Traffic Safety Facts

2020 Data

November 2022 (Revised)

DOT HS 813 285



In this fact sheet for 2020 the information is presented as follows.

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- <u>State</u>
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Children

For the purpose of this fact sheet, children are defined as 14 years old and younger.

Key Findings

- Of the 38,824 traffic fatalities in 2020 in the United States, 1,093 (3%) were children 14 and younger.
- Child traffic fatalities increased by 3 percent from 2019 (1,064) to 2020 (1,093).
- An estimated 139,042 children were injured in traffic crashes in 2020, a 24-percent decrease from 183,166 in 2019.
- On average, 3 children were killed and an estimated 380 children were injured every day in traffic crashes in 2020.
- Of the 23,824 passenger vehicle occupants killed in 2020 in traffic crashes, 755 (3%) were children. Of these 755 child passenger vehicle occupants killed

in traffic crashes, restraint use was known for 680, of whom 286 (42%) were unrestrained.

- In 2020, based on known restraint use, 65 percent of the children riding with unrestrained passenger vehicle drivers were also unrestrained.
- Of the 1,093 children killed in traffic crashes, 229 (21%) were killed in alcoholimpaired-driving crashes in 2020.
- Of the 6,516 pedestrian traffic fatalities in 2020, 177 (3%) were children.
- Of the 938 pedalcyclist traffic fatalities in 2020, 48 (5%) were children.

This fact sheet contains information on fatal motor vehicle traffic crashes based on data from the Fatality Analysis Reporting System (FARS) and non-fatal motor vehicle traffic crashes from the Crash Report Sampling System (CRSS). A change instituted with the release of 2020 data is rounding estimates to the nearest whole number instead of the nearest thousand for all police-reported crashes, including injury estimates. Refer to the end of this publication for more information on FARS and CRSS.

A motor vehicle traffic crash is defined as an incident that involved one or more motor vehicles in transport that originated on a public trafficway, such as a road or highway. Crashes that occurred on private property, including parking lots and driveways, are excluded. The terms "motor vehicle traffic crash" and "traffic crash" are used interchangeably.

Overview

Motor vehicle traffic crashes are a leading cause of death of children. $^{\rm l}$

In 2020:

- There were 60.3 million children in the United States, comprising 18 percent of the total U.S. population.
- Of the 38,824 traffic fatalities in the United States, 1,093 (3%) were children.
- Child traffic fatalities increased by 3 percent from 1,064 in 2019, but are down 4 percent from 1,139 in 2011.
 - The 3-percent increase in child traffic fatalities from 2019 to 2020 is smaller than the 7-percent increase in overall traffic fatalities.
- An estimated 139,042 children were injured in traffic crashes, a 24-percent decrease from 183,166 in 2019.
- On average, 3 children were killed and an estimated 380 children were injured every day in the United States in traffic crashes.
- Males accounted for 58 percent of child fatalities, and females account for an estimated 51 percent of children injured in traffic crashes.

Figure 1 displays the distribution of the 1,093 child traffic fatalities in 2020—77 percent (845) were occupants and 23 percent (248) were nonoccupants (pedestrians, pedalcyclists, or other nonoccupants).

As shown in Figure 2, the number of child traffic fatalities decreased by 4 percent from 1,139 in 2011 to 1,093 in 2020 and the child fatality rate per 100,000 child population decreased by 3 percent from 1.86 in 2011 to 1.81 in 2020.

Figure 1 Child Traffic Fatalities, 2020



Source: FARS 2020 Annual Report File (ARF) Note: Percentages may not add up to 100 percent due to independent rounding.



Figure 2 Child Traffic Fatalities and Fatality Rates per 100,000 Child Population, 2011–2020

Sources: FARS 2011–2019 Final File, 2020 ARF; Population – Census Bureau

¹ Centers for Disease Control and Prevention's Web-based Injury Statistics Query and Reporting System. Available at <u>https://webappa.cdc.gov/sasweb/ncipc/leadcause.html</u> Figure 3 displays the child traffic fatality trends of five age groups from 2011 to 2020.

