
7. Author(s) <b>Rajesh Subramanian</b>			8. Performing Organization Report No.		
9. Performing Organization Name and Address Mathematical Analysis Division, Office of Traffic Records and Analysis National Center for Statistics and Analysis National Highway Traffic Safety Administration U.S. Department of Transportation NPO-121, 400 Seventh Street, S.W. Washington, DC 20590			10. Work Unit No. (TRAI)n code		
			11. Contract of Grant No.		
12. Sponsoring Agency Name and Address Mathematical Analysis Division, Office of Traffic Records and Analysis National Center for Statistics and Analysis National Highway Traffic Safety Administration U.S. Department of Transportation NPO-121, 400 Seventh Street, S.W. Washington, DC 20590			13. Type of Report and Period Covered <b>NHTSA Technical Report</b>		
			14. Sponsoring Agency Code		
15. Supplementary Notes <b>Rajesh Subramanian is a Senior Researcher employed by Rainbow Technology, Inc., a contractor for the Mathematical Analysis Division of the National Center for Statistics and Analysis.</b>					
16. Abstract  This report examines the status of motor vehicle traffic crashes as a leading or major cause of death in the United States in 2002. It is based on a study, by age and sex, of the rank ordering of 68 causes of death which have been adopted by the National Center for Statistics and Analysis (NCSA) of the National Highway Traffic Safety Administration (NHTSA) to study the leading causes of death in the U.S. This study was originally prompted by a number of unanswered questions regarding adequate background material and appropriate information pertaining to the general concept of motor vehicle traffic crashes as a leading cause of death.					
17. Key Words <b>Motor vehicle crashes, leading causes, age-adjusted death rates, Life Expectancy, Years of Lost Life</b>			18. Distribution Statement <b>Document is available to the public through the National Technical Information Service, Springfield, VA 22161</b>		
19. Security Classif. (of this report) <b>Unclassified</b>	20. Security Classif. (of this page) <b>Unclassified</b>	21. No of Pages <b>48</b>	22. Price		



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## Executive Summary

Fatalities due to motor vehicle traffic crashes comprise a significant proportion of all fatalities due to unintentional injuries, especially at younger ages and this has prompted the National Highway Traffic Safety Administration (NHTSA) to separate motor vehicle crashes as an individual cause of death in this report. The National Center for Statistics and Analysis (NCSA) added the computation of the years of lost life to the conventional rank ordering of the causes of death in order to highlight the tremendous toll that motor vehicle traffic crashes have on the younger population.

From the 2002 National Center for Health Statistics (NCHS) data, it was determined that motor vehicle traffic crashes were the leading cause of death for every age 3 through 33. Because of the young lives consumed, motor vehicle traffic crashes ranked 3<sup>rd</sup>, behind only cancer and diseases of the heart, in terms of the years of life lost, i.e., the number of remaining years that the person is expected to live had they not died.

About 1 out of every 55 deaths that occurred was in a motor vehicle traffic crash. For males, traffic crashes were the 6th ranked cause of death accounting for 1 out of every 40 male deaths. For females they were the 10th ranked cause of death, or 1 out of every 88 female deaths that occurred.

Motor vehicle traffic crashes ranked first among both males and females as an external cause of death, accounting for different proportions of deaths in each case: 1 out of every 3 male deaths due to external causes, and about 1 out of every 3 such deaths for females.

Traffic crashes caused almost 51 percent of all deaths due to *unintentional injuries* that occurred, about 53% of all such deaths for males and 48% for females. When comparing unintentional deaths in 2002 for both sexes combined, the likelihood of dying from a traffic crash was 2.5 times as great as dying from Accidental Poisoning (generally the No. 2 cause of accidental death, regardless of year), 2.7 times that of dying from Accidental Falls, 12.7 times that of dying from Accidental Drowning and 22 times that of dying in a crash involving another mode of transport such as an aircraft, a train or a boat.

Fifty percent of all persons killed in traffic crashes were under the age of 37. For all males killed in traffic crashes, half were under 36. For all females killed in traffic crashes half were under 40.

The average age of death from all causes was 72.5 years (68.8 for males and 76.1 for females), whereas the average age for those killed in motor vehicle traffic crashes was 41 years (39 years for males and 43 years for females).

Native Americans have the highest age-adjusted death rates due to motor vehicle traffic crashes at 28.1 deaths per 100,000 population followed by non-Hispanic Whites at 15.5, Hispanics at 14.8, non-Hispanic Blacks at 14.6. Asian/Pacific Islanders had the lowest death rate at 8.2 deaths per 100,000 population.



For non-Hispanic Whites, motor vehicle traffic crashes were the No. 1 cause of death for ages 8-27 and 29-32. For non-Hispanic Blacks, motor vehicle traffic crashes were the No. 1 cause of death for ages 3 and 5-14. For Native Americans, motor vehicle traffic crashes were the No. 1 cause of death for ages 4-7, 10, 12-39 and 42. For Asian/Pacific Islanders, motor vehicle traffic crashes were the No. 1 cause of death for ages 5, 7, 12 and 15-28. For Hispanics, motor vehicle traffic crashes were the No. 1 cause of death for ages 3-8, 11, 14-34 and 37.

In 2002, by the *State of Residence* of the deceased, the highest rank as a cause of death due to motor vehicle crashes for both sexes was 5 for Mississippi, West Virginia and Wyoming. For males, the highest rank was 4 for Alaska, New Mexico and Wyoming. For females, the highest rank was 7 for Wyoming.



# 1. Introduction

This report examines the status of motor vehicle traffic crashes as a leading or major cause of death in the United States in 2002 – the latest year for which data is available from the Center for Disease Control’s (CDC) National Center for Health Statistics (NCHS). It is based on a study, by age and sex, of the rank-ordering<sup>1</sup> of 68 causes of death. This rank ordering has been adopted by the National Center for Statistics and Analysis (NCSA) of the National Highway Traffic Safety Administration (NHTSA) to study the leading causes of death in the U.S. This study was originally prompted by a number of unanswered questions regarding adequate background material and appropriate information pertaining to the general concept of motor vehicle traffic crashes as a leading cause of death. Although the National Center for Health Statistics (NCHS), in its annual reports on mortality, publishes detailed tabulations of the leading causes of death, the fatalities due to motor vehicle traffic crashes are “lumped” under the very general category of *Unintentional Injuries*. Fatalities due to motor vehicle traffic crashes comprise a significant proportion of all fatalities due to unintentional injuries at certain ages and this has prompted NHTSA to separate out motor vehicle crashes as an individual cause of death in this report.

The data used for this study are based on complete mortality information for the United States for the year 2002, obtained from the NCHS. These data are compiled annually by the NCHS from a census of death records (certificates) furnished by the 50 states, the District of Columbia and the independent death registration areas representing the five boroughs of New York City. Although the United States death registration system also includes Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Marianas, the term “United States” in this report refers only to the aggregate of the 50 states (including New York City) and the District of Columbia<sup>2</sup>. Complete and fully edited mortality data are generally not available to the public until approximately 2 to 3 years after the calendar year of the data.

The population data used to compute the death rates shown in this report are the latest estimated resident population of the United States as of July 1, 2000, as determined by the Bureau of the Census<sup>3</sup>. All deaths and death rates shown reflect U.S. resident data only. Nonresident deaths in the U.S. are fully recorded, but nonresident population figures are generally not available due to the difficulty of estimating the number of nonresidents living or traveling in the U.S. during any given year. Consequently, all death rates are computed only with fully compatible (i.e., resident) data in both numerator and denominator. All mortality statistics, then, reflect only resident data.

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<sup>1</sup>Rank based on number of deaths.

<sup>2</sup>For additional details regarding sources, definitions and classifications of mortality data for the United States, see Reference 2.

<sup>3</sup>Reference 7.

## 2. Methodology

### Cause of Death Classification

Any study of rank-orderings of data is ultimately dependent upon how the data in question is classified in the first place. The mortality data from NCHS are categorized as to cause of death according to the International Classification of Diseases (ICD)<sup>4</sup>, and the specific data used for this report reflect, for each death, a single underlying cause as opposed to multiple causes of death. This single underlying cause of death is defined to be:

- a. That disease or injury which initiated the chain of events leading directly to death, or
- b. The circumstance of the crash or violence, which produced the fatal injury.

NCSA has adopted a reduced listing comprising 68 causes of death<sup>5</sup> in order to more effectively study the leading causes of death, specifically the role of motor vehicle traffic crashes as a leading cause, in the United States. This 68-cause listing consists of single underlying causes in addition to the “aggregated” causes, which are the result of grouping together highly related causes from the remaining single causes. The underlying causes which have been retained, and not grouped with other possible related causes, consist of prominent related diseases or disorders such as septicemia, diabetes mellitus, multiple sclerosis, etc., each of which take a significant toll of human life. The aggregated causes, on the other hand, consist of groups of biologically related internal bodily disorders or logically related external causes, which are studied better and more easily understood as grouped causes. For example, all diseases of the circulatory system, which are heart-related, are grouped together and considered under the comprehensive designation “Diseases of the Heart”. All of the many different and complex forms of malignancy are considered as “Malignant Neoplasms”.

The NCSA-adopted listing of 68 causes of death is comprehensive in that all underlying causes are represented. Fifty-one of these 68 adopted causes reflect the underlying causes based on internal morbid bodily conditions, while the remaining 16 NCSA-adopted causes reflect the underlying causes based on external factors such as crashes and acts of violence. This 68-cause listing is also not an arbitrary listing, but is generally in close agreement with a special listing of death causes used by the NCHS to report on leading causes of death in the United States<sup>6</sup>. The

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<sup>4</sup>Tenth Revision, International Classification of Diseases, 1992. The ICD is regulated by the World Health Organization (WHO) and is currently supported by more than 60 member nations, including all the major world powers.

<sup>5</sup>See Appendix 1.

<sup>6</sup>NCHS cause-of-death rankings are based on the 73 Selected Causes of Death and the categories of Human Immunodeficiency Virus (HIV) Infection and Alzheimer’s Disease. See discussion of NCHS procedure for cause-of-death rankings on page 11 of Section 7 (Technical

latter differs from the NCSA listing primarily in that motor vehicle traffic crashes are separated out as a major cause of death in the rank-ordering. The NCHS listing, on the other hand, ranks deaths due to *Unintentional Injuries* as one major cause that includes deaths due to motor vehicle traffic crashes, motor vehicle nontraffic crashes, other transport and specific nontransport accidents like falls, poisoning, exposure to smoke, etc. In general, however, leading causes that are responsible for large number of deaths such as heart disease, cancer, stroke, chronic pulmonary diseases, etc. are virtually identical in both listings.

Using a valid classification of causes of death, the primary purpose of this report then, is to provide clear and concise information on traffic crashes as the leading causes of death in the United States, in relation to basic population demographics (age, sex, race and Hispanic origin), and in relation to other leading causes. This is the fifth in the series of such reports and the first using the 10<sup>th</sup> Revision of the ICD. The first report on this topic examined deaths occurring during calendar year 1979. This was the first year of implementation of revised cause-of-death classifications under the 9th Revision of the ICD. The results of this initial study were presented in a technical report dated February, 1997, which reviews the U.S. mortality experience for calendar year 1992. A following technical report dated March 1998 reviewed the U.S. mortality experience for calendar year 1994. The most recent report and the last one using ICD-9 was published in June 2000 that reviewed the U.S. mortality experience for 1997.

### Death Rates (Crude and Age-Adjusted)

Unless otherwise specified, all death rates shown are “crude” death rates, that is, they represent the actual death rates prevailing in the U.S. for 2002, by stated cause of death, for each specific population subgroup. They are the number of annual deaths resulting from each stated cause for any subgroup, divided by the estimated mid-2002 population for that subgroup, multiplied by 100,000. Some death rates shown, however, are “age-adjusted”. These represent the average of crude death rates for specific population subgroups, which have been adjusted to eliminate differences in the age composition of the U.S. population for 2002, as compared to that of a “standard” population for the United States. To date, the total resident population of the U.S. as enumerated in 2000 is usually selected as the standard population; this practice has generally been followed in this report. When the death rates are age-adjusted according to a different standard population, this is indicated in the text. Age-adjusted death rates show what the level of mortality would be if there were no changes in the age composition of U.S. population from one year to the next, or from one subgroup (e.g., sex, race etc.) to another, for any given year. They are better indicators than unadjusted (crude) death rates for showing changes in death rates over a period of time when the age distribution of the population is changing. They are also better indicators for comparisons of mortality between subgroups of the population (e.g., race, sex)

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Appendix) of reference 2, and refer to Table 2 of the Appendix to this report for the NCHS-adopted listing of 39 death causes for ranking purposes.

with different age distributions<sup>7</sup>. While age-adjusted rates are good measures to compare relative mortality risks among groups and over time, they should be viewed as relative indexes rather than actual measures of mortality risk.

## Differences from FARS reported Death Counts

It is also important to point out that the annual traffic crash death counts obtained by NCHS are different than those obtained from NHTSA's Fatality Analysis Reporting System (FARS). The primary reason for the discrepancy between the two data sources lies in reporting differences. FARS reports on fatal traffic crashes occurring during the calendar year, but includes only those in which death occurs within 30 days of the crash. On the other hand, the NCHS data include all traffic deaths occurring during the calendar year, even if the crash occurred during the previous year. However, all deaths from motor vehicle crashes, that occur more than one year after the crash, are categorized as due to "late effects of motor vehicle crash". Since no other crash information is provided (e.g., traffic or nontraffic occurrence, occupant of vehicle or pedestrian), these deaths are usually excluded from the annual NCHS summaries of deaths from motor vehicle crashes.

## Age Groups and Specific Ages

In the sections that follow in this report, the role of motor vehicle traffic crashes as a cause of death is analyzed by various categories of interest such as age, sex, race, Hispanic origin and the state of occurrence of the death. Rank ordering is done either for an age group or specific ages for the various demographic categories. When ranked by specific ages, the rank of a cause of death is with respect to that age alone. So, the statement "motor vehicle traffic crashes are the leading cause of death in the age-group 2-15" implies that the rank is for the total deaths in that age-group and may not necessarily be true for each specific age in that interval. On the other hand, the statement "motor vehicle traffic crashes are the leading cause of death for every age in 2-11" implies that they are the leading cause for every age in that age-group including the beginning and ending years.

