

DOT HS 813 730

May 2025

Occupant Protection in Passenger Vehicles

In this fact sheet for 2023 the information is presented as follows.

- <u>Overview</u>
- <u>Occupant</u> <u>Characteristics</u>
 - <u>Passenger Vehicle</u>
 <u>Types</u>
 - <u>Age and Sex</u>
 - <u>Seating Position</u>
- <u>Restraint Use by Time</u> of Day and Benefits
 - Seat Belts
 - Frontal Air Bags
 - <u>Child Restraints</u>
- <u>State</u>
- <u>Restraint Use Laws</u>
- <u>Important Safety</u> <u>Reminders</u>

This fact sheet discusses occupant protection including seat belts, car seats for children under 5 years old, and frontal air bags in passenger vehicles. These are passenger cars and light trucks (pickups, SUVs, and vans) with gross vehicle weight ratings of 10,000 lb or less. Vehicle occupants are drivers and passengers.

Key Findings

- Forty-nine percent of passenger vehicle occupants killed in traffic crashes in 2023 were unrestrained (based on known restraint use).
- In traffic crashes in 2023, considering known driver restraint use by passenger vehicle type, 59 percent of pickup drivers killed were unrestrained, compared to SUV drivers (47%), passenger car drivers (47%), and van drivers (41%).
- Sixty-one percent (based on known restraint use) of passenger vehicle occupant fatalities in the 13-to-14 and 25-to-34 age groups in traffic crashes in 2023 were unrestrained—the highest percentage of all age groups.
- In 2023 traffic crashes, among passenger vehicle occupants with known restraint use, 53 percent of male fatalities were unrestrained compared to 41 percent of females.
- In 2023 among passenger vehicle occupant traffic fatalities with known restraint use, 48 percent seated in the front row and 59 percent of those in the second row were unrestrained.
- Among passenger vehicle occupant fatalities in traffic crashes in 2023 with known restraint use, 42 percent were unrestrained during the day compared to 56 percent at night.

This fact sheet contains information on fatal motor vehicle traffic crashes based on data from the Fatality Analysis Reporting System (FARS). Refer to the end of this publication for more information on FARS.

Due to a vehicle classification change, the 2020 and later-year vehicle type classifications are not comparable to 2019 and earlier-year vehicle type classifications. This change affects any analysis with a vehicle component to it. Refer to the end of this publication for more information on Product Information Catalog and Vehicle Listing (vPIC).

A motor vehicle traffic crash is defined as an incident that involved one or more motor vehicles in-transport that originated on or had a harmful event (injury or damage) on a public trafficway, such as a road or highway. Crashes that occurred on private property not regularly used by the public for transport, including some parts of parking lots and driveways, are excluded. The terms "motor vehicle traffic crash" and "traffic crash" are used interchangeably in this document.

Overview

According to NHTSA's 2023 National Occupant Protection Use Survey (NOPUS), the estimated seat belt use rate from 2014 to 2023 increased from 86.7 percent in 2014 to 91.9 percent in 2023 (National Center for Statistics and Analysis, 2024a). NOPUS provides the only nationwide probability-based estimate of observed seat belt use in the United States. This represents estimates of observed front seat occupant (driver and passenger) seat belt use during daylight (7 a.m. to 6 p.m.) and does not necessarily represent restraint use among occupants in crashes.

Restraint use for passenger vehicle occupants killed in traffic crashes from 2014 to 2023 is shown in Table 1. There were 40,901 traffic fatalities in the United States in 2023, of which 23,959 (59%) were occupants of passenger vehicles. Of the 23,959 killed, there were 10,816 who were restrained (45%) and 10,484 who were unrestrained (44%) at the time of the crashes. Restraint use was unknown for the remaining 2,659 occupants (11%) killed. Considering only passenger vehicle occupant fatalities whose restraint use was known, 51 percent were restrained and 49 percent were unrestrained. The number of unrestrained passenger vehicle occupants killed in 2023 declined 7.7 percent compared to 2022.