From 2011 to 2020:

- Under-1 age group 5-percent decrease from 62 to 59
- 1-to-3 age group 15-percent decrease from 218 to 185
- 4-to-7 age group 2-percent decrease from 282 to 276
- 8-to-12 age group 6-percent decrease from 346 to 325
- 13-to-14 age group 7-percent increase from 231 to 248

Figure 3 Child Traffic Fatalities, by Age Group, 2011–2020

From 2019 to 2020:

- Under-1 age group 7-percent increase from 55 to 59
- 1-to-3 age group 3-percent decrease from 191 to 185
- 4-to-7 age group 1-percent increase from 273 to 276
- 8-to-12 age group 3-percent decrease from 336 to 325
- 13-to-14 age group 19-percent increase from 209 to 248



Source: FARS 2011-2019 Final File, 2020 ARF

Restraint Use and Effectiveness

Child safety seats have been shown to reduce fatal injury by 71 percent for infants (under 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.²

Analysis has also shown that lap/shoulder seat belts, when used, reduce the risk of fatal injury to front-seat occupants 5 and older of passenger cars 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 the risk of moderate-to-critical injury by 65 percent.³ Table 1 provides the number and percentage of passenger vehicle (passenger cars and light trucks) occupants involved in fatal crashes, by survival status (killed or survived), age group, and restraint use (seat belts or child restraints).

In 2020:

- Of the 62,243 passenger vehicle occupants *involved* in fatal crashes, 4,806 (8%) were children.
 - Of these 4,806 child passenger vehicle occupants *involved* in fatal crashes, restraint use was known for 4,460, of whom 825 (18%) were unrestrained. This percentage (18%) was lower compared to all ages (29%).

² Hertz, E. (1996, December). Revised estimates of child restraint effectiveness (Report No. DOT HS 96 855). National Highway Traffic Safety Administration. Available at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/96855</u>

³ Kahane, C. J. (2000, December). *Fatality reduction by safety belts for front-seat occupants of cars and light trucks* (Report No. DOT HS 809 199). National Highway Traffic Safety Administration. Available at https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/809199).

- Of the 23,824 passenger vehicle occupants *killed* in traffic crashes, 755 (3%) were children.
 - Of these 755 child passenger vehicle occupants *killed* in traffic crashes, restraint use was known for 680, of whom 286 (42%) were unrestrained. This percentage (42%) was lower compared to all ages (51%).
- Of the 38,419 passenger vehicle occupants who *survived* in fatal crashes, 4,051 (11%) were children.
- Of these 4,051 child passenger vehicle occupants who *survived* in fatal crashes, restraint use was known for 3,780, of whom 539 (14%) were unrestrained. This percentage (14%) was lower compared to all ages (16%).
- Based on known restraint use, children 13 to 14 years old had the highest percentages out of the children age groups of unrestrained passenger vehicle occupants for those *involved* (29%), *killed* (57%), and *survived* (23%). In some instances, these percentages were higher than for occupants 15 and older.

Table 1

Passenger Vehicle Occupants Involved in Fatal Crashes, by Survival Status, Age Group, and Restraint Use, 2020

				Restra	int Use				Percent	Based on	
Surviva	I Status/	Restr	ained	Unrest	rained	Unkı	nown	Total		Known Restraint Use	
Age Group		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Restrained	Unrestrained
	<1	35	66%	13	25%	5	9%	53	100%	73%	27%
	1–3	79	62%	39	30%	10	8%	128	100%	67%	33%
	4–7	106	51%	80	39%	21	10%	207	100%	57%	43%
	8–12	118	54%	79	36%	22	10%	219	100%	60%	40%
Killed	13–14	56	38%	75	51%	17	11%	148	100%	43%	57%
	<15	394	52%	286	38%	75	10%	755	100%	58%	42%
	15–20	1,002	38%	1,325	50%	298	11%	2,625	100%	43%	57%
	21+	9,066	44%	9,255	45%	2,059	10%	20,380	100%	49%	51%
	Total*	10,483	44%	10,893	46 %	2,448	10%	23,824	100%	49 %	51%
	<1	196	91%	11	5%	9	4%	216	100%	95%	5%
	1–3	720	84%	85	10%	55	6%	860	100%	89%	11%
	4–7	878	79%	141	13%	90	8%	1,109	100%	86%	14%
	8–12	1,020	80%	176	14%	80	6%	1,276	100%	85%	15%
Survived	13–14	427	72%	126	21%	37	6%	590	100%	77%	23%
	<15	3,241	80%	539	13%	271	7%	4,051	100%	86%	14%
	15–20	3,702	67%	1,268	23%	582	10%	5,552	100%	74%	26%
	21+	21,826	78%	3,599	13%	2,432	9%	27,857	100%	86%	14%
	Total*	29,018	76%	5,488	14%	3,913	10%	38,419	100%	84%	16%
	<1	231	86%	24	9%	14	5%	269	100%	91%	9%
	1–3	799	81%	124	13%	65	7%	988	100%	87%	13%
	4–7	984	75%	221	17%	111	8%	1,316	100%	82%	18%
	8–12	1,138	76%	255	17%	102	7%	1,495	100%	82%	18%
Total Involved	13–14	483	65%	201	27%	54	7%	738	100%	71%	29%
monou	<15	3,635	76%	825	17%	346	7%	4,806	100%	82%	18%
	15–20	4,704	58%	2,593	32%	880	11%	8,177	100%	64%	36%
	21+	30,892	64%	12,854	27%	4,491	9%	48,237	100%	71%	29%
	Total*	39,501	63%	16,381	26%	6,361	10%	62,243	100%	71%	29%

Source: FARS 2020 ARF

*Includes occupants of unknown age.

