

Traffic Safety Facts

Crash•Stats

December 2004

A Brief Statistical Summary

DOT HS 809 818

Restraint Use Among Fatally Injured Passenger Vehicle Occupants by Sex

The National Highway Traffic Safety Administration's (NHTSA) National Center for Statistics and Analysis (NCSA) recently released the annual crash statistics for the year 2003. A total of 42,643 people died on the Nation's highways. The numbers were made available from NHTSA's Fatality Analysis Reporting System (FARS), which annually collects crash statistics from 50 States, the District of Columbia and Puerto Rico. Research has found that lap/shoulder safety belts, when used, reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light truck occupants, safety belts reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent. However, the 2003 data showed that a majority of fatally injured passenger vehicle occupants continue to be

unrestrained (56 percent). This Crash•Stats looks at the differences in restraint use among fatally injured passenger vehicle occupants based on sex.

Out of the 31,904 passenger vehicle occupants killed in 2003, 20,654 (65 percent) were males, 11,246 (35 percent) were females and the rest were unknown. The chart below and Table 1 (overleaf) show 5-year trend data of passenger vehicle occupant fatalities by sex and restraint use. Among the 20,654 fatally injured male passenger vehicle occupants 12,751 (62 percent) were not restrained and of the 11,246 female passenger vehicle occupants 5,279 (47 percent) were not restrained. The data clearly show that restraint use in fatal crashes among males is much lower than among females.

Figure 1
Percent Unrestrained Passenger Vehicle Occupant Fatalities by Sex and Year

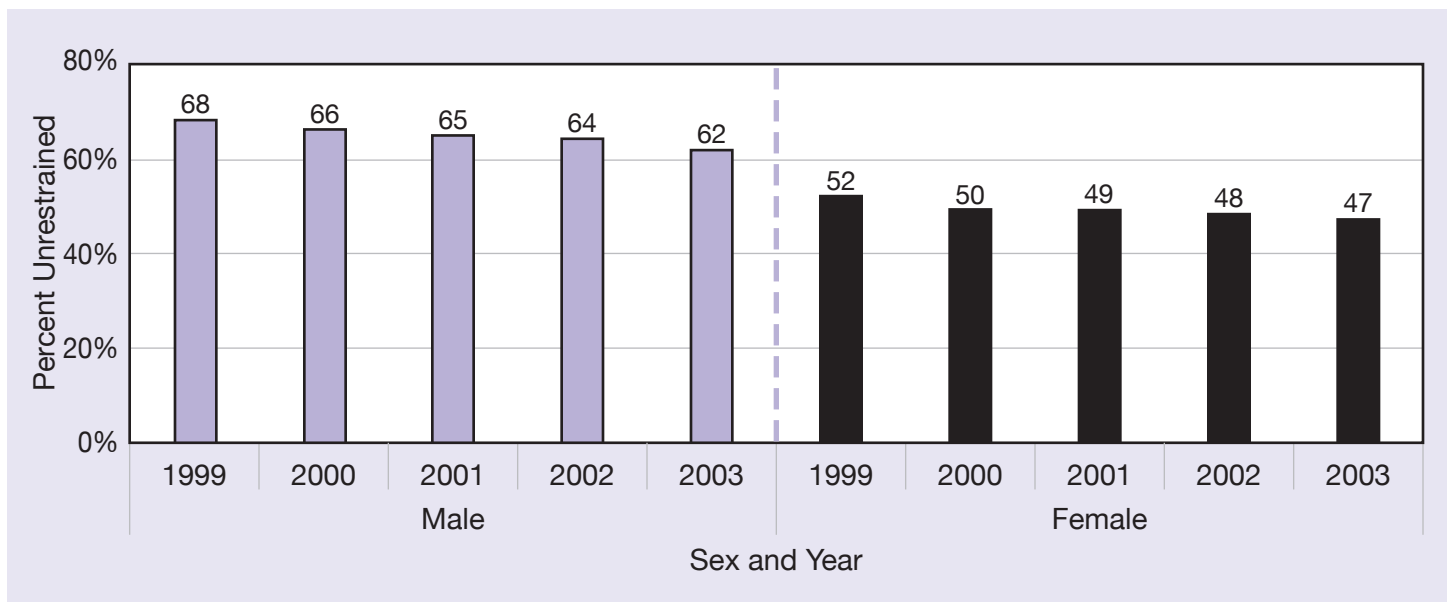


Table 1

Passenger Vehicle Occupant Fatalities by Year, Sex and Restraint Use

Calendar Year and Sex		Restraint Use				Total	
		Not used		Used			
		Number	Percent	Number	Percent	Number	Percent
1999	Male	13,923	68	6,523	32	20,446	100
	Female	6,037	52	5,637	48	11,674	100
	Unknown	4	50	3	50	7	100
	Total*	19,954	62	12,173	38	32,127	100
2000	Male	13,772	66	7,091	34	20,863	100
	Female	5,633	50	5,725	50	11,358	100
	Unknown	1	33	3	67	4	100
	Total*	19,391	60	12,834	40	32,225	100
2001	Male	13,546	65	7,288	35	20,834	100
	Female	5,513	49	5,692	51	11,205	100
	Unknown	3	67	1	33	4	100
	Total*	19,051	59	12,992	41	32,043	100
2002	Male	13,767	64	7,664	36	21,431	100
	Female	5,506	48	5,897	52	11,403	100
	Unknown	7	83	2	17	9	100
	Total*	19,272	59	13,571	41	32,843	100
2003	Male	12,751	62	7,903	38	20,654	100
	Female	5,279	47	5,967	53	11,246	100
	Unknown	4	100	0	0	4	100
	Total*	18,019	56	13,885	44	31,904	100

Source: NCSA, FARS 1999-2002 (FINAL), 2003 (ARF)

Unknown restraint use is distributed proportionally to the known use categories.

* Not equal to sum of (Male, Female & Unknown) due to individual rounding.

Definitions

The term 'occupant' is used for drivers, passengers and the unknown occupant types of a motor vehicle in transport. The term 'passenger vehicle occupant' refers to the drivers, passengers and unknown occupant type of passenger cars, SUVs, pickup trucks, vans and other light trucks. Restraint usage is classified into 3 categories. Table 2 shows the classification of restraint use.

Table 2

Classification of Restraint Use

Classification	Categories Used
Used	Shoulder belt, Lap belt, Lap and shoulder belt, Child safety seat, Restraint used – type unknown, Safety belt used improperly, Child safety seat used improperly
Not Used	None used (vehicle occupant)
Unknown	Unknown if used

For questions regarding the data reported in this note, contact Umesh G. Shankar [202-366-5558] or Cherian Varghese [202-366-1114]. Some of the findings in this note were obtained from the following NCSA publication: DOT HS 809 774. This crash stats 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>