Traffic Safety Facts

2018 Data

June 2020

DOT HS 812 967

NHTSA

In this fact sheet for 2018 the information is presented as follows.

U.S. Department of Transportation

National Highway Traffic Safety Administration

1200 New Jersey Avenue SE
Washington, DC 20590

Occupant Protection

Occupant protection discussed in this fact sheet includes seat belts, car seats for those under 5, and frontal air bags in passenger vehicles. Passenger vehicles consist of passenger cars, pickup trucks, vans, and SUVs. Vehicle occupants include drivers and passengers.

Key Findings

- Forty-seven percent of passenger vehicle occupants killed in traffic crashes in 2018 were unrestrained.
- Sixty percent of the passenger vehicle occupant fatalities in the 25-to-34 age group in 2018 traffic crashes were not using restraints — the highest percentage of all age groups in this report.
- In traffic crashes in 2018, among male fatalities with known restraint use, 52 percent were unrestrained; among female fatalities with known restraint use, 39 percent were unrestrained.
- In traffic crashes in 2018, considering known restraint use by passenger vehicle type, 59 percent of pickup truck drivers who were killed were unrestrained, compared to 50 percent of SUV drivers, 42 percent of passenger car drivers, and 38 percent of van drivers.
- In 2017 seat belts saved an estimated 14,955 lives of passenger vehicle occupants 5 and older (latest data available).
- In 2017 an estimated 2,790 lives were saved by frontal air bags (latest data available).
- An estimated 325 lives of children under 5 were saved by the use of restraints in 2017 (latest data available).

This fact sheet contains information on fatal motor vehicle crashes and fatalities based on data from the Fatality Analysis Reporting System (FARS). Refer to the end of this publication for more information on FARS. Data from the National Occupant Protection Use Survey (NOPUS) and observed belt use rate survey data obtained from individual States are also used in this fact sheet. Both sets of surveys are based on the observation of front seat (driver and passenger) seat belt use as it occurs in traffic, and is not crash data.

Overview

According to NOPUS for 2018 (Report No. DOT HS 812 662), estimated belt use increased from 84.1 percent in 2009 to 89.6 percent in 2018. NOPUS provides nationwide probability-based observed data on seat belt use in the United States.

The number of passenger vehicle occupants who were restrained and unrestrained, and those whose restraint use was not known, for 2009 to 2018 is shown in Table 1. In 2018 there were 36,560 traffic fatalities in the United States, of which 22,697 (62%) were occupants of

passenger vehicles. Of the 22,697 passenger vehicle occupants killed in 2018, there were 10,978 (48%) who were restrained and 9,778 (43%) who were unrestrained at the time of the crashes. Restraint use was not known for the remaining 1,941 (9%) occupants. Looking only at those passenger vehicle occupants who were killed and their restraint use was known, 53 percent were restrained and 47 percent were unrestrained.

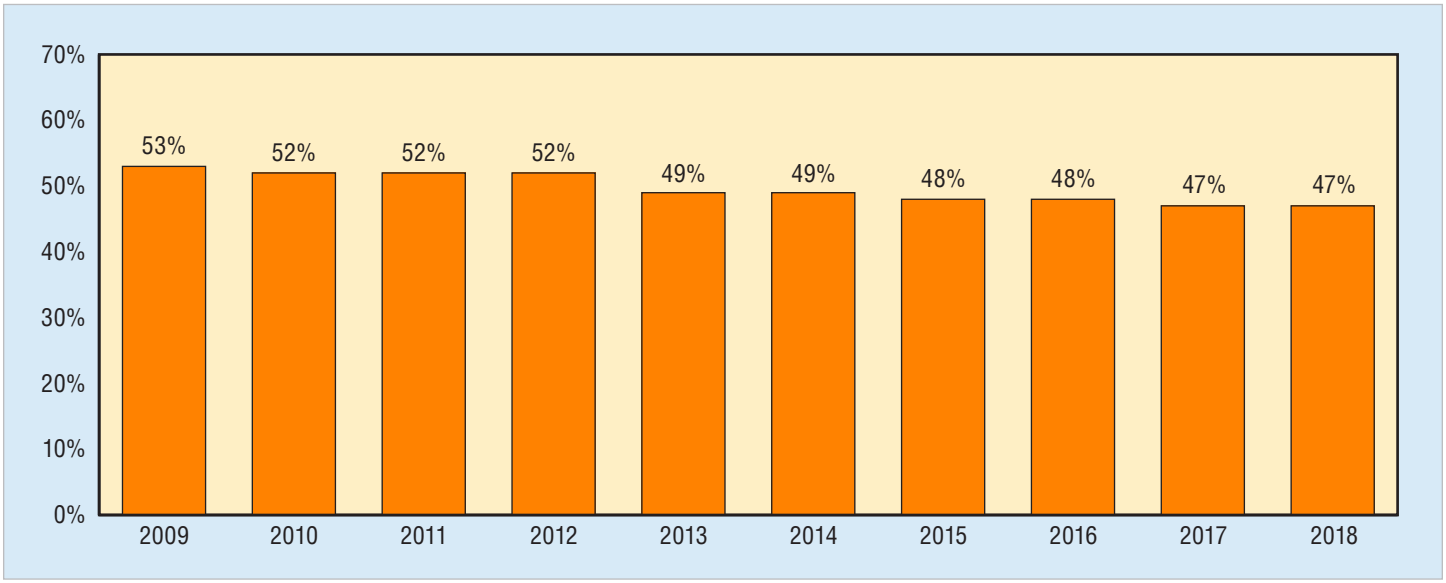
Table 1
Passenger Vehicle Occupants Killed, by Restraint Use, 2009–2018

Year	Restraint Use						Total		Percent Restrained Based on Known Use	Percent Unrestrained Based on Known Use
	Restrained		Unrestrained		Unknown					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
2009	10,190	43%	11,545	49%	1,712	7%	23,447	100%	47%	53%
2010	9,969	45%	10,590	48%	1,714	8%	22,273	100%	48%	52%
2011	9,471	44%	10,215	48%	1,630	8%	21,316	100%	48%	52%
2012	9,746	45%	10,370	48%	1,663	8%	21,779	100%	48%	52%
2013	9,840	46%	9,622	45%	1,761	8%	21,223	100%	51%	49%
2014	9,961	47%	9,410	45%	1,679	8%	21,050	100%	51%	49%
2015	10,763	48%	9,975	44%	1,903	8%	22,641	100%	52%	48%
2016	11,343	48%	10,463	44%	1,981	8%	23,787	100%	52%	48%
2017	11,488	49%	10,116	43%	2,059	9%	23,663	100%	53%	47%
2018	10,978	48%	9,778	43%	1,941	9%	22,697	100%	53%	47%

Source: FARS 2009–2017 Final File, 2018 Annual Report File (ARF)

The percentage of unrestrained passenger vehicle occupants killed in motor vehicle traffic crashes is graphed in Figure 1. The unrestrained percentage has decreased from 2009 to 2018. Among passenger vehicle occupants killed, when restraint use was known, the percentage of unrestrained deaths decreased by 6 percentage points, from 53 percent in 2009 to 47 percent in 2018.