Table 2 presents the restraint use of child passengers killed in passenger vehicles and their respective drivers (killed or survived) in 2020.

Based on known restraint use:

- When the drivers were restrained, 32 percent of the children were unrestrained.
- When the driver were unrestrained, 65 percent of the children were also unrestrained.

Table 2 Child Passengers Killed in Passenger Vehicles, by Their Restraint Use and Their Driver's Restraint Use, 2020

			Child Res	traint Use					Percent	Based on
Driver	Restr	ained	Unrestrained		Unknown		Total		Known Child Restraint Use	
Restraint Use	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Restrained	Unrestrained
Restrained	302	64%	142	30%	25	5%	469	100%	68%	32%
Unrestrained	66	34%	120	62%	7	4%	193	100%	35%	65%
Unknown	22	31%	10	14%	39	55%	71	100%	69%	31%
Total	390	53%	272	37%	71	10%	733	100%	59 %	41 %

Source: FARS 2020 ARF

Note: Excludes child passengers with no driver present in the vehicle.

Table 3 contains the number of children killed in passenger vehicles by type of restraint and age group.

In 2020:

- Of the 755 child passenger vehicle occupants killed, restraint use was known for 680, of whom 286 (42%) were unrestrained.
 - Of the 53 infants (under 1 year old) killed, restraint use was known for 48, of whom 13 (27%) were unrestrained.
- Of the 128 children 1 to 3 years old killed, restraint use was known for 118, of whom 39 (33%) were unrestrained.
- Of the 207 children 4 to 7 years old killed, restraint use was known for 186, of whom 80 (43%) were unrestrained.
- Of the 219 children 8 to 12 years old killed, restraint use was known for 197, of whom 79 (40%) were unrestrained.
- Of the 148 children 13 to 14 years old killed, restraint use was known for 131, of whom 75 (57%) were unrestrained.

Table 3

Children Killed in Passenger Vehicles, by Type of Restraint and Age Group, 2020

		Age Group										
	<1		1–3		4–7		8–12		13–14		Total	
Type of Restraint	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
None	13	25%	39	30%	80	39%	79	36%	75	51%	286	38%
Child Restraint	34	64%	71	55%	63	30%	8	4%	0	0%	176	23%
—Forward Facing	5	9%	31	24%	15	7%	0	0%	0	0%	51	7%
—Rear Facing	15	28%	5	4%	1	0%	0	0%	0	0%	21	3%
—Booster Seat	1	2%	4	3%	24	12%	3	1%	0	0%	32	4%
—Unknown Child Restraint	13	25%	31	24%	23	11%	5	2%	0	0%	72	10%
Seat Belt	0	0%	8	6%	38	18%	109	50%	54	36%	209	28%
—Shoulder Belt Only	0	0%	1	1%	0	0%	2	1%	1	1%	4	1%
—Lap Belt Only	0	0%	1	1%	5	2%	13	6%	2	1%	21	3%
—Shoulder and Lap Belt	0	0%	6	5%	33	16%	94	43%	51	34%	184	24%
Restraint Used - Type Unknown	1	2%	0	0%	5	2%	1	0%	2	1%	9	1%
Unknown	5	9%	10	8%	21	10%	22	10%	17	11%	75	10%
Total	53	100%	128	100%	207	100%	219	100%	148	100%	755	100%

Source: FARS 2020 ARF

Analysis has shown that among children under 5 years old, an estimated 325 lives were saved in 2017 by restraint use.⁴ Of these 325 lives saved, an estimated 312 were associated with the use of child safety seats and 14 with the use of adult seat belts. At 100-percent child safety seat use for those under 5 years old, an estimated 371 lives (that is, an additional 46) could have been saved in 2017.

From 1975 to 2017 an estimated 11,606 lives were saved by child restraints (child safety seats or adult seat belts) for children under 5 years old in passenger vehicles (latest data available).

NHTSA conducted the National Survey of the Use of Booster Seats (NSUBS) in July 2019 and produced a technical report, *The 2019 National Survey of the Use of Booster Seats.*⁵

Table 4 provides data on the use of child restraints by age group and race/ethnicity for those under 13 years old in 2019. Child restraints include child safety seats, seat belts, and booster seats.

