

Traffic Safety Facts

Crash•Stats

Restraint Use Among Fatally Injured Passenger Vehicle Occupants by Time of Day

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 time of day (day and night).

Out of the 31,904 passenger vehicle occupants killed in 2003, 16,308 persons (51 percent) were killed in crashes during daytime, 15,271 persons (48 percent) were killed in crashes during nighttime and the rest were killed in crashes at unknown times. The chart below and Table 1 (overleaf) show 5-year trend data of passenger vehicle occupant fatalities by time of day and restraint use. Among the 15,271 persons killed at nighttime, 10,106 persons or almost two-thirds (66 percent) did not use restraints and 5,165 persons (34 percent) used restraints. In contrast the proportion of unrestrained fatally injured passenger vehicle occupants during daytime crashes was under 50 percent (47 percent).

Figure 1
Passenger Vehicle Occupant Fatalities by Year, Time of Day and Restraint Use

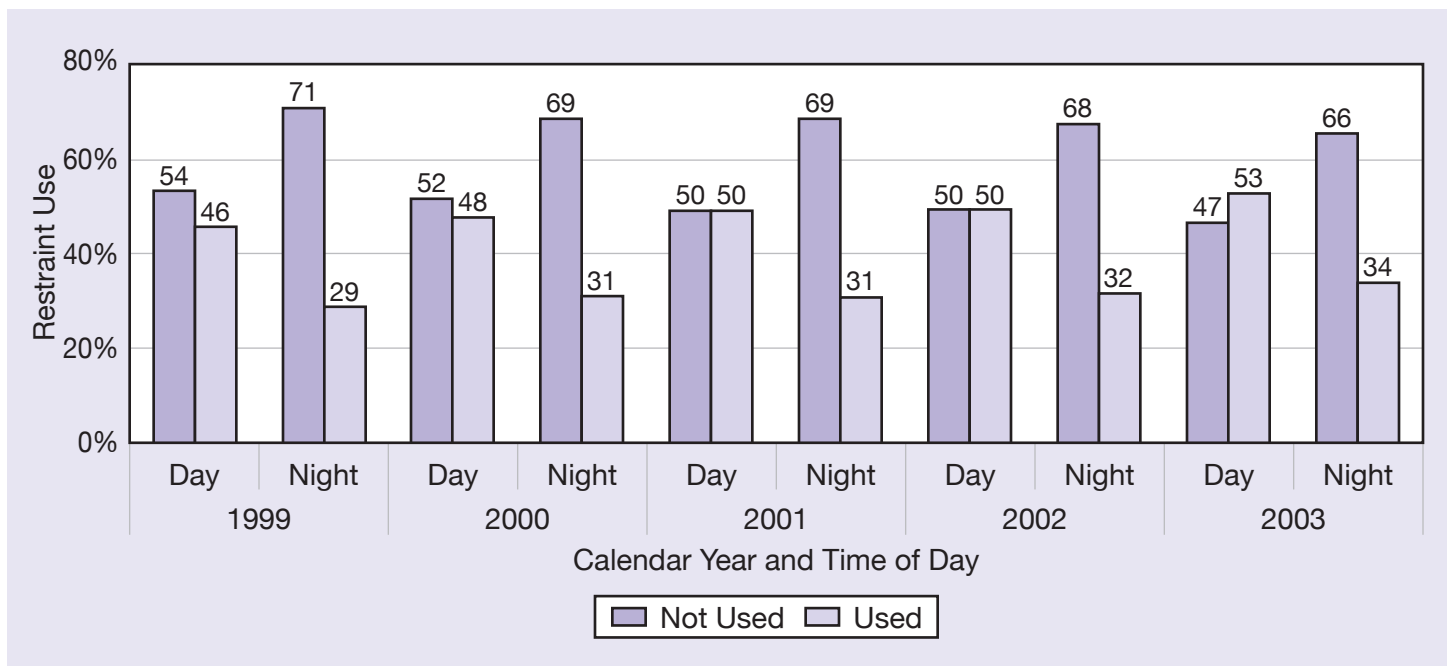


Table 1

Passenger Vehicle Occupant Fatalities by Year, Time of Day and Restraint Use

Calendar Year and Time of Day		Restraint				Total	
		Not used		Used			
		Number	Percent	Number	Percent	Number	Percent
1999	Night	10,650	71	4,335	29	14,985	100
	Day	9,109	54	7,761	46	16,870	100
	Unknown	212	78	60	22	272	100
	Total*	19,954	62	12,173	38	32,127	100
2000	Night	10,621	69	4,738	31	15,359	100
	Day	8,560	52	8,022	48	16,582	100
	Unknown	226	79	58	21	284	100
	Total*	19,391	60	12,834	40	32,225	100
2001	Night	10,626	69	4,725	31	15,351	100
	Day	8,265	50	8,176	50	16,441	100
	Unknown	183	73	68	27	251	100
	Total*	19,051	59	12,992	41	32,043	100
2002	Night	10,808	68	5,176	32	15,984	100
	Day	8,275	50	8,308	50	16,583	100
	Unknown	216	78	60	22	276	100
	Total*	19,272	59	13,571	41	32,843	100
2003	Night	10,106	66	5,165	34	15,271	100
	Day	7,729	47	8,579	53	16,308	100
	Unknown	217	67	108	33	325	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 (Night, Day and 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 and light trucks (include sport utility vehicles, Pickups & Vans). Time of day is classified into 2 categories, day (6:00 A.M.-5:59 P.M.) and night (6:00 P.M.-5:59 A.M.). Restraint usage is classified into 3 categories. Table 2 shows the classification of restraint use.

Table 2

Classification of Restraint Use

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>