

# Traffic Safety Facts

## Research Note

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DOT HS 810 742

## Motor Vehicle Traffic Crashes as a Leading Cause of Death in the United States, 2004

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### Summary

In 2004, motor vehicle traffic crashes were the leading cause of death for every age 2 through 34. Because of the young lives consumed, motor vehicle traffic crashes ranked third overall in terms of the years of life lost, i.e., the number of remaining years that the person would be expected to live had they not died, behind only cancer and heart disease. The table shows the 10 leading causes of death by age group in 2004. The age groups reflect categories of interest to the National Highway Traffic Safety Administration in terms of child-restraint programs (toddlers, infants, and young children), new drivers (youth and young adults), other adults, and older people.

### Background

This Research Note examines the status of motor vehicle traffic crashes as a leading cause of death in the United States in 2004. This note reflects an update of a prior research note (DOT HS 810 568) that was based on the mortality data for 2003. It is based on a study of the ranking of 68 causes of death that have been adopted by NHTSA's National Center for Statistics and Analysis (NCSA). 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 report on mortality, publishes detailed tabulations of the leading causes of death, the fatalities due to motor vehicle traffic crashes are lumped into 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, especially at younger ages, and this has prompted NHTSA to separate motor vehicle crashes as an individual cause of death in this report. 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 eighth overall as a cause of death, they were ranked as high as third in terms of the years of life lost.

### Methodology

**Years of Life Lost:** This is the number of remaining years that the person would be expected to have lived 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 people who died due to that cause. The expected years of remaining life is calculated using standard tables of life expectancy by age (Life Expectancy at Selected Ages for 2003, NCHS).

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 16 NCSA-adopted causes reflect the underlying causes based on **external** factors such as traffic crashes and acts of violence, and the remaining cause reflects all other diseases. This 68-cause listing is 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. The latter differs from the NCSA listing primarily in causal areas related to *unintentional injuries* (accidental death). While NCHS uses the combined cause of unintentional injuries in its reports of leading causes of death, this study separates out the various causes that comprise unintentional injuries like fatalities in motor vehicle traffic crashes, accidental falls, poisoning, motor vehicle non-traffic crashes, etc. Accordingly, the rank of some causes of death will differ from those reported by NCHS. The NCSA cause listing also differs from the NCHS listing for causes of infant mortality. While NCHS, for reasons of public health interest, uses a detailed 130-cause listing, the NCSA list combines it into one major cause – conditions originating in the *perinatal period*.

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# Top 10 Leading Causes of Death in the United States for 2004, by Age Group<sup>1</sup>

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

RANK	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			
<b>1</b>	Perinatal Period 14,079	Congenital Anomalies 511	<b>MV Traffic Crashes</b> 478	<b>MV Traffic Crashes</b> 1,603	<b>MV Traffic Crashes</b> 5,914	<b>MV Traffic Crashes</b> 4,390	<b>MV Traffic Crashes</b> 6,834	Malignant Neoplasms 14,723	Malignant Neoplasms 146,476	Heart Disease 533,302	Heart Disease 652,486	Malignant Neoplasms 23% (8,741,953)
<b>2</b>	Congenital Anomalies 5,622	<b>MV Traffic Crashes</b> 398	Malignant Neoplasms 432	Malignant Neoplasms 823	Homicide 2,403	Homicide 2,515	Suicide 5,074	Heart Disease 12,925	Heart Disease 101,169	Malignant Neoplasms 385,847	Malignant Neoplasms 553,888	Heart Disease 21% (7,812,765)
<b>3</b>	Heart Disease 421	Accidental Drowning 386	Congenital Anomalies 193	Suicide 462	Suicide 1,972	Suicide 2,167	Homicide 4,495	Suicide 6,638	Diabetes 16,347	Stroke 130,538	Stroke 150,074	<b>MV Traffic Crashes</b> 5%(1,742,625)
<b>4</b>	Homicide 325	Homicide 318	Exposure to Smoke/Fire 178	Homicide 426	Accidental Poisoning 826	Accidental Poisoning 1,389	Accidental Poisoning 3,641	<b>MV Traffic Crashes</b> 6,451	Stroke 16,147	Chronic Lwr. Resp. Dis. 105,197	Chronic Lwr. Resp. Dis. 121,987	Stroke 4% (1,616,418)
<b>5</b>	Influenza/Pneumonia 273	Malignant Neoplasms 290	Accidental Drowning 131	Congenital Anomalies 311	Malignant Neoplasms 759	Malignant Neoplasms 823	Malignant Neoplasms 3,633	Accidental Poisoning 6,444	Chronic Lwr. Resp. Dis. 15,265	Alzheimer's 65,313	Diabetes 73,138	Chronic Lwr. Resp. Dis. 4% (1,458,092)
<b>6</b>	Septicemia 271	Heart Disease 171	Homicide 129	Heart Disease 254	Heart Disease 404	Heart Disease 575	Heart Disease 3,163	HIV 4,826	Chronic Liver Disease 14,065	Diabetes 53,956	Alzheimer's 65,965	Suicide 3% (1,151,559)
<b>7</b>	Nephritis/Nephrosis 174	Exposure to Smoke/Fire 165	Heart Disease 66	Accidental Drowning 222	Accidental Drowning 331	Accidental Drowning 203	HIV 1,468	Homicide 2,984	Suicide 10,917	Influenza/Pneumonia 52,760	Influenza/Pneumonia 59,664	Perinatal Period 3% (1,099,806)
<b>8</b>	<b>MV Traffic Crashes</b> 139	Influenza/Pneumonia 106	MV Nontraffic Crashes <sup>4</sup> 50	Exposure to Smoke/Fire 153	Congenital Anomalies 243	Congenital Anomalies 183	Diabetes 599	Chronic Liver Disease 2,799	<b>MV Traffic Crashes</b> 10,024	Nephritis/Nephrosis 35,105	<b>MV Traffic Crashes</b> 43,432	Diabetes 3% (1,066,772)
<b>9</b>	Stroke 127	MV Nontraffic Crashes <sup>4</sup> 104	Benign Neoplasms 43	MV Nontraffic Crashes <sup>4</sup> 133	Accidental Falls 122	HIV 149	Stroke 567	Stroke 2,361	Accidental Poisoning 7,610	Septicemia 25,644	Nephritis/Nephrosis 42,480	Homicide 2% (809,816)
<b>10</b>	Malignant Neoplasms 74	Septicemia 73	Septicemia 39	Chronic Lwr. Resp. Dis. 119	MV Nontraffic Crashes <sup>4</sup> 107	Stroke 121	Congenital Anomalies 420	Diabetes 2,026	Nephritis/Nephrosis 6,030	Hypertension Renal Dis. 19,619	Septicemia 33,373	Accidental Poisoning 2%(809,122)
<b>ALL<sup>3</sup></b>	27,936	4,047	2,535	6,564	15,927	15,967	40,868	85,362	442,394	1,755,669	2,397,615	100% (37,394,946)

<sup>1</sup>When ranked by specific ages, motor vehicle crashes are the leading cause of death for ages 2 through 34.

<sup>2</sup>Number of years calculated based on remaining life expectancy (2003 data from CDC) 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. 4A 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 2004.

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.