There are charts in this report that tabulate motor vehicle traffic crashes as a leading cause of death by NHTSA-specified age groups. The age groups reflect categories of interest to NHTSA in terms of Child Restraint Programs (Toddlers, Infants and Young Children), New Drivers (Youth and Young Adults), Other Adults and the Elderly.

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<sup>7</sup>For additional details regarding crude death rates, age-adjusted according to NCHS procedures, see Reference 2. For additional details regarding general standardization procedures for crude death rates, see Reference 8 or 9.

## Race and Hispanic Origin

Tabulations of leading causes of death are provided by the race and Hispanic origin of the deceased. Race and Hispanic Origin information is provided by five major categories of non-Hispanic White, non-Hispanic Black, Native Americans, Asian/Pacific Islanders and Hispanics.

## Years of Life Lost

This is a statistical measure of the number of remaining years that the person is expected to live had they not died. The number of years of life lost due to a particular cause is the aggregate of years of life lost for all persons that died due to that cause. The expected years of remaining life is calculated using standard tables of life expectancy by age as enumerated by NCHS for a given year. NCSA added the computation of the years of lost life to the conventional rank ordering of the causes of death in order to highlight the tremendous toll that motor vehicle traffic crashes have on the younger population. In fact, while motor vehicle traffic crashes ranked 8<sup>th</sup> overall as a cause of death, they were ranked as high as 3<sup>rd</sup> in terms of the years of life lost in 2002.

The following sections in this report are organized into two major sections that each contains three sub-sections. The first major section describes motor vehicle traffic crashes as a leading cause of death for persons of all races and Hispanic origin, while the second section tabulates the rank ordering by race and Hispanic origin. Within each of these sections are three sub-sections that analyze motor vehicle traffic crashes as a leading cause of death for all ages, specific ages and NHTSA-specified age groups.

### 3. Results

#### 3.1. Motor Vehicle Traffic Crashes as a Leading Cause of Death – Persons of all Races

This section describes the role of motor vehicle traffic crashes as a leading cause of death for all races in 2002.

##### 3.1.1. Leading Causes for all Ages Combined

In 2002, a total of 2,443,387 deaths occurred among the residents of the United States. The age-adjusted death rate<sup>8</sup> for 2002 was 845.3 per 100,000 population. Nearly 4 percent more females than males died during the year (1,199,264 males and 1,244,123). The age-adjusted death rate for males was 42 percent greater than that for females (1013.7 versus 715.2). Table 1 depicts the data on the 10 leading causes of death in 2002 for both sexes.

<b>Table 1: Deaths, Percents of Total Deaths and Death Rates for the 10 Leading Causes of Death for BOTH SEXES of All Ages, United States, 2002</b>					
Cause of Death	Rank	Number of Deaths	Percent of all Deaths	Age-adjusted Death Rate	Median (Mean) Age of Death
Diseases of the Heart	1	696,947	28.52%	240.8	80 (77)
Malignant Neoplasms (Cancer)	2	557,271	22.81%	193.5	73 (71)
Stroke	3	162,672	6.66%	56.2	82 (80)
Chronic Lower Respiratory Dis.	4	124,816	5.11%	43.5	78 (76)
Diabetes	5	73,249	3%	25.4	75 (73)
Influenza/Pneumonia	6	65,681	2.69%	22.6	84 (81)
Alzheimer’s Disease	7	58,866	2.41%	20.2	86 (86)
<b>Motor Vehicle Traffic Crashes</b>	<b>8</b>	<b>44,065</b>	<b>1.8%</b>	<b>15.2</b>	<b>37 (41)</b>
Nephritis, Nephrotic Syndrome and Nephrosis	9	40,974	1.68%	14.2	80 (77)
Septicemia	10	33,865	1.39%	11.7	78 (74)
All Causes	-	2,443,387	100.00%	845.3	77 (72)

Source: NCHS 2002 Mortality Data, U.S. Bureau of Census

For all ages combined and people of all races and ethnicity, motor vehicle traffic crashes were the 8<sup>th</sup> leading cause of resident deaths in the U.S. in 2002. This constitutes about two percent of all resident deaths in the U.S. in 2002. The age-adjusted death rate due to motor vehicle traffic

<sup>8</sup>All crude population death rates in this document are deaths per 100,000 resident population. All death rates designated as “age-adjusted” in this section have been age-adjusted according to NCHS procedures. For additional details, see Reference 2.



crashes was 15.2 deaths per 100,000 resident population. Tables 2 and 3 depict the same data for males and females of all races and ethnicity.

<b>Table 2: Deaths, Percents of Total Deaths and Death Rates for the 10 Leading Causes of Death for MALES of All Ages, United States, 2002</b>					
Cause of Death	Rank	Number of Deaths	Percent of all Deaths	Age-adjusted Death Rate	Median (Mean) Age of Death
Diseases of the Heart	1	340,933	28.43%	297.4	76 (73)
Malignant Neoplasms (Cancer)	2	288,768	24.08%	238.9	72 (70)
Stroke	3	62,622	5.22%	56.5	79 (76)
Chronic Lower Respiratory Dis.	4	60,713	5.06%	53.5	77 (76)
Diabetes	5	34,301	2.86%	28.6	72 (70)
<b>Motor Vehicle Traffic Crashes</b>	<b>6</b>	<b>29,989</b>	<b>2.50%</b>	<b>21.3</b>	<b>36 (39)</b>
Influenza/Pneumonia	7	28,918	2.41%	27	82 (78)
Suicide	8	25,409	2.12%	18.4	44 (46)
Nephritis, Nephrotic Syndrome and Nephrosis	9	19,695	1.64%	17.6	78 (75)
Chronic Liver Disease and Cirrhosis	10	17,401	1.45%	12.9	57 (58)
All Causes	-	1,199,264	100.00%	1,013.7	74 (69)

Source: NCHS 2002 Mortality Data, U.S. Bureau of Census

<b>Table 3: Deaths, Percents of Total Deaths and Death Rates for the 10 Leading Causes of Death for FEMALES of All Ages, United States, 2002</b>					
Cause of Death	Rank	Number of Deaths	Percent of all Deaths	Age-adjusted Death Rate	Median (Mean) Age of Death
Diseases of the Heart	1	356,014	28.62%	197.1	84 (81)
Malignant Neoplasms (Cancer)	2	268,503	21.58%	163.1	73 (71)
Stroke	3	100,050	8.04%	55.2	84 (82)
Chronic Lower Respiratory Dis.	4	64,103	5.15%	37.4	79 (77)
Alzheimer's Disease	5	41,877	3.37%	22.0	87 (86)
Diabetes	6	38,948	3.13%	23.0	77 (75)
Influenza/Pneumonia	7	36,763	2.95%	19.9	86 (83)
Nephritis, Nephrotic Syndrome and Nephrosis	8	21,279	1.71%	12.1	81 (78)
Septicaemia	9	18,918	1.52%	10.9	80 (76)
<b>Motor Vehicle Traffic Crashes</b>	<b>10</b>	<b>14,076</b>	<b>1.13%</b>	<b>9.4</b>	<b>40 (43)</b>
All Causes	-	1,244,123	100.00%	715.2	80 (76)

Source: NCHS 2002 Mortality Data, U.S. Bureau of Census

In 2002, traffic crashes resulted in 44,065 deaths in the U.S. The total age-adjusted death rate was 15.2 deaths per 100,000. While ranking 6th as a cause of death for males in 2002 and accounting for 29,989 or 2.5% of all male deaths, traffic crashes ranked 10th for females,

accounting for 14,076 or 1.1% of total female deaths. Thus, more than twice as many males as females died in traffic crashes in 2002. The age-adjusted male death rate from traffic crashes was 21.3 compared to 9.4 for females. That is, the actual risk of male death from traffic crashes was 2.3 times the female risk.

In recent years, males compared to females have accounted for slightly more than two-thirds of all deaths due to traffic crashes. The ratio of males to females in the total population is approximately 1.0 (actually slightly less than 1.0, or 0.96 to be exact). However, more males than females die in traffic crashes because males are exposed to the risk of a motor vehicle crash in greater numbers than females. In addition, males are generally at greater personal risk than females as a result of more aggressive overall behavior, especially as young drivers, night drivers and alcohol-involved drivers at all ages.

The ranking of traffic crashes as a leading cause of death in 2002 (6th for males and 10th for females) reflects the rank ordering of all 68 NCSA-adopted death causes. Reviewing briefly, there are two basic types of underlying causes: *internal* causes, or those attributable to some type of internal bodily disease or disorder which results in death (e.g., cholera, diabetes, emphysema, etc.), and *external* causes, or those attributable to external factors, which produce a fatal injury or have a fatal effect, such as crashes, poisoning or acts of violence<sup>9</sup>. As a result of this basic distinction between underlying causes, 52 of the 68 NCSA-adopted causes are internal causes while the remaining 16 are external causes, and motor vehicle traffic crashes are among the major external causes of death in the United States compared to, say, suicide, homicide or other transport crashes<sup>10</sup>. If traffic crashes are ranked only in relation to *external* causes of death, then, for all ages combined in 2002, traffic crashes are the No.1 cause of death for all ages for males, females and both sexes combined. Table 4 depicts additional data on the 5 major external causes of death in 2002.

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<sup>9</sup>See Reference 2 for additional information regarding the medical classification of mortality data.

<sup>10</sup>Crashes involving other modes of transport such as railway, aerospace or water transport conveyances.

**Table 4: Deaths, Percents of Total Deaths and Death Rates for the 5 Leading EXTERNAL Causes of Death for Persons of All Ages, by Sex, United States, 2002**

Cause of Death	Rank Order	Number of Deaths	Percent of all Deaths	Age-adjusted Death Rate
<b>MALE Deaths</b>				
<b>Motor Vehicle Traffic Crashes</b>	<b>1</b>	<b>29,989</b>	<b>26.53%</b>	<b>21.3</b>
Suicide	2	25,409	22.48%	18.4
Homicide and Legal Intervention	3	13,640	12.07%	9.4
Accidental Poisoning	4	12,059	10.67%	8.5
Accidental Falls	5	8,463	7.49%	7.4
<b>FEMALE Deaths</b>				
<b>Motor Vehicle Traffic Crashes</b>	<b>1</b>	<b>14,076</b>	<b>27.56%</b>	<b>9.4</b>
Accidental Falls	2	7,794	15.26%	4.3
Suicide	3	6,246	12.23%	4.2
Accidental Poisoning	4	5,491	10.75%	3.7
Homicide and Legal Intervention	5	3,998	7.83%	2.7
<b>TOTAL Deaths</b>				
<b>Motor Vehicle Traffic Crashes</b>	<b>1</b>	<b>44,065</b>	<b>26.85%</b>	<b>15.2</b>
Suicide	2	31,655	19.29%	10.9
Homicide and Legal Intervention	3	17,638	10.75%	6.1
Accidental Poisoning	4	17,550	10.69%	6.1
Accidental Falls	5	16,257	9.91%	5.6
Source: NCHS 2002 Mortality Data, U.S. Bureau of Census				

In a rank-order analysis of the prime cause of *unintentional* death (e.g., causes of death like accidental falling, poisoning, drowning, fires), fatalities due to motor vehicle crashes are then ranked as a leading cause of unintentional deaths. As a major external cause, traffic crashes are the prime cause of *unintentional* death in the United States, and this has been true for many years. Thus, for persons of all ages, traffic crashes alone in 2002 caused almost 41% of all unintentional deaths that occurred, about 43% for males and somewhat less, about 38%, for females. When compared with other unintentional causes, traffic crashes accounted for 2.5 times as many male deaths as poisoning and twice as many female deaths as falling, which is the No. 2 cause of accidental death for females. Table 5 presents additional information on the leading causes of unintentional death in 2002.

**Table 5: Deaths, Percents of Total Deaths and Death Rates for the 5 Leading UNINTENTIONAL Causes of Death for Persons of All Ages, by Sex, United States, 2002**

Cause of Death	Rank Order	Number of Deaths	Percent of all Deaths	Age-adjusted Death Rate
<b>MALE Deaths</b>				
<b>Motor Vehicle Traffic Crashes</b>	<b>1</b>	<b>29,989</b>	<b>43.30%</b>	<b>21.3</b>
Accidental Poisoning	2	12,059	17.41%	8.5
Accidental Falls	3	8,463	12.22%	7.4
Accidental Drowning	4	2,761	3.99%	1.9
Accidental Exposure to Smoke, Fire and Flames	5	1,935	2.79%	1.4
<b>FEMALE Deaths</b>				
<b>Motor Vehicle Traffic Crashes</b>	<b>1</b>	<b>14,076</b>	<b>37.55%</b>	<b>9.4</b>
Accidental Falls	2	7,794	20.79%	4.3
Accidental Poisoning	3	5,491	14.65%	3.7
Accidental Exposure to Smoke, Fire and Flames	4	1,224	3.27%	0.8
Accidental Drowning	5	686	1.83%	0.5
<b>TOTAL Deaths</b>				
<b>Motor Vehicle Traffic Crashes</b>	<b>1</b>	<b>44,065</b>	<b>41.28%</b>	<b>15.2</b>
Accidental Poisoning	2	17,550	16.44%	6.1
Accidental Falls	3	16,257	15.23%	5.6
Accidental Drowning	4	3,447	3.23%	1.2
Accidental Exposure to Smoke, Fire and Flames	5	3,159	2.96%	1.1
Source: NCHS 2002 Mortality Data, U.S. Bureau of Census				

### 3.1.2. Leading Causes for Specific Ages

This section presents the role of motor vehicle traffic crashes as a leading cause of death for each specific age by sex for persons of all races and ethnicity. The rank ordering in this section reflects the rank of motor vehicle traffic crashes as a cause of death for that specific age. Table 6 presents the rank ordering for both sexes combined.

As seen in Table 6, motor vehicle traffic crashes are the leading cause of death in every age from 3 through 33 for both sexes combined. For these ages, traffic crashes were responsible for 19,323 deaths or 24.7% of all deaths in both sexes at these ages.

