

Traffic Safety Facts

2018 Data

January 2021 (revised)

DOT HS 812 887



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

- [Overview](#)
- [Restraint Use and Effectiveness](#)
- [Pedestrians](#)
- [Pedalcyclists](#)
- [Children in Alcohol-Impaired-Driving Crashes](#)
- [Fatalities by State](#)
- [Important Safety Reminders](#)



U.S. Department of Transportation
**National Highway Traffic Safety
Administration**

1200 New Jersey Avenue SE
Washington, DC 20590

Children

Children are defined as 14 years old and younger. Motor vehicle traffic crashes are a leading cause of death of children.¹

Key Findings

- Of the 36,560 motor vehicle traffic fatalities in 2018 in the United States, 1,038 (3%) were children 14 and younger.
- There were 1,038 children killed in motor vehicle traffic crashes in 2018, a 10-percent decrease from 1,158 in 2017.
- In 2018, an estimated 190,000 children were injured in traffic crashes, a 1-percent decrease from 191,000 in 2017.
- On average, 3 children were killed and 520 children were injured every day in traffic crashes in 2018.
- Based on known restraint use in 2018, when the drivers involved in fatal crashes were unrestrained, 63 percent of the children were also unrestrained.
- Of the 22,697 passenger vehicle occupants killed in 2018 in fatal crashes, 736 (3%) were children. Based on known restraint use, 236 (35%) of these 736 child occupant fatalities were unrestrained.
- Of the 6,283 pedestrian traffic fatalities, 181 (3%) were children in 2018.
- Of the 857 pedalcyclist traffic fatalities, 37 (4%) were children in 2018.
- In 2018, 52 percent of child pedestrian fatalities occurred from 3 to 8:59 p.m., and 86 percent of child pedalcyclist fatalities occurred from noon to 8:59 p.m.
- Of the 1,038 children killed in traffic crashes, 231 children (22%) were killed in alcohol-impaired-driving crashes in 2018.

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. Injury estimates are based on data obtained from a nationally representative sample of police-reported crashes from the Crash Report Sampling System. In addition, the methodology for estimating people injured has changed. For more information, read **Crash Report Sampling System (CRSS) Replaced the National Automotive Sampling System (NASS) General Estimates System (GES)** at the end of this publication.

Overview

In 2018:

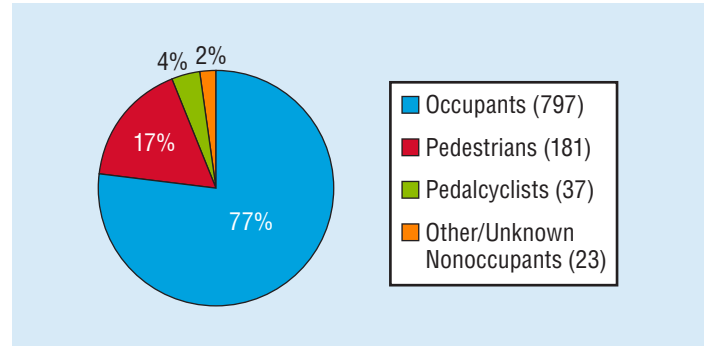
- There were 61 million children in the United States, 19 percent of the total U.S. population.
- Of the 36,560 motor vehicle traffic fatalities in the United States, 1,038 (3%) were children.

¹ Centers for Disease Control and Prevention's Web-based Injury Statistics Query and Reporting System. Available at http://webappa.cdc.gov/sasweb/ncipc/leadcaus10_us.html.

- Child motor vehicle traffic fatalities decreased by 10 percent, from 1,158 in 2017.
- An estimated 190,000 children were injured in traffic crashes, a 1-percent decrease from 191,000 in 2017.
- On average, 3 children were killed and an estimated 520 children were injured every day in the United States in traffic crashes.
- Boys accounted for 53 percent of child fatalities, while an estimated 53 percent of children injured in traffic crashes were girls.

Figure 1 displays the distribution of the 1,038 child motor vehicle traffic fatalities—77 percent (797) were occupants and 23 percent (241) were nonoccupants (pedestrians, pedalcyclists, and other) in 2018.