			Restra	int Use					Percent Based on		
	Restrained		Unrestrained		Unkr	nown	Total		Known Restraint Use		
Year	Number Percent		Number	Percent	Number	Percent	Number	Percent	Restrained	Unrestrained	
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	11,055	48%	9,845	43%	1,945	9%	22,845	100%	53%	47%	
2019	10,891	49%	9,523	43%	1,958	9%	22,372	100%	53%	47%	
2020	10,532	44%	10,925	46%	2,457	10%	23,914	100%	49%	51%	
2021	11,899	45%	11,878	45%	2,689	10%	26,466	100%	50%	50%	
2022	11,436	45%	11,359	45%	2,705	11%	25,500	100%	50%	50%	
2023	10,816	45%	10,484	44%	2,659	11%	23,959	100%	51%	49%	

Table 1. Passenger Vehicle Occupants Killed in Traffic Crashes, by Restraint Use, 2014–2023

Source: FARS 2014–2022 Final File, 2023 Annual Report File (ARF)

Notes: Percentages may not add up to 100 percent due to individual rounding. Due to a vehicle classification change, the 2020 and later year data are not comparable to 2019 and earlier years. Due to amendments in the 2021 FARS Final File, the 2021 passenger vehicle occupant fatalities changed from 26,465 to 26,466.

The percentages of unrestrained passenger vehicle occupants killed in motor vehicle traffic crashes are shown in Figure 1. Among passenger vehicle occupants killed, when restraint use was known, the percentage of unrestrained deaths declined to 49 percent in 2023 from 50 percent in 2022.



Figure 1. Percentages of Unrestrained* Passenger Vehicle Occupants Killed in Traffic Crashes, 2014–2023

Source: FARS 2014–2022 Final File, 2023 ARF

*Based on known restraint use.

Note: Due to a vehicle classification change, the 2020 and later year data are not comparable to 2019 and earlier years.

Occupant Characteristics

Passenger Vehicle Types

Table 2 shows traffic fatalities separately for drivers and passengers for each passenger vehicle type. Seventy-six percent of passenger vehicle occupants killed in 2023 were drivers, and 24 percent were passengers.

In 2023 there were 18,101 passenger vehicle drivers killed in traffic crashes, 49 percent in passenger cars. Among the 16,235 passenger vehicle driver fatalities for whom restraint use was known, 49 percent were unrestrained. However, the percentage of drivers killed who were unrestrained differed by vehicle type: 59 percent of pickup drivers, 47 percent of SUV drivers, 47 percent of passenger car drivers, and 41 percent of van drivers.

				Restra	int Use				Percent	Based on	
				Unrestrained		Unknown		Total		Known Re	estraint Use
Passenger	Vehicle Type	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Restrained	Unrestrained
Drivers	Passenger Car	4,236	47%	3,726	42%	983	11%	8,945	100%	53%	47%
Killed	Light Truck*	4,039	44%	4,234	46%	883	10%	9,156	100%	49%	51%
	–Pickup	1,287	37%	1,887	54%	349	10%	3,523	100%	41%	59%
	–SUV	2,418	48%	2,116	42%	473	9%	5,007	100%	53%	47%
	–Van	333	53%	230	37%	61	10%	624	100%	59%	41%
	Total	8,275	46%	7,960	44%	1,866	10%	18,101	100%	51%	49%
Passengers	Passenger Car	1,253	44%	1,171	41%	423	15%	2,847	100%	52%	48%
Killed	Light Truck	1,288	43%	1,353	45%	370	12%	3,011	100%	49%	51%
	–Pickup	237	30%	456	58%	95	12%	788	100%	34%	66%
	–SUV	905	48%	736	39%	240	13%	1,881	100%	55%	45%
	–Van	146	43%	161	47%	35	10%	342	100%	48%	52%
	Total	2,541	43%	2,524	43%	793	14%	5,858	100%	50%	50%

Table 2. Drivers and Passengers Killed in Traffic Crashes, by Passenger Vehicle Type a	nd
Restraint Use, 2023	

Source: FARS 2023 ARF

Note: Percentages may not add up to 100 percent due to individual rounding.

