

Traffic Safety Facts

2007 Data

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DOT HS 810 991

Occupant Protection

Restraint Use

Seat belt use rates in the States, the District of Columbia, and Puerto Rico are shown in Table 1. The results were obtained by observing traffic on roads at selected observation sites. Where rates are missing from the table, States did not submit rates to NHTSA. For more information on State seat belt use rates, see the National Occupant Protection Use Survey (NOPUS) Crash*Stat titled "Seat Belt Use in 2007 -- Use Rates in the States and Territories" (DOT HS 810 949).

The overall observed shoulder belt use rate was 82 percent in 2007, compared to 81 percent observed in 2006, 82 percent in 2005, 80 percent in 2004, 79 percent in 2003, 75 percent in 2002, and 73 percent in 2001. In 1994, the overall observed shoulder belt use rate was 58 percent.

Table 1
Seat Belt Use Rates by State, 2006 and 2007

State or U.S. Territory	2006	2007	Reduction in Nonuse 2006-2007	State or U.S. Territory	2006	2007	Reduction in Nonuse 2006-2007
Alabama	82.9%	82.3%	-4%	Nebraska	76.0%	78.7%	11%
Alaska	83.2%	82.4%	-5%	Nevada	91.2%	92.2%	11%
Arizona	78.9%	80.9%	9%	New Hampshire	63.5%	63.8%	1%
Arkansas	69.3%	69.9%	2%	New Jersey	90.0%	91.4%	14%
California	93.4%	94.6%	18%	New Mexico	89.6%	91.5%	18%
Colorado	80.3%	81.1%	4%	New York	83.0%	83.5%	3%
Connecticut	83.5%	85.8%	14%	North Carolina	88.5%	88.8%	3%
Delaware	86.1%	86.6%	4%	North Dakota	79.0%	82.2%	15%
Dist. Of Columbia	85.4%	87.1%	12%	Ohio	81.7%	81.6%	-1%
Florida	80.7%	79.1%	-8%	Oklahoma	83.7%	83.1%	-4%
Georgia	90.0%	89.0%	-10%	Oregon	94.1%	95.3%	20%
Hawaii	92.5%	97.6%	68%	Pennsylvania	86.3%	86.7%	3%
Idaho	79.8%	78.5%	-6%	Rhode Island	74.0%	79.1%	20%
Illinois	87.8%	90.1%	19%	South Carolina	72.5%	74.5%	7%
Indiana	84.3%	87.9%	23%	South Dakota	71.3%	73.0%	6%
Iowa	89.6%	91.3%	16%	Tennessee	78.6%	80.2%	7%
Kansas	73.5%	75.0%	6%	Texas	90.4%	91.8%	15%
Kentucky	67.2%	71.8%	14%	Utah	88.6%	86.8%	-16%
Louisiana	74.8%	75.2%	2%	Vermont	82.4%	87.1%	27%
Maine	77.2%	79.8%	11%	Virginia	78.7%	79.9%	6%
Maryland	91.1%	93.1%	22%	Washington	96.3%	96.4%	3%
Massachusetts	66.9%	68.7%	5%	West Virginia	88.5%	89.6%	10%
Michigan	94.3%	93.7%	-11%	Wisconsin	75.4%	75.3%	0%
Minnesota	83.3%	87.8%	27%	Wyoming	63.5%	72.2%	24%
Mississippi	73.6%	71.8%	-7%	Nationwide	81%	82%	7%
Missouri	75.2%	77.2%	8%	Puerto Rico	92.7%	92.1%	-8%
Montana	79.0%	79.6%	3%				

Note: Rates in jurisdictions with primary belt enforcement during the calendar year of the survey are shaded.

Source: Rates in States and Territories are from surveys conducted in accordance with Section 157, Title 23, U.S. Code.

“In 2007, 65 percent of the passenger vehicle occupants ages 13 to 15 and 21 to 34 killed in traffic crashes were not using restraints — these age groups had the highest percentage out of all age groups.”

Occupant Fatalities by Age and Restraint Use

In 2007 28,933 occupants of passenger vehicles (passenger cars, light trucks, vans, and SUVs) were killed in motor vehicle traffic crashes, 70 percent of the 41,059 traffic fatalities reported for the year.