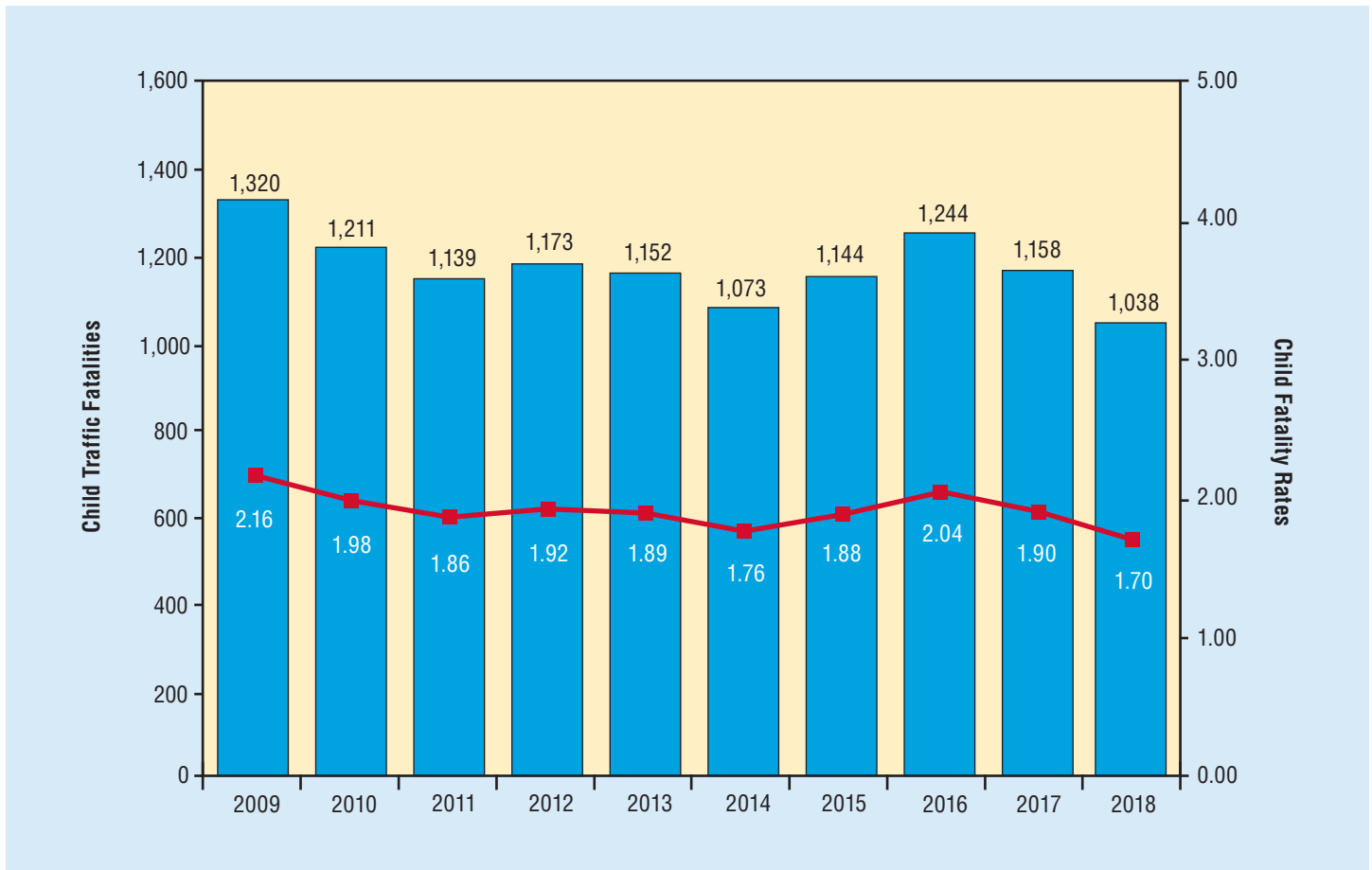
Figure 1
Child Motor Vehicle Traffic Fatalities, 2018



Source: FARS 2018 Annual Report File (ARF)

As shown in Figure 2, the number of child motor vehicle traffic fatalities decreased by 21 percent from 1,320 in 2009 to 1,038 in 2018, lowest in the last 10 years, and the child fatality rate per 100,000 child population decreased by 21 percent from 2.16 in 2009 to 1.70 in 2018.