Figure 1
Percentages of Unrestrained* Passenger Vehicle Occupants Killed, 2009–2018



Source: FARS 2009–2017 Final File, 2018 ARF
*Based on known restraint use.

Occupant Demographics

Age

Information on restraint use by age group for passenger vehicle occupants who were killed in 2018 is shown in Table 2.

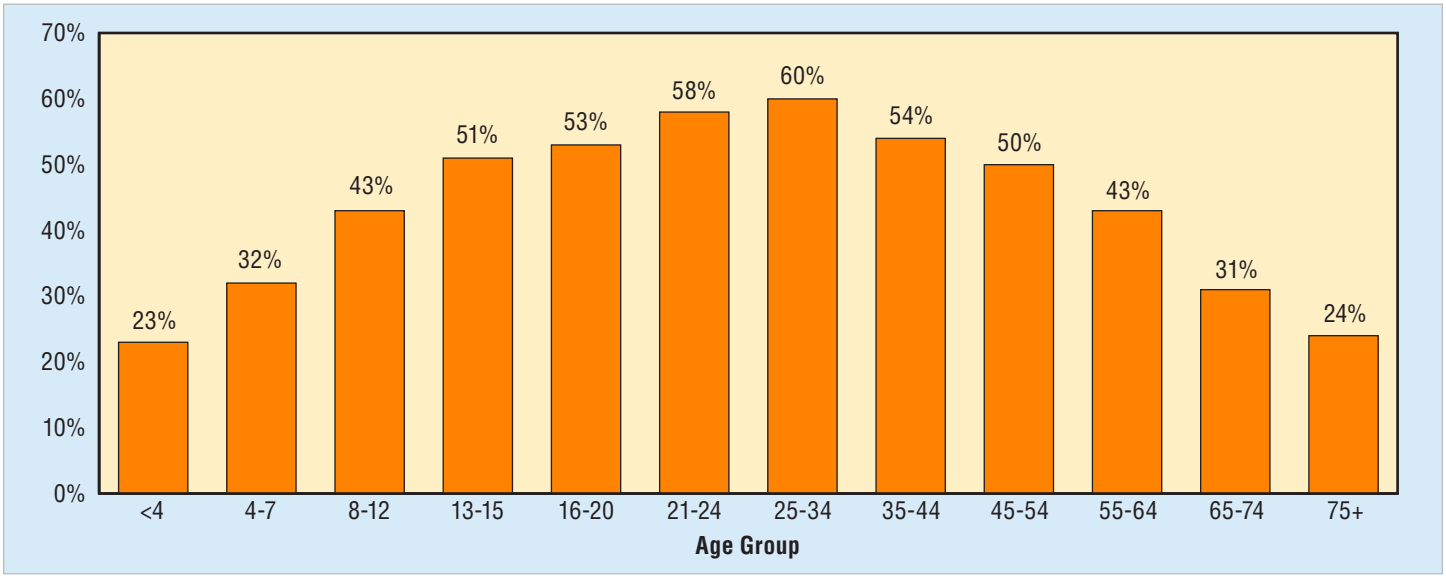
Among passenger vehicle occupant fatalities where restraint use was known, the 25-to-34 age group had the highest percentage of unrestrained occupants (60%), followed by the 21-to-24 age group at 58 percent unrestrained. These percentages are shown in Figure 2.

Table 2
Passenger Vehicle Occupants Killed, by Age Group and Restraint Use, 2018

Age Group	Restraint Use						Total		Percent Restrained Based on Known Use	Percent Unrestrained Based on Known Use
	Restrained		Unrestrained		Unknown					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
<4	157	72%	47	21%	15	7%	219	100%	77%	23%
4–7	116	60%	55	28%	22	11%	193	100%	68%	32%
8–12	116	52%	89	40%	19	8%	224	100%	57%	43%
13–15	91	44%	93	45%	21	10%	205	100%	49%	51%
16–20	938	42%	1,064	48%	227	10%	2,229	100%	47%	53%
21–24	837	38%	1,141	51%	245	11%	2,223	100%	42%	58%
25–34	1,544	36%	2,304	54%	417	10%	4,265	100%	40%	60%
35–44	1,205	42%	1,389	49%	268	9%	2,862	100%	46%	54%
45–54	1,239	46%	1,245	46%	210	8%	2,694	100%	50%	50%
55–64	1,484	53%	1,117	40%	210	7%	2,811	100%	57%	43%
65–74	1,389	64%	638	29%	157	7%	2,184	100%	69%	31%
75+	1,854	72%	585	23%	120	5%	2,559	100%	76%	24%
Total*	**10,978**	**48%**	**9,778**	**43%**	**1,941**	**9%**	**22,697**	**100%**	**53%**	**47%**

Source: FARS 2018 ARF
*Includes passenger vehicle occupants of unknown age.

Figure 2
Percentages of Unrestrained* Passenger Vehicle Occupants Killed, by Age Group, 2018



Source: FARS 2018 ARF
*Based on known restraint use.

In 2018 there were 219 passenger vehicle occupant fatalities among children younger than 4, and 23 percent were unrestrained (based on known restraint use). In the 4-to-7 age group, there were 193 fatalities; 32 percent were unrestrained (based on known restraint use).