**Table 6: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Both Sexes, 2002 (Rank for all Ages Combined=8)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	8	14	1	28	1	42	3	56	8	70	13	84	18
1	4	15	1	29	1	43	4	57	8	71	12	85	18
2	2	16	1	30	1	44	4	58	8	72	12	86	17
3	1	17	1	31	1	45	5	59	10	73	15	87	17
4	1	18	1	32	1	46	5	60	6	74	15	88	19
5	1	19	1	33	1	47	5	61	8	75	16	89	19
6	1	20	1	34	2	48	5	62	10	76	16	90	20
7	1	21	1	35	3	49	6	63	9	77	17	91	19
8	1	22	1	36	3	50	6	64	10	78	18	92	21
9	1	23	1	37	3	51	6	65	10	79	18	93	21
10	1	24	1	38	3	52	6	66	10	80	18	94	21
11	1	25	1	39	3	53	6	67	11	81	18	95	23
12	1	26	1	40	4	54	8	68	11	82	16	96	22
13	1	27	1	41	5	55	8	69	11	83	17	97+	24

Source: NCHS 2002 Mortality Data

As seen in Table 7, motor vehicle traffic crashes are the leading cause of death in every age from 3 through 34 for males. For these ages, traffic crashes were responsible for 14,207 deaths or 24.3% of all male deaths at these ages.

**Table 7: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Males, 2002 (Rank for all Ages Combined=6)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	9	14	1	28	1	42	4	56	8	70	12	84	18
1	4	15	1	29	1	43	4	57	8	71	12	85	17
2	2	16	1	30	1	44	4	58	8	72	13	86	17
3	1	17	1	31	1	45	4	59	8	73	14	87	18
4	1	18	1	32	1	46	4	60	8	74	17	88	17
5	1	19	1	33	1	47	5	61	7	75	16	89	18
6	1	20	1	34	1	48	5	62	11	76	17	90	19
7	1	21	1	35	2	49	5	63	9	77	18	91	17
8	1	22	1	36	2	50	5	64	10	78	17	92	19
9	1	23	1	37	3	51	5	65	11	79	18	93	16
10	1	24	1	38	4	52	7	66	12	80	19	94	19
11	1	25	1	39	4	53	7	67	12	81	19	95	22
12	1	26	1	40	4	54	7	68	12	82	18	96	19
13	1	27	1	41	5	55	8	69	12	83	17	97+	23

Source: NCHS 2002 Mortality Data

Motor vehicle traffic crashes are the leading cause of death in every age 3 and 6 through 29 for females [Table 8]. For these ages, traffic crashes were responsible for 4,748 deaths or 28.5% of all female deaths at these ages.

**Table 8: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Females, 2002 (Rank for all Ages Combined=10)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	8	14	1	28	1	42	4	56	8	70	12	84	17
1	4	15	1	29	1	43	4	57	10	71	13	85	20
2	2	16	1	30	2	44	4	58	10	72	12	86	20
3	1	17	1	31	2	45	5	59	10	73	14	87	19
4	2	18	1	32	2	46	5	60	9	74	15	88	22
5	2	19	1	33	2	47	6	61	10	75	15	89	21
6	1	20	1	34	3	48	6	62	10	76	17	90	22
7	1	21	1	35	3	49	7	63	10	77	17	91	22
8	1	22	1	36	3	50	6	64	10	78	18	92	20
9	1	23	1	37	3	51	7	65	10	79	18	93	23
10	1	24	1	38	3	52	6	66	11	80	18	94	23
11	1	25	1	39	3	53	6	67	12	81	18	95	23
12	1	26	1	40	4	54	7	68	10	82	18	96	23
13	1	27	1	41	3	55	8	69	12	83	18	97+	25

Source: NCHS 2002 Mortality Data

### 3.1.3. Leading Causes for NHTSA-specified Age Groups

This section tabulates the role of motor vehicle traffic crashes as a leading cause of death by NHTSA-specified age groups. These age groups reflect categories of interest to NHTSA in terms of Child Restraint Programs (Toddlers, Infants and Young Children), New Drivers (Youth and Young Adults), Other Adults and the Elderly. Table 9 depicts the rank ordering for the age groups and also consists of a metric, *the years of lost life*, a statistical measure to provide the number of remaining years that the person is expected to live had they not died. The number of years of life lost due to a particular cause is the aggregate of years of life lost for all persons that died due to that cause. The expected years of remaining life is calculated using standard tables of life expectancy by age. Because of the young lives consumed, motor vehicle traffic crashes ranked 3<sup>rd</sup>, behind only cancer and diseases of the heart, in terms of the years of life lost, i.e., the number of remaining years that the person is expected to live had they not died.



Table 9



## Top 10 Leading Causes of Death in the United States for 2002, By Age Group<sup>1</sup>

National Highway Traffic Safety Administration's  
National Center for Statistics and Analysis

R A N K	Cause and Number of Deaths											Years of Life Lost <sup>2</sup>
	Infants Under 1	Toddlers 1-3	Young Children 4-7	Children 8-15	Youth 16-20	Young Adults 21-24	Other Adults			Elderly 65+	All Ages	
							25-34	35-44	45-64			
1	Perinatal Period 14,106	Congenital Anomalies 474	MV Traffic Crashes 495	MV Traffic Crashes 1,584	MV Traffic Crashes 6,327	MV Traffic Crashes 4,446	MV Traffic Crashes 6,933	Malignant Neoplasms 16,085	Malignant Neoplasms 143,028	Heart Disease 576,301	Heart Disease 696,947	Malignant Neoplasms 23%(8,686,782)
2	Congenital Anomalies 5,623	MV Traffic Crashes 410	Malignant Neoplasms 449	Malignant Neoplasms 842	Homicide 2,422	Homicide 2,650	Suicide 5,046	Heart Disease 13,688	Heart Disease 101,804	Malignant Neoplasms 391,001	Malignant Neoplasms 557,271	Heart Disease 22%(8,140,300)
3	Heart Disease 500	Accidental Drowning 380	Congenital Anomalies 180	Suicide 428	Suicide 1,810	Suicide 2,036	Homicide 4,489	MV Traffic Crashes 6,883	Stroke 15,952	Stroke 143,293	Stroke 162,672	MV Traffic Crashes 5%(1,766,854)
4	Homicide 303	Homicide 366	Accidental Drowning 171	Homicide 426	Malignant Neoplasms 805	Accidental Poisoning 974	Malignant Neoplasms 3,872	Suicide 6,851	Diabetes 15,518	Chronic Lwr. Resp. Dis. 108,313	Chronic Lwr. Resp. Dis. 124,816	Stroke 5%(1,682,465)
5	Septicemia 296	Malignant Neoplasms 285	Exposure to Smoke/Fire 151	Congenital Anomalies 345	Accidental Poisoning 679	Malignant Neoplasms 823	Heart Disease 3,165	Accidental Poisoning 6,007	Chronic Lwr. Resp. Dis. 14,755	Influenza/ Pneumonia 58,826	Diabetes 73,249	Chronic Lwr. Resp. Dis. 4%(1,466,004)
6	Influenza/ Pneumonia 263	Exposure to Smoke/Fire 163	Homicide 134	Accidental Drowning 270	Heart Disease 449	Heart Disease 518	Accidental Poisoning 3,116	HIV 5,707	Chronic Liver Disease 13,313	Alzheimer's 58,289	Influenza/ Pneumonia 65,681	Suicide 3%(1,109,748)
7	Nephritis/ Nephrosis 173	Heart Disease 144	Heart Disease 73	Heart Disease 258	Accidental Drowning 345	Accidental Drowning 238	HIV 1,839	Homicide 3,239	Suicide 9,926	Diabetes 54,715	Alzheimer's 58,866	Perinatal Period 3%(1,099,767)
8	MV Traffic Crashes 120	Influenza/ Pneumonia 92	Influenza/ Pneumonia 41	Exposure to Smoke/Fire 170	Congenital Anomalies 254	Congenital Anomalies 186	Diabetes 642	Chronic Liver Disease 3,154	MV Traffic Crashes 9,412	Nephritis/ Nephrosis 34,316	MV Traffic Crashes 44,065	Diabetes 3%(1,050,798)
9	Stroke 117	MV Nontraffic Crashes <sup>4</sup> 69	Septicemia 38	Chr. Lwr. Resp. Dis. 131	MV Nontraffic Crashes <sup>4</sup> 121	Accidental Falls 134	Stroke 567	Stroke 2,425	HIV 5,821	Septicemia 26,670	Nephritis/ Nephrosis 40,974	Homicide 2%(822,762)
10	Malignant Neoplasms 74	Septicemia 63	Benign Neoplasms 36	MV Nontraffic Crashes <sup>4</sup> 115	Acc. Dischg. Of Firearms 113	HIV 130	Congenital Anomalies 475	Diabetes 2,164	Accidental Poisoning 5,780	Hypertension Renal Dis. 17,345	Septicemia 33,865	Accidental Poisoning 2%(675,348)
ALL <sup>3</sup>	28,034	4,079	2,586	6,760	16,239	15,390	41,355	91,140	425,727	1,811,720	2,443,387	All Causes 100%(37,341,511)

<sup>1</sup>When ranked by specific ages, motor vehicle crashes are the leading cause of death for age 3 through 33.

<sup>2</sup>Number of years calculated based on remaining life expectancy at time of death; percents calculated as a proportion of total years of life lost due to all causes of death.

<sup>3</sup>Not a total of top 10 causes of death. <sup>4</sup>A Motor Vehicle Nontraffic crash is any vehicle crash that occurs entirely in any place other than a public highway.

**Source:** National Center for Health Statistics (NCHS) CDC, Mortality Data 2002

**Note:** The cause of death classification is based on the National Center for Statistics and Analysis (NCSA) Revised 68 Cause of Death Listing. This listing differs from the one used by the NCHS for its reports on leading causes of death by separating out unintentional injuries into separate causes of death, i.e., motor vehicle traffic crashes, accidental falls, motor vehicle nontraffic crashes, etc. Accordingly, the rank of some causes of death will differ from those reported by the NCHS. This difference will mostly be observed for minor causes of death in smaller age groupings



## 3.2. Motor Vehicle Traffic Crashes as a Leading Cause of Death by Race and Hispanic Origin

This section presents 2002 data on U.S. resident deaths for the 4 leading causes of death, according to the demographical characteristics of race and Hispanic origin. In those cases that death due to motor vehicle traffic crashes was not included in the top 4 causes of death, it was added to the list of causes reported upon. Race and Hispanic Origin are reported separately on the death certificate. Persons of a particular race can be of Hispanic or non-Hispanic origin and vice-versa. In this report, deaths from motor vehicle traffic crashes are studied along five broad categories that encompass race and Hispanic origin namely,

- Non-Hispanic Whites
- Non-Hispanic Blacks
- Native Americans
- Asian/Pacific Islanders
- Hispanics (does not include Native Americans or Asian/Pacific Islanders)

The comparison groups enable convenient assessment of motor vehicle traffic crashes as a leading cause of death among population sub-groups to develop programs and counter-measures. It is noted that a small proportion of Native Americans and Asian/Pacific Islanders can also be of Hispanic Origin. However, the proportion of such persons is small and from the perspective of targeting safety programs, the audience is clearly defined with the classifications adopted above. Also, the code for Native Americans includes Eskimos and Aleuts.

This revised race classification has been used to derive the statistics presented in the following sections. Measures of mortality in this section include the number of deaths, rank of causes as well as age-adjusted death rates for each race. The populations used to calculate death rates in this section are estimates generated by the National Center for Health Statistics [1, Pages 108-109].

### 3.2.1. Leading Causes for all Ages by Race and Sex

Among all demographic sub-sections, Native American males were in the highest risk of being killed in a motor vehicle traffic crash with an age-adjusted death rate of 37.6. Hispanic females had the lowest risk of being killed in a motor vehicle crash with an age-adjusted death rate of 7.9. The greatest disparity between males and females in terms of the risk of being killed in a motor vehicle traffic crash was for non-Hispanic Blacks while the least disparity was for Asian/Pacific Islanders. Table 10 provides a measure of this disparity in terms of the ratio of the age-adjusted death rates due to motor vehicle traffic crashes between males and females by race.

**Table 10: Disparity of Risks of being killed in a Motor Vehicle Traffic Crash between Males and Females, by Race, 2002**

Race	Age-Adjusted Death Rates (per 100,000 population)		Ratios
	Males	Females	
Non-Hispanic Whites	21.3	9.9	2.15
Non-Hispanic Blacks	23.2	8.3	2.79
Native Americans	37.6	19.2	1.95
Asian/Pacific Islanders	10.5	8.2	1.28
Hispanics	21.5	7.9	2.72

Tables 11-13 depict the comparison of the rank order and age-adjusted death rates for all ages combined by the race and sex of the deceased. As shown in Table 11, the age-adjusted death for all causes and all ages is the highest for non-Hispanic Blacks at about 1,099 deaths per 100,000 population followed by non-Hispanic whites (838), Native Americans (677), Hispanics (625) and Asian/Pacific Islanders (474). However, for deaths due to motor vehicle traffic crashes, the highest age-adjusted death rate was for Native Americans (28.1), followed by non-Hispanic Whites (15.5), Hispanics (14.8), non-Hispanic Blacks (14.6) and Asian Pacific-Islanders (8.2). Thus, it can be inferred that a Native American is more than twice as likely as a non-Hispanics White or an non-Hispanic Black or a Hispanic to die from motor vehicle traffic crashes during their lifetime. Deaths due to motor vehicle traffic crashes also had the highest overall rank for Native Americans, ranking 3<sup>rd</sup> for all ages and all causes. For Hispanics, they were ranked 5<sup>th</sup> followed by Asian/ Pacific islanders (7<sup>th</sup>), non-Hispanic Whites (9<sup>th</sup>) and non-Hispanic Blacks (11<sup>th</sup>). This trend was also reflected for the proportion of all deaths caused by motor vehicle traffic crashes. For Native Americans, about 6.8 percent of all deaths were in motor vehicle traffic crashes followed by Hispanics (4.7%), Asian pacific-Islander (2.6%), non-Hispanic Blacks (1.8 percent) and non-Hispanic Whites (1.6 percent).

Among males, the highest rank for motor vehicle traffic crashes as a cause of death was 3<sup>rd</sup> for Native American as well as Hispanic males, followed by Asian/Pacific Islander males (7<sup>th</sup>) and non-Hispanic Whites as well as non-Hispanic Blacks (8<sup>th</sup>). Among females, the highest rank for motor vehicle traffic crashes as a cause of death was 5<sup>th</sup> for Native American females, followed by Asian/Pacific Islander as well as Hispanic females (7<sup>th</sup>), non-Hispanic Whites (10<sup>th</sup>) and non-Hispanic Blacks (13<sup>th</sup>).

