

# Traffic Safety Facts

## Traffic Tech – Technology Transfer Series



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# 2007 Motor Vehicle Occupant Safety Survey Finds Children More Likely to Use Booster Seats Compared to 2003

## Background

The National Highway Traffic Safety Administration conducts a national telephone survey on a periodic basis to monitor the public's attitudes, knowledge, and self-reported behavior regarding use of seat belts and child occupant restraints. The 2007 Motor Vehicle Occupant Safety Survey (MVOSS) was the sixth in the series that began in 1994. The survey was composed of two questionnaires, each administered to a randomly selected sample of approximately 6,000 persons age 16 and older, with younger ages over-sampled. Interviewing ran from January 9, 2007, to April 30, 2007.

## Parent/Caregiver Subgroup

The survey selected a subgroup of drivers to ask detailed questions about children's use of child restraints. These drivers (parents/caregivers) were considered most likely to have significant responsibility for transporting young children. The respondents were chosen for questioning if they fell into one of the following categories:

- Parents of children under age 9. Usually this was a parent living with a child or children. Sometimes it was a parent not living with the child, but who drove the child (children) at least on occasion during the past year.
- Nonparents living with children under age 9. These were drivers who said that they at least sometimes drove with a child under 9 who lives in the driver's household.

The interviewers asked respondents to focus on one specific child for the interviews. If there was more than one child under age 9 in the household, one child was randomly selected. Respondents were asked about child restraint use with the selected child.

## Reported Child Restraint Use

Interviewers asked the parents/caregivers how frequently the selected child uses a car seat when riding with them. They were told that car seats for purposes of the survey

included infant seats, toddler seats, and booster seats. The majority (77%) reported that the selected child used a car seat "all of the time." Only 5% said the child was a car seat user, but not all the time. Almost one-fifth (17%) said the selected child "never" used a car seat. Usually this was because the child reportedly had graduated to seat belt use. For those children identified as never using child restraints, the vast majority (96%) reportedly wore seat belts all of the time when riding in motor vehicles. Another 2% reportedly used seat belts most of the time.

The survey employed a series of questions to identify the type of seat used by the referent child. Table 1 shows the transition from infant seats to child safety seats at age 1, and the movement to booster seats beginning at age 3 and accelerating at age 4. It also shows many 7- and 8-year-olds having left child restraints for seat belts alone. In many cases, the booster seat would still have been the appropriate restraint for the child. Despite a concerted effort to obtain correct seat type information, there remained a few obvious errors in how respondents described their seats, which is reflected in the table (e.g., some older children in infant seats). This attests to the difficulties in making such determinations over the phone.

There were 763 referent children age 4 to 8 for whom detailed child restraint information was obtained. Weighted estimates showed 40% using booster seats and another 24% using front-facing child safety seats, at least on occasion. In 2003, based on 850 cases, the numbers were 21% using booster seats and 19% using front-facing child safety seats. The number of cases per individual year of age for both years was small, between 100 and 200. But the general pattern of the data suggests that booster seat use by children age 6 and 7 is no longer a rare occurrence.

## Inspection Stations

Parents/caregivers whose referent child at least on occasion used a child restraint were asked if they had ever gone to a place where people can go to have someone check whether they are correctly attaching their car seats

**Table 1. Percentage of Children Who at Least on Occasion Use a Child Restraint, by Age**

Age	<1	1	2	3	4	5	6	7	8	4-8
<b>2007 Survey</b>										
Unweighted N	116	107	148	128	155	119	155	146	188	763
Booster Seat	5%	---	3%	16%	42%	50%	51%	40%	20%	40%
Front-Facing Seat	13%	85%	95%	78%	47%	29%	22%	14%	8%	24%
Infant Seat	79%	14%	1%	4%	2%	5%	1%	---	*	2%
Undetermined Seat	2%	---	1%	1%	7%	3%	2%	1%	1%	3%
Never Uses Seat	1%	1%	---	---	1%	9%	24%	44%	69%	30%
Never Drives Child	---	---	---	---	*	3%	*	*	2%	1%
<b>2003 Survey</b>										
Unweighted N	148	110	169	163	143	171	158	197	181	850
Booster Seat	7%	3%	8%	12%	29%	32%	27%	15%	9%	21%
Front-Facing Seat	18%	84%	82%	76%	53%	27%	15%	8%	1%	19%
Infant Seat	64%	9%	1%	2%	1%	2%	1%	*	1%	1%
Undetermined Seat	---	1%	2%	1%	---	---	---	*	---	*
Never Uses Seat	3%	*	3%	6%	13%	34%	54%	74%	87%	56%
Never Drives Child	7%	2%	4%	4%	3%	4%	3%	1%	---	2%

\*Less than 0.5% ---Zero cases

and buckling in their children. About one-quarter (26%) responded “Yes.” Most often, the sponsor was the local police (40%) or fire or rescue units (27%). The parents/caregivers usually found out about the car seat check through word-of-mouth (30%), doctors’ offices or hospitals (17%), radio announcements (10%), the local paper (9%), or flyers (8%).

Most of the parents/caregivers who had gone to an inspection station (66%) said that the technician did not find anything wrong with how the seat was attached or the child buckled; 3% were unsure. But when asked if the technician suggested that they do anything differently, 40% said “Yes” compared to 31% who had said that the technician found something wrong with what they were doing. Two-thirds of the parents/caregivers (67%) said that they were given a chance to practice attaching the seat and buckling in the child, as opposed to only watching the technician attach the seat. Upon leaving the station, 79% of the parents/caregivers felt fully confident that they could attach the car seat and buckle in the child correctly themselves.

### Booster Seats

The vast majority of all the parents/caregivers (92%) had seen or heard of booster seats. Two-thirds of those who were aware of them (67%) said they had used them. The most frequent age at which they started using booster seats with their children was 4 (33%), but 35% reported an age younger than 4. Among the 92% of parents/caregivers who had heard of booster seats, 17% had concerns about their safety. The concerns revolved around the perceived lack of security of the attachment (48%), perceived inadequacy of the seat to hold the child (27%), or nonspecific expressions of concern about safety (25%).

### How to Order

For a copy of *2007 Motor Vehicle Occupant Safety Survey, Volume 5 Child Safety Seat Report* (134 pages plus appendix) prepared by Schulman, Ronca, and Bucuvalas, Inc., write to the Office of Behavioral Safety Research, NHTSA, NTI-130, 1200 New Jersey Avenue SE., Washington, DC 20590, or send a fax to 202-366-7394, or download from [www.nhtsa.gov](http://www.nhtsa.gov). Alan Block was the project manager for this study.



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