*Includes passenger vehicle occupants in other/unknown light-truck vehicle types.

There were 5,858 passengers killed in passenger vehicles in 2023 traffic crashes, and 49 percent were riding in passenger cars. Among the 5,065 passengers killed in passenger vehicles for whom restraint use was known, 50

percent were unrestrained, but non-use varied by vehicle type: 66 percent of passengers killed in pickups were unrestrained, compared 52 percent in vans, 48 percent in passenger cars, and 45 percent in SUVs. Figure 2 compares the percentage of known unrestrained drivers killed versus passengers killed for each passenger vehicle type.





Source: FARS 2023 ARF *Based on known restraint use.

Age and Sex

Table 3 shows information on restraint use by age group for passenger vehicle occupants killed in 2023 traffic crashes. Among those where restraint use was known, the 13-to-14 and 25-to-34 age groups had the highest percentage (61%) of unrestrained occupants, followed by the 21-to-24 age group (59%). Figure 3 shows these percentages.

Table 3. Passenger Vehicle Occupants Killed in Traffic Crashes, by Age Group and RestraintUse, 2023

			Restra	int Use					Percent Bas	ed on Known
Age	Restr	ained	Unrest	rained	Unkr	nown	То	tal		aint Use
Group	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Restrained	Unrestrained
<4	132	67%	49	25%	15	8%	196	100%	73%	27%
4–7	85	55%	50	32%	20	13%	155	100%	63%	37%
8–12	93	45%	92	45%	20	10%	205	100%	50%	50%
13–14	46	32%	73	51%	25	17%	144	100%	39%	61%
15–20	955	36%	1,282	48%	419	16%	2,656	100%	43%	57%
21–24	758	35%	1,104	50%	327	15%	2,189	100%	41%	59%
25-34	1,523	34%	2,399	54%	546	12%	4,468	100%	39%	61%
35–44	1,290	38%	1,701	51%	375	11%	3,366	100%	43%	57%
45–54	1,167	45%	1,171	45%	272	10%	2,610	100%	50%	50%
55-64	1,422	51%	1,093	39%	254	9%	2,769	100%	57%	43%
65–74	1,488	61%	765	31%	192	8%	2,445	100%	66%	34%
75+	1,844	68%	696	26%	175	6%	2,715	100%	73%	27%
Total*	10,816	45%	10,484	44%	2,659	11%	23,959	100%	51%	49%

Source: FARS 2023 ARF

Note: Percentages may not add up to 100 percent due to individual rounding.

*Includes passenger vehicle occupants of unknown age.

In 2023 there were 196 passenger vehicle occupant fatalities among children under 4 years old, and 27 percent were unrestrained (based on known restraint use). In the 4-to-7 age group, there were 155 fatalities; 37 percent were unrestrained (based on known restraint use).





Source: FARS 2023 ARF

*Based on known restraint use.

Nearly twice as many male occupants (15,783) as female occupants (8,146) in passenger vehicles were killed in traffic crashes in 2023, as shown in Table 4. When restraint use was known, 53 percent of the males killed and 41 percent of the females killed were unrestrained (Figure 4) in passenger vehicles. Restraint use was unknown for 12 percent of male passenger vehicle occupant fatalities and 9 percent of the female passenger vehicle occupant fatalities.

			Restra	int Use		Percent Based on Known				
	Restrained		Unrestrained		Unkr	known Tota		tal	Restraint Use	
Sex	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Restrained	Unrestrained
Male	6,465	41%	7,416	47%	1,902	12%	15,783	100%	47%	53%
Female	4,344	53%	3,052	37%	751	9%	8,147	100%	59%	41%
Total*	10,816	45%	10,484	44%	2,659	11%	23,959	100%	51%	49%

Source: FARS 2023 ARF

Note: Percentages may not add up to 100 percent due to individual rounding.

*Includes passenger vehicle occupants of unknown sex.