Children in Alcohol-Impaired-Driving Crashes

Drivers are considered to be alcohol-impaired when their blood alcohol concentrations (BACs) are .08 grams per deciliter (g/dL) or higher. Thus, any fatal crash involving at least one driver with a BAC of .08 g/dL or higher is considered to be an alcohol-impaired-driving crash.

In 2020, of the 1,093 children killed in traffic crashes, 229 children (21%) were killed in alcohol-impaired-driving crashes. Of these 229 deaths:

- 130 (57%) were passengers of vehicles with alcoholimpaired drivers;
- 65 (28%) were occupants of other vehicles;

Table 4

Observed Child Restraint Use, by Race/Ethnicity and Age Group, 2019*

	Age Group								
Race/Ethnicity	<1	1–3	4–7	8–12					
Hispanic	99.4%	91.4%	83.2%	84.6%					
Black Non-Hispanic	89.4%	85.3%	66.3%	79.3%					
White Non-Hispanic	100%	97.6%	92.1%	89.4%					
Asian Non-Hispanic	N/A	99.3%	95.9%	94.6%					
Other Non-Hispanic	N/A	96.4%	88.1%	97.8%					

Source: Enriquez, J. (2021, May). The 2019 national survey of the use of booster seats (Report No. DOT HS 813 033). National Highway Traffic Safety Administration. Available at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ ViewPublication/813033</u>

N/A: Data not sufficient to produce a reliable estimate. *Most recent year for which the data is available.

- 30 (13%) were nonoccupants; and
- 4 (2%) were child drivers.

Table 5 presents the restraint use of child passengers killed in passenger vehicles and their respective driver's BAC in 2020.

Based on known restraint use:

- When the driver had no alcohol, 38 percent of the children were unrestrained.
- When the driver was alcohol-impaired, 56 percent of the children were unrestrained.

Table 5

Child Passengers Killed in Passenger Vehicles, by Their Restraint Use and Their Driver's BAC, 2020

			Child Rest	traint Use				Percent Based on		
Driver's	Restrained		Unrestrained		Unknown		Total		Known Child Restraint Use	
BAC	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Restrained	Unrestrained
BAC=.00 g/dL	329	56%	202	34%	57	10%	588	100%	62%	38%
BAC=.0107 g/dL	14	54%	11	43%	1	4%	25	100%	56%	44%
BAC=.08+ g/dL	48	40%	60	50%	13	11%	120	100%	44%	56%
BAC=.01+ g/dL	61	42%	70	49%	14	9%	145	100%	46%	54%
Total	390	53 %	272	37%	71	10%	733	100%	59%	41%

Source: FARS 2020 ARF

Note: Percentages are computed based on unrounded estimates.

⁴ 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 <u>https://crashstats.nhtsa.dot.gov/Api/Public/ ViewPublication/812683</u>

⁵ Enriquez, J. (2021, May). *The 2019 national survey of the use of booster seats* (Report No. DOT HS 813 033). National Highway Traffic Safety Administration. Available at <u>https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813033</u>

Pedestrians

Pedestrians are any people on foot, walking, running, jogging, hiking, sitting, or lying down, who are involved in traffic crashes. These exclude people on personal conveyances like roller skates, in-line skates, skateboards, skates, baby strollers, scooters, toy wagons, motorized skateboards, motorized toy cars, motorized kick scooters, Segway-style devices, motorized and non-motorized wheelchairs, and scooters for those with disabilities.

In 2020:

- There were 177 child pedestrians killed in traffic crashes.
 - Sixteen percent (177) of the 1,093 children killed in traffic crashes were pedestrians.
 - Three percent (177) of the 6,516 pedestrians killed in traffic crashes were children.
- Of the 177 child pedestrian fatalities in traffic crashes, 105 (59%) were males.
- Of the 177 child pedestrians killed, 164 (93%) were killed in single-vehicle crashes and 13 (7%) were killed in multiplevehicle crashes.
- Of the 164 child pedestrians killed in single-vehicle crashes, 95 percent (155) were killed in crashes where the first harmful event was collision with a pedestrian. Of these 155 fatalities:
 - 120 children (77%) were struck by the front of the vehicles;
 - 6 (4%) were struck by the right side of the vehicles;
 - 3 (2%) were struck by the left side of the vehicles;
 - 7 (5%) were struck by the rear of the vehicles; and
 - 19 (12%) had impact points on the vehicles that were unknown.
- Of the 177 child pedestrians killed, 35 (20%) were struck by hit-and-run drivers.
- Of the estimated 54,769 injured pedestrians in traffic crashes, 5,223 (10%) were children.
- Of the estimated 5,223 injured child pedestrians in traffic crashes, 2,967 (57%) were males.