Figure 2
Child Traffic Fatalities and Fatality Rates per 100,000 Child Population, 2009-2018



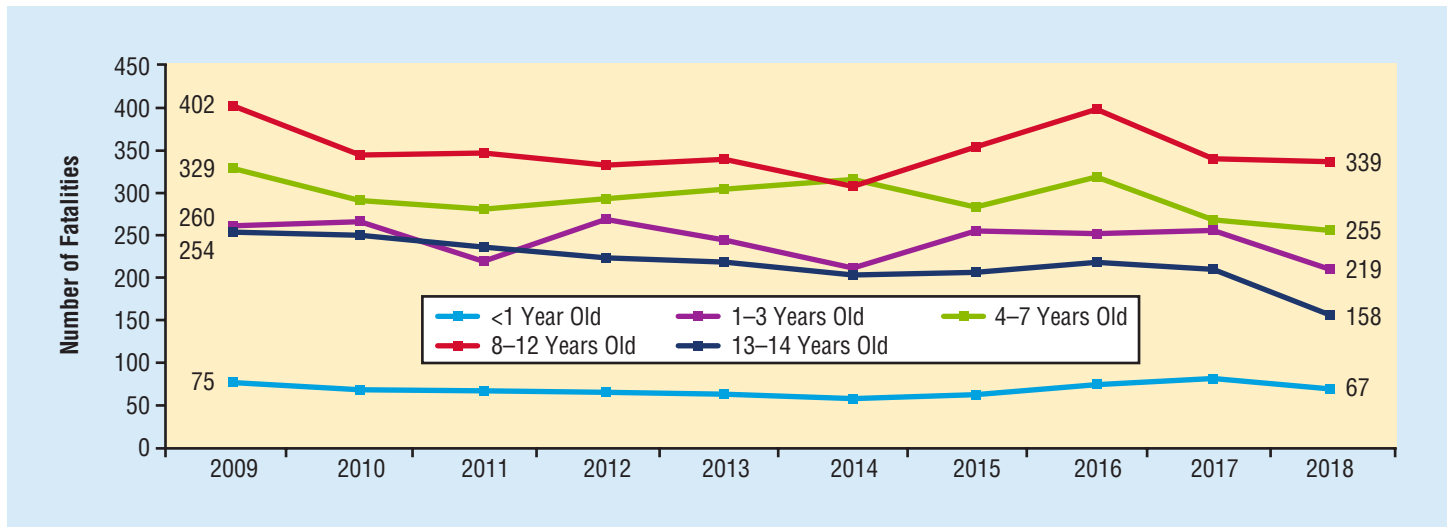
Sources: FARS 2009-2017 Final File, 2018 ARF; Population – Census Bureau

Figure 3 displays the child motor vehicle traffic fatality trends of five age groups from 2009 to 2018.

- Under 1 age group: 11-percent decrease from 75 to 67
- 1-to-3 age group: 16-percent decrease from 260 to 219

- 4-to-7 age group: 22-percent decrease from 329 to 255
- 8-to-12 age group: 16-percent decrease from 402 to 339
- 13-to-14 age group: 38-percent decrease from 254 to 158

Figure 3
Child Traffic Fatalities, by Age Group, 2009-2018



Source: FARS 2009-2017 Final File, 2018 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 age 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 (defined as 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).

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

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 crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/809199.

In 2018:

- Of the 22,697 passenger vehicle occupants *killed* in fatal crashes, 736 (3.2%) were children.
 - Of these 736 child passenger vehicle occupants *killed* in fatal crashes, restraint use was known for 669, of whom 236 (35%) were unrestrained. This percentage (35%) was lower compared to all ages (47%).
- Of the 38,502 passenger vehicle occupants who *survived* in fatal crashes, 4,452 (11.6%) were children.
 - Of these 4,452 child passenger vehicle occupants who *survived* in fatal crashes, restraint use was known for 4,163, of whom 501 (12%) were unrestrained. This percentage (12%) was lower compared to all ages (13%).
- Of the 61,199 passenger vehicle occupants *involved* in fatal crashes, 5,188 (8.4%) were children.
 - Of these 5,188 child passenger vehicle occupants *involved* in fatal crashes, restraint use was known for 4,832, of whom 737 (15%) were unrestrained.