Figure 4. Percentages of Passenger Vehicle Occupants Killed in Traffic Crashes, by Sex and Restraint Use,* 2023



Source: FARS 2023 ARF *Based on known restraint use.

Seating Position

Table 5 shows restraint use for passenger vehicle occupants killed in traffic crashes in 2023, by their seating position. Among killed passenger vehicle occupants with known restraint use, 48 percent of those in the front row and 59 percent of those in the second row were unrestrained.

				Restra	int Use					Percent	nt Based on	
		Restrained		Unrest	rained	Unkr	nown	То	tal	Known Re	Known Restraint Use	
Sea	ting Position	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Restrained	Unrestrained	
	Total	10,147	47%	9,324	43%	2,277	10%	21,748	100%	52%	48%	
Et	Left (Driver)	8,274	46%	7,962	44%	1,866	10%	18,102	100%	51%	49%	
Front Row	Middle	7	29%	15	63%	2	8%	24	100%	32%	68%	
11000	Right	1,865	52%	1,336	37%	405	11%	3,606	100%	58%	42%	
	Other/Unknown	1	6%	11	69%	4	25%	16	100%	8%	92%	
	Total	617	35%	891	51%	243	14%	1,751	100%	41%	59%	
	Left	246	36%	338	50%	93	14%	677	100%	42%	58%	
Second Row	Middle	44	23%	123	65%	22	12%	189	100%	26%	74%	
11000	Right	323	39%	386	47%	117	14%	826	100%	46%	54%	
	Other/Unknown	4	7%	44	75%	11	19%	59	100%	8%	92%	
Other*		25	13%	158	79%	17	9%	200	100%	14%	86%	
Unknow	n	27	10%	111	43%	122	47%	260	100%	20%	80%	
Total	Total		45%	10,484	44%	2,659	11%	23,959	100%	51%	49%	

Table 5. Passenger Vehicle Occupants Killed in Traffic Crashes, by Seating Position and Restraint Use, 2023

Source: FARS 2023 ARF

Note: Percentages may not add up to 100 percent due to individual rounding. *Includes additional rows, cargo areas, trailing units, and vehicle exteriors.

Restraint Use by Time of Day and Benefits

Seat Belts

Table 6 shows passenger vehicle occupants in fatal traffic crashes by their survival status, time of day, and restraint use. Forty-nine percent of passenger vehicle occupants killed were unrestrained (based on known restraint use), compared to 14 precent for those who survived. Looking at all passenger vehicle occupants in fatal traffic crashes in 2023 with known restraint use:

- 27 percent were unrestrained at the time of the crashes;
- 24 percent were unrestrained during daytime; and
- 30 percent were unrestrained during nighttime.

For those passenger vehicle occupants with known restraint use who survived fatal traffic crashes in 2023:

- 13 percent were unrestrained during daytime; and
- 16 percent of crash survivors were unrestrained during nighttime.

Table 6. Passenger Vehicle Occupants in Fatal Traffic Crashes, by Survival Status, Time of Day, and Restraint Use, 2023

				Restra	int Use					Percent Base	ed on Known
Survival Sta	Survival Status/Time		Restrained		rained	Unkr	nown	То	tal	Restra	int Use
of Day		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Restrained	Unrestrained
Killed	Daytime	6,270	53%	4,600	39%	1,031	9%	11,901	100%	58%	42%
	Nighttime	4,499	38%	5,779	49%	1,608	14%	11,886	100%	44%	56%
	Unknown	47	27%	105	61%	20	12%	172	100%	31%	69%
	Total	10,816	45%	10,484	44%	2,659	11%	23,959	100%	51%	49%
Survived	Daytime	15,714	80%	2,263	12%	1,550	8%	19,527	100%	87%	13%
	Nighttime	16,525	74%	3,091	14%	2,788	12%	22,404	100%	84%	16%
	Unknown	22	42%	12	23%	18	35%	52	100%	65%	35%
	Total	32,261	77%	5,366	13%	4,356	10%	41,983	100%	86%	14%
Total	Daytime	21,984	70%	6,863	22%	2,581	8%	31,428	100%	76%	24%
	Nighttime	21,024	61%	8,870	26%	4,396	13%	34,290	100%	70%	30%
	Unknown	69	31%	117	52%	38	17%	224	100%	37%	63%
	Total	43,077	65%	15,850	24%	7,015	11%	65,942	100%	73%	27%