Sex

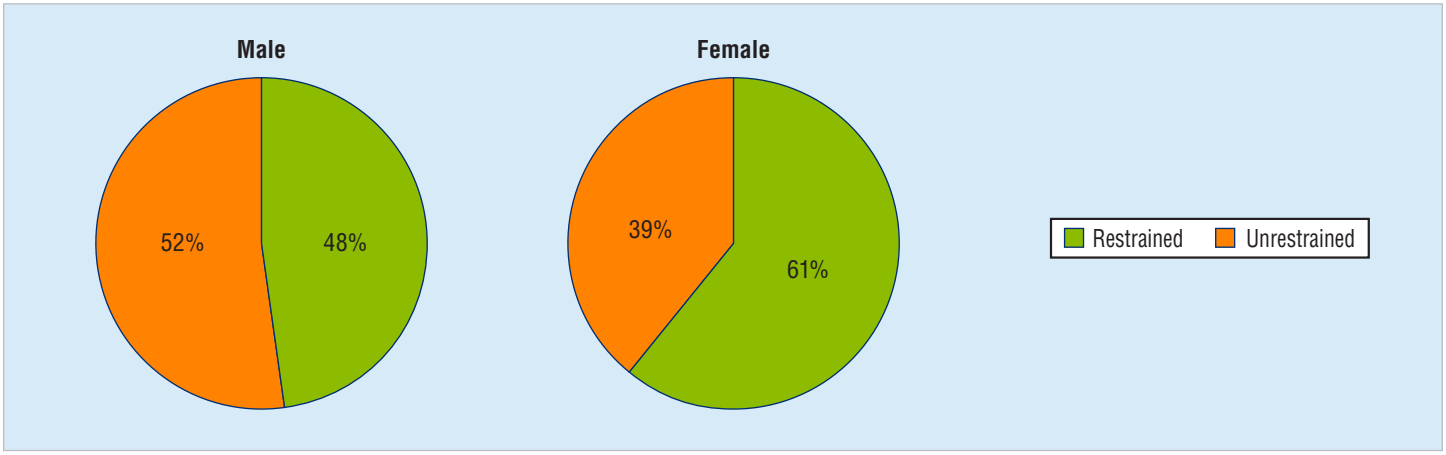
Nearly twice as many male occupants (14,708) as female occupants (7,979) were killed in 2018, as shown in Table 3. When restraint use was known, 52 percent of male fatalities and 39 percent of female fatalities were unrestrained (Figure 3). Restraint use was unknown for 9 percent of male occupant fatalities and 7 percent of the female fatalities.

Table 3
Passenger Vehicle Occupants Killed, by Sex and Restraint Use, 2018

Sex	Restraint Use						Total		Percent Restrained Based on Known Use	Percent Unrestrained Based on Known Use
	Restrained		Unrestrained		Unknown					
	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Male	6,441	44%	6,900	47%	1,367	9%	14,708	100%	48%	52%
Female	4,536	57%	2,875	36%	568	7%	7,979	100%	61%	39%
Total*	**10,978**	**48%**	**9,778**	**43%**	**1,941**	**9%**	**22,697**	**100%**	**53%**	**47%**

Source: FARS 2018 ARF
*Includes passenger vehicle occupants of unknown sex.

Figure 3
Percentages of Passenger Vehicle Occupants Killed, by Sex and Restraint* Use, 2018



Source: FARS 2018 ARF
*Based on known restraint use.

Seating Position

Restraint use by seating position for passenger vehicle occupants killed in 2018 is presented in Table 4. Among killed passenger vehicle occupants with known restraint use, 46 percent of those in the front row and 55 percent of those in the second row of seats were unrestrained.

Table 4
Passenger Vehicle Occupants Killed, by Seating Position and Restraint Use, 2018

Seating Position		Restraint Use						Total		Percent Restrained Based on Known Use	Percent Unrestrained Based on Known Use
		Restrained		Unrestrained		Unknown					
		Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Front Row	Total	10,229	50%	8,653	42%	1,700	8%	20,582	100%	54%	46%
	Left	8,334	49%	7,316	43%	1,388	8%	17,038	100%	53%	47%
	Middle	6	22%	17	63%	4	15%	27	100%	26%	74%
	Right	1,888	54%	1,317	38%	306	9%	3,511	100%	59%	41%
	Other/Unknown	1	17%	3	50%	2	33%	6	100%	25%	75%
Second Row	Total	687	41%	826	49%	159	10%	1,672	100%	45%	55%
	Left	249	42%	282	48%	58	10%	589	100%	47%	53%
	Middle	60	30%	123	61%	19	9%	202	100%	33%	67%
	Right	369	45%	381	46%	74	9%	824	100%	49%	51%
	Other/Unknown	9	16%	40	70%	8	14%	57	100%	18%	82%
Other*		46	18%	191	74%	21	8%	258	100%	19%	81%
Unknown		16	9%	108	58%	61	33%	185	100%	–	–
Total		**10,978**	**48%**	**9,778**	**43%**	**1,941**	**9%**	**22,697**	**100%**	**53%**	**47%**

Source: FARS 2018 ARF
*Includes additional rows, cargo areas, trailing units, and vehicle exteriors.

Passenger Vehicle Types

Table 5 shows passenger vehicle occupant fatalities separately for drivers and passengers for each passenger vehicle type. Seventy-five percent of the passenger vehicle occupants killed in 2018 were drivers, and 25 percent were passengers.

In 2018 there were 17,036 passenger vehicle drivers killed in traffic crashes, the majority in passenger cars. Among the 15,648 passenger vehicle driver fatalities for which restraint use was known, 47 percent were unrestrained. However, restraint use differed by vehicle type: 59 percent (1,869) of the drivers of pickup trucks, 50 percent (1,494) of SUV drivers, 42 percent (3,688) of passenger car drivers, and 38 percent (237) of van drivers killed were unrestrained.