Table 1
Passenger Vehicle Occupants Involved in Fatal Crashes, by Survival Status, Age Group, and Restraint Use, 2018

| Survival Status/ 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 | | |
| Killed | <1 | 45 | 76% | 9 | 15% | 5 | 8% | 59 | 100% | 83% | 17% |
| | 1-3 | 112 | 70% | 38 | 24% | 10 | 6% | 160 | 100% | 75% | 25% |
| | 4-7 | 116 | 60% | 55 | 28% | 22 | 11% | 193 | 100% | 68% | 32% |
| | 8-12 | 116 | 52% | 89 | 40% | 19 | 8% | 224 | 100% | 57% | 43% |
| | 13-14 | 44 | 44% | 45 | 45% | 11 | 11% | 100 | 100% | 49% | 51% |
| | <15 | 433 | 59% | 236 | 32% | 67 | 9% | 736 | 100% | 65% | 35% |
| | 15-20 | 985 | 42% | 1,112 | 48% | 237 | 10% | 2,334 | 100% | 47% | 53% |
| | All Other | 9,560 | 49% | 8,430 | 43% | 1,637 | 8% | 19,627 | 100% | 53% | 47% |
| | Total | 10,978 | 48% | 9,778 | 43% | 1,941 | 9% | 22,697 | 100% | 53% | 47% |
| Survived | <1 | 219 | 93% | 6 | 3% | 10 | 4% | 235 | 100% | 97% | 3% |
| | 1-3 | 811 | 88% | 75 | 8% | 40 | 4% | 926 | 100% | 92% | 8% |
| | 4-7 | 933 | 82% | 121 | 11% | 78 | 7% | 1,132 | 100% | 89% | 11% |
| | 8-12 | 1,198 | 81% | 168 | 11% | 115 | 8% | 1,481 | 100% | 88% | 12% |
| | 13-14 | 501 | 74% | 131 | 19% | 46 | 7% | 678 | 100% | 79% | 21% |
| | <15 | 3,662 | 82% | 501 | 11% | 289 | 6% | 4,452 | 100% | 88% | 12% |
| | 15-20 | 3,672 | 72% | 968 | 19% | 431 | 8% | 5,071 | 100% | 79% | 21% |
| | All Other | 23,023 | 79% | 3,137 | 11% | 2,819 | 10% | 28,979 | 100% | 88% | 12% |
| | Total | 30,357 | 79% | 4,606 | 12% | 3,539 | 9% | 38,502 | 100% | 87% | 13% |
| Total Involved | <1 | 264 | 90% | 15 | 5% | 15 | 5% | 294 | 100% | 95% | 5% |
| | 1-3 | 923 | 85% | 113 | 10% | 50 | 5% | 1,086 | 100% | 89% | 11% |
| | 4-7 | 1,049 | 79% | 176 | 13% | 100 | 8% | 1,325 | 100% | 86% | 14% |
| | 8-12 | 1,314 | 77% | 257 | 15% | 134 | 8% | 1,705 | 100% | 84% | 16% |
| | 13-14 | 545 | 70% | 176 | 23% | 57 | 7% | 778 | 100% | 76% | 24% |
| | <15 | 4,095 | 79% | 737 | 14% | 356 | 7% | 5,188 | 100% | 85% | 15% |
| | 15-20 | 4,657 | 63% | 2,080 | 28% | 668 | 9% | 7,405 | 100% | 69% | 31% |
| | All Other | 32,583 | 67% | 11,567 | 24% | 4,456 | 9% | 48,606 | 100% | 74% | 26% |
| | Total | 41,335 | 68% | 14,384 | 24% | 5,480 | 9% | 61,199 | 100% | 74% | 26% |

Source: FARS 2018 ARF

Table 2 presents the restraint use of child passenger vehicle occupants killed in traffic crashes and their respective drivers (killed or survived) in 2018. Based on known restraint use:

- When the drivers were restrained, 27 percent of the children were unrestrained.
- When the drivers were unrestrained, 63 percent of the children were also unrestrained.