Source: FARS 2023 ARF

Note: Percentages may not add up to 100 percent due to individual rounding. 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 traffic crashes in 2023 with known restraint use, the percentage of unrestrained fatalities during daytime was 42 percent compared to 56 percent during nighttime (Figure 5).

Figure 5. Percentages of Passenger Vehicle Occupants Killed in Traffic Crashes, by Time of Day and Restraint Use,* 2023



Source: FARS 2023 ARF

*Based on known restraint use.

For passenger vehicle occupants in fatal traffic crashes in 2023, forty-nine percent of those killed were unrestrained, compared to only 14 percent of those who survived (Figure 6).





Source: FARS 2023 ARF

*Based on known restraint use.

Ejection from the vehicle is one of the most injurious events that can happen to people in a crash. In NHTSA's FARS data, ejection refers to an occupant being totally or partially thrown from the vehicle. In 2023 fatal traffic crashes based on known restraint use, 82 percent of passenger vehicle occupants who were totally ejected from vehicles were killed. Seat belts are very effective in preventing total ejections; in 2023 only 1 percent of all passenger vehicle occupants involved (those killed as well as survived) in fatal traffic crashes reported to have been using restraints were totally ejected, compared to 25 percent of those unrestrained.

The safety benefits of seat belt use are significant and well-documented. Seat belts help keep occupants inside vehicles and 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).

Frontal Air Bags

Frontal air bags, combined with lap/shoulder belts, offer effective safety protection for passenger vehicle occupants. NHTSA analyses show 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 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.

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 and 59 percent (Kahane, 2015).

State

Figure 7 shows the percentages of unrestrained passenger vehicle occupants killed in traffic crashes for each State for 2023, based on known restraint use. Table 7 shows seat belt use information for passenger vehicle occupants killed in traffic crashes by State. Also, Table 7 shows seat belt use rates in the States, the District of Columbia, and Puerto Rico. The national seat belt use rate results were obtained from NOPUS by observing occupants in traffic on roads at selected sites. Observed seat belt use rates at the State level were obtained from probability-based observational surveys conducted during daylight hours (7 a.m. to 6 p.m.) by each State, certified by NHTSA.





Source: FARS 2023 ARF *Based on known restraint use.

Table 7. Passenger Vehicle Occupants Killed in Traffic Crashes, by State, Restraint Use, and	
Observed Seat Belt Use Rate, 2023	