The sections following Table 13 provide age-specific rank ordering of deaths due to motor vehicle traffic crashes by race and sex.

**Table 11: Deaths, Percents of Total Deaths and Death Rates for the Leading Causes of Death for Persons of All Ages and Both Sexes, by Race and Hispanic Origin, 2002**

Cause of Death	Rank Order	Number of Deaths	Percent of all Deaths	Age-adjusted Death Rate
<b>White (Non-Hispanic)</b>				
Heart Disease	1	577,761	29.15%	239.2
Malignant Neoplasms	2	458,754	23.15%	195.6
Stroke	3	133,118	6.72%	54.6
Chronic Lower Respiratory Disease	4	112,128	5.66%	46.9
<b>Motor Vehicle Traffic Crashes</b>	<b>9</b>	<b>31,326</b>	<b>1.58%</b>	<b>15.5</b>
ALL CAUSES	-	1,981,973	100.0%	837.5
<b>Black (Non-Hispanic)</b>				
Heart Disease	1	76,694	26.76%	312.1
Malignant Neoplasms	2	61,996	21.63%	242.5
Stroke	3	18,691	6.52%	77.5
Diabetes	4	12,583	4.39%	50.3
<b>Motor Vehicle Traffic Crashes</b>	<b>11</b>	<b>5,267</b>	<b>1.84%</b>	<b>14.6</b>
ALL CAUSES	-	286,573	100.0%	1,099.2
<b>Native American</b>				
Heart Disease	1	2,467	19.87%	157.4
Malignant Neoplasms	2	2,175	17.52%	125.4
<b>Motor Vehicle Traffic Crashes</b>	<b>3</b>	<b>845</b>	<b>6.81%</b>	<b>28.1</b>
Diabetes	4	744	5.99%	43.2
ALL CAUSES	-	12,415	100.0%	677.4
<b>Asian/Pacific Islander</b>				
Malignant Neoplasms	1	9,998	26.08%	113.6
Heart Disease	2	9,983	26.04%	134.6
Stroke	3	3,530	9.21%	47.7
Diabetes	4	1,359	3.55%	17.4
<b>Motor Vehicle Traffic Crashes</b>	<b>7</b>	<b>977</b>	<b>2.55%</b>	<b>8.2</b>
ALL CAUSES	-	38,332	100.0%	474.4
<b>Hispanic</b>				
Malignant Neoplasms	1	27,712	23.83%	179.4
Heart Disease	2	22,962	19.75%	127.4
Stroke	3	6,404	5.51%	41.0
Chronic Lower Respiratory Disease	4	5,880	5.06%	35.5
<b>Motor Vehicle Traffic Crashes</b>	<b>5</b>	<b>5,503</b>	<b>4.73%</b>	<b>14.8</b>
ALL CAUSES	-	116,278	100.0%	625.1
Source: NCHS 2002 Mortality Data, U.S. Bureau of Census				

**Table 12: Deaths, Percents of Total Deaths and Death Rates for the Leading Causes of Death for Males of All Ages, by Race and Hispanic Origin, 2002**

Cause of Death	Rank Order	Number of Deaths	Percent of all Deaths	Age-adjusted Death Rate
<b>White (Non-Hispanic)</b>				
Heart Disease	1	281,442	29.39%	297.7
Malignant Neoplasms	2	237,323	24.78%	239.6
Chronic Lower Respiratory Disease	3	53,662	5.6%	56.4
Stroke	4	49,908	5.21%	54.4
<b>Motor Vehicle Traffic Crashes</b>	<b>8</b>	<b>20,853</b>	<b>2.18%</b>	<b>21.3</b>
ALL CAUSES	-	957,645	100.0%	1,002.2
<b>Black (Non-Hispanic)</b>				
Heart Disease	1	36,596	25.27%	375.5
Malignant Neoplasms	2	32,287	22.3%	324.4
Stroke	3	7,754	5.35%	83.0
Homicide	4	6,780	4.68%	37.5
<b>Motor Vehicle Traffic Crashes</b>	<b>8</b>	<b>3,722</b>	<b>2.6%</b>	<b>23.2</b>
ALL CAUSES	-	144,802	100.0%	1,099.2
<b>Native American</b>				
Heart Disease	1	1,412	20.92	201.2
Malignant Neoplasms	2	1,081	16.01	141.8
<b>Motor Vehicle Traffic Crashes</b>	<b>3</b>	<b>552</b>	<b>8.18</b>	<b>37.6</b>
Diabetes	4	336	4.98	41.7
ALL CAUSES	-	6,750	100.0%	794.2
<b>Asian/Pacific Islander</b>				
Heart Disease	1	5,523	26.96%	169.8
Malignant Neoplasms	2	5,193	25.35%	137.9
Stroke	3	1,599	7.81%	50.8
Chronic Lower Respiratory Disease	4	743	3.63%	25.0
<b>Motor Vehicle Traffic Crashes</b>	<b>7</b>	<b>602</b>	<b>2.94%</b>	<b>10.5</b>
ALL CAUSES	-	20,483	100.0%	578.4
<b>Hispanic</b>				
Heart Disease	1	14,697	22.53%	218.4
Malignant Neoplasms	2	12,139	18.61%	160.2
<b>Motor Vehicle Traffic Crashes</b>	<b>3</b>	<b>4,142</b>	<b>6.35%</b>	<b>21.5</b>
Stroke	4	2,979	4.57%	43.9
ALL CAUSES	-	65,220	100.0%	761.3

Source: NCHS 2002 Mortality Data, U.S. Bureau of Census

**Table 13: Deaths, Percents of Total Deaths and Death Rates for the Leading Causes of Death for Females of All Ages, by Race and Hispanic Origin, 2002**

Cause of Death	Rank Order	Number of Deaths	Percent of all Deaths	Age-adjusted Death Rate
<b>White (Non-Hispanic)</b>				
Heart Disease	1	296,319	28.93%	193.7
Malignant Neoplasms	2	221,431	21.62%	166
Stroke	3	83,210	8.12%	53.9
Chronic Lower Respiratory Disease	4	58,466	5.71%	41.2
<b>Motor Vehicle Traffic Crashes</b>	<b>10</b>	<b>10,473</b>	<b>1.02%</b>	<b>9.9</b>
ALL CAUSES	-	1,024,328	100.0%	709.9
<b>Black (Non-Hispanic)</b>				
Heart Disease	1	40,098	28.28%	266.4
Malignant Neoplasms	2	29,709	20.96%	193.4
Stroke	3	10,937	7.71%	72.8
Diabetes	4	7,425	5.24%	49.4
<b>Motor Vehicle Traffic Crashes</b>	<b>13</b>	<b>1,545</b>	<b>1.09%</b>	<b>8.3</b>
ALL CAUSES	-	141,771	100.0%	915.3
<b>Native American</b>				
Malignant Neoplasms	1	1,094	19.31%	112.9
Heart Disease	2	1,055	18.62%	123.6
Diabetes	3	408	7.20%	44.1
Stroke	4	331	5.84%	38
<b>Motor Vehicle Traffic Crashes</b>	<b>5</b>	<b>293</b>	<b>5.17%</b>	<b>19.2</b>
ALL CAUSES	-	5,665	100.0%	581.1
<b>Asian/Pacific Islander</b>				
Malignant Neoplasms	1	4,805	26.92%	95.9
Heart Disease	2	4,460	24.99%	108.1
Stroke	3	1,931	10.82%	45.4
Diabetes	4	711	3.98%	16.3
<b>Motor Vehicle Traffic Crashes</b>	<b>7</b>	<b>375</b>	<b>2.10%</b>	<b>6.1</b>
ALL CAUSES	-	17,849	100.0%	395.9
<b>Hispanic</b>				
Malignant Neoplasms	1	13,015	25.49%	148.9
Heart Disease	2	10,823	21.20%	105.2
Stroke	3	3,425	6.71%	38.3
Diabetes	4	3,116	6.10%	33.4
<b>Motor Vehicle Traffic Crashes</b>	<b>7</b>	<b>1,361</b>	<b>2.67%</b>	<b>7.9</b>
ALL CAUSES	-	51,058	100.0%	514.8

Source: NCHS 2002 Mortality Data, U.S. Bureau of Census

### 3.2.2. Leading Causes for Specific Ages by Race and Sex

#### *Non-Hispanic Whites*

In 2002, for both sexes combined, motor vehicle traffic crashes were the No. 1 cause of non-Hispanic White deaths for ages 8-27 and 29-32. For these ages, traffic crashes were responsible for 11,518 deaths or 30.2% of all deaths in both sexes at these ages. This was 100% more than the number of victims due to the No. 2 cause (Suicide) at these ages.

Motor vehicle traffic crashes were the No. 1 cause of non-Hispanic White male deaths for ages 4, 7-27, 30 and 32. For these ages, traffic crashes were responsible for 7,497 deaths or 31.5% of all male deaths at these ages. This was 84% more than the number of victims due to the No. 2 cause (suicide) at these ages.

They were the No. 1 cause of non-Hispanic White female deaths for ages 3,6, 8-27 and 29. For these ages, traffic crashes were responsible for 3,204 deaths or 34.3% of all female deaths at these ages. This was more than three times the number of victims due to the No. 2 cause (cancer) at these ages.

Tables 14-16 present the rank of motor vehicle traffic crashes as a cause of death for each age among whites by sex. Overall, among non-Hispanic White victims, they were the 8th leading cause of death for males and 10th for females of all ages.

<b>Table 14: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Non-Hispanic Whites of Both Sexes, 2002 (Rank for all Ages Combined=8)</b>													
Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	8	14	1	28	2	42	4	56	8	70	12	84	17
1	4	15	1	29	1	43	4	57	8	71	13	85	17
2	3	16	1	30	1	44	5	58	7	72	12	86	17
3	2	17	1	31	1	45	5	59	8	73	14	87	17
4	2	18	1	32	1	46	5	60	7	74	15	88	19
5	2	19	1	33	2	47	5	61	8	75	17	89	19
6	2	20	1	34	3	48	5	62	9	76	17	90	21
7	2	21	1	35	3	49	5	63	8	77	17	91	20
8	1	22	1	36	4	50	5	64	10	78	18	92	21
9	1	23	1	37	4	51	5	65	11	79	18	93	20
10	1	24	1	38	4	52	7	66	11	80	18	94	21
11	1	25	1	39	4	53	7	67	12	81	18	95	22
12	1	26	1	40	4	54	8	68	11	82	16	96	22
13	1	27	1	41	5	55	8	69	12	83	17	97+	25

Source: NCHS 2002 Mortality Data

**Table 15: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Whites (Non-Hispanic) Males, 2000 (Rank for all Ages Combined=8)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	9	14	1	28	2	42	4	56	8	70	12	84	18
1	6	15	1	29	2	43	4	57	8	71	14	85	17
2	3	16	1	30	1	44	5	58	8	72	13	86	17
3	3	17	1	31	2	45	4	59	8	73	15	87	18
4	1	18	1	32	1	46	4	60	8	74	16	88	18
5	2	19	1	33	2	47	5	61	8	75	17	89	18
6	2	20	1	34	2	48	5	62	9	76	16	90	19
7	1	21	1	35	2	49	5	63	8	77	17	91	16
8	1	22	1	36	2	50	5	64	10	78	18	92	19
9	1	23	1	37	3	51	5	65	12	79	18	93	18
10	1	24	1	38	4	52	5	66	12	80	19	94	19
11	1	25	1	39	4	53	6	67	12	81	19	95	22
12	1	26	1	40	4	54	7	68	12	82	18	96	19
13	1	27	1	41	5	55	8	69	12	83	17	97+	24

Source: NCHS 2002 Mortality Data

**Table 16: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, White (Non-Hispanic) Females, 2000 (Rank for all Ages Combined=10)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	8	14	1	28	3	42	4	56	8	70	12	84	17
1	4	15	1	29	1	43	4	57	10	71	12	85	19
2	2	16	1	30	2	44	5	58	9	72	11	86	20
3	1	17	1	31	2	45	5	59	10	73	15	87	19
4	2	18	1	32	2	46	5	60	7	74	15	88	22
5	2	19	1	33	2	47	6	61	10	75	15	89	21
6	1	20	1	34	2	48	7	62	9	76	17	90	22
7	2	21	1	35	2	49	8	63	10	77	17	91	20
8	1	22	1	36	3	50	7	64	10	78	18	92	21
9	1	23	1	37	3	51	7	65	10	79	18	93	23
10	1	24	1	38	3	52	7	66	11	80	18	94	24
11	1	25	1	39	3	53	6	67	11	81	18	95	23
12	1	26	1	40	4	54	7	68	10	82	18	96	23
13	1	27	1	41	3	55	7	69	11	83	18	97+	26

Source: NCHS 2002 Mortality Data

## **Non-Hispanic Blacks**

In 2002, for both sexes combined, motor vehicle traffic crashes were the No. 1 cause of non-Hispanic Black deaths for ages 3 and 5-14. For these ages, traffic crashes were responsible for 299 deaths or 16.2% of all deaths in both sexes at these ages. This was 61% more than the number of victims due to the No. 2 cause (cancer) at these ages.

Motor vehicle traffic crashes were the No. 1 cause of non-Hispanic Black male deaths for ages 3, 5-6, and 8-13. For these ages, traffic crashes were responsible for 157 deaths or 16.4% of all male deaths at these ages. This was 57% more than the number of victims due to the No. 2 cause (cancer) at these ages.

They were the No. 1 cause of non-Hispanic Black female deaths for ages 5-14, 16-21, 23 and 26. For these ages, traffic crashes were responsible for 424 deaths or 20.7% of all female deaths at these ages. This was 47% more than the number of victims due to the No. 2 cause (homicide) at these ages.

Tables 17-19 present the rank of motor vehicle traffic crashes as a cause of death for each age among non-Hispanic Blacks by sex. Overall, among non-Hispanic Black victims, they were the 8th leading cause of death for males and 13th for females of all ages.