Of the 28,933 passenger vehicle occupant fatalities in 2007, restraint use was unknown for 2,291 (8%). Of the 26,642 passenger vehicle occupant fatalities for which restraint use was known, 14,390 (54%) were unrestrained.

The age groups of 13 to 15, 21 to 24, and 25 to 34 held the highest percentage of unrestrained occupants at 65 percent. Of the 488 passenger vehicle occupant fatalities among 13- to 15-year-olds for which restraint use was known, 316 (65%) were unrestrained; of the 3,193 passenger vehicle occupant fatalities among 21- to 24-year-olds for which restraint use was known, 2,090 (65%) were unrestrained; and of the 4,350 passenger vehicle occupant fatalities among 25- to 34-year-olds for which restraint use was known, 2,810 (65%) were unrestrained. Of the 4,117 passenger vehicle occupant fatalities among 16- to 20-year-olds for which restraint use was known, 2,502 (61%) were unrestrained, which was the second highest percentage for any age group.

In 2007, there were a total of 317 passenger vehicle occupant fatalities among children under age 4. Of the 317 fatalities in this age group for which restraint use was known, 84 (28%) were unrestrained. Of the 265 fatalities among children ages 4 to 7 for which restraint use was known, 109 (44%) were unrestrained.

Table 2

Passenger Vehicle Occupants Killed, by Age and Restraint Use, 2007

Age (Years)	Restraint Used		Restraint Not Used		Restraint Use Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<4	217	68	84	27	16	5	317	100
4-7	138	52	109	41	18	7	265	100
8-12	152	48	141	44	24	8	317	100
13-15	172	32	316	59	47	9	535	100
16-20	1,615	36	2,502	55	423	9	4,540	100
21-24	1,103	32	2,090	60	300	9	3,493	100
25-34	1,540	32	2,810	59	434	9	4,784	100
35-44	1,406	37	2,092	55	275	7	3,773	100
45-54	1,614	45	1,732	48	277	8	3,623	100
55-64	1,399	53	1,057	40	193	7	2,649	100
65-74	1,107	58	671	35	117	6	1,895	100
75+	1,775	66	748	28	149	6	2,672	100
Unknown	14	20	38	54	18	26	70	100
Total	12,252	42	14,390	50	2,291	8	28,933	100

“In 2007, 67 percent of the pickup truck drivers killed in traffic crashes were not using restraints.”

Driver and Occupant Fatalities by Vehicle Type and Restraint Use

A total of 20,413 passenger vehicle drivers were killed in traffic crashes in 2007. Among the 18,886 passenger vehicle driver fatalities for which restraint use was known, 67 percent (2,800) of the drivers of pickup trucks killed were unrestrained, compared to 61 percent (1,788) for SUVs, 49 percent (477) for vans, and 46 percent (4,954) for passenger cars.

A total of 8,520 occupants of passenger vehicles were killed in traffic crashes in 2007. Among the 7,756 passenger vehicle occupant fatalities for which restraint use was known, 71 percent (880) of the passengers in pickup trucks were unrestrained, compared to 65 percent (966) for SUVs, 57 percent (369) for vans, and 49 percent (2,151) for passenger cars.

Table 3

Drivers and Passengers Killed, by Passenger Vehicle Type and Restraint Use, 2006

Type of Passenger Vehicle	Restraint Used		Restraint Not Used		Restraint Use Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Drivers Killed								
Passenger Cars	5,810	50	4,954	42	912	8	11,676	100
Pickup Trucks	1,391	31	2,800	62	304	7	4,495	100
Sport Utility Vehicles	1,167	37	1,788	56	226	7	3,181	100
Vans	487	46	477	45	85	8	1,049	100
Other Light Trucks	7	58	5	42	0	0	12	100
Total	8,862	43	10,024	49	1,527	7	20,413	100
Passengers Killed								
Passenger Cars	2,222	46	2,151	44	471	10	4,844	100
Pickup Trucks	359	27	880	66	96	7	1,335	100
Sport Utility Vehicles	530	33	966	59	132	8	1,628	100
Vans	279	39	369	52	63	9	711	100
Other Light Trucks	0	0	0	0	2	100	2	100
Total	3,390	40	4,366	51	764	9	8,520	100

“Seat belts, when used, reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent.”

