



Crash Stats

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Restraint Use Among Fatally Injured Passenger Vehicle Occupants

For 16 through 20-year-old occupants, passenger vehicle fatalities have climbed 14.2 percent from 1993 to 2003, while for occupants ages 21 or older, there was a 6.7 percent increase in passenger vehicle fatalities over this time period (see Table 1). Passenger vehicles consist of passenger cars, sport utility vehicles, vans, and pickups. The fatalities analyzed in this note are limited to people within passenger vehicles in transport.

Table 1
Passenger Vehicle Occupant Fatalities, Age 16 and Older,
by Year, Age Group, and Restraint Use

Year	16 through 20					21 or older				
	Restraint Used		Unrestrained		Total	Restraint Used		Unrestrained		Total
	Number	Percent	Number	Percent	Number	Number	Percent	Number	Percent	Number
1993	1,154	25	3,514	75	4,668	7,807	33	15,609	67	23,416
1994	1,337	27	3,653	73	4,990	8,471	36	15,290	64	23,761
1995	1,439	29	3,584	71	5,023	8,907	36	15,888	64	24,795
1996	1,508	29	3,629	71	5,137	9,441	38	15,677	62	25,118
1997	1,555	30	3,575	70	5,130	9,692	38	15,482	62	25,174
1998	1,548	30	3,534	70	5,082	9,871	40	14,891	60	24,762
1999	1,676	32	3,626	68	5,302	9,702	39	15,071	61	24,773
2000	1,770	33	3,539	67	5,309	10,186	41	14,710	59	24,896
2001	1,840	34	3,518	66	5,358	10,341	42	14,507	58	24,848
2002	1,999	36	3,626	64	5,625	10,617	42	14,492	58	25,109
2003	1,907	36	3,424	64	5,332	10,909	44	14,078	56	24,987

Source: FARS 1993-2001 Final, 2002 Annual Report File, 2003 Early Assessment File

- In 2003, almost two-thirds of 16-20 year old occupants who were fatally injured were unrestrained.
- The percent of fatally injured occupants age 16 through 20 who were unrestrained declined from 75 percent to 64 percent from 1993 to 2003.
- Over 3,400 unrestrained occupants age 16 through 20 were fatally injured in 2003. Restraint use was lower among occupants age 16 through 20 than age 21 or older.
- The number of restrained occupants age 16 through 20 who were fatally injured increased 65 percent, from 1,154 in 1993 to 1,907 in 2003. Among occupants age 21 or older, there was a 40 percent increase, from 7,807 to 10,909.
- Restraint use in fatal crashes has climbed approximately one percentage point per year since 1993 among age 16 to 20 (25 percent up to 36 percent) and age 21 or older (33 percent up to 44 percent).

Table 2
Passenger Vehicle Occupant Fatality Rates per 100,000 Population,
by Year and Age Group

Year	16 through 20	21 or older	Total
1993	26.73	12.99	11.67
1994	28.27	13.06	11.87
1995	27.89	13.51	12.17
1996	27.80	13.56	12.23
1997	27.00	13.47	12.12
1998	26.16	13.12	11.80
1999	26.74	13.00	11.78
2000	26.20	12.60	11.42
2001	26.35	12.40	11.23
2002	27.58	12.35	11.30
2003*	N/A	N/A	N/A

Sources: FARS 1993-2001 Final, 2002 Annual Report File, US Census Bureau.

* The 2003 rates are not included because the 2003 populations are not currently available from the U.S. Census Bureau

As shown in Table 2, the rates in each cell were calculated by dividing the number of passenger vehicle occupant fatalities by the population of the appropriate calendar year and age group. The rates represent the number of fatalities per 100,000 population of the specified year and age group.

- For all ages 16 and older, the fatality rate among occupants in passenger vehicles has decreased 3.2 percent from 1993 to 2002.
 - Among 16 to 20 year olds, the passenger vehicle occupant fatality rate per 100,000 population has increased 3.2 percent, while the passenger vehicle occupant fatality rate per 100,000 population has decreased 4.9 percent among the 21 or older age group
- The 16 to 20-year-old fatality rate has remained approximately twice as high as the rate for passengers 21 and older. The rate in 2002 for 16-20 year old occupants was 2.2 times as high as the rate for occupants age 21 and older
- Over this time period, the fatality rates for both age groups peaked during the mid-90's.
- The age group of 21 years or older had their lowest fatality rate in the last 10 years in 2002.
- The 2002 rate for the 16-20 age range was the highest since 1996, the year in which the Buckle Up America campaign was started.
- From 1993 through 2002, the size of the 16 through 20 year old population increased 16.8 percent, while the 21 and older population increased 12.8 percent.

The Fatality Analysis Reporting System (FARS) provided the fatality data in this report.

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>