**Table 17: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Blacks (Non-Hispanic) of Both Sexes, 2000 (Rank for all Ages Combined=11)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	9	14	1	28	2	42	6	56	9	70	13	84	18
1	3	15	2	29	2	43	7	57	11	71	14	85	16
2	2	16	2	30	4	44	6	58	12	72	13	86	20
3	1	17	2	31	4	45	7	59	12	73	14	87	18
4	3	18	2	32	4	46	8	60	12	74	16	88	19
5	1	19	2	33	4	47	8	61	11	75	17	89	18
6	1	20	2	34	5	48	10	62	12	76	14	90	19
7	1	21	2	35	5	49	8	63	11	77	17	91	21
8	1	22	2	36	5	50	9	64	11	78	16	92	23
9	1	23	2	37	5	51	12	65	12	79	16	93	16
10	1	24	2	38	5	52	9	66	12	80	16	94	17
11	1	25	2	39	5	53	9	67	11	81	15	95	19
12	1	26	2	40	6	54	13	68	11	82	17	96	19
13	1	27	2	41	5	55	11	69	13	83	16	97+	21

Source: NCHS 2002 Mortality Data



**Table 18: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Black (Non-Hispanic) Males, 2000 (Rank for all Ages Combined=8)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	9	14	2	28	2	42	5	56	11	70	12	84	16
1	3	15	2	29	2	43	6	57	10	71	10	85	14
2	2	16	2	30	2	44	5	58	11	72	11	86	16
3	1	17	2	31	3	45	6	59	11	73	14	87	17
4	3	18	2	32	4	46	8	60	11	74	14	88	15
5	1	19	2	33	4	47	8	61	11	75	15	89	13
6	1	20	2	34	4	48	8	62	11	76	11	90	17
7	2	21	2	35	4	49	6	63	12	77	15	91	17
8	1	22	2	36	4	50	8	64	12	78	13	92	16
9	1	23	2	37	4	51	12	65	10	79	15	93	13
10	1	24	2	38	5	52	7	66	11	80	16	94	11
11	1	25	2	39	5	53	7	67	11	81	13	95	13
12	1	26	2	40	6	54	12	68	11	82	14	96	13
13	1	27	2	41	5	55	8	69	12	83	14	97+	18

Source: NCHS 2002 Mortality Data

**Table 19: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Blacks (Non-Hispanic) Females, 2000 (Rank for all Ages Combined=13)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	7	14	1	28	3	42	6	56	12	70	11	84	17
1	7	15	2	29	5	43	6	57	12	71	18	85	20
2	2	16	1	30	5	44	6	58	11	72	15	86	22
3	2	17	1	31	5	45	9	59	11	73	13	87	18
4	3	18	1	32	5	46	8	60	11	74	16	88	18
5	1	19	1	33	5	47	8	61	12	75	17	89	20
6	1	20	1	34	5	48	9	62	12	76	18	90	20
7	1	21	1	35	5	49	9	63	10	77	16	91	23
8	1	22	2	36	4	50	12	64	11	78	18	92	21
9	1	23	1	37	7	51	12	65	11	79	19	93	19
10	1	24	2	38	5	52	11	66	13	80	16	94	20
11	1	25	2	39	7	53	9	67	13	81	20	95	19
12	1	26	1	40	6	54	12	68	12	82	16	96	17
13	1	27	2	41	7	55	12	69	15	83	17	97+	20

Source: NCHS 2002 Mortality Data

**Native Americans**

In 2002, for both sexes combined, motor vehicle traffic crashes were the No.1 cause of Native American deaths for ages 4-7, 10, 12-39 and 42. For these ages, traffic crashes were responsible for 548 deaths or 27.6% of all deaths in both sexes at these ages. This was 130% more than the number of victims due to the No. 2 cause (Suicide) at these ages.

Motor vehicle traffic crashes were the No. 1 cause of Native American male deaths for ages 3, 5-7, 10, 12-25, 27-40 and 42. For these ages, traffic crashes were responsible for 365 deaths or 26.6% of all male deaths at these ages. This was 97% more than the number of victims due to the No. 2 cause (suicide) at these ages.

They were the No. 1 cause of Native American female deaths for ages 2, 4, 6-7, 10, 12-31, 33-35, 38 and 43. For these ages, traffic crashes were responsible for 166 deaths or 32.7% of all female deaths at these ages. This was four times than the number of victims due to the No. 2 cause (cancer) at these ages.

Tables 20-22 present the rank of motor vehicle traffic crashes as a cause of death for each age among Native American by sex. Overall, among victims of Native American race, they were the 3rd leading cause of death for males and 5th for females of all ages.

**Table 20: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Native Americans of Both Sexes, 2002 (Rank for all Ages Combined=3)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	6	14	1	28	1	42	1	56	4	70	9	84	11
1	2	15	1	29	1	43	2	57	6	71	5	85	9
2	3	16	1	30	1	44	4	58	7	72	8	86	11
3	2	17	1	31	1	45	2	59	8	73	11	87	9
4	1	18	1	32	1	46	4	60	6	74	10	88	9
5	1	19	1	33	1	47	5	61	6	75	8	89	10
6	1	20	1	34	1	48	4	62	7	76	10	90	11
7	1	21	1	35	1	49	5	63	7	77	10	91	9
8	2	22	1	36	1	50	5	64	4	78	8	92	7
9	2	23	1	37	1	51	3	65	8	79	11	93	7
10	1	24	1	38	1	52	3	66	6	80	12	94	6
11	3	25	1	39	1	53	4	67	11	81	9	95	7
12	1	26	1	40	2	54	5	68	8	82	10	96	7
13	1	27	1	41	2	55	5	69	9	83	11	97+	9

Source: NCHS 2002 Mortality Data

**Table 21: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Native American Males, 2002 (Rank for all Ages Combined=3)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	6	14	1	28	1	42	1	56	4	70	7	84	8
1	2	15	1	29	1	43	2	57	4	71	6	85	8
2	4	16	1	30	1	44	3	58	6	72	9	86	7
3	1	17	1	31	1	45	2	59	5	73	7	87	8
4	2	18	1	32	1	46	4	60	5	74	9	88	6
5	1	19	1	33	1	47	4	61	4	75	6	89	7
6	1	20	1	34	1	48	3	62	7	76	7	90	6
7	1	21	1	35	1	49	4	63	6	77	8	91	4
8	2	22	1	36	1	50	4	64	4	78	6	92	5
9	2	23	1	37	1	51	4	65	7	79	8	93	4
10	1	24	1	38	1	52	3	66	5	80	8	94	5
11	3	25	1	39	1	53	4	67	8	81	7	95	3
12	1	26	2	40	1	54	4	68	7	82	6	96	4
13	1	27	1	41	3	55	6	69	8	83	9	97+	5

Source: NCHS 2002 Mortality Data

**Table 22: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Native American Females, 2002 (Rank for all Ages Combined=5)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	4	14	1	28	1	42	2	56	4	70	8	84	9
1	3	15	1	29	1	43	1	57	7	71	7	85	8
2	1	16	1	30	1	44	4	58	7	72	7	86	9
3	2	17	1	31	1	45	3	59	8	73	11	87	9
4	1	18	1	32	2	46	2	60	6	74	9	88	7
5	3	19	1	33	1	47	4	61	7	75	8	89	9
6	1	20	1	34	1	48	2	62	5	76	9	90	8
7	1	21	1	35	1	49	7	63	6	77	9	91	8
8	2	22	1	36	2	50	5	64	5	78	10	92	7
9	2	23	1	37	2	51	4	65	6	79	9	93	6
10	1	24	1	38	1	52	4	66	9	80	11	94	7
11	3	25	1	39	2	53	2	67	8	81	6	95	6
12	1	26	1	40	2	54	5	68	6	82	9	96	5
13	1	27	1	41	2	55	5	69	8	83	10	97+	6

Source: NCHS 2002 Mortality Data

## *Asian/Pacific Islander*

In 2002, for both sexes combined, motor vehicle traffic crashes were the No. 1 cause of Asian/Pacific Islander deaths for ages 5, 7, 12 and 15-28. For these ages, traffic crashes were responsible for 345 deaths or 29.2% of all deaths in both sexes at these ages. This was 110% more than the number of victims due to the No. 2 cause (Homicide) at these ages.

Motor vehicle traffic crashes were the No. 1 cause of Asian/Pacific Islander male deaths for ages 5, 7, 11-12, 15-26 and 31. For these ages, traffic crashes were responsible for 236 deaths or 30.5% of all male deaths at these ages. This was 114% more than the number of victims due to the No. 2 cause (Homicide) at these ages.

They were the No. 1 cause of Asian/Pacific Islander female deaths for ages 6, 8-9, 12, 14-19, 21-24 and 27-29. For these ages, traffic crashes were responsible for 99 deaths or 30.8% of all female deaths at these ages. This was 2.5 times the number of victims due to the No. 2 cause (cancer) at these ages.

Tables 23-25 present the rank of motor vehicle traffic crashes as a cause of death for each age among Asian/Pacific Islanders by sex. Overall, among victims of Asian/Pacific Islander race, they were the 3rd leading cause of death for males and 5th for females of all ages.

**Table 23: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Asian/Pacific Islanders of Both Sexes, 2002 (Rank for all Ages Combined=3)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	9	14	2	28	1	42	4	56	5	70	6	84	17
1	2	15	1	29	2	43	4	57	9	71	8	85	16
2	2	16	1	30	2	44	3	58	6	72	10	86	15
3	2	17	1	31	2	45	4	59	5	73	8	87	12
4	4	18	1	32	2	46	4	60	9	74	11	88	14
5	1	19	1	33	4	47	5	61	7	75	8	89	14
6	3	20	1	34	4	48	3	62	8	76	10	90	17
7	1	21	1	35	2	49	4	63	6	77	12	91	15
8	3	22	1	36	5	50	4	64	5	78	12	92	13
9	2	23	1	37	4	51	5	65	6	79	14	93	11
10	3	24	1	38	3	52	4	66	5	80	11	94	12
11	2	25	1	39	3	53	6	67	7	81	13	95	10
12	1	26	1	40	3	54	7	68	8	82	12	96	11
13	3	27	1	41	4	55	7	69	6	83	15	97+	16

Source: NCHS 2002 Mortality Data

**Table 24: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Asian/Pacific Islander Males, 2002 (Rank for all Ages Combined=3)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	7	14	4	28	2	42	4	56	6	70	6	84	15
1	2	15	1	29	3	43	5	57	8	71	11	85	12
2	2	16	1	30	2	44	3	58	7	72	8	86	11
3	2	17	1	31	1	45	3	59	6	73	7	87	12
4	4	18	1	32	2	46	9	60	10	74	10	88	11
5	1	19	1	33	4	47	5	61	8	75	9	89	14
6	3	20	1	34	4	48	4	62	8	76	11	90	15
7	1	21	1	35	4	49	5	63	6	77	9	91	12
8	2	22	1	36	7	50	4	64	8	78	12	92	9
9	2	23	1	37	4	51	5	65	6	79	14	93	7
10	2	24	1	38	3	52	3	66	6	80	12	94	11
11	1	25	1	39	3	53	6	67	5	81	13	95	8
12	1	26	1	40	2	54	9	68	9	82	11	96	9
13	3	27	2	41	4	55	6	69	8	83	12	97+	12

Source: NCHS 2002 Mortality Data

**Table 25: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Asian/Pacific Islander Females, 2002 (Rank for all Ages Combined=5)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	8	14	1	28	1	42	5	56	4	70	9	84	13
1	2	15	1	29	1	43	3	57	6	71	6	85	13
2	2	16	1	30	3	44	4	58	4	72	10	86	15
3	2	17	1	31	2	45	3	59	6	73	8	87	14
4	2	18	1	32	2	46	4	60	6	74	10	88	14
5	2	19	1	33	2	47	3	61	5	75	7	89	12
6	1	20	2	34	2	48	3	62	7	76	8	90	14
7	3	21	1	35	3	49	4	63	7	77	12	91	12
8	1	22	1	36	2	50	6	64	5	78	9	92	13
9	1	23	1	37	4	51	5	65	6	79	12	93	10
10	2	24	1	38	3	52	3	66	7	80	9	94	10
11	2	25	2	39	3	53	5	67	11	81	11	95	9
12	1	26	2	40	3	54	4	68	6	82	13	96	11
13	2	27	1	41	5	55	5	69	6	83	14	97+	12

Source: NCHS 2002 Mortality Data

**People of Hispanic Origin**

In 2002, for both sexes combined, motor vehicle traffic crashes were the No.1 cause of Hispanic deaths for ages 3-8, 11, 14-34 and 37. For these ages, traffic crashes were responsible for 3,389 deaths or 26.6% of all deaths in both sexes at these ages. This was 54% more than the number of victims due to the No. 2 cause (Homicide) at these ages.

Motor vehicle traffic crashes were the No. 1 cause of Hispanic male deaths for ages 2-8, 11-24 and 26-40. For these ages, traffic crashes were responsible for 2,919 deaths or 24.2% of all male deaths at these ages. This was 43% more than the number of victims due to the No. 2 cause (Homicide) at these ages.

They were the No. 1 cause of Hispanic female deaths for ages 1, 3-7, 10 and 14-29. For these ages, traffic crashes were responsible for 613 deaths or 28.6% of all female deaths at these ages. This was 2.4 times the number of victims due to the No. 2 cause (cancer) at these ages.

Tables 26-28 present the rank of motor vehicle traffic crashes as a cause of death for each age among Hispanics by sex. Overall, among victims of Hispanic race, they were the 3rd leading cause of death for males and 7th for females of all ages.

