

Traffic Safety Facts

Research Note

DOT HS 811 226

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Motor Vehicle Traffic Crashes as a Leading Cause of Death in the United States, 2006

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Summary

In 2006, motor vehicle traffic crashes were the leading cause of death for every age 3 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 is expected to have lived had they not died, behind only cancer and heart diseases. The table (page 2) shows the 10 leading causes of death by age group in 2006. 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 2006. This note reflects an update of a prior research note (DOT HS 810 742) that was based on the mortality data for 2005. It is based on a study of the ranking of 68 causes of death, which 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 life lost 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 ninth 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 was 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 are calculated using standard tables of life expectancy by age (Life Expectancy at Selected Ages for 2005, 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 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 rankings 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 2006, by Age Group¹

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 ² |
|------------------------|---------------------------------------|--|---|--|--|---|---|---|--|---------------------------------------|--|--|
| | Infants Under 1 | Toddlers 1-3 | Young Children 4-7 | Children 8-15 | Youth 16-20 | Young Adults 21-24 | Other Adults | | | Older Adults 65+ | All Ages | |
| | | | | | | | 25-34 | 35-44 | 45-64 | | | |
| 1 | Perinatal Period 14,321 | Congenital Anomalies 462 | MV Traffic Crashes 449 | MV Traffic Crashes 1,272 | MV Traffic Crashes 5,689 | MV Traffic Crashes 4,667 | MV Traffic Crashes 7,162 | Malignant Neoplasms 13,917 | Malignant Neoplasms 151,788 | Heart Disease 510,542 | Heart Disease 631,636 | Malignant Neoplasms 23% (8,908,211) |
| 2 | Congenital Anomalies 5,819 | Accidental Drowning 395 | Malignant Neoplasms 392 | Malignant Neoplasms 723 | Homicide 2,794 | Homicide 2,749 | Accidental Poisoning 5,267 | Heart Disease 12,339 | Heart Disease 103,572 | Malignant Neoplasms 387,515 | Malignant Neoplasms 559,888 | Heart Disease 20% (7,685,448) |
| 3 | Heart Disease 346 | MV Traffic Crashes 351 | Congenital Anomalies 183 | Homicide 472 | Suicide 1,836 | Suicide 2,162 | Suicide 4,985 | Accidental Poisoning 7,542 | Diabetes 17,124 | Stroke 117,010 | Stroke 137,119 | MV Traffic Crashes 5% (1,760,796) |
| 4 | Homicide 336 | Homicide 317 | Accidental Drowning 163 | Suicide 410 | Accidental Poisoning 1,086 | Accidental Poisoning 1,821 | Homicide 4,725 | Suicide 6,591 | Stroke 16,859 | Chronic Lwr. Resp. Dis. 106,845 | Chronic Lwr. Resp. Dis. 124,583 | Stroke 4% (1,536,877) |
| 5 | Septicemia 269 | Malignant Neoplasms 277 | Homicide 141 | Congenital Anomalies 256 | Malignant Neoplasms 724 | Malignant Neoplasms 812 | Malignant Neoplasms 3,656 | MV Traffic Crashes 6,470 | Chronic Lwr. Resp. Dis. 16,299 | Alzheimer's 71,660 | Diabetes 72,449 | Chronic Lwr. Resp. Dis. 4% (1,503,483) |
| 6 | Influenza/ Pneumonia 263 | Exposure to Smoke/Fire 158 | Exposure to Smoke/Fire 121 | Heart Disease 249 | Heart Disease 425 | Heart Disease 598 | Heart Disease 3,307 | HIV 4,010 | Chronic Liver Disease 14,929 | Diabetes 52,351 | Alzheimer's 72,432 | Suicide 3% (1,176,020) |
| 7 | Nephritis/ Nephrosis 162 | Heart Disease 144 | Heart Disease 74 | Accidental Drowning 198 | Accidental Drowning 335 | Accidental Drowning 239 | HIV 1,182 | Homicide 3,020 | Suicide 12,009 | Influenza/ Pneumonia 49,346 | Influenza/ Pneumonia 56,236 | Perinatal Period 3% (1,122,740) |
| 8 | Stroke 142 | Influenza/ Pneumonia 111 | MV Nontraffic Crashes⁴ 50 | Exposure to Smoke/Fire 113 | Congenital Anomalies 230 | Congenital Anomalies 188 | Diabetes 673 | Chronic Liver Disease 2,551 | MV Traffic Crashes 10,713 | Nephritis/ Nephrosis 37,377 | Nephritis/ Nephrosis 45,344 | Diabetes 3% (1,084,880) |
| 9 | MV Traffic Crashes 139 | MV Nontraffic Crashes⁴ 107 | Benign Neoplasms 41 | Chronic Lwr. Resp. Dis. 104 | MV Nontraffic Crashes⁴ 135 | HIV 153 | Stroke 527 | Stroke 2,221 | Accidental Poisoning 10,649 | Septicemia 26,201 | MV Traffic Crashes 43,664 | Accidental Poisoning 3% (1,071,895) |
| 10 | Malignant Neoplasms 76 | Septicemia 78 | Influenza/ Pneumonia 37 | MV Nontraffic Crashes⁴ 100 | Accidental Falls 116 | Pregnancy Childbirth 124 | Congenital Anomalies 437 | Diabetes 2,094 | Nephritis/ Nephrosis 6,613 | Hypertension Renal Dis. 19,852 | Septicemia 34,234 | Homicide 2% (878,954) |
| ALL³ | 28,527 | 3,923 | 2,447 | 5,824 | 16,330 | 17,143 | 42,952 | 83,043 | 466,432 | 1,759,423 | 2,426,264 | All Causes 100% (38,315,767) |

¹When ranked by specific ages, motor vehicle crashes are the leading cause of death for each age 3 through 34.

²Number of years calculated based on remaining life expectancy (2005 data from CDC) at time of death; percents calculated as a proportion of total years of life lost due to all causes of death.

³Not 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 2006.

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.