Figure 4 contains information on three crash characteristics (land use, pedestrian location, and light condition) where/ when child pedestrian fatalities in traffic crashes occurred in 2020:

- Seventy-eight percent (135) of the child pedestrian fatalities occurred in urban areas and 22 percent (37) in rural areas.
- Sixty-two percent (105) of the child pedestrian fatalities occurred at non-intersection locations as compared to 18 percent (30) at intersections and 20 percent (34) at other locations (10 on shoulder/roadside, 9 on sidewalk, 7 on driveway access, 6 on non-trafficway area, 1 on bicycle lane, and 1 on median/crossing island).
- Fifty-two percent (90) of the child pedestrian fatalities occurred during daylight compared to 38 percent (66) in the dark, 6 percent (11) during dusk, and 3 percent (6) during dawn. When compared to adult pedestrians, more child pedestrians were killed during daylight hours.

Figure 4

Percentage of Child Pedestrian Fatalities in Traffic Crashes in Relation to Land Use, Pedestrian Location, and Light Condition, 2020



Source: FARS 2020 ARF

*Based on location of pedestrian struck at the time of the crash. "Other" includes sidewalk, bicycle lane, median/crossing island, parking lane/zone, shoulder/ roadside, driveway access, shared-use path, and non-traffic area, which may or may not have been at intersection, but were not distinguished by collected data. Thus, "At Intersection" and "Not At Intersection" do not include those in the "Other" category that were at intersection or not at intersection.

Notes: Percentages may not add up to 100 percent due to independent rounding. Unknowns were removed before calculating percentages. Sixty-four percent (113) of the child pedestrians in traffic crashes were killed during the weekday (6 a.m. Monday to 5:59 p.m. Friday) and 36 percent (63) were killed during the weekend (6 p.m. Friday to 5:59 a.m. Monday) in 2020. In Figure 5, time of day is divided into eight 3-hour intervals starting at midnight, and day of week is defined as weekday or weekend. To summarize the 2020 child pedestrian fatalities in traffic crashes:

- The highest total percentage (30%) occurred from 6 to 8:59 p.m., followed by 20 percent from 3 to 5:59 p.m.
- The highest weekday percentage (29%) occurred from 6 to 8:59 p.m., followed by 24 percent from 3 to 5:59 p.m. and 15 percent from 6 to 8:59 a.m.
- The highest weekend percentage (30%) occurred from 6 to 8:59 p.m., followed by 19 percent from 9 to 11:59 p.m. and 16 percent from noon to 2:59 p.m.

Figure 6 contains the child pedestrian fatality trends of five age groups from 2011 to 2020:

- The number of child pedestrian fatalities in traffic crashes decreased by 22 percent, from 228 fatalities to 177.
 - Under-1 age group 200-percent increase from 1 to 3.
 - 1-to-3 age group 11-percent decrease from 54 to 48.
 - 4-to-7 age group 7-percent decrease from 54 to 50.
 - 8-to-12 age group 28-percent decrease from 60 to 43.
 - 13-to-14 age group 44-percent decrease from 59 to 33.

Figure 5

Percentage of Child Pedestrian Fatalities in Traffic Crashes, by Time of Day and Day of Week, 2020



Source: FARS 2020 ARF

Weekday – Monday 6 a.m. to Friday 5:59 p.m. (4.5 days) Weekend – Friday 6 p.m. to Monday 5:59 a.m. (2.5 days)

Note: Unknowns were removed before calculating percentages.



Figure 6 Child Pedestrian Fatalities in Traffic Crashes, by Age Group, 2011–2020

Source: FARS 2011-2019 Final File, 2020 ARF

Pedalcyclists

Pedalcyclists are riders of bicycles (two-wheel, nonmotorized cycles) and other cycles (tricycles and unicycles) powered solely by pedals, who are involved in traffic crashes.

In 2020:

- There were 48 child pedalcyclists killed in traffic crashes.
 - Four percent (48) of the 1,093 children killed in traffic crashes were pedalcyclists.
 - Five percent (48) of the 938 pedalcyclists killed in traffic crashes were children.
- Of the 48 child pedalcyclists killed in traffic crashes, 40 (83%) were males.
- Of the 48 child pedalcyclists killed in traffic crashes, 33 (69%) were helmeted, 7 (15%) were unhelmeted, and 8 (17%) were unknown.
- Of the 48 child pedalcyclists killed, 47 (98%) were killed in single-vehicle crashes and 1 (2%) was killed in a multiple-vehicle crash.
- Of the 47 child pedalcyclists killed in single-vehicle crashes, 100 percent were killed in crashes where the first harmful event was collision with a pedalcyclist. Of these 47 fatalities:
 - 39 (83%) were struck by the front of the vehicles;
 - 2 (4%) were struck by the right side of the vehicles;
 - 3 (6%) were struck by the left side of the vehicles;
 - 1 (2%) were struck by the rear of the vehicles; and
 - 2 (4%) had impact points on the vehicles that were unknown.
- Of the 48 child pedalcyclists killed, 5 (10%) were struck by hit-and-run drivers.
- Of the estimated 38,886 injured pedalcyclists in traffic crashes, 5,183 (13%) were children.
- Of the estimated 5,183 injured child pedalcyclists in traffic crashes, 3,973 (77%) were males.