Seat Belt Use and Benefits

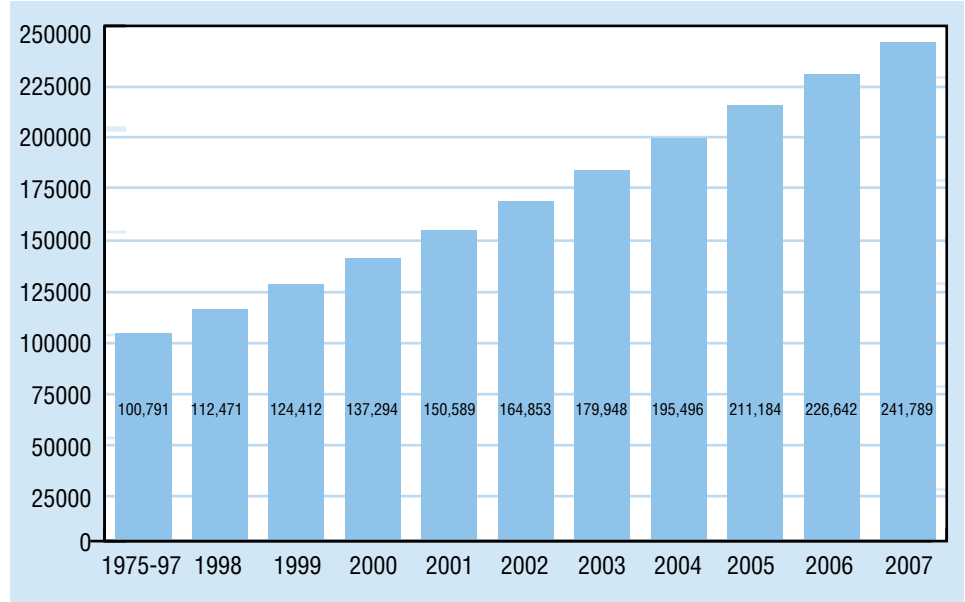
Research has found that lap/shoulder seat belts, when used, reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light-truck occupants, seat belts reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent.

Ejection from the vehicle is one of the most injurious events that can happen to a person in a crash. In fatal crashes in 2007, 76 percent of passenger vehicle occupants who were totally ejected from the vehicle were killed. Seat belts are effective in preventing total ejections: only 1 percent of the occupants reported to have been using restraints were totally ejected, compared with 31 percent of the unrestrained occupants.

Lives Saved by Seat Belts

Among passenger vehicle occupants over age 4, seat belts saved an estimated 15,147 lives in 2007. If all passenger vehicle occupants over age 4 had worn seat belts, 20,171 lives (that is, an additional 5,024) could have been saved in 2007.

Figure 1
Cumulative Estimated Number of Lives Saved by Seat Belt Use, 1975-2007

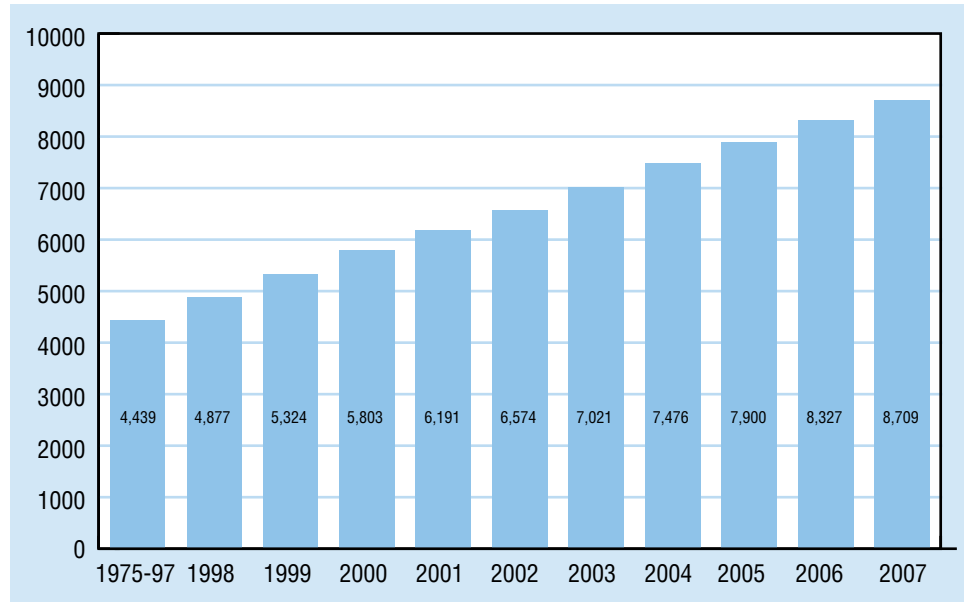


“From 1975 through 2007, an estimated 8,709 lives were saved by child restraints.”