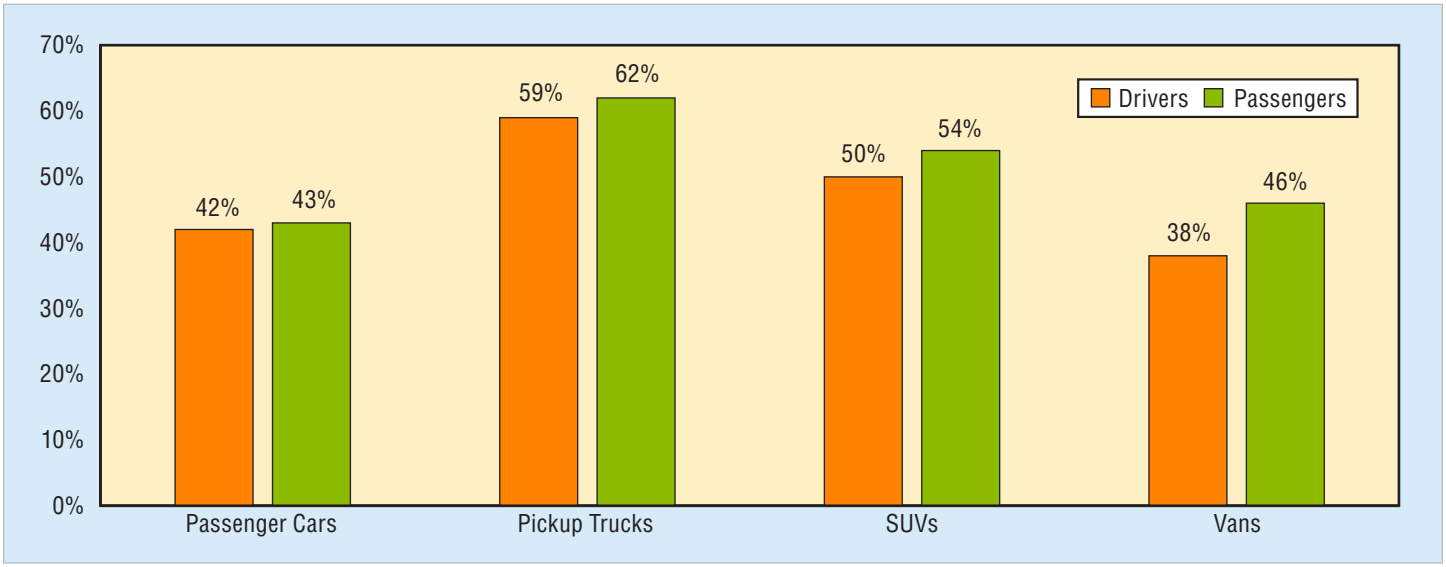
Table 5
Drivers and Passengers Killed, by Passenger Vehicle Type and Restraint Use, 2018

Passenger Vehicle Type		Restraint Use						Total		Percent Restrained Based on Known Use	Percent Unrestrained Based on Known Use
		Restrained		Unrestrained		Unknown					
		Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Drivers Killed	Passenger Car	5,092	53%	3,688	38%	803	8%	9,583	100%	58%	42%
	Pickup Truck	1,324	38%	1,869	54%	269	8%	3,462	100%	41%	59%
	SUV	1,507	46%	1,494	46%	249	8%	3,250	100%	50%	50%
	Van	391	57%	237	34%	62	9%	690	100%	62%	38%
	Other Light Truck	19	37%	27	53%	5	10%	51	100%	41%	59%
	Total	**8,333**	**49%**	**7,315**	**43%**	**1,388**	**8%**	**17,036**	**100%**	**53%**	**47%**
Passengers Killed	Passenger Car	1,642	51%	1,226	38%	324	10%	3,192	100%	57%	43%
	Pickup Truck	275	35%	449	57%	67	8%	791	100%	38%	62%
	SUV	538	42%	626	49%	120	9%	1,284	100%	46%	54%
	Van	188	49%	158	41%	41	11%	387	100%	54%	46%
	Other Light Truck	2	29%	4	57%	1	14%	7	100%	33%	67%
	Total	**2,645**	**47%**	**2,463**	**44%**	**553**	**10%**	**5,661**	**100%**	**52%**	**48%**

Source: FARS 2018 ARF

Figure 4

Percentages of Unrestrained* Drivers and Passengers Killed, by Passenger Vehicle Type, 2018



Source: FARS 2018 ARF
*Based on known restraint use.

There were 5,661 passengers killed in passenger vehicles in 2018. Fifty-six percent of the passengers killed were riding in passenger cars. Among the 5,108 fatalities for which restraint use was known, 48 percent (2,463) were unrestrained, but use varied by vehicle type: 62 percent (449) of the passengers killed in pickup trucks were unrestrained, compared to 54 percent (626) in SUVs, 46 percent (158) in vans, and 43 percent (1,226) in passenger cars. Figure 4 compares the percent known unrestrained use of drivers killed versus passengers killed for each passenger vehicle type.

Restraint Use and Benefits

Seat Belts

The safety benefits of seat belt use are significant and well-documented. Seat belts help keep occupants inside vehicles and also prevent them from becoming projectiles inside the vehicle and hurting others. NHTSA has estimated that lap/shoulder seat belts, when used, reduce the risk of:

- fatal injury to front-seat passenger car occupants by 45 percent;
- moderate-to-critical injury to front-seat passenger car occupants by 50 percent;
- fatal injury to front-seat light-truck occupants by 60 percent; and
- moderate-to-critical injury to front-seat light-truck occupants by 65 percent (Kahane, 2015; NHTSA, 1984).

Among passenger vehicle occupants 5 and older, seat belts saved an estimated 14,955 lives in 2017 (latest data available), as shown in Table 6. If all passenger vehicle occupants 5 and older had worn seat belts, 17,504 lives (that is, an additional 2,549) could have been saved in 2017. From 1975, when NHTSA's FARS database began, through 2017, seat belts have saved an estimated 374,276 lives. If all passengers had worn seat belts during these years, a total of 760,994 (that is, an additional 386,718 lives) would have been saved. The estimated number of lives saved by child restraints, seat belts, and frontal air bags, as well as the additional lives that could have been saved at 100-percent belt use, are available for each State in the Crash*Stat *Lives Saved in 2017 by Restraint Use and Minimum Drinking Age Laws* at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812691.

Table 6

Estimated Number of Lives Saved in Passenger Vehicles, by Restraint System, 1975–2017 (2018 Lives Saved Data Not Available)

Restraint System	1975–2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Frontal Air Bags*	25,294	2,557	2,481	2,403	2,341	2,422	2,398	2,400	2,597	2,774	2,790	**50,457**
Child Restraints (age 4 and younger)	8,884	262	281	286	245	267	246	236	255	319	325	**11,606**
Seat Belts (age 5+)	241,865	13,312	12,757	12,670	12,071	12,386	12,644	12,801	14,062	14,753	14,955	**374,276**
Lives Savable at 100% Seat Belt Use	597,558	17,482	16,447	16,026	15,467	15,416	15,415	15,678	16,777	17,224	17,504	**760,994**
Additional Lives That Would Have Been Saved at 100% Seat Belt Use	355,693	4,171	3,690	3,356	3,396	3,030	2,771	2,877	2,715	2,471	2,549	**386,719**

Source: *Lives Saved in 2017 by Restraint Use and Minimum Drinking Age Laws* (Report No. DOT HS 812 683)
*Total from 1987-2007; frontal air bags did not exist prior to 1987

Looking at all passenger vehicle occupants (those that were killed as well as those that survived) in fatal crashes in 2018 with known restraint use:

- Twenty-six percent were unrestrained at the time of the crash and the remaining 74 percent were restrained (Table 7);
- Twenty-two percent were unrestrained during daytime hours; and
- Thirty percent were unrestrained during nighttime hours.

