Traffic Safety Facts Research Note

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Motor Vehicle Traffic Crashes as a Leading Cause of Death in the United States, 2000

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Introduction

This Research Note examines the status of motor vehicle traffic crashes as a leading cause of death in the United States in 2000. It is based on a study, by age and sex, of the ranking of 70 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 at certain ages and this has prompted NHTSA to separate motor vehicle crashes as an individual cause of death in this report. The data used in this report is the public use file of the final mortality data for the U.S. in 2000, as provided by NCHS.

The NCSA-adopted listing of 70 causes of death is comprehensive in that all underlying causes are represented. Fifty-six of these 70 adopted causes reflect the underlying causes based on internal morbid bodily conditions, while the remaining 14 NCSA-adopted causes reflect the underlying causes based on external factors such as crashes and acts of violence. This 70-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 infectious diseases that currently result in only small numbers of deaths (e.g., whooping cough, measles, etc.), but are of continuing interest as a public health concern, and, secondarily, in those areas relating to accidental death. Accordingly, the rank of some causes of death will differ from those reported by NCHS. This difference will mostly be observed for minor causes of death in smaller groups of age.

The table (overleaf) shows the ten leading causes of death by age. 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. The ranks reflect the status of the cause of death in that age category. Overall, motor vehicle traffic crashes ranked 8th as a cause of death for all ages. When ranked by specific age, motor vehicle traffic crashes are the leading cause of death for every age 2 through Some of the causes of 33. death in the table are aggregated causes like Perinatal Period (all conditions originating in the perinatal period), Other (Symptoms, Signs and III-Defined Conditions, not elsewhere classified), Other/Unspecified Nontransport (Accidental causes not otherwise classifiable under existing cause listing). NHTSA will publish a comprehensive report titled Motor Vehicle Traffic Crashes as a Leading Cause of Death in the U.S., 2000 that will describe the ranking in greater detail.

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 (United States Life Tables 2000, NCHS).



Motor Vehicle Traffic Crashes as a

Leading Cause of Death in the United States for 2000, by Age Group



R	Deaths Due to Causes by Age Groups**											Years
A N K	Infants Under 1	Toddlers 1-3	Young Children 4-7	Children 8-15	Youth 16-20	Young Adults 21-24	25-34	Other Adults 35-44	45-64	Elderly 65+	All Ages	of Life Lost ¹
1	Perinatal Period	Congenital Anomalies	MV Traffic Crashes	Malignant Neoplasms	Malignant Neoplasms	Heart Disease	Heart Disease	Malignant Neoplasms				
	13,918	447	567	1,681	5,873	3,982	6,716	16,520	137,039	593,707	710,760	23% (8,468,700)
2	Congenital Anomalies	MV Traffic Crashes	Malignant Neoplasms	Malignant Neoplasms	Homicide	Homicide	Suicide	Heart Disease	Heart Disease	Malignant Neoplasms	Malignant Neoplasms	Heart Disease
	5,743	430	426	827	2,476	2,385	4,792	13,181	98,879	392,366	553,091	22% (8,091,669)
3	Other	Accidental Drowning	Smoke Exposure	Suicide	Suicide	Suicide	Homicide	MV Traffic Crashes	Stroke	Stroke	Stroke	Stroke
	3,639	427	202	489	1,911	1,900	4,274	6,757	15,967	148,045	167,661	5% (1,708,035)
4	Oth./Unsp. Nontransport	Homicide	Accidental Drowning	Homicide	Malignant Neoplasms	Malignant Neoplasms	Malignant Neoplasms	Suicide	Diabetes	Obstructive Pulm. Disease	Obstructive Pulm. Disease	MV Traffic Crashes
	572	323	200	431	794	788	3,916	6,562	14,140	106,375	122,009	5% (1,674,868)
5	Heart Disease	Malignant Neoplasms	Nervous Disease	Nervous Disease	Accidental Poisoning	Accidental Poisoning	Heart Disease	HIV	Obstructive Pulm. Disease	Pneumonia	Diabetes	Obstructive Pulm. Disease
	493	312	183	374	468	669	2,958	5,919	13,990	57,011	69,301	4% (1,414,309)
6	Homicide	Other	Congenital Anomalies	Congenital Anomalies	Heart Disease	Heart Disease	HIV	Accidental Poisoning	Liver Disease	Diabetes	Pneumonia	Prenatal Period
	349	228	173	330	443	519	2,437	4,663	12,428	52,414	63,548	3% (1,080,590)
7	Nervous Disease	Oth./Unsp. Nontransport	Homicide	Accidental Drowning	Other	Other	Accidental Poisoning	Liver Disease	MV Traffic Crashes	Alzheimer's	Alzheimer's	Suicide
	293	222	127	300	380	444	2,380	3,371	8,583	48,993	49,558	3% (1,032,765)
8	Pneumonia	Smoke Exposure	Oth./Unsp. Nontransport	Heart Disease	Accidental Drowning	Oth./Unsp. Nontransport	Other	Homicide	Suicide	Mental Retardation	MV Traffic Crashes	Diabetes
	280	221	112	269	366	286	1,554	3,320	8,382	36,656	41,995	3% (970,832)
9	Septicemia	Nervous Disease	Heart Disease	Oth./Unsp. Nontransport	Nervous Disease	Nervous Disease	Oth./Unsp. Nontransport	Other	Other	Nephritis	Mental Retardation	Other
	274	209	89	239	330	249	895	2,987	5,395	31,225	38,882	2% (825,216)
10	Other Resp. Disease	Heart Disease	Other	Metabolic Disorder	Oth./Unsp. Nontransport	Accidental Drowning	Injury Intent Unk.	Stroke	HIV	Septicemia	Nephritis	Homicide
	254	163	75	174	322	221	679	2,599	5,381	24,786	37,251	2% (792,291)
ALL*	28,035	4,195	2,823	6,933	15,727	14,021	40,451	89,798	401,187	1,799,825	2,403,351	All Causes 100% (36,067,102)

¹Number 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.

Source: National Center for Health Statistics, CDC, Mortality Data 2000. *Not a total of top 10 causes of death.

Note: The cause of death classification is based on the National Center for Statistics and Analysis (NCSA) Revised 70 Cause of Death Listing. Accordingly, the rank of some causes of death will differ from those reported by the National Center for Health Statistics (NCHS). This difference will mostly be observed for minor causes of death in smaller age groupings.

*When ranked by specific ages, motor vehicle traffic crashes are the leading cause of death for every age 2 through 33.