Child Restraint Use and Benefits

Research on the effectiveness of child safety seats has found them to reduce fatal injury by 71 percent for infants (younger than 1 year old) and by 54 percent for toddlers (1 to 4 years old) in passenger cars. For infants and toddlers in light trucks, the corresponding reductions are 58 percent and 59 percent, respectively.

Figure 2
Cumulative Estimated Number of Lives Saved by Child Restraints, 1975-2007



Lives Saved by Child Safety Seats

Among children under age 5, an estimated 382 lives were saved in 2007 by child restraint use. Of these 382 lives saved, 358 were associated with the use of child safety seats and 24 with the use of adult seat belts.

At 100 percent child safety seat use for children under age 5, an estimated 453 lives (that is, an additional 71) could have been saved in 2007.

From 1975 through 2007, an estimated 8,709 lives were saved by child restraints (child safety seats or adult seat belts).

Air Bag Use and Benefits

Air bags, combined with lap/shoulder seat belts, offer the most effective safety protection available today for passenger vehicle occupants.

Recent NHTSA analyses indicated a fatality-reducing effectiveness for air bags of 14 percent when no seat belt was used and 11 percent when a seat belt was used in conjunction with air bags.

It is estimated that, as of 2007, 176 million air-bag-equipped passenger vehicles were on the road, including 164 million with dual air bags.

Air bags are supplemental protection and are not designed to deploy in all crashes. Most are designed to inflate in a moderate-to-severe frontal crash.

Some crashes at lower speeds may result in injuries, but generally not the serious injuries that air bags are designed to prevent. For this and other reasons, lap/shoulder belts should always be used, even in vehicles with air bags.

Children in rear-facing child safety seats should not be placed in the front seat of vehicles equipped with passenger-side air bags. The impact of a deploying air bag striking a rear-facing child safety seat could result in injury to the child.

Lives Saved by Air Bags

In 2007, an estimated 2,788 lives were saved by air bags. From 1987 to 2007, a total of 25,282 lives were saved.

“Air bags, combined with lap/shoulder belts, offer the most effective safety protection available today for passenger vehicle occupants.”

“Between 1987 and 2007, 25,282 lives were saved by air bags.”

Table 4

Estimated Number of Lives Saved by Restraint Systems, 1975-2007

Restraint Type	1975-97	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Seat Belts	100,791	11,680	11,941	12,882	13,295	14,264	15,095	15,548	15,688	15,458	15,147
Child Restraints	4,439	438	447	479	388	383	447	455	424	427	382
Air Bags	3,022	1,208	1,491	1,716	1,978	2,324	2,519	2,660	2,752	2,824	2,788