	Total			Restra	int Use			Percent	Observed	
	Occupants	Restr	ained		rained	Unkn	lown		vn Use	Seat Belt
State	Killed	Number	Percent	Number	Percent	Number	Percent		Unrestrained	Use Rate*
Alabama	699	260	37%	381	55%	58	8%	41%	59%	93.4%
Alaska	36	14	39%	14	39%	8	22%	50%	50%	95.2%
Arizona	599	258	43%	254	42%	87	15%	50%	50%	87.8%
Arkansas	363	160	44%	160	44%	43	12%	50%	50%	79.7%
California	2,111	1,111	53%	780	37%	220	10%	59%	41%	96.2%
Colorado	402	172	43%	209	52%	21	5%	45%	55%	88.6%
Connecticut	188	63	34%	71	38%	54	29%	47%	53%	93.5%
Delaware	83	41	49%	32	39%	10	12%	56%	44%	93.9%
District of Columbia	21	2	10%	13	62%	6	29%	13%	87%	94.6%
Florida	1,584	840	53%	704	44%	40	3%	54%	46%	89.4%
Georgia	1,001	418	42%	464	46%	119	12%	47%	53%	87.6%
Hawaii	34	17	50%	15	44%	2	6%	53%	47%	98.4%
Idaho	176	76	43%	83	47%	17	10%	48%	52%	87.5%
	761									
Illinois	569	302 228	40% 40%	255 222	34% 39%	204	27% 21%	54% 51%	46% 49%	92.9% 93.2%
Indiana						119				
lowa	243	106	44%	107	44%	30	12%	50%	50%	96.9%
Kansas	275	119	43%	132	48%	24	9%	47%	53%	85.3%
Kentucky	521	261	50%	260	50%	0	0%	50%	50%	89.4%
Louisiana	489	174	36%	268	55%	47	10%	39%	61%	85.6%
Maine	95	31	33%	63	66%	1	1%	33%	67%	94.5%
Maryland	337	162	48%	128	38%	47	14%	56%	44%	92.1%
Massachusetts	200	82	41%	94	47%	24	12%	47%	53%	80.4%
Michigan	667	338	51%	216	32%	113	17%	61%	39%	92.4%
Minnesota	264	149	56%	80	30%	35	13%	65%	35%	94.2%
Mississippi	526	221	42%	216	41%	89	17%	51%	49%	82.2%
Missouri	615	207	34%	354	58%	54	9%	37%	63%	87.0%
Montana	145	52	36%	84	58%	9	6%	38%	62%	81.1%
Nebraska	173	45	26%	99	57%	29	17%	31%	69%	77.3%
Nevada	191	98	51%	61	32%	32	17%	62%	38%	93.5%
New Hampshire	71	19	27%	42	59%	10	14%	31%	69%	77.9%
New Jersey	303	149	49%	117	39%	37	12%	56%	44%	92.9%
New Mexico	232	88	38%	110	47%	34	15%	44%	56%	91.5%
New York	519	287	55%	183	35%	49	9%	61%	39%	94.1%
North Carolina	1,013	512	51%	474	47%	27	3%	52%	48%	92.2%
North Dakota	70	23	33%	33	47%	14	20%	41%	59%	78.5%
Ohio	775	317	41%	350	45%	108	14%	48%	52%	84.8%
Oklahoma	456	209	46%	201	44%	46	10%	51%	49%	81.2%
Oregon	365	202	55%	111	30%	52	14%	65%	35%	97.0%
Pennsylvania	687	278	40%	314	46%	95	14%	47%	53%	87.7%
Rhode Island	40	15	38%	20	50%	5	13%	43%	57%	89.1%
South Carolina	652	278	43%	341	52%	33	5%	45%	55%	93.2%
South Dakota	80	23	29%	50	63%	7	9%	32%	68%	91.0%
Tennessee	858	405	47%	345	40%	108	13%	54%	46%	91.9%
Texas	2,554	1,158	45%	1,117	44%	279	11%	51%	49%	90.6%
Utah	164	84	51%	67	41%	13	8%	56%	44%	92.4%
Vermont	41	12	29%	25	61%	4	10%	32%	68%	88.9%
Virginia	597	260	44%	337	56%	- 4	0%	44%	56%	73.2%
Washington	466	200	44%	171	37%	89	19%	55%	45%	93.3%
West Virginia	177	200	44%	71	40%	30	19%	52%	43%	93.0%
Wisconsin	378	168	43%	138	37%	72	19%	52%	40%	93.0%
	93									
Wyoming		40	43%	48	52%	5	5%	45%	55%	81.9%
U.S. Total Puerto Rico	23,959 120	10,816 34	45% 28%	10,484 86	44% 72%	2,659	11% 0%	51% 28%	49% 72%	91.9%** 90.6%

Sources: FARS 2023 ARF; NOPUS 2023

Notes: Shaded States are those with primary seat belt laws for front seat occupants in 2023. Percentages may not add up to 100 percent due to individual rounding.

*Observed seat belt use rates were obtained from probability-based observational surveys conducted by each State, certified by NHTSA. **From NHTSA's NOPUS. Observations were made of moving traffic, not crashes (NCSA, 2024b). For more information on State observed seat belt use rates, see NCSA (2024b). Note that restraint use (observed data as well as that for passenger vehicle 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 (GHSA) web page at <u>www.ghsa.org/state-laws-issues/seat-belt-use</u>.