Figure 7 contains information on three crash characteristics (land use, pedalcyclist location, and light condition) where/ when child pedalcyclist fatalities in traffic crashes occurred in 2020:

- Sixty-seven percent (30) of the child pedalcyclist fatalities occurred in urban areas and 33 percent (15) in rural areas.
- Fifty-eight percent (28) of the child pedalcyclist fatalities occurred at non-intersection locations as compared to 33 percent (16) at intersections and 8 percent (4) at other locations (2 on shoulder/roadside, 1 on bicycle lane, and 1 on sidewalk).
- Sixty-five percent (31) of the child pedalcyclist fatalities occurred during daylight compared to 31 percent (15) in the dark and 4 percent (2) during dusk. When compared to adult pedalcyclists, more child pedalcyclists were killed during daylight hours.

Figure 7

Percentage of Child Pedalcyclist Fatalities in Traffic Crashes in Relation to Land Use, Pedalcyclist Location, and Light Condition, 2020



Source: FARS 2020 ARF

*Based on location of pedalcyclist struck at the time of the crash. "Other" includes sidewalk, bicycle lane, median/crossing island, parking lane/zone, shoulder/ roadside, driveway access, shared-use path, and non-traffic area, which may or may not have been at intersection, but were not distinguished by collected data. Thus, "At Intersection" and "Not At Intersection" do not include those in the "Other" category that were at intersection or not at intersection.

Notes: Percentages may not add up to 100 percent due to independent rounding. Unknowns were removed before calculating percentages. Sixty percent (29) of the child pedalcyclists in traffic crashes were killed during the weekday and 40 percent (19) were killed during the weekend in 2020. Figure 8 provides time of day and day of week information for the 2020 child pedalcyclist fatalities in traffic crashes:

- The highest total percentage (31%) occurred from 6 to 8:59 p.m., followed by 27 percent from 3 to 5:59 p.m.
- The highest weekday percentage (28%) occurred from noon to 2:59 p.m., followed by 24 percent from 3 to 5:59 p.m. and 6 to 8:59 p.m., respectively.
- The highest weekend percentage (42%) occurred from 6 to 8:59 p.m., followed by 32 percent from 3 to 5:59 p.m. and 16 percent from 9 to 11:59 p.m.

Figure 9 contains the child pedalcyclist fatality trends of five age groups from 2011 to 2020:

- The number of child pedalcyclist traffic fatalities in traffic crashes decreased by 19 percent, from 59 fatalities to 48.
 - Under-1 age group remained 0 for 2011 and 2020.
 - 1-to-3 age group 100-percent increase from 2 to 4.
 - 4-to-7 age group 72-percent decrease from 18 to 5.
 - 8-to-12 age group 10-percent decrease from 20 to 18.
 - 13-to-14 age group 11-percent increase from 19 to 21.

Figure 8

Percentage of Child Pedalcyclist Fatalities in Traffic Crashes, by Time of Day and Day of Week, 2020



Source: FARS 2020 ARF

Weekday – Monday 6 a.m. to Friday 5:59 p.m. (4.5 days) Weekend – Friday 6 p.m. to Monday 5:59 a.m. (2.5 days) Note: Unknowns were removed before calculating percentages.



Figure 9 Child Pedalcyclist Fatalities in Traffic Crashes, by Age Group, 2011–2020

Source: FARS 2011-2019 Final File, 2020 ARF

State

Figure 10

Figure 10 contains a color-coded map of the percentage of child fatalities by State in 2020. Table 6 contains the child traffic fatalities by State and age group in 2020. For each State in 2020, Table 7 contains the total traffic fatalities, child traffic fatalities, percentage of child traffic fatalities divided by total traffic fatalities, child population, and child fatality rate (child traffic fatalities per 100,000 child population). Included in these tables is Puerto Rico, which is not included in the overall U.S. total.