For those passenger vehicle occupants with known restraint use who survived fatal crashes in 2018:

- During daytime hours, 12 percent of passenger vehicle occupants who survived fatal crashes were unrestrained (thus 88% of the survivors were restrained); and
- Fifteen percent of crash survivors were unrestrained during nighttime hours.

Table 7

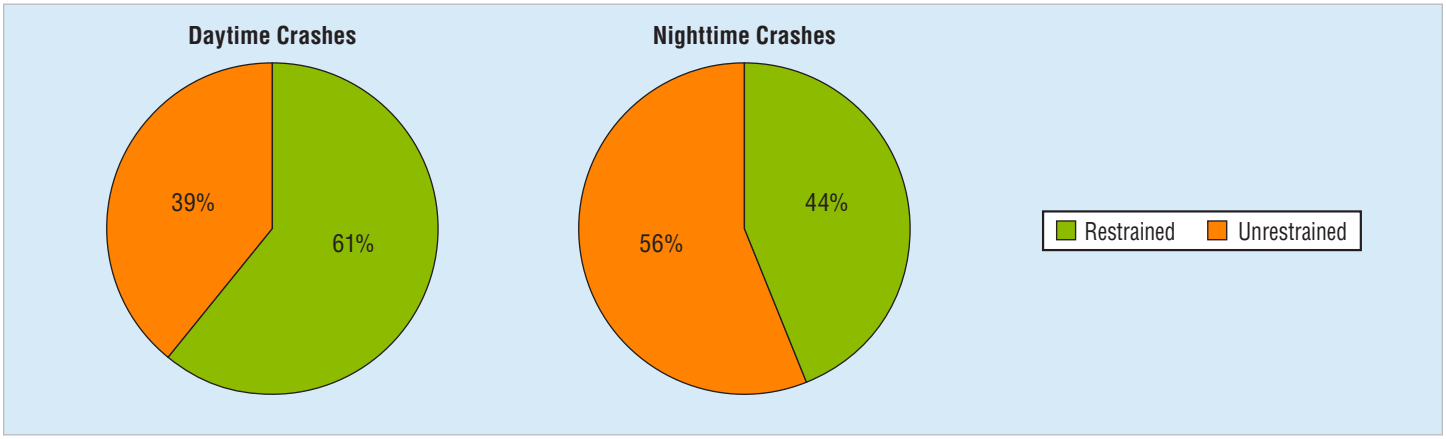
Passenger Vehicle Occupants Involved in Fatal Crashes, by Survival Status, Time of Day, and Restraint Use, 2018

Survival Status / Time of Day		Restraint Use						Total		Percent Restrained Based on Known Use	Percent Unrestrained Based on Known Use
		Restrained		Unrestrained		Unknown					
		Number	Percent	Number	Percent	Number	Percent	Number	Percent		
Killed	Daytime	6,751	57%	4,380	37%	806	7%	11,937	100%	61%	39%
	Nighttime	4,182	39%	5,307	50%	1,117	11%	10,606	100%	44%	56%
	Unknown	45	29%	91	59%	18	12%	154	100%	33%	67%
	Total	10,978	48%	9,778	43%	1,941	9%	22,697	100%	53%	47%
Survived	Daytime	15,989	83%	2,091	11%	1,290	7%	19,370	100%	88%	12%
	Nighttime	14,334	75%	2,505	13%	2,228	12%	19,067	100%	85%	15%
	Unknown	34	52%	10	15%	21	32%	65	100%	77%	23%
	Total	30,357	79%	4,606	12%	3,539	9%	38,502	100%	87%	13%
Total	Daytime	22,740	73%	6,471	21%	2,096	7%	31,307	100%	78%	22%
	Nighttime	18,516	62%	7,812	26%	3,345	11%	29,673	100%	70%	30%
	Unknown	79	36%	101	46%	39	18%	219	100%	44%	56%
	Total	41,335	68%	14,384	24%	5,480	9%	61,199	100%	74%	26%

Source: FARS 2018 ARF
Daytime – 6 a.m. to 5:59 p.m.; Nighttime – 6 p.m. to 5:59 a.m.

Among passenger vehicle occupants killed in fatal crashes in 2018 with known restraint use, the percentage of unrestrained fatalities during daytime hours was 39 percent compared to 56 percent during nighttime hours (Figure 5).

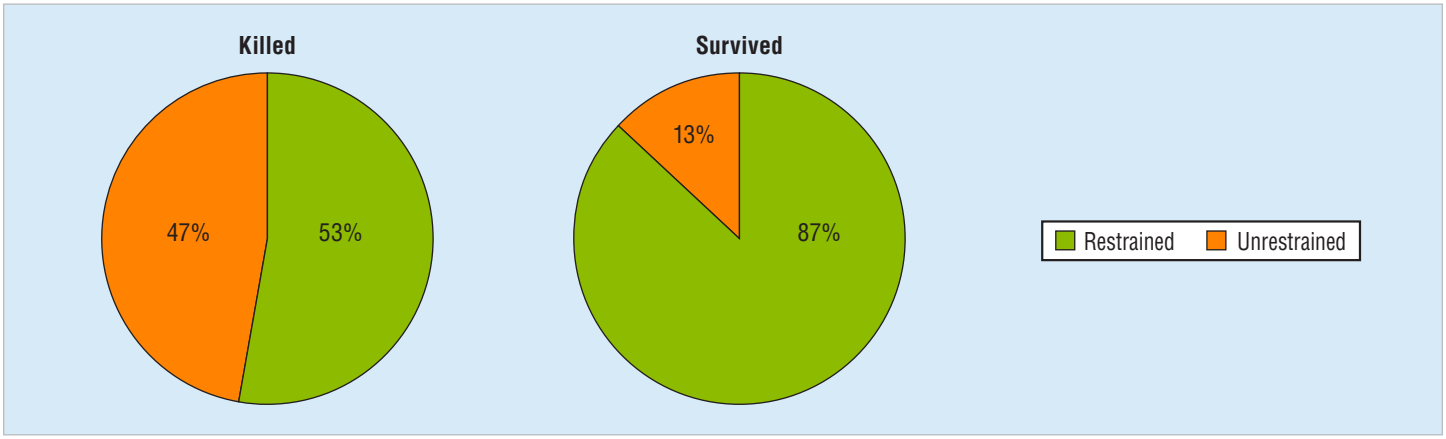
Figure 5
Percentages of Passenger Vehicle Occupants Killed, by Time of Day and Restraint* Use, 2018



Source: FARS 2018 ARF
*Based on known restraint use.