**Table 26: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Hispanics of Both Sexes, 2002 (Rank for all Ages Combined=5)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	8	14	1	28	1	42	4	56	6	70	11	84	17
1	2	15	1	29	1	43	5	57	7	71	11	85	17
2	2	16	1	30	1	44	5	58	6	72	11	86	15
3	1	17	1	31	1	45	6	59	8	73	9	87	16
4	1	18	1	32	1	46	5	60	7	74	13	88	18
5	1	19	1	33	1	47	6	61	6	75	12	89	20
6	1	20	1	34	1	48	6	62	7	76	13	90	18
7	1	21	1	35	2	49	4	63	8	77	12	91	17
8	1	22	1	36	2	50	6	64	10	78	12	92	17
9	2	23	1	37	1	51	7	65	8	79	13	93	15
10	2	24	1	38	2	52	6	66	10	80	16	94	18
11	1	25	1	39	2	53	5	67	10	81	17	95	16
12	2	26	1	40	2	54	6	68	10	82	16	96	12
13	2	27	1	41	3	55	7	69	9	83	17	97+	18

Source: NCHS 2002 Mortality Data

**Table 27: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Hispanic Males, 2002 (Rank for all Ages Combined=3)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	8	14	1	28	1	42	5	56	6	70	11	84	17
1	2	15	1	29	1	43	5	57	7	71	11	85	14
2	1	16	1	30	1	44	5	58	6	72	10	86	14
3	1	17	1	31	1	45	5	59	6	73	10	87	15
4	1	18	1	32	1	46	5	60	7	74	12	88	14
5	1	19	1	33	1	47	5	61	6	75	10	89	16
6	1	20	1	34	1	48	7	62	7	76	12	90	15
7	1	21	1	35	1	49	5	63	7	77	14	91	13
8	1	22	1	36	1	50	4	64	9	78	10	92	14
9	3	23	1	37	1	51	6	65	7	79	12	93	12
10	2	24	1	38	1	52	6	66	9	80	15	94	14
11	1	25	2	39	1	53	8	67	9	81	12	95	11
12	1	26	1	40	1	54	7	68	8	82	15	96	10
13	1	27	1	41	2	55	8	69	10	83	15	97+	14

Source: NCHS 2002 Mortality Data

**Table 28: Rank of Motor Vehicle Traffic Crashes as a Cause of Death in the U.S. by Age, Hispanic Females, 2002 (Rank for all Ages Combined=7)**

Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank	Age	Rank
<1	9	14	1	28	1	42	2	56	7	70	10	84	16
1	1	15	1	29	1	43	4	57	8	71	11	85	19
2	2	16	1	30	2	44	3	58	7	72	11	86	14
3	1	17	1	31	2	45	3	59	8	73	14	87	15
4	1	18	1	32	2	46	4	60	7	74	12	88	16
5	1	19	1	33	2	47	6	61	9	75	13	89	17
6	1	20	1	34	2	48	5	62	7	76	12	90	15
7	1	21	1	35	2	49	6	63	8	77	13	91	17
8	2	22	1	36	2	50	7	64	9	78	14	92	16
9	2	23	1	37	3	51	6	65	10	79	16	93	14
10	1	24	1	38	2	52	7	66	12	80	13	94	15
11	2	25	1	39	3	53	5	67	11	81	18	95	15
12	2	26	1	40	4	54	6	68	10	82	13	96	14
13	2	27	1	41	3	55	8	69	13	83	16	97+	16

Source: NCHS 2002 Mortality Data

### 3.2.3. Leading Causes by Race for NHTSA-specified Age Groups

This section tabulates the role of motor vehicle traffic crashes as a leading cause of death by race and NHTSA-specified age groups. These age groups reflect categories of interest to NHTSA in terms of Child Restraint Programs (Toddlers, Infants and Young Children), New Drivers (Youth and Young Adults), Other Adults and the Elderly. The life expectancy for each age is based on those computed by NCHS. It is noted that since the life expectancy for non-Hispanic Whites and non-Hispanic Blacks is not available, the life expectancy for all whites and blacks is used. Also, for Native Americans, Asian Pacific Islanders and Hispanics, the overall life expectancies are used for lack of specific life expectancy numbers. Tables 29-33 depict the leading causes of death by NHTSA-specified age groups for non-Hispanic Whites, non-Hispanic Blacks, Native Americans, Asian/Pacific Islanders and Hispanics.

For non-Hispanic Whites, motor vehicle traffic crashes ranked 5<sup>th</sup> in terms of the number of years of life lost as compared to 7<sup>th</sup> for non-Hispanic Blacks, 3<sup>rd</sup> for Native Americans, 4<sup>th</sup> for Asian/Pacific Islanders and 3<sup>rd</sup> for Hispanics.





Table 29



## Top 10 Leading Causes of Death in the United States for 2002, By Age Group<sup>1</sup>, Non-Hispanic Whites

National Highway Traffic Safety Administration's  
National Center for Statistics and Analysis

(Years of Lost Life based on Life Expectancy for all Whites due to  
lack of Life Expectancy for non-Hispanic Whites)

R A N K	Cause and Number of Deaths											Years of Life Lost <sup>2</sup>
	Infants Under 1	Toddlers 1-3	Young Children 4-7	Children 8-15	Youth 16-20	Young Adults 21-24	Other Adults			Elderly 65+	All Ages	
							25-34	35-44	45-64			
1	Perinatal Period 6,313	Accidental Drowning 262	Malignant Neoplasms 282	MV Traffic Crashes 1,584	MV Traffic Crashes 4,524	MV Traffic Crashes 2,875	MV Traffic Crashes 4,279	Malignant Neoplasms 11,234	Malignant Neoplasms 110,418	Heart Disease 492,173	Heart Disease 577,761	Malignant Neoplasms 25%(6,383,621)
2	Congenital Anomalies 3,068	Congenital Anomalies 254	MV Traffic Crashes 255	Malignant Neoplasms 489	Suicide 1,344	Suicide 1,481	Suicide 3,809	Heart Disease 9,114	Heart Disease 73,700	Malignant Neoplasms 332,605	Malignant Neoplasms 458,754	Heart Disease 23%(6,025,698)
3	Heart Disease 249	MV Traffic Crashes 180	Congenital Anomalies 98	Suicide 303	Accidental Poisoning 550	Accidental Poisoning 788	Malignant Neoplasms 2,483	Suicide 5,795	Chronic Lwr. Resp. Dis. 12,443	Stroke 121,566	Stroke 133,118	Stroke 5%(1,210,602)
4	Septicemia 129	Malignant Neoplasms 171	Accidental Drowning 87	Congenital Anomalies 214	Malignant Neoplasms 503	Malignant Neoplasms 530	Accidental Poisoning 2,375	MV Traffic Crashes 4,768	Diabetes 9,788	Chronic Lwr. Resp. Dis. 98,721	Chronic Lwr. Resp. Dis. 112,128	Chronic Lwr. Resp. Dis. 5%(1,466,004)
5	Homicide 117	Homicide 154	Exposure to Smoke/Fire 65	Heart Disease 147	Homicide 458	Homicide 464	Heart Disease 1,715	Accidental Poisoning 4,496	Stroke 9,752	Alzheimer's 52,981	Influenza/ Pneumonia 55,419	MV Traffic Crashes 4%(1,103,185)
6	Influenza/ Pneumonia 114	Heart Disease 79	Homicide 52	Homicide 132	Heart Disease 262	Heart Disease 253	Homicide 977	Chronic Liver Disease 2,148	Chronic Liver Disease 9,506	Influenza/ Pneumonia 50,793	Alzheimer's 53,486	Suicide 3%(825,348)
7	Nephritis/ Nephrosis 77	Exposure to Smoke/Fire 64	Heart Disease 43	Accidental Drowning 114	Congenital Anomalies 163	Accidental Drowning 127	HIV 429	HIV 1,790	Suicide 8,857	Diabetes 40,830	Diabetes 52,463	Diabetes 3%(664,541)
8	MV Traffic Crashes 54	Influenza/ Pneumonia 37	Influenza/ Pneumonia 25	MV Nontraffic Crashes <sup>4</sup> 93	MV Nontraffic Crashes <sup>4</sup> 98	Congenital Anomalies 120	Diabetes 382	Diabetes 1,345	MV Traffic Crashes 7,087	Nephritis/ Nephrosis 27,172	MV Traffic Crashes 31,326	Influenza/ Pneumonia 2%(490,255)
9	Stroke 51	Benign Neoplasms 33	MV Nontraffic Crashes <sup>4</sup> 24	Exposure to Smoke/Fire 81	Accidental Falls 74	Accidental Falls 87	Congenital Anomalies 331	Stroke 1,288	Accidental Poisoning 4,174	Septicemia 21,055	Nephritis/ Nephrosis 30,669	Accidental Poisoning 2%(462,324)
10	Meningitis 44	MV Nontraffic Crashes <sup>4</sup> 30	Septicemia 22	Septicemia 48	Acc. Dischg. Of Firearms 58	MV Nontraffic Crashes <sup>4</sup> 64	Stroke 285	Homicide 1,268	Septicemia 3,515	Parkinson's Disease 15,307	Suicide 26,691	Perinatal Period 2%(460,349)
ALL <sup>3</sup>	13,463	2,115	1,381	3,932	9,878	8,685	23,758	59,529	310,655	1,548,455	1,981,973	All Causes 100%(25,733,143)

<sup>1</sup>When ranked by specific ages, motor vehicle crashes are the leading cause of death for ages 8-27 and 29-32.

<sup>2</sup>Number of years calculated based on remaining life expectancy at time of death; percents calculated as a proportion of total years of life lost due to all causes of death.

<sup>3</sup>Not a total of top 10 causes of death. <sup>4</sup>A Motor Vehicle Nontraffic crash is any vehicle crash that occurs entirely in any place other than a public highway.

**Source:** National Center for Health Statistics (NCHS) CDC, Mortality Data 2002

**Note:** The cause of death classification is based on the National Center for Statistics and Analysis (NCSA) Revised 68 Cause of Death Listing. This listing differs from the one used by the NCHS for its reports on leading causes of death by separating out unintentional injuries into separate causes of death, i.e., motor vehicle traffic crashes, accidental falls, motor vehicle nontraffic crashes, etc. Accordingly, the rank of some causes of death will differ from those reported by the NCHS. This difference will mostly be observed for minor causes of death in smaller age groupings



Table 30



## Top 10 Leading Causes of Death in the United States for 2002, By Age Group<sup>1</sup> Non-Hispanic Blacks

National Highway Traffic Safety Administration's  
National Center for Statistics and Analysis

(Years of Lost Life based on Life Expectancy for all Blacks due to  
lack of Life Expectancy for non-Hispanic Blacks)

R A N K	Cause and Number of Deaths											Years of Life Lost <sup>2</sup>
	Infants Under 1	Toddlers 1-3	Young Children 4-7	Children 8-15	Youth 16-20	Young Adults 21-24	Other Adults			Elderly 65+	All Ages	
							25-34	35-44	45-64			
1	Perinatal Period 4,735	Homicide 132	MV Traffic Crashes 94	MV Traffic Crashes 247	Homicide 1,250	Homicide 1,533	Homicide 2,425	Heart Disease 3,312	Malignant Neoplasms 21,069	Heart Disease 51,961	Heart Disease 76,694	Heart Disease 20%(1,123,887)
2	Congenital Anomalies 1,015	Congenital Anomalies 97	Malignant Neoplasms 74	Homicide 182	MV Traffic Crashes 623	MV Traffic Crashes 562	HIV 1,110	HIV 3,011	Heart Disease 19,872	Malignant Neoplasms 36,898	Malignant Neoplasms 61,996	Malignant Neoplasms 18%(1,029,601)
3	Heart Disease 142	MV Traffic Crashes 89	Exposure to Smoke/Fire 56	Malignant Neoplasms 139	Suicide 154	Suicide 233	MV Traffic Crashes 1,045	Malignant Neoplasms 2,870	Stroke 4,177	Stroke 13,499	Stroke 18,691	Homicide 7%(366,935)
4	Homicide 114	Exposure to Smoke/Fire 67	Accidental Drowning 50	Accidental Drowning 116	Heart Disease 120	Heart Disease 161	Heart Disease 993	Homicide 1,357	Diabetes 3,597	Diabetes 8,166	Diabetes 12,583	Perinatal Period 6%(345,027)
5	Influenza/ Pneumonia 86	Malignant Neoplasms 47	Homicide 45	Heart Disease 73	Malignant Neoplasms 117	Malignant Neoplasms 104	Malignant Neoplasms 663	MV Traffic Crashes 946	HIV 3,144	Chronic Lwr. Resp. Dis. 5,484	Homicide 8,147	Stroke 5%(256,988)
6	Septicemia 85	Accidental Drowning 42	Congenital Anomalies 38	Congenital Anomalies 67	Accidental Drowning 71	HIV 93	Suicide 497	Accidental Poisoning 786	Nephritis/ Nephrosis 1,817	Nephritis/ Nephrosis 5,079	Chronic Lwr. Resp. Dis. 7,730	HIV 4%(252,366)
7	Nephritis/ Nephrosis 55	Heart Disease 37	Chronic Lwr. Resp. Dis. 16	Exposure to Smoke/Fire 61	Congenital Anomalies 54	Accidental Poisoning 55	Accidental Poisoning 299	Stroke 741	Chronic Lwr. Resp. Dis. 1,656	Influenza/ Pneumonia 4,338	HIV 7,714	MV Traffic Crashes 4%(209,808)
8	Stroke 36	Influenza/ Pneumonia 36	Heart Disease 13	Suicide 40	Chronic Lwr. Resp. Dis. 41	Accidental Drowning 43	Diabetes 194	Diabetes 554	Chronic Liver Disease 1,605	Septicemia 4,110	Nephritis/ Nephrosis 7,410	Diabetes 3%(195,792)
9	MV Traffic Crashes 34	Perinatal Period 26	Anemias 9	Stroke 22	Anemias 40	Anemias 39	Stroke 166	Suicide 432	Septicemia 1,461	Alzheimer's 3,264	Septicemia 6,074	Chronic Lwr. Resp. Dis. 2%(117,630)
10	Meningitis 20	Chronic Lwr. Resp. Dis. 23	Benign Neoplasms 8	Anemias 19	Acc. Dischg. Of Firearms 37	Diabetes 39	Anemias 127	Chronic Liver Disease 313	MV Traffic Crashes 1,117	Hypertension Renal Dis. 2,961	Influenza/ Pneumonia 5,803	Nephritis/ Nephrosis 2%(111,704)
ALL <sup>3</sup>	8,284	965	580	1,503	3,113	3,540	10,009	19,955	76,089	162,496	286,573	All Causes 100%(5,625,555)

<sup>1</sup>When ranked by specific ages, motor vehicle crashes are the leading cause of death for ages 3 and 5-14.

<sup>2</sup>Number of years calculated based on remaining life expectancy at time of death; percents calculated as a proportion of total years of life lost due to all causes of death.

<sup>3</sup>Not a total of top 10 causes of death. <sup>4</sup>A Motor Vehicle Nontraffic crash is any vehicle crash that occurs entirely in any place other than a public highway.