Table 2

Child Passengers Killed in Traffic Crashes, by Their Restraint Use and Their Driver's Restraint Use, 2018

| Driver Restraint Use | Child Restraint Use | | | | | | Total | | Known Child Restraint Use | |
|----------------------|---------------------|------------|--------------|------------|-----------|-----------|------------|-------------|---------------------------|----------------------|
| | Restrained | | Unrestrained | | Unknown | | | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Percent Restrained | Percent Unrestrained |
| Restrained | 344 | 69% | 126 | 25% | 26 | 5% | 496 | 100% | 73% | 27% |
| Unrestrained | 55 | 36% | 93 | 61% | 5 | 3% | 153 | 100% | 37% | 63% |
| Unknown | 33 | 40% | 13 | 16% | 36 | 44% | 82 | 100% | 72% | 28% |
| Total | 432 | 59% | 232 | 32% | 67 | 9% | 731 | 100% | 65% | 35% |

Source: FARS 2018 ARF

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

Table 3 contains the number of children killed in passenger vehicles by age group and type of restraint. In 2018:

- Of the 736 children killed in passenger vehicle crashes, restraint use was known for 669, of whom 236 (35%) were unrestrained.
 - Of the 59 infants (under 1 year old) killed, restraint use was known for 54, of whom 9 (17%) were unrestrained.
 - Of the 160 children 1 to 3 years old killed, restraint use was known for 150, of whom 38 (25%) were unrestrained.

- Of the 193 children 4 to 7 years old killed, restraint use was known for 171, of whom 55 (32%) were unrestrained.
- Of the 224 children 8 to 12 years old killed, restraint use was known for 205, of whom 89 (43%) were unrestrained.
- Of the 100 children 13 to 14 years old killed, restraint use was known for 89, of whom 45 (51%) were unrestrained.

Table 3

Children Killed in Passenger Vehicles, by Type of Restraint and Age Group, 2018

| Type of Restraint | Age Group | | | | | | | | | | Total | |
|-------------------------------|-----------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|
| | <1 | | 1-3 | | 4-7 | | 8-12 | | 13-14 | | | |
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| None | 9 | 15% | 38 | 24% | 55 | 28% | 89 | 40% | 45 | 45% | 236 | 32% |
| Child Restraint | 45 | 76% | 99 | 62% | 72 | 37% | 9 | 4% | 0 | 0% | 225 | 31% |
| —Forward Facing | 5 | 8% | 37 | 23% | 19 | 10% | 2 | 1% | 0 | 0% | 63 | 8% |
| —Rear Facing | 19 | 32% | 12 | 8% | 1 | 1% | 0 | 0% | 0 | 0% | 32 | 4% |
| —Booster Seat | 0 | 0% | 10 | 6% | 29 | 15% | 3 | 1% | 0 | 0% | 42 | 5% |
| —Unknown Child Restraint | 21 | 36% | 40 | 25% | 23 | 12% | 4 | 2% | 0 | 0% | 88 | 12% |
| Seat Belt | 0 | 0% | 10 | 6% | 43 | 22% | 104 | 46% | 42 | 42% | 199 | 25% |
| —Shoulder Belt Only | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 0% | 0 | 0% | 1 | 0% |
| —Lap Belt Only | 0 | 0% | 3 | 2% | 7 | 4% | 7 | 3% | 2 | 2% | 19 | 3% |
| —Shoulder and Lap Belt | 0 | 0% | 7 | 4% | 36 | 19% | 96 | 43% | 40 | 40% | 179 | 24% |
| Restraint Used - Type Unknown | 0 | 0% | 3 | 2% | 1 | 1% | 3 | 1% | 2 | 2% | 9 | 1% |
| Unknown | 5 | 8% | 10 | 6% | 22 | 11% | 19 | 8% | 11 | 11% | 67 | 9% |
| Total | 59 | 100% | 160 | 100% | 193 | 100% | 224 | 100% | 100 | 100% | 736 | 100% |

Source: FARS 2018 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, 312 were associated with the use of child safety seats and 14 with the use of adult seat belts. At 100-percent restraint 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 2017 and produced a technical report, *The 2017 National Survey of the Use of Booster Seats* (Report No. DOT HS 812 617) (latest data available).

