



Reduction of Fatalities and Injuries Among Passenger Vehicle Occupants Age 4 - 7

Among four through seven year-old passenger vehicle occupants, fatalities have declined 14.5 percent from 1999 to 2003 (see Table 1). The number of passenger vehicle occupants injured has dropped from 71,000 in 1999 to 52,000 in 2003 (see Table 2). Passenger vehicles consist of passenger cars, sport utility vehicles, vans, and pickups. The fatalities and injuries analyzed in this note are limited to people within passenger vehicles in transport.

Table 1
Passenger Vehicle Occupant Fatalities, Age 4 - 7,
by Year, and Restraint Use

Year	Restraint Used		Unrestrained		Total
	Number	Percent (%)	Number	Percent (%)	Number
1999	152	39	235	61	387
2000	180	49	187	51	367
2001	186	50	184	50	370
2002	155	49	163	51	318
2003	168	51	163	49	331

Source: FARS 1999-2002 Final, 2003 Annual Report File

Note: Children whose restraint use was coded as "unknown" were pro-rated between the restraint used and unrestrained categories. The pro-rated fatality counts in the table above have been rounded off to the nearest integer.

- In 2003, almost half of the 4 through 7 year-old occupants who were fatally injured were unrestrained.
- The percent of fatally injured occupants age 4 through 7 who were unrestrained declined from 61 percent to 49 percent from 1999 to 2003.
- The number of unrestrained occupants age 4 through 7 who were fatally injured decreased 31 percent, from 235 in 1999 to 163 in 2003. Two-thirds of this decrease occurred from 1999 to 2000.

For the fatality data provided in Table 1, children whose restraint use was coded as "Shoulder Belt", "Lap Belt", "Lap and Shoulder Belt", "Safety Belt Used Improperly", "Child Safety Seat", "Child Safety Seat Used Improperly", or "Restraint Used, Type Unknown" were grouped into the "Restraint Used" category. Those children with a restraint use variable coded as "None Used" were considered unrestrained.

Table 1, shown above, provides fatality counts for 4 through 7 year olds from 1999 through 2003. Table 2 shows corresponding injury data for the same age group and time period.

Table 2
Passenger Vehicle Occupants Injured, Age 4 – 7,
by Year, and Restraint Use

Year	Restraint Used		Unrestrained		Total
	Number	Percent (%)	Number	Percent (%)	Number
1999	60,000	84	11,000	16	71,000
2000	57,000	87	9,000	13	65,000
2001	50,000	87	8,000	13	57,000
2002	47,000	85	8,000	15	56,000
2003	46,000	89	6,000	11	52,000

Source: GES 1999-2003

Note: Totals may not equal sum of components due to independent rounding. Percents were calculated prior to rounding. Restraint use is determined by police and may be overreported.

- The number of injured passenger vehicle occupants age 4 through 7 declined by 27 percent from 1999 to 2003. Within this five-year period, the number of injured occupants dropped each year, from 71,000 in 1999, down to 52,000 in 2003.
- In 2003, the percent of injured 4 through 7 year old passenger vehicle occupants that were unrestrained dropped to an all-time low of 11 percent.

For the injury data provided in Table 2, children whose restraint use was coded as “Shoulder Belt”, “Lap Belt”, “Lap and Shoulder Belt”, “Child Safety Seat”, or “Restraint Used, Type Unknown” were grouped into the “Restraint Used” category. Those children with a restraint use variable coded as “None Used” were considered unrestrained. Children whose restraint use was coded as “Unknown” were pro-rated between the restrained and unrestrained categories. The pro-rated injury counts in Table 2 have been rounded off to the nearest thousand.

The National Occupant Protection Use Survey (NOPUS) provides probability-based data on the use of child restraints on the nation’s roads. The NOPUS survey of 2002 was the first to examine the age group of 4 through 7 years old. In 2002, this survey found that only 83 percent of 4 through 7 year olds are restrained. The survey also found that 29 percent of 4 through 7 year olds were seated in the front seat, instead of the safer back seat.

NHTSA’s National Center for Statistics and Analysis (NCSA) utilized three databases for this report. The passenger vehicle occupant fatality data shown in Table 1 were provided by the Fatality Analysis Reporting System (FARS). The injury data provided in Table 2 was collected from the National Automotive Sampling System General Estimates System (GES). The probability-based estimates of restraint use were provided by the NOPUS observational survey.

For additional copies of this research note, please call 1-800-934-8517 or fax your request to (202) 366-3189. For questions regarding the data reported in this research, contact Marc Starnes [202-366-0183]. This research note and other general information on highway traffic safety may be accessed by internet users at: <http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/AvailInf.html>