For passenger vehicle occupants involved in fatal crashes in 2018, nearly half (47%) of those who were killed were unrestrained in the crash, compared to only 13 percent of those who survived (Figure 6).

Figure 6
Percentages of Passenger Vehicle Occupants Involved in Fatal Crashes, by Survival Status and Restraint* Use, 2018



Source: FARS 2018 ARF
*Based on known restraint use.

Ejection from the vehicle is one of the most injurious events that can happen to a person in a crash. In NHTSA's FARS data, ejection refers to occupants being totally or partially thrown from the vehicles as a result of impact or rollover. In fatal crashes in 2018, about 82 percent of passenger vehicle occupants who were totally ejected from vehicles were killed. Seat belts are very effective in preventing total ejections; in 2018 only 1 percent of all passenger vehicle occupants (those killed as well as survivors) in fatal crashes reported to have been using restraints were totally ejected, compared to 27 percent of those unrestrained.

Frontal Air Bags

Frontal air bags, combined with lap/shoulder belts, offer effective safety protection for passenger vehicle occupants. NHTSA analyses indicate frontal air bags reduce fatalities by 14 percent when no seat belts were used, and 11 percent when seat belts were used in conjunction with frontal air bags (Kahane, 2015).

Air bags are supplemental protection and are designed to work in combination with seat belts. In addition, they are not designed to deploy in all crashes. Most are designed to inflate in moderate-to-severe frontal crashes. Some crashes at lower

speeds may result in injuries, but generally not the serious injuries that air bags are designed to prevent. Lap/shoulder belts should always be used, even in vehicles with air bags.

In 2017 (latest data available), an estimated 2,790 lives were saved by frontal air bags. From 1987, when frontal air bags were first widely adopted in production vehicles, through 2017, a total of 50,457 lives were saved, as shown in Table 6.

Child Restraints

NHTSA has estimated that car seats reduce the risk of 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 (Kahane, 2015).

Among children under 5, an estimated 325 lives were saved in 2017 by restraint use. Of these 325 lives saved, 312 were associated with the use of car seats and 14 with the use of adult seat belts. At 100-percent car seat use for those under 5 years old, an estimated 371 (that is, an additional 46) lives could have been saved in 2017. Since 1975 there have been 11,606 lives of children under 5 saved because of child restraint use.

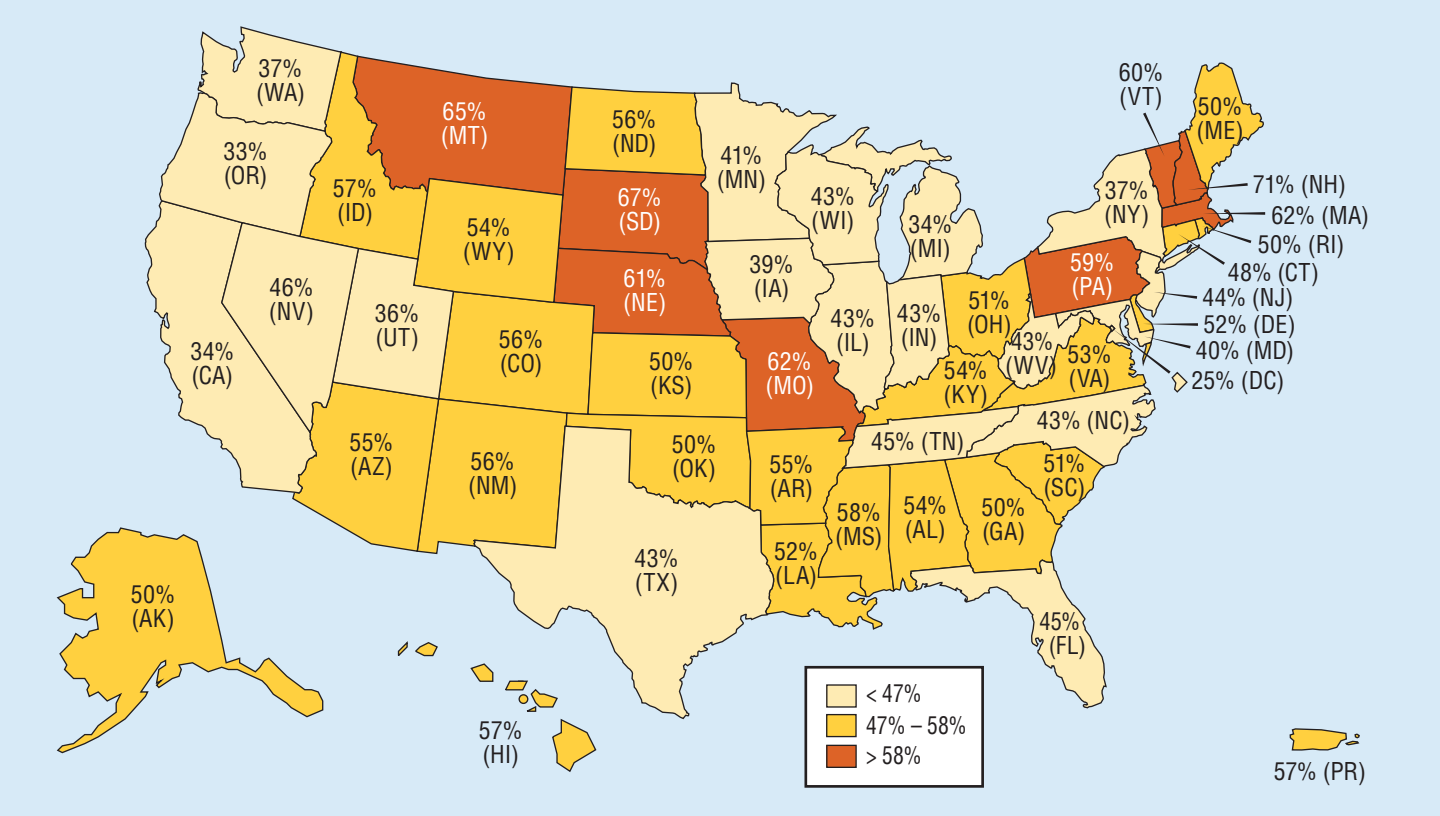
For more information on children in motor vehicle crashes, see *Children Traffic Safety Facts: 2017 Data* at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812719.