**Source:** National Center for Health Statistics (NCHS) CDC, Mortality Data 2002

**Note:** The cause of death classification is based on the National Center for Statistics and Analysis (NCSA) Revised 68 Cause of Death Listing. This listing differs from the one used by the NCHS for its reports on leading causes of death by separating out unintentional injuries into separate causes of death, i.e., motor vehicle traffic crashes, accidental falls, motor vehicle nontraffic crashes, etc. Accordingly, the rank of some causes of death will differ from those reported by the NCHS. This difference will mostly be observed for minor causes of death in smaller age groupings



Table 31



## Top 10 Leading Causes of Death in the United States for 2002, By Age Group<sup>1</sup>, Native Americans

National Highway Traffic Safety Administration's  
National Center for Statistics and Analysis

(Years of Lost Life based on Overall Life Expectancy due to  
lack of race-specific Life Expectancy)

R A N K	Cause and Number of Deaths											Years of Life Lost <sup>2</sup>
	Infants Under 1	Toddlers 1-3	Young Children 4-7	Children 8-15	Youth 16-20	Young Adults 21-24	Other Adults			Elderly 65+	All Ages	
							25-34	35-44	45-64			
1	Perinatal Period 140	Homicide 10	MV Traffic Crashes 14	MV Traffic Crashes 42	MV Traffic Crashes 139	MV Traffic Crashes 85	MV Traffic Crashes 163	MV Traffic Crashes 164	Malignant Neoplasms 778	Heart Disease 1,634	Heart Disease 2,467	Malignant Neoplasms 14%(41,525)
2	Congenital Anomalies 61	MV Traffic Crashes 7	Accidental Drowning 5	Suicide 14	Suicide 46	Suicide 46	Suicide 84	Chronic Liver Disease 142	Heart Disease 658	Malignant Neoplasms 1,226	Malignant Neoplasms 2,175	Heart Disease 13%(40,804)
3	Homicide 10	Heart Disease 5	Malignant Neoplasms 4	Malignant Neoplasms 12	Homicide 40	Homicide 30	Homicide 63	Heart Disease 107	Chronic Liver Disease 274	Diabetes 435	MV Traffic Crashes 845	MV Traffic Crashes 12%(37,778)
4	Influenza/ Pneumonia 6	Congenital Anomalies 5	Homicide 3	Homicide 10	Accidental Drowning 9	Malignant Neoplasms 10	Accidental Poisoning 38	Malignant Neoplasms 100	Diabetes 271	Stroke 399	Diabetes 744	Chronic Liver Disease 5%(16,157)
5	Heart Disease 5	MV Nontraffic Crashes <sup>4</sup> 5	Septicemia 2	Exposure to Smoke/Fire 6	Malignant Neoplasms 8	Heart Disease 9	Chronic Liver Disease 35	Accidental Poisoning 71	MV Traffic Crashes 175	Chronic Lwr. Resp. Dis. 344	Stroke 567	Suicide 5%(14,963)
6	Septicemia 4	Accidental Drowning 4	Heart Disease 2	Congenital Anomalies 4	Heart Disease 8	Accidental Poisoning 8	Heart Disease 34	Suicide 68	Stroke 125	Influenza/ Pneumonia 215	Chronic Liver Dis. 547	Diabetes 4%(13,619)
7	MV Traffic Crashes 4	Exposure to Smoke/Fire 3	Chronic Lwr. Resp. Dis. 2	Stroke 3	Accidental Poisoning 7	Accidental Falls 3	HIV 13	Homicide 52	Chronic Lwr. Resp. Dis. 97	Nephritis/ Nephrosis 132	Chronic Lwr. Resp. Dis. 452	Perinatal Period 4%(10,876)
8	Nephritis/ Nephrosis 2	Septicemia 2	Congenital Anomalies 2	MV Nontraffic Crashes <sup>4</sup> 2	MV Nontraffic Crashes <sup>4</sup> 2	Accidental Drowning 3	Accidental Drowning 12	HIV 36	Nephritis/ Nephrosis 69	Alzheimer's 114	Suicide 324	Diabetes 3%(1,050,798)
9	Whooping Cough 1	Benign Neoplasms 2	Exposure to Smoke/Fire 2	Exposure to Smoke/Fire 2	MV Nontraffic Crashes <sup>4</sup> 2	Legal Intervention 3	Exposure to Smoke/Fire 11	Diabetes 33	Accidental Poisoning 59	Septicemia 111	Influenza/ Pneumonia 293	Stroke 3%(8,821)
10	Malignant Neoplasms 1	Meningoccl. Infection 1	Influenza/ Pneumonia 1	Accidental Drowning 2	Exposure to Smoke/Fire 2	Septicemia 2	Influenza/ Pneumonia 7	Accidental Drowning 20	Suicide 58	Chronic Liver Dis. 95	Homicide 267	Accidental Poisoning 2%(7,474)
ALL <sup>3</sup>	343	71	50	130	304	244	652	1,169	3,488	5,957	12,415	All Causes 100%(306,975)

<sup>1</sup>When ranked by specific ages, motor vehicle crashes are the leading cause of death for ages 4-7, 10, 12-39 and 42.

<sup>2</sup>Number of years calculated based on remaining life expectancy at time of death; percents calculated as a proportion of total years of life lost due to all causes of death.

<sup>3</sup>Not a total of top 10 causes of death. <sup>4</sup>A Motor Vehicle Nontraffic crash is any vehicle crash that occurs entirely in any place other than a public highway.

**Source:** National Center for Health Statistics (NCHS) CDC, Mortality Data 2002

**Note:** The cause of death classification is based on the National Center for Statistics and Analysis (NCSA) Revised 68 Cause of Death Listing. This listing differs from the one used by the NCHS for its reports on leading causes of death by separating out unintentional injuries into separate causes of death, i.e., motor vehicle traffic crashes, accidental falls, motor vehicle nontraffic crashes, etc. Accordingly, the rank of some causes of death will differ from those reported by the NCHS. This difference will mostly be observed for minor causes of death in smaller age groupings



Table 32



## Top 10 Leading Causes of Death in the United States for 2002, By Age Group<sup>1</sup>, Asian/Pacific Islanders

National Highway Traffic Safety Administration's  
National Center for Statistics and Analysis

(Years of Lost Life based on Overall Life Expectancy due to  
lack of race-specific Life Expectancy)

R A N K	Cause and Number of Deaths											Years of Life Lost <sup>2</sup>
	Infants Under 1	Toddlers 1-3	Young Children 4-7	Children 8-15	Youth 16-20	Young Adults 21-24	Other Adults			Elderly 65+	All Ages	
							25-34	35-44	45-64			
1	Perinatal Period 398	MV Traffic Crashes 15	Malignant Neoplasms 16	MV Traffic Crashes 34	MV Traffic Crashes 134	MV Traffic Crashes 106	Malignant Neoplasms 171	Malignant Neoplasms 500	Malignant Neoplasms 3,319	Heart Disease 7,905	Malignant Neoplasms 9,998	Malignant Neoplasms 27%(185,314)
2	Congenital Anomalies 185	Malignant Neoplasms 15	MV Traffic Crashes 13	Malignant Neoplasms 31	Homicide 61	Suicide 54	Suicide 160	Heart Disease 258	Heart Disease 1,669	Malignant Neoplasms 5,881	Heart Disease 9,983	Heart Disease 19%(130,970)
3	Heart Disease 19	Congenital Anomalies 13	Accidental Drowning 9	Accidental Drowning 13	Suicide 43	Homicide 49	MV Traffic Crashes 156	Suicide 122	Stroke 590	Stroke 2,808	Stroke 3,530	Stroke 7%(45,517)
4	Septicemia 10	Accidental Drowning 13	Accidental Drowning 171	Heart Disease 7	Malignant Neoplasms 33	Malignant Neoplasms 27	Homicide 92	MV Traffic Crashes 117	Diabetes 276	Diabetes 1,060	Diabetes 1,359	MV Traffic Crashes 6%(38,930)
5	Stroke 8	Homicide 7	Homicide 8	Congenital Anomalies 7	Accidental Drowning 20	Heart Disease 16	Heart Disease 87	Stroke 101	MV Traffic Crashes 210	Influenza/ Pneumonia 1,055	Influenza/ Pneumonia 1,171	Perinatal Period 4%(31,226)
6	Influenza/ Pneumonia 8	Accidental Falls 6	Heart Disease 5	Exposure to Smoke/Fire 6	Heart Disease 15	Accidental Drowning 11	Accidental Poisoning 27	Homicide 71	Suicide 169	Chronic Lwr. Resp. Dis. 994	Chronic Lwr. Resp. Dis. 1,138	Suicide 4%(25,051)
7	Homicide 6	Influenza/ Pneumonia 4	Heart Disease 73	Chr. Lwr. Resp. Dis. 4	Accidental Poisoning 11	Accidental Poisoning 8	Stroke 18	Chronic Liver Disease 38	Chronic Liver Disease 132	Nephritis/ Nephrosis 511	MV Traffic Crashes 977	Diabetes 3%(18,658)
8	Malignant Neoplasms 5	Chronic Lwr. Resp. Dis. 3	Influenza/ Pneumonia 41	Influenza/ Pneumonia 3	Congenital Anomalies 4	Congenital Anomalies 4	Accidental Drowning 16	Accidental Poisoning 35	Viral Hepatitis 119	Hypertension Renal Dis. 345	Suicide 661	Homicide 3%(18,475)
9	Anemias 4	MV Nontraffic Crashes <sup>4</sup> 3	Septicemia 38	Benign Neoplasms 2	Exposure to Smoke/Fire 4	MV Nontraffic Crashes <sup>4</sup> 4	HIV 15	Diabetes 17	Chronic Lwr. Resp. Dis. 118	Alzheimer's 342	Nephritis/ Nephrosis 649	Congenital Anomalies 3%(18,309)
10	Nephritis/ Nephrosis 4	Viral Hepatitis 2	Benign Neoplasms 36	Anemias 2	Septicemia 3	Accidental Falls 4	Pregnancy Child Birth 12	Viral Hepatitis 16	Nephritis/ Nephrosis 115	Septicemia 304	Septicemia 423	Chronic Lwr. Resp. Dis. 2%(13,280)
ALL <sup>3</sup>	798	141	92	184	392	354	961	1,643	8,050	25,710	38,332	All Causes 100%(694,007)

<sup>1</sup>When ranked by specific ages, motor vehicle crashes are the leading cause of death for ages 5,7,12 and 15-28.

<sup>2</sup>Number of years calculated based on remaining life expectancy at time of death; percents calculated as a proportion of total years of life lost due to all causes of death.

<sup>3</sup>Not a total of top 10 causes of death. <sup>4</sup>A Motor Vehicle Nontraffic crash is any vehicle crash that occurs entirely in any place other than a public highway.

**Source:** National Center for Health Statistics (NCHS) CDC, Mortality Data 2002

**Note:** The cause of death classification is based on the National Center for Statistics and Analysis (NCSA) Revised 68 Cause of Death Listing. This listing differs from the one used by the NCHS for its reports on leading causes of death by separating out unintentional injuries into separate causes of death, i.e., motor vehicle traffic crashes, accidental falls, motor vehicle nontraffic crashes, etc. Accordingly, the rank of some causes of death will differ from those reported by the NCHS. This difference will mostly be observed for minor causes of death in smaller age groupings





Table 33



## Top 10 Leading Causes of Death in the United States for 2002, By Age Group<sup>1</sup> Hispanics

National Highway Traffic Safety Administration's  
National Center for Statistics and Analysis

(Years of Lost Life based on Overall Life Expectancy due to  
lack of race-specific Life Expectancy)

R A N K	Cause and Number of Deaths											Years of Life Lost <sup>2</sup>
	Infants Under 1	Toddlers 1-3	Young Children 4-7	Children 8-15	Youth 16-20	Young Adults 21-24	Other Adults			Elderly 65+	All Ages	
							25-34	35-44	45-64			
1	Perinatal Period 2,350	MV Traffic Crashes 118	MV Traffic Crashes 119	MV Traffic Crashes 223	MV Traffic Crashes 895	MV Traffic Crashes 806	MV Traffic Crashes 1,270	Malignant Neoplasms 1,337	Malignant Neoplasms 7,045	Heart Disease 20,827	Heart Disease 27,712	Malignant Neoplasms 16%(443,471)
2	Congenital Anomalies 1,248	Congenital Anomalies 101	Malignant Neoplasms 73	Malignant Neoplasms 168	Homicide 593	Homicide 559	Homicide 895	MV Traffic Crashes 865	Heart Disease 5,461	Malignant Neoplasms 13,481	Malignant Neoplasms 22,962	Heart Disease 14%(393,106)
3	Heart Disease 83	Homicide 61	Congenital Anomalies 39	Homicide 86	Suicide 212	Suicide 215	Malignant Neoplasms 500	Heart Disease 845	Chronic Liver Disease 1,730	Stroke 4,715	Stroke 6,404	MV Traffic Crashes 9%(256,828)
4	Septicemia 64	Accidental Drowning 57	Homicide 26	Suicide 58	Malignant Neoplasms 139	Malignant Neoplasms 151	Suicide 474	HIV 777	Diabetes 1,531	Diabetes 4,075	Diabetes 5,880	Perinatal Period 7%(183,377)
5	Homicide 52	Malignant Neoplasms 50	Exposure to Smoke/Fire 23	Congenital Anomalies 52	Accidental Drowning 82	Accidental Poisoning 109	Accidental Poisoning 361	Accidental Poisoning 580	Stroke 1,261	Chronic Lwr. Resp. Dis. 2,499	MV Traffic Crashes 5,503	Homicide 6%(155,428)
6	Influenza/ Pneumonia 47	Exposure to Smoke/Fire 26	Accidental Drowning 18	Heart Disease 27	Accidental Poisoning 79	Heart Disease 77	Heart Disease 316	Chronic Liver Disease 499	MV Traffic Crashes 779	Influenza/ Pneumonia 2,260	Chronic Liver Dis. 3,386	Congenital Anomalies 4%(120,220)
7	Nephritis/ Nephrosis 35	MV Nontraffic Crashes <sup>4</sup> 22	Benign Neoplasms 10	Accidental Drowning 23	Heart Disease 44	Accidental Drowning 54	HIV 259	Homicide 463	HIV 720	Alzheimer's 1,445	Homicide 3,097	Stroke 3%(95,193)
8	MV Traffic Crashes 25	Heart Disease 21	Heart Disease 10	Stroke 21	Congenital Anomalies 32	Accidental Falls 34	Stroke 93	Suicide 403	Viral Hepatitis 450	Nephritis/ Nephrosis 1,315	Chronic Lwr. Resp. Dis. 3,038	Diabetes 3%(92,844)
9	Stroke 20	Septicemia 15	Influenza/ Pneumonia 7	Benign Neoplasms 16	Accidental Falls 16	Congenital Anomalies 24	Chronic Liver Disease 81	Stroke 254	Accidental Poisoning 442	Chronic Liver Disease 1,063	Influenza/ Pneumonia 2,802	Chronic Liver Disease 3%(84,486)
10	Accidental Drowning 18	Influenza/ Pneumonia 14	Septicemia 6	Exposure to Smoke/Fire 15	MV Nontraffic Crashes <sup>4</sup> 15	HIV 22	Accidental Drowning 80	Diabetes 202	Nephritis/ Nephrosis 421	Septicemia 1,000	Perinatal Period 2,376	Suicide 3%(81,314)
ALL <sup>3</sup>	4,884	766	479	984	2,490	2,510	5,770	8,407	25,745	64,185	116,278	All Causes 100%(2,731,849)

<sup>1</sup>When ranked by specific ages, motor vehicle crashes are the leading cause of death for ages 3-8, 11, 14-34 and 37.