Restraint Use Laws

The first mandatory seat belt use law was enacted in New York in 1984. Adult seat 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 the type and age of the vehicle, occupant age, and seating position. The goal of these laws is to promote seat belt use and thereby reduce deaths and injuries in motor vehicle crashes.

In 2023 there were 35 States, the District of Columbia, and Puerto Rico that had primary seat belt laws in effect for front seat occupants, enabling law enforcement officers to stop vehicles and write citations when they observed violations of the seat belt law. In 14 States the laws specified secondary enforcement, meaning that police officers were permitted to write citations only after a vehicle was 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.

The first mandatory child restraint use law was implemented in Tennessee in 1978. 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 GHSA website at <u>www.ghsa.org</u>.

- Seat belt laws-<u>www.ghsa.org/state-laws-issues/seat-belt-use</u>
- Child passenger safety laws—<u>www.ghsa.org/state-laws-issues/child-passengers</u>

In addition, results from the annual NOPUS have found that seat belt use in primary law States is consistently higher than use in States with secondary laws or no law (92.0% versus 91.3% in 2023) ([NCSA, 2024a], Figure 3).

Important Safety Reminders

Child Restraint Systems

- As children grow, so do their restraint types (rear-facing, forward-facing, booster seat, or seat belt). Always use the one that fits your child's current age and size. Use the NHTSA Car Seat Finder located at <u>www.nhtsa.gov/equipment/car-seats-and-booster-seats</u>.
- Use either the lower anchors and tether, or the seat belt and tether when installing forward-facing seats.
- Every car seat or booster seat has different installation instructions, so make sure you read, understand and follow both the car seat instructions and the vehicle owner's manual.
- To get assistance with installation, find a certified child passenger safety technician at a location near you using NHTSA's Inspection Station locator: www.nhtsa.gov/equipment/car-seats-and-booster
- Remember to register your car seat or booster seat so you can be notified in the event of a safety recall.
- Plan for using car seats or booster seats when traveling and riding in taxis or rideshare vehicles.
- To find out when your child is ready to use an adult seat belt, please reference the Car Seat Recommendations for Children located at: <u>www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/carseat-recommendations-for-children-by-age-size.pdf</u>. Be sure to read information for Booster Seat and Seat Belt Use.
- Keep children in the back seat until at least age 13. It's the safest place to ride.

Seat Belts

- Buckling up is the single most effective thing you can do to protect yourself in a crash. Wear your seat belt for the entirety of every trip you make. Protect yourself no matter the time of day, weather, trip distance, vehicle speed, road type, or proximity to your home.
- It is important to keep yourself safe when driving and when riding in the front AND back seat of all vehicles.
- Always wear your seat belt when riding in taxis and rideshare vehicles.
- Always wear your seat belt properly. Learn how to correctly position your belt across the middle of your chest and away from your neck. NEVER put the shoulder belt behind your back or under an arm.
- If you're pregnant, always wear a seat belt to maximize your safety and the safety of your unborn child. For more information, see <u>www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/pregnant-seat-belt-use.pdf</u>.
- You still need to wear your seat belt even if your car or truck has air bags or advanced safety features.
- Encourage your passengers to wear their seat belts when riding in your car. Establish your own safety rules.

For information on all of these safety tips, please visit <u>www.nhtsa.gov</u>.

—NHTSA's Research and Program Development

References

- 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. https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812069
- National Center for Statistics and Analysis. (2024a, February). *Seat belt use in 2023 Overall results* (Traffic Safety Facts Research Note. Report No. DOT HS 813 543). National Highway Traffic Safety Administration. <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813543</u>
- NCSA. (2024b, August). Seat belt use in 2023 Use rates in the States and territories (Traffic Safety Facts Crash•Stats. Report No. DOT HS 813 615). National Highway Traffic Safety Administration. https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813615
- 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). <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/806572</u>

Fatality Analysis Reporting System

FARS contains data on every fatal motor vehicle traffic crash within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a traffic crash must involve a motor vehicle traveling on a trafficway customarily open to the public 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 the following year to the final version 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. More information on FARS can be found at <u>www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system</u>.