Find the right car seat: infant, convertible, or booster seat. At NHTSA, we know that finding the right car seat and installing it correctly is no easy task. Then there's the question of when to transition your child to another type of car seat. Follow the steps to help you through the decision-making process and keep your child safe by visiting www.nhtsa.gov/equipment/car-seats-and-booster-seats.

State Belt Use

Table 8 shows seat belt use information for passenger vehicle occupants killed in crashes in 2018 by State. Also in Table 8 are observed seat belt use rates in the States, the District of Columbia, and Puerto Rico. These results were obtained by observing occupants in traffic on roads at selected sites. Figure 7 is a map that shows the percentage of the known unrestrained use of passenger vehicle occupants killed in each State for 2018.

Figure 7
Percentages of Unrestrained* Passenger Vehicle Occupants Killed, by State, 2018



Source: FARS 2018 ARF
*Based on known restraint use.

Table 8

Passenger Vehicle Occupants Killed by Restraint Use, and Observed Seat Belt Use Rate, by State, 2018

State	Total Occupants Killed	Restraint Use						Percent Restrained Based on Known Use	Percent Unrestrained Based on Known Use	Observed Seat Belt Use Rate*
		Restrained		Unrestrained		Unknown				
		Number	Percent	Number	Percent	Number	Percent			
Alabama	716	299	42%	354	49%	63	9%	46%	54%	91.8%
Alaska	45	20	44%	20	44%	5	11%	50%	50%	91.6%
Arizona	501	197	39%	237	47%	67	13%	45%	55%	85.9%
Arkansas	350	143	41%	177	51%	30	9%	45%	55%	78.0%
California	1,923	1,169	61%	598	31%	156	8%	66%	34%	95.9%
Colorado	402	171	43%	216	54%	15	4%	44%	56%	86.3%
Connecticut	173	74	43%	69	40%	30	17%	52%	48%	92.1%
Delaware	62	29	47%	32	52%	1	2%	48%	52%	92.4%
District of Columbia	8	3	38%	1	13%	4	50%	75%	25%	95.1%
Florida	1,582	848	54%	695	44%	39	2%	55%	45%	90.6%
Georgia	994	448	45%	441	44%	105	11%	50%	50%	96.3%
Hawaii	37	12	32%	16	43%	9	24%	43%	57%	97.8%
Idaho	149	58	39%	78	52%	13	9%	43%	57%	85.4%
Illinois	664	327	49%	245	37%	92	14%	57%	43%	94.6%
Indiana	561	273	49%	210	37%	78	14%	57%	43%	93.4%
Iowa	223	120	54%	78	35%	25	11%	61%	39%	93.9%
Kansas	278	129	46%	127	46%	22	8%	50%	50%	84.0%
Kentucky	514	235	46%	279	54%	0	0	46%	54%	89.9%
Louisiana	465	207	45%	222	48%	36	8%	48%	52%	86.9%
Maine	101	51	50%	50	50%	0	0	50%	50%	88.5%
Maryland	292	159	54%	104	36%	29	10%	60%	40%	90.3%
Massachusetts	207	64	31%	103	50%	40	19%	38%	62%	81.6%
Michigan	640	353	55%	183	29%	104	16%	66%	34%	93.4%
Minnesota	252	123	49%	84	33%	45	18%	59%	41%	92.4%
Mississippi	492	206	42%	281	57%	5	1%	42%	58%	80.2%
Missouri	655	232	35%	379	58%	44	7%	38%	62%	87.1%
Montana	132	45	34%	85	64%	2	2%	35%	65%	86.6%
Nebraska	165	57	35%	88	53%	20	12%	39%	61%	85.5%
Nevada	172	89	52%	76	44%	7	4%	54%	46%	91.9%
New Hampshire	98	28	29%	68	69%	2	2%	29%	71%	76.4%
New Jersey	298	161	54%	126	42%	11	4%	56%	44%	94.5%
New Mexico	222	87	39%	112	50%	23	10%	44%	56%	90.2%
New York	467	258	55%	153	33%	56	12%	63%	37%	92.9%
North Carolina	958	523	55%	393	41%	42	4%	57%	43%	91.3%
North Dakota	76	29	38%	37	49%	10	13%	44%	56%	82.5%
Ohio	728	320	44%	333	46%	75	10%	49%	51%	84.9%
Oklahoma	445	205	46%	205	46%	35	8%	50%	50%	85.6%
Oregon	290	156	54%	76	26%	58	20%	67%	33%	95.8%
Pennsylvania	748	263	35%	384	51%	101	14%	41%	59%	88.5%
Rhode Island	30	13	43%	13	43%	4	13%	50%	50%	88.8%
South Carolina	678	315	46%	330	49%	33	5%	49%	51%	89.7%
South Dakota	94	29	31%	59	63%	6	6%	33%	67%	78.9%
Tennessee	684	348	51%	290	42%	46	7%	55%	45%	90.9%
Texas	2,345	1,221	52%	926	39%	198	8%	57%	43%	91.3%
Utah	156	87	56%	50	32%	19	12%	64%	36%	89.0%
Vermont	52	20	38%	30	58%	2	4%	40%	60%	89.8%
Virginia	554	260	47%	294	53%	0	0	47%	53%	84.1%
Washington	331	183	55%	109	33%	39	12%	63%	37%	93.2%
West Virginia	197	94	48%	70	36%	33	17%	57%	43%	90.5%
Wisconsin	414	204	49%	153	37%	57	14%	57%	43%	89.3%
Wyoming	77	33	43%	39	51%	5	6%	46%	54%	86.3%
U.S. Total	**22,697**	**10,978**	**48%**	**9,778**	**43%**	**1,941**	**9%**	**53%**	**47%**	**89.6%**
Puerto Rico	134	57	43%	77	57%	0	0	43%	57%	85.0%

Sources: FARS 2018 ARF; NOPUS 2018

Shaded States are those with primary seat belt laws in 2018.