Table 5
Passenger Vehicle Occupants Killed by State and Restraint Use, 2007

State	Restraint Use							
	Restraint Used		No Restraint Used		Restraint Use Unknown		Total Occupants Killed	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Alabama	335	37	538	59	33	4	906	100
Alaska	26	46	30	54	0	0	56	100
Arizona	233	34	374	54	80	12	687	100
Arkansas	159	33	275	57	48	10	482	100
California	1,495	58	857	33	243	9	2,595	100
Colorado	161	44	193	53	13	4	367	100
Connecticut	88	46	82	42	23	12	193	100
Delaware	43	52	35	42	5	6	83	100
Dist of Columbia	8	38	7	33	6	29	21	100
Florida	735	39	1,077	57	66	4	1,878	100
Georgia	488	39	637	51	119	10	1,244	100
Hawaii	40	55	27	37	6	8	73	100
Idaho	71	37	113	59	8	4	192	100
Illinois	364	42	395	46	103	12	862	100
Indiana	293	44	291	44	83	12	667	100
Iowa	151	45	153	46	29	9	333	100
Kansas	131	40	178	54	21	6	330	100
Kentucky	265	41	382	59	0	0	647	100
Louisiana	238	32	435	59	60	8	733	100
Maine	57	40	76	54	8	6	141	100
Maryland	205	54	148	39	28	7	381	100
Massachusetts	76	27	142	51	59	21	277	100
Michigan	426	54	255	33	101	13	782	100
Minnesota	166	43	186	48	33	9	385	100
Mississippi	226	31	511	69	0	0	737	100
Missouri	244	32	461	61	53	7	758	100
Montana	58	28	145	71	2	1	205	100
Nebraska	67	31	122	56	30	14	219	100
Nevada	114	45	124	49	16	6	254	100
New Hampshire	26	30	60	70	0	0	86	100
New Jersey	228	50	213	47	16	4	457	100
New Mexico	107	39	163	59	7	3	277	100
New York	413	52	280	36	95	12	788	100
North Carolina	584	47	540	44	113	9	1,237	100
North Dakota	27	29	58	63	7	8	92	100
Ohio	364	40	525	58	20	2	909	100
Oklahoma	224	39	317	55	35	6	576	100
Oregon		166	52	106	33	46	14	318
Pennsylvania	333	32	547	53	154	15	1,034	100
Rhode Island	14	34	19	46	8	20	41	100
South Carolina	243	31	487	61	63	8	793	100
South Dakota	24	23	73	69	9	8	106	100
Tennessee	337	36	534	58	56	6	927	100
Texas	1,234	51	986	41	178	7	2,398	100
Utah	103	47	78	36	36	17	217	100
Vermont	24	51	22	47	1	2	47	100
Virginia	272	35	463	60	35	5	770	100
Washington	211	53	149	37	38	10	398	100
West Virginia	113	35	158	49	52	16	323	100
Wisconsin	196	36	298	55	45	8	539	100
Wyoming	46	41	65	58	1	1	112	100
U.S. Total	12,252	42	14,390	50	2,291	8	28,933	100
Puerto Rico	85	42	119	58	0	0	204	100

Restraint Use Laws

The U.S. Department of Transportation's July 1984 rulemaking on automatic occupant protection began a wave of legislative action that resulted in the enactment of seat belt use laws in many States. The goal of those laws is to promote belt use and thereby reduce deaths and injuries in motor vehicle crashes.

The first mandatory belt use law was enacted in the State of New York in 1984. Adult belt use laws are now in effect in 49 States and the District of Columbia. The laws differ from State to State, according to the type and age of the vehicle, occupant seating position, etc.

In 23 of the States with belt use laws, the law specifies secondary enforcement. That is, police officers are permitted to write a citation only after a vehicle is stopped for some other traffic infraction. Twenty-six States, Puerto Rico and the District of Columbia have laws that allow primary enforcement, enabling officers to stop vehicles and write citations whenever they observe violations of the seat belt law.

A 1995 NHTSA study, *Seat Belt Use Laws: An Evaluation of Primary Enforcement and Other Provisions*, indicated that States with primary enforcement seat belt laws achieved significantly higher belt use than did those with secondary enforcement laws. The analysis suggests that belt use among fatally injured occupants was at least 15 percent higher in States with primary enforcement laws.

The first mandatory child restraint use law was implemented in the State of Tennessee in 1978. Since 1985, all 50 States and the District of Columbia have had child restraint use laws in effect. These laws also cover various segments of the population.

For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis, NVS-424, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted at 800-934-8517. Fax messages should be sent to 202-366-7078. General information on highway traffic safety can be accessed by Internet users at www.nhtsa.gov/portal/site/nhtsa/nca. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are *Overview*, *Alcohol*, *African American*, *Bicyclists and Other Cyclists* (formerly titled *Pedalcyclists*), *Children*, *Hispanic*, *Large Trucks*, *Motorcycles*, *Older Population*, *Pedestrians*, *Race and Ethnicity*, *Rural/Urban Comparisons*, *School Transportation-Related Crashes*, *Speeding*, *State Alcohol Estimates*, *State Traffic Data*, and *Young Drivers*. Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle Crash Data from the Fatality Analysis Reporting System and the General Estimates System*. The fact sheets and annual Traffic Safety Facts report can be accessed online at www-nrd.nhtsa.dot.gov/CATS.