<sup>2</sup>Number of years calculated based on remaining life expectancy at time of death; percents calculated as a proportion of total years of life lost due to all causes of death.

<sup>3</sup>Not a total of top 10 causes of death. <sup>4</sup>A Motor Vehicle Nontraffic crash is any vehicle crash that occurs entirely in any place other than a public highway.

**Source:** National Center for Health Statistics (NCHS) CDC, Mortality Data 2002

**Note:** The cause of death classification is based on the National Center for Statistics and Analysis (NCSA) Revised 68 Cause of Death Listing. This listing differs from the one used by the NCHS for its reports on leading causes of death by separating out unintentional injuries into separate causes of death, i.e., motor vehicle traffic crashes, accidental falls, motor vehicle nontraffic crashes, etc. Accordingly, the rank of some causes of death will differ from those reported by the NCHS. This difference will mostly be observed for minor causes of death in smaller age groupings



### 3.3. Motor Vehicle Traffic Crashes as a Leading Cause of Death by the State of Residence

Table 34 presents the deaths, percentage of deaths due to all causes and rank-order by the State of Residence of the victims due to motor vehicle traffic crashes in 2002. The death rate in Table 34 is the crude death rate for both sexes combined. The rank in Table 34 denotes the rank of motor vehicle traffic crashes as a cause of death for the fatalities associated with that particular state.

The highest rank as a cause of death due to motor vehicle traffic crashes for both sexes was 5 for Mississippi, West Virginia and Wyoming. For males, the highest rank as a cause of death was 4 for Wyoming, Alaska and New Mexico. For females, the highest rank as a cause of death was 7 for Wyoming.

The highest crude death rate due to motor vehicle traffic crashes was 33.3 for both sexes in the State of Wyoming. The lowest death rate of 7.9 was for the State of Massachusetts. These numbers are found under “Males-Deaths” in Table 34, not under “Both Sexes-Rate”.

In Wyoming, traffic crashes accounted for 5.4% of all male deaths, the highest percentage for any State followed by Montana at 4.5%. The corresponding percentage for female deaths was 2.9%, also in Wyoming. In Wyoming, for both sexes combined, traffic crashes were responsible for 4.2% of all deaths in 2002, the highest such percentage among all the states.

**Table 34: Rank of Motor Vehicle Traffic Crashes as a Cause of Death by State and Sex, 2002**

State	Males			Females			Both Sexes			
	Deaths	Rank	%	Deaths	Rank	%	Deaths	Rank	%	Rate
Alabama	703	5	3.2	387	10	1.7	1,090	8	2.4	24.3
Alaska	72	4	4.2	22	10	1.8	94	6	3.2	14.6
Arizona	743	5	3.2	363	8	1.8	1,106	8	2.5	20.3
Arkansas	446	5	3.2	205	10	1.5	651	7	2.3	24.0
California	2,855	7	2.4	1,243	10	1.1	4,098	8	1.7	11.7
Colorado	529	6	3.6	242	9	1.6	771	6	2.6	17.1
Connecticut	236	8	1.6	88	14	0.6	324	11	1.1	9.4
Delaware	93	6	2.7	43	10	1.2	136	7	2	16.8
Dist of Columbia	55	10	1.5	31	13	1	86	11	1.3	15.1
Florida	2,192	6	2.5	1,053	8	1.3	3,245	8	1.9	19.4
Georgia	1,017	5	3.1	483	10	1.4	1,500	8	2.3	17.5
Hawaii	80	9	1.6	40	12	1	120	12	1.4	9.6
Idaho	174	6	3.6	89	8	1.9	263	7	2.7	19.6
Illinois	969	8	1.9	438	12	0.8	1,407	10	1.4	11.2
Indiana	589	7	2.2	321	11	1.1	910	9	1.6	14.8
Iowa	293	7	2.2	135	9	0.9	428	8	1.5	14.6
Kansas	348	5	3	171	10	1.3	519	8	2.1	19.1
Kentucky	587	5	2.9	276	10	1.4	863	8	2.1	21.1
Louisiana	625	6	2.9	295	10	1.4	920	9	2.2	20.5
Maine	125	9	2	74	9	1.1	199	9	1.6	15.4
Maryland	475	7	2.2	214	13	0.9	689	9	1.6	12.6
Massachusetts	351	12	1.3	155	16	0.5	506	12	0.9	7.9
Michigan	868	8	2.1	402	11	0.9	1,270	9	1.5	12.6
Minnesota	442	6	2.4	227	11	1.1	669	8	1.7	13.3
Mississippi	574	5	4.1	297	9	2.1	871	5	3.1	30.3
Missouri	853	5	3.1	430	10	1.5	1,283	7	2.2	22.6
Montana	187	5	4.5	88	8	2	275	6	3.2	30.2
Nebraska	203	5	2.7	108	9	1.3	311	8	2	18.0
Nevada	276	6	2.9	146	10	1.8	422	6	2.4	19.4
New Hampshire	87	8	1.8	41	11	0.8	128	10	1.3	10.0
New Jersey	489	10	1.4	208	17	0.5	697	12	1	8.1
New Mexico	324	4	4.3	144	8	2.2	468	6	3.3	25.2
New York	1,046	9	1.4	501	13	0.6	1,547	11	1	8.1
North Carolina	1,156	5	3.2	515	10	1.4	1,671	8	2.3	20.1
North Dakota	68	9	2.2	39	8	1.2	107	8	1.7	16.9
Ohio	995	8	1.9	475	11	0.8	1,470	10	1.3	12.9
Oklahoma	483	5	2.9	252	9	1.4	735	8	2.1	21.0
Oregon	301	8	2	157	10	1	458	9	1.5	13.0
Pennsylvania	1,170	9	1.9	530	11	0.8	1,700	10	1.3	13.8
Rhode Island	73	8	1.5	24	16	0.4	97	11	0.9	9.1
South Carolina	745	5	4	310	10	1.7	1,055	6	2.9	25.7
South Dakota	130	5	3.6	62	9	1.7	192	7	2.7	25.2
Tennessee	894	5	3	434	8	1.4	1,328	8	2.2	22.9
Texas	2,671	6	3.4	1,225	9	1.6	3,896	6	2.5	17.9
Utah	221	7	3.2	126	8	1.9	347	7	2.6	15.0
Vermont	55	7	2.3	25	11	0.9	80	9	1.6	13.0
Virginia	665	6	2.4	278	12	1	943	10	1.7	12.9
Washington	509	8	2.3	189	12	0.8	698	9	1.5	11.5
West Virginia	305	6	3	143	10	1.4	448	5	2.2	24.9
Wisconsin	531	7	2.3	277	10	1.2	808	9	1.7	14.8
Wyoming	111	4	5.4	55	7	2.9	166	5	4.2	33.3
U.S.	29,989	8	2.4%	14,076	12	1.1%	44,065	8	1.8%	15.3

Source: NCHS 2002 Final Mortality Data, U.S. Bureau of Census 2002 Estimates

## 4. Conclusions

Motor vehicle traffic crashes take a tremendous toll on human life in the United States every year. In 2002, motor vehicle traffic crashes were the leading cause of death for every age 3 through 33. Because of the young lives consumed, motor vehicle traffic crashes ranked 3<sup>rd</sup>, behind only cancer and diseases of the heart, in terms of the years of life lost, i.e., the number of remaining years that the person is expected to live had they not died.

The human toll of motor vehicle traffic crashes also show variation among the races. For non-Hispanic Whites, motor vehicle traffic crashes ranked 4<sup>th</sup> in terms of the number of years of life lost as compared to 7<sup>th</sup> for non-Hispanic Blacks, 3<sup>rd</sup> for Native Americans, 4<sup>th</sup> for Asian/Pacific Islanders and 3<sup>rd</sup> for Hispanics.

The risk of dying in a motor vehicle traffic crash, measured in terms of age-adjusted death rates per 100,000 resident population, is the highest for Native Americans followed by non-Hispanic Whites, Hispanics, non-Hispanic Blacks and Asian/Pacific Islanders.

Among all demographic sub-sections, Native American males were in the highest risk of being killed in a motor vehicle traffic crash with an age-adjusted death rate of 37.6. Hispanic females had the lowest risk of being killed in a motor vehicle crash with an age-adjusted death rate of 7.9. The greatest disparity between males and females in terms of the risk of being killed in a motor vehicle traffic crash was for non-Hispanic Blacks while the least disparity was for Asian/Pacific Islanders.

The human toll of motor vehicle traffic crashes also show wide variation among the states. The highest rank as a cause of death due to motor vehicle traffic crashes for both sexes was 5 for Mississippi, West Virginia and Wyoming as compared to the lowest rank of 12 in Hawaii, Massachusetts and New Jersey. For males, the highest rank as a cause of death was 4 for Wyoming, Alaska and New Mexico as compared to the lowest rank of 12 for Massachusetts. For females, the highest rank as a cause of death was 7 for Wyoming as compared to the lowest rank of 14 for Connecticut.

All analyses on motor vehicle traffic crashes point to a tremendous toll on young life in the U.S. The charts on the leading causes of death are intended to highlight this effect by assessing the role of motor vehicle traffic crashes as a leading cause of death in age groups that are of significant interest to NHTSA program areas.

## 5. References

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## Appendix 1: List of 68 Single and Aggregated Cause of Death Adopted by NCSA for Cause of Death Ranking

Code	Cause of Death	Code	Cause of Death
1	SALMONELLA INFECTIONS	35	CHRONIC LOWER RESPIRATORY DISEASE
2	SHIGELLOSIS AND AMOEBIASIS	36	PNEUMOCONIOSIS AND CHEMICAL EFFECTS
3	CERTAIN OTHER INTESTINAL INFECTIONS	37	PNEUMONITIS DUE TO SOLIDS AND LIQUIDS
4	TUBERCULOSIS	38	OTHER DISEASES OF RESP SYSTEM
5	WHOOPING COUGH	39	PEPTIC ULCER
6	SCARLET FEVER AND ERYSIPELAS	40	DISEASES OF APPENDIX
7	MENINGOCOCCAL INFECTION	41	HERNIA
8	SEPTICEMIA	42	CHRONIC LIVER DISEASE AND CIRRHOSIS
9	SYPHILLIS	43	CHOLELITHIASIS/OTH DIS OF GALL BLADDER
10	ACUTE POLIOMYELITIS	44	NEPHRITIS, NEPHROTIC SYNDROME AND NEPHROSIS
11	ARTHROPOD-BORNE VIRAL ENCEPHALITIS	45	INFECTIONS OF THE KIDNEY
12	MEASLES	46	HYPERPLASIA OF PROSTATE
13	VIRAL HEPATITIS	47	INFLAMATORY DIS OF FEM PELVIC ORGANS
14	HIV	48	PREGNANCY, CHILDBIRTH AND PUERPERIUM
15	MALARIA	49	CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD
16	OTH/UNSPC PARASITIC DISEASES AND THEIR	50	CONGENITAL ANOMALIES
17	MALIGNANT NEOPLASMS	51	SYMPTOMS, SIGNS AND ILL-DEFINED CONDITIONS
18	BENIGN NEOPLASMS	52	ALL OTHER DISEASES
19	ANEMIAS	53	MOTOR VEHICLE TRAFFIC CRASHES
20	DIABETES MELLITUS	54	MOTOR VEHICLE NONTRAFFIC CRASHES
21	NUTRITIONAL DEFICIENCIES	55	OTHER LAND TRANSPORT ACCIDENTS
22	MENINGITIS	56	WATER, AIR AND SPACE, AND OTHER UNSPCFD
23	PARKINSONS DISEASE	57	ACCIDENTAL FALLS
24	ALZHEIMERS DISEASE	58	ACCIDENTAL DISCHARGE OF FIREARMS
25	DISEASES OF THE HEART	59	ACCIDENTAL DROWNING AND SUBMERSION
26	HYPERTENSION AND HYPERTENSIVE RENAL	60	ACCIDENTAL EXPOSURE TO SMOKE FIRE AND
27	STROKE	61	ACCIDENTAL POISONING
28	ATHEROSCLEROSIS	62	OTH/UNSPECIFIED NONTRANSPORT CRASHES
29	AORTIC ANEURYSM AND DISSECTION	63	SUICIDE
30	OTHER DIS OF ARTERIES, ARTERIOLES	64	HOMICIDE
31	OTHER DISORDERS OF CIRCULATORY SYSTEM	65	LEGAL INTERVENTION
32	INFLUENZA AND PNEUMONIA	66	INJURY UNKNOWN IF PURPOSELY OR ACCDNTLY
33	ACUTE BRONCHITIS AND BRONCHIOLITIS	67	OPERATIONS OF WAR AND THEIR SEQUELAE
34	UNSPCFD. ACUTE LOWER RESP INFECTION	68	COMPLICATIONS OF MEDICAL AND SURGICAL CARE



DOT HS 809 843  
June 2005



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