*Observed Seat Belt Use Rates were obtained from probability-based observational surveys conducted by each State. Observations were made of moving traffic, not crashes (refer to NOPUS 2018 in Report No. DOT HS 812 763).

For more information on State observed seat belt use rates, see the Crash*Stat titled *Seat Belt Use in 2018—Use Rates in the States and Territories* (NCSA, 2019). Note that restraint use (observed data as well as that for occupants killed in traffic crashes) differs considerably by State. Additional information on State seat belts laws, such as the ages and seating positions covered, is available at the Governors Highway Safety Association's web site at www.ghsa.org/state-laws/issues/Seat-Belts.

Additional State- and county-level data is available at NHTSA's State Traffic Safety Information website at https://cdan.nhtsa.gov/stsi.htm.

Restraint Use Laws

- The first mandatory belt use law was enacted in New York in 1984.
- The first mandatory child restraint use law was implemented in Tennessee in 1978.

Adult belt use laws are in effect in 49 States, the District of Columbia, and Puerto Rico. The laws differ from State to State, according to conditions such as the type and age of the vehicle, occupant age, and seating position. The goal of these laws is to promote belt use and thereby reduce deaths and injuries in motor vehicle crashes.

In 2018 the District of Columbia, Puerto Rico, and 34 States had primary seat belt laws in effect, enabling law enforcement officers to stop vehicles and write citations when they observed violations of the seat belt law. In another 15 States, the laws specified secondary enforcement, meaning that police officers were permitted to write citations only after vehicles were stopped for some other traffic infraction. New Hampshire is the only State without a seat belt law for adults, although it does have a primary child passenger safety law that covers all drivers and passengers under 18 years old.

Since 1985, all 50 States and the District of Columbia have had child restraint use laws in effect. Child restraint use laws differ from State to State, in terms of the ages of children covered and in other important ways, including height and weight limits, seating position requirements, and various exemptions and exceptions.

The most current information on seat belt laws and child passenger safety laws is available on the web site of the Governors Highway Safety Association at www.ghsa.org.

- Seat belt laws—www.ghsa.org/html/stateinfo/laws/seatbelt_laws.html
- Child passenger safety laws—www.ghsa.org/html/stateinfo/laws/childsafety_laws.html

A 2008 NHTSA research note, *States With Primary Enforcement Laws Have Lower Fatality Rates* (Updated) (NCSA, 2008), suggested that seat belt use among killed occupants was at least 13 percentage points higher in States with primary enforcement laws. In addition, results from the annual National Occupant Protection Use Survey (NOPUS) have found that seat belt use in primary law States is consistently higher than use in States with secondary laws or no law (90.6% versus 86.4%, respectively, in 2018) (see Report No. DOT HS 812 662, Figure 3).

Fatality Analysis Reporting System (FARS)

The Fatality Analysis Reporting System (FARS) contains data on every fatal traffic crash within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a public trafficway and must result in the death of a vehicle occupant or a nonoccupant within 30 days of the crash. The Annual Report File (ARF) is the FARS data file associated with the most recent available year, which is subject to change when it is finalized about a year later. The updated version of the file is aptly known as the Final File. The additional time between the ARF and the Final File provides the opportunity for submission of important variable data requiring outside sources, which may lead to changes in the final counts.

The updated final counts for a given previous calendar year will be reflected with the release of the recent year's ARF. For example, along with the release of the 2018 ARF, the 2017 Final File was also released to replace the previous year's 2017 ARF. The final fatality count in motor vehicle traffic crashes for 2017 was 37,473, which was updated from 37,133 from the 2017 ARF. The number of passenger vehicle occupants killed from the 2017 Final File was 23,663 versus 23,551 from the 2017 ARF.

References

Enriquez, J., & Pickrell, T. M. (2019, January). *Seat belt use in 2018 – Overall results.* (Traffic Safety Facts Research Note. Report No. DOT HS 812 662). National Highway Traffic Safety Administration. Available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812662.

Kahane, C. J. (2015, January). *Lives saved by vehicle safety technologies and associated Federal Motor Vehicle Safety Standards, 1960 to 2012 – Passenger cars and LTVs – With reviews of 26 FMVSS and the effectiveness of their associated safety technologies in reducing fatalities, injuries, and crashes* (Report No. DOT HS 812 069). National Highway Traffic Safety Administration. Available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812069.

National Center for Statistics and Analysis. (2019, June). *Seat Belt Use in 2018—Use Rates in the States and Territories* (Traffic Safety Facts Crash•Stats. Report No. DOT HS 812 763). National Highway Traffic Safety Administration. Available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812763.

National Center for Statistics and Analysis. (2019, March). *Lives saved in 2017 by restraint use and minimum-drinking-age laws* (Traffic Safety Facts Crash•Stats. Report No. DOT HS 812 683). National Highway Traffic Safety Administration. Available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812683.

National Center for Statistics and Analysis (2008). *States with primary enforcement laws have lower fatality rates* (Updated) (Report No. DOT HS 810 921). National Highway Traffic Safety Administration. Available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/810921.

National Highway Traffic Safety Administration. (1984, July). *Final regulatory impact analysis: Amendment to Federal Motor Vehicle Safety Standard 208. Passenger car front seat occupant protection* (Report No. DOT HS 806 572). Available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/806572.

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For more information

Information on traffic fatalities is available from the National Center for Statistics and Analysis, NSA-230, 1200 New Jersey Avenue SE, Washington, DC 20590. NCSA can be contacted at 800-934-8517 or by e-mail at NCSARequests@dot.gov. General information on highway traffic safety can be found at www.nhtsa.gov/research-data. 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 *Alcohol-Impaired Driving, Bicyclists and Other Cyclists, Children, Large Trucks, Motorcycles, Older Population, Passenger Vehicles, Pedestrians, Rural/Urban Comparison of Traffic Fatalities, School-Transportation-Related Crashes, Speeding, State Alcohol-Impaired-Driving Estimates, State Traffic Data, Summary of Motor Vehicle Crashes*, 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 found at https://crashstats.nhtsa.dot.gov/.

U.S. Department of Transportation
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