Motor Vehicle Traffic Crashes as a Leading Cause of Death in the United States, 2002

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 3rd 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, behind only cancer and diseases of the heart. The table (overleaf) shows the ten leading causes of death by age group in 2002. 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.

Background

This Research Note examines the status of motor vehicle traffic crashes as a leading cause of death in the United States in 2002. This note reflects an update of a prior research note (DOT HS 809 695) that was based on the mortality data for 2001. It is based on a study of the ranking 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).

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" 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, 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 8th overall as a cause of death, they were ranked as high as 3rd in terms of the years of life lost.

Methodology

Years of Life Lost: This is 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 (Life expectancy at selected ages for 2002, 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 sixteen 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 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*.

¹Rajesh Subramanian, a researcher with the Mathematical Analysis Division, can be reached at rsubra@nhtsa.dot.gov.NHTSA's National Center for Statistics and Analysis 400 Seventh St., SW, Washington, DC 20590