Table 4 provides data on the use of child restraints by age group and race/ethnicity for those under 13 years old in 2017. Child restraints include child safety seats, seat belts, and booster seats.

Table 4
Observed Child Restraint Use, by Race/Ethnicity and Age Group in 2017*

| Ethnicity/Race | Age Group | | | |
|--------------------|-----------|-------|-------|-------|
| | <1 | 1-3 | 4-7 | 8-12 |
| Hispanic | 97.7% | 96.5% | 87.0% | 82.2% |
| Black Non-Hispanic | 93.0% | 86.8% | 75.8% | 79.9% |
| White Non-Hispanic | 99.4% | 98.1% | 94.6% | 91.1% |
| Asian Non-Hispanic | N/A | 98.6% | 99.8% | 90.7% |
| Other Non-Hispanic | 96.8% | 92.3% | 90.9% | 82.9% |

Source: *The 2017 National Survey of the Use of Booster Seats* (Report No. DOT HS 812 617). National Highway Traffic Safety Administration. Available at crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812617
N/A: Data not sufficient to produce a reliable estimate.
*Most recent year for which the data is available.

Pedestrians

Pedestrians are any people on foot, walking, running, jogging, hiking, sitting, or lying down, who are involved in motor vehicle traffic crashes.⁵ These exclude people on personal conveyances like roller skates, inline skates, skateboards, motorized skate boards, baby strollers, scooters, toy wagons, motorized skateboard, motorized toy car, Segway-style devices, motorized and non-motorized wheelchairs, and scooters for those with disabilities.

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

⁵ A traffic crash is defined as an incident that involved one or more motor vehicles where at least one vehicle was in transport and the crash originated on a public trafficway, such as a road or highway. Crashes that occurred on private property, including parking lots and driveways, are excluded.

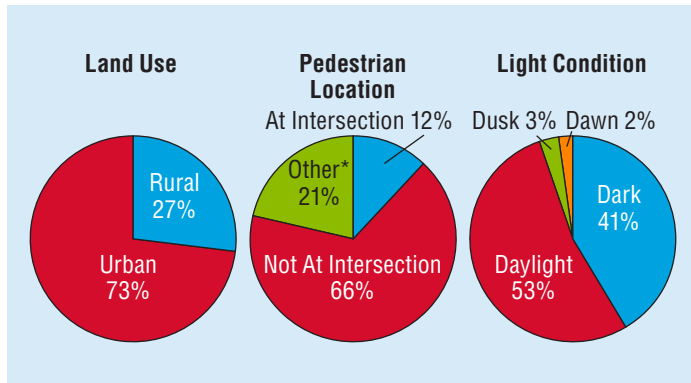
In 2018:

- Of the 6,283 pedestrian fatalities in traffic crashes, 181 (3%) were children.
- Seventeen percent (181) of the 1,038 children killed in traffic crashes were pedestrians.
- Of the 181 child pedestrian fatalities in traffic crashes, 106 (59%) were boys.
- Of the estimated 75,000 injured pedestrians in traffic crashes, 8,000 (11%) were children.
- Of the estimated 8,000 injured child pedestrians in traffic crashes, 5,000 (60%) were boys.
- Of the 181 child pedestrians killed, 174 (96%) were killed in single-vehicle crashes and 7 (4%) were killed in multiple-vehicle crashes.
- Of the 174 child pedestrians killed in single-vehicle crashes, 96 percent (167) were killed in crashes where the first harmful event was collision with a pedestrian. Of these 167 fatalities:
 - 138 children (82.6%) were struck by the front of the vehicle,
 - 2 (1.2%) were struck by the right side of the vehicle,
 - 4 (2.4%) were struck by the left side of the vehicle,
 - 9 (5.4%) were struck by the rear of the vehicle, and
 - 14 (8.4%) were unknowns.
- Of the 181 child pedestrians killed, 27 (15%) were struck by a hit-and-run driver.