The updated final counts for the previous data year will be reflected with the release of the recent year's ARF. For example, along with the release of the 2023 ARF, the 2022 Final File was released to replace the 2022 ARF. The final fatality count in motor vehicle traffic crashes for 2022 was 42,721, which was updated from 42,514 in the 2022 ARF. The number of passenger vehicle occupant fatalities from the 2022 Final File was 25,500, which was updated from the 2022 ARF.

Product Information Catalog and Vehicle Listing (vPIC) Vehicle Classification

Historically, vehicle type classifications (e.g., passenger cars, light trucks, large trucks, motorcycles, buses) from FARS used for analysis and data reporting were based on analyst-coded vehicle body type. NHTSA did not have manufacturer authoritative data to assist in vehicle body type coding. NCSA has developed a Product Information Catalog and Vehicle Listing (vPIC) dataset that is being used to decode VINs (Vehicle Identification Numbers) and extract vehicle information. Details of vehicles (make, model, body class, etc.) involved in crashes are obtained from vPIC via VIN-linkage. The VIN-derived information from vPIC uses the manufacturer's classification of body class, which allows for more accurate vehicle type analysis.

The vPIC-based analysis data are available beginning with the 2020 FARS data file. Vehicle-related analysis for 2020 and later years are based on vPIC vehicle classification. As a result, the 2020 and later-year vehicle type classifications are not comparable to 2019 and earlier-year vehicle type classifications. This change affects any analysis with a vehicle component to it. More information on vPIC can be found at https://vpic.nhtsa.dot.gov/.

The suggested APA format citation for this document is:

National Center for Statistics and Analysis. (2025, May). Occupant protection in passenger vehicles: 2023 data (Traffic Safety Facts. Report No. DOT HS 813 730). National Highway Traffic Safety Administration.

For More Information:

Motor vehicle traffic crash data are available from the National Center for Statistics and Analysis (NCSA), NSA-230. NCSA can be contacted at <u>NCSARequests@dot.gov</u> or 800-934-8517. NCSA programs can be found at <u>www.nhtsa.gov/data</u>. To report a motor vehicle safety-related problem or to inquire about safety information, contact the Vehicle Safety Hotline at 888-327-4236 or <u>www.nhtsa.gov/report-a-safety-problem</u>.

The following data tools and resources can be found at https://cdan.dot.gov/.

- Fatal Motor Vehicle Traffic Crash Data Visualizations
- Fatality and Injury Reporting System Tool (FIRST)
- State Traffic Safety Information (STSI)
- Traffic Safety Facts Annual Report Tables
- FARS Data Tables (FARS Encyclopedia)
- Motor Vehicle Crash Databook
- Leading Cause of Death Reports
- Crash Viewer
- Product Information Catalog and Vehicle Listing (vPIC)
- FARS, NASS GES, CRSS, NASS Crashworthiness Data System (CDS), and Crash Investigation Sampling System (CISS) data can be downloaded for further analysis.

Other fact sheets available from NCSA:

- Alcohol-Impaired Driving
- Bicyclists and Other Cyclists
- Children
- Large Trucks
- Motorcycles
- Older Population
- Passenger Vehicles
- Pedestrians
- Race and Ethnicity
- Rural/Urban Traffic Fatalities
- School-Transportation-Related Traffic Crashes
- Speeding
- State Alcohol-Impaired-Driving Estimates
- State Traffic Data
- Summary of Motor Vehicle Traffic Crashes
- Young Drivers

Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle Traffic Crash Data*. The fact sheets and Traffic Safety Facts annual report can be found at https://crashstats.nhtsa.dot.gov/.



U.S. Department of Transportation

National Highway Traffic Safety Administration