In 2020:

- Among all States, child traffic fatalities ranged from 0 (Delaware, the District of Columbia, and Rhode Island) to 149 (Texas).
- Texas had the highest number of child traffic fatalities (149), followed by California (100), Florida (87), Georgia (55) and Arizona (41).
- The States with the highest percentage of child traffic fatalities compared to the 2.8 percent in the United States were Alaska (6.3%), followed by Iowa (4.5%) and Kansas (4.5%).
- The States with the highest child fatality rates compared to the U.S. child fatality rate of 1.81 were Mississippi (4.89), followed by Montana (4.72) and Arkansas (4.48).



Percentage of Child Fatalities in Traffic Crashes, by State, 2020

Source: FARS 2020 ARF

Table 6 Child Fatalities in Traffic Crashes, by State and Age Group, 2020

Age Group								
State	<1	1–3	4–7	8–12	13–14	Total		
Alabama	3	3	9	8	3	26		
Alaska	0	0	3	0	1	4		
Arizona	3	6	11	11	10	41		
Arkansas	1	7	5	6	7	26		
California	4	14	18	42	22	100		
Colorado	0	1	4	10	2	17		
Connecticut	0	0	1	1	1	3		
Delaware	0	0	0	0	0	0		
District of Columbia	0	0	0	0	0	0		
Florida	7	13	19	20	28	87		
Georgia	4	11	16	13	11	55		
Hawaii	0	0	0	0	1	1		
Idaho	0	1	1	0	3	5		
llinois	4	5	8	10	7	34		
Indiana	2	4	10	4	8	28		
lowa	0	2	2	6	5	15		
Kansas	1	1	4	6	7	19		
Kentucky	1	2	3	7	3	16		
Louisiana	1	0	12	13	5	31		
Maine	0	0	1	2	2	5		
Varyland	1	1	5	0	0	7		
Vassachusetts	0	0	0	1	0	1		
Vichigan	0	10	6	9	3	28		
Vinnesota	1	3	0	2	3	9		
Vississippi	3	5	7	7	6	28		
Vissouri	1	4	6	9	8	28		
Montana	0	0	3	4	2	9		
Nebraska	0	1	1	2	2	6		
Nevada	0	1	0	2	5	8		
New Hampshire	0	0	1	0	0	1		
New Jersey	1	3	4	1	3	12		
New Mexico	0	1	2	5	2	10		
New York	0	3	6	13	8	30		
North Carolina	1	5	10	10	5	31		
North Dakota	0	2	0	2	0	4		
Ohio	2	7	10	8	9	36		
Oklahoma	1	7	8	7		27		
	0	6	3	4	4	16		
<mark>Dregon</mark> Pennsylvania	1	9	7	7	5	29		
Rhode Island	0							
South Carolina	2	0 6	0	0 4	0 5	0 23		
			6		5			
South Dakota	0	0	1	0		2		
Tennessee	3	6	7	4	2	22		
lexas	10	27	43	40	29	149		
Jtah	0	2	1	5	3	11		
/ermont	0	0	0	1	0	1		
/irginia	1	2	4	8	3	18		
Nashington	0	3	1	7	5	16		
Vest Virginia	0	1	2	1	1	5		
Nisconsin	0	0	5	2	4	11		
Nyoming	0	0	0	1	1	2		
J.S.Total	59	185	276	325	248	1,093		
Puerto Rico	0	0	0	1	1	2		

Source: FARS 2020 ARF

Table 7Child Fatalities and Fatality Rates in Traffic Crashes, by State, 2020

			hild Fatalities		Child Fatality Rate per	
State	Total Fatalities	Number	Percentage of Total Fatalities	Child Population	100,000 Child Population	
Alabama	934	26	2.8%	901,534	2.88	
Alaska	64	4	6.3%	150,422	2.66	
Arizona	1,054	41	3.9%	1,361,815	3.01	
Arkansas	638	26	4.1%	579,962	4.48	
California	3,847	100	2.6%	7,284,284	1.37	
Colorado	622	17	2.7%	1,030,859	1.65	
Connecticut	295	3	1.0%	583,654	0.51	
Delaware	116	0	0.0%	169,379	0.00	
District of Columbia	36	0	0.0%	114,070	0.00	
Florida	3,331	87	2.6%	3,525,573	2.47	
Georgia	1,664	55	3.3%	2,061,725	2.67	
Hawaii	85	1	1.2%	250,169	0.40	
Idaho	214	5	2.3%	371,675	1.35	
Illinois	1,194	34	2.8%	2,285,800	1.49	
Indiana	897	28	3.1%	1,295,474	2.16	
lowa	337	15	4.5%	601,584	2.49	
Kansas	426	19	4.5%	577,419	3.29	
Kansas Kentucky			1	,		
,	780 828	16 31	2.1% 3.7%	830,613	1.93 3.44	
Louisiana				902,444		
Maine	164	5	3.0%	202,573	2.47	
Maryland	567	7	1.2%	1,107,955	0.63	
Massachusetts	343	1	0.3%	1,099,049	0.09	
Vichigan	1,084	28	2.6%	1,748,988	1.60	
Vinnesota	394	9	2.3%	1,079,090	0.83	
Vississippi	752	28	3.7%	572,951	4.89	
Missouri	987	28	2.8%	1,136,715	2.46	
Montana	213	9	4.2%	190,783	4.72	
Nebraska	233	6	2.6%	395,421	1.52	
Nevada	317	8	2.5%	580,574	1.38	
New Hampshire	104	1	1.0%	205,363	0.49	
New Jersey	584	12	2.1%	1,595,135	0.75	
New Mexico	398	10	2.5%	389,028	2.57	
New York	1,046	30	2.9%	3,312,987	0.91	
North Carolina	1,538	31	2.0%	1,905,690	1.63	
North Dakota	100	4	4.0%	154,241	2.59	
Ohio	1,230	36	2.9%	2,122,841	1.70	
Oklahoma	652	27	4.1%	793,574	3.40	
Oregon	508	16	3.1%	712,566	2.25	
Pennsylvania	1,129	29	2.6%	2,159,916	1.34	
Rhode Island	67	0	0.0%	165,566	0.00	
South Carolina	1,064	23	2.2%	927,435	2.48	
South Dakota	141	2	1.4%	183,136	1.09	
Tennessee	1,217	22	1.8%	1,254,988	1.75	
Texas	3,874	149	3.8%	6,175,300	2.41	
Utah	276	11	4.0%	769,605	1.43	
Vermont	62	1	1.6%	92,323	1.08	
Virginia	850	18	2.1%	1,548,688	1.16	
Washington	560	16	2.9%	1,392,400	1.15	
West Virginia	267	5	1.9%	293,530	1.70	
Wisconsin	614	11	1.8%	1,036,188	1.06	
Wyoming	127	2	1.6%	110,372	1.81	
U.S. Total	38,824	1,093	2.8%	60,293,426	1.81	
Puerto Rico	242 Population – Census Burea	2	0.8%	433,768	0.46	

Important Safety Reminders

- 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.</u> gov/equipment/car-seats-and-booster-seats.
- Every car and every car seat or booster seat has different installation instructions, so make sure you read both the car seat instructions and the vehicle owner's manual.
- Remember that children in rear-facing seats should never be placed in front of an active passenger air bag.
- Use either the lower anchors and tether, or the seat belt and tether when installing forward-facing seats.
- To get assistance with installation, find a certified child passenger safety technician (CPST) at a location near you using NHTSA's Inspection Station locator: www.nhtsa.gov/equipment/car-seats-and-boosterseats#installation-help-inspection

- 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 travelling and riding in taxis or ride-share vehicle.
- Find out when your child is ready to use an adult seat belt, reference the "Car Seat Recommendations for Children" located at: www.nhtsa.gov/sites/nhtsa.dot. gov/files/documents/carseat-recommendations-forchildren-by-age-size.pdf. 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.
- NHTSA's Research and Program Development

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 public trafficway that results 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>.

Crash Report Sampling System

NHTSA's National Center for Statistics and Analysis (NCSA) redesigned the nationally representative sample of police-reported traffic crashes, which estimates the number of police-reported injury and property-damage-only crashes in the United States. The new system, called CRSS, replaced the National Automotive Sampling System (NASS) General Estimates System (GES) in 2016. More information on CRSS can be found at <u>www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss</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 2020 ARF, the 2019 Final File was released to replace the 2019 ARF. The final fatality count in motor vehicle traffic crashes for 2019 was 36,355, which was updated from 36,096 in the 2019 ARF. The number of children fatalities from the 2019 Final File was 1,064, which was updated from 1,053 from the 2019 ARF.

The 2017 and 2018 Final Files have been amended, but this amendment did not change the overall number of fatal crashes or fatalities.

In calendar year 2020, NCSA changed the methodology of estimating people nonfatally injured in motor vehicle traffic crashes. The new approach combines people nonfatally injured from both FARS and NASS GES/CRSS. This is done by extracting people nonfatally injured in fatal crashes from FARS with people nonfatally injured in police-reported injury crashes from NASS GES/CRSS. The old approach extracted people nonfatally injured from only NASS GES/CRSS, regardless of crash severity. This change in methodology caused some estimates of people injured to change for prior years.

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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-odi.nhtsa.dot.gov/VehicleComplaint/</u>.

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

- Fatal Motor Vehicle 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)
- 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
- Large Trucks
- Motorcycles
- Occupant Protection in Passenger Vehicles
- 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
- Young Drivers

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



U.S. Department of Transportation

National Highway Traffic Safety Administration