Figure 4 contains information on three environmental characteristics (land use, pedestrian location, and light condition) where/when child pedestrian fatalities in traffic crashes occurred in 2018:

- Twenty-seven percent (46) were killed in rural areas and 73 percent (125) were killed in urban areas.
- Sixty-six percent (119) occurred at non-intersection locations as compared to 12 percent (22) at intersections and 21 percent (38) at other locations (5 on shoulder/roadside, 6 on sidewalk, 3 on non-trafficway area, 2 on median/crossing island and 5 on driveway access).
- Fifty-three percent (96) were killed during daylight compared to 41 percent (75) in the dark, 3 percent (6) during dusk, and 2 percent (4) 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, 2018

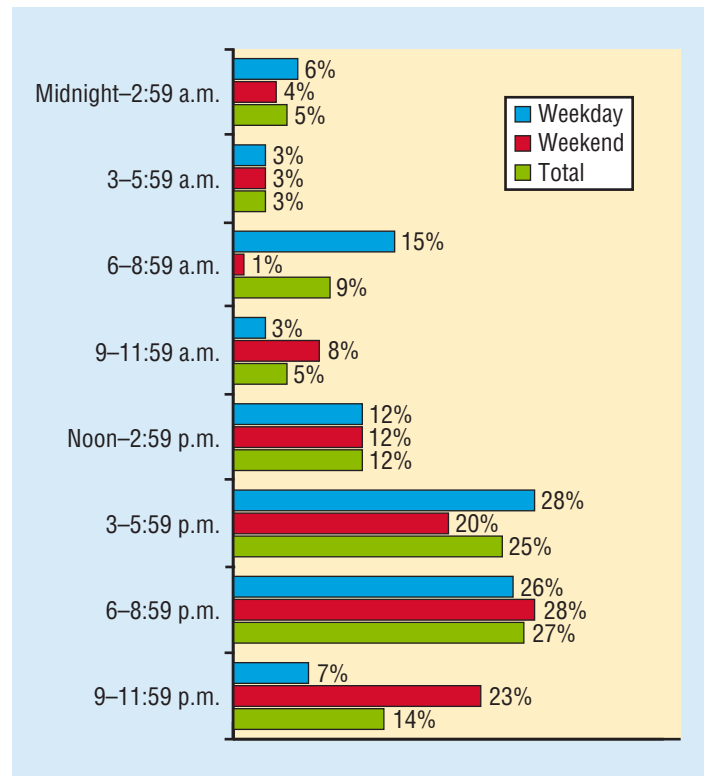


Source: FARS 2018 ARF
 *Based on location of pedestrian struck at the time of the crash. "Other" includes sidewalk, bicycle lane, median/crossing island, parking lane/zone, shoulder/roadside, driveway access, shared-use path, and non-traffic area, which may or may not have been at intersection, but were 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.
 Note: Percentages may not add up to 100 percent due to independent rounding. Unknowns were removed before calculating percentages.

Fifty-nine percent (107) of child pedestrian fatalities in traffic crashes were killed during the weekday (Monday 6 a.m. to Friday 5:59 p.m.) and 41 percent (74) were killed during the weekend (Friday 6 p.m. to Monday 5:59 a.m.) in 2018. In Figure 5, time of day is divided into eight 3-hour intervals starting at midnight, and day of week is defined as weekday and weekend. To summarize the 2018 child pedestrian fatalities in traffic crashes:

- The highest total percentage (27%) occurred from 6 to 8:59 p.m., followed by 25 percent from 3 to 5:59 p.m.
- The highest weekday percentage (28%) occurred from 3 to 5:59 p.m., followed by 26 percent from 6 to 8:59 p.m. and 15 percent from 6 to 8:59 a.m.
- The highest weekend percentage (28%) occurred from 6 to 8:59 p.m., followed by 23 percent from 9 to 11:59 p.m. and 20 percent from 3 to 5:59 p.m.

Figure 5
Percentage of Child Pedestrian Fatalities in Traffic Crashes, by Time of Day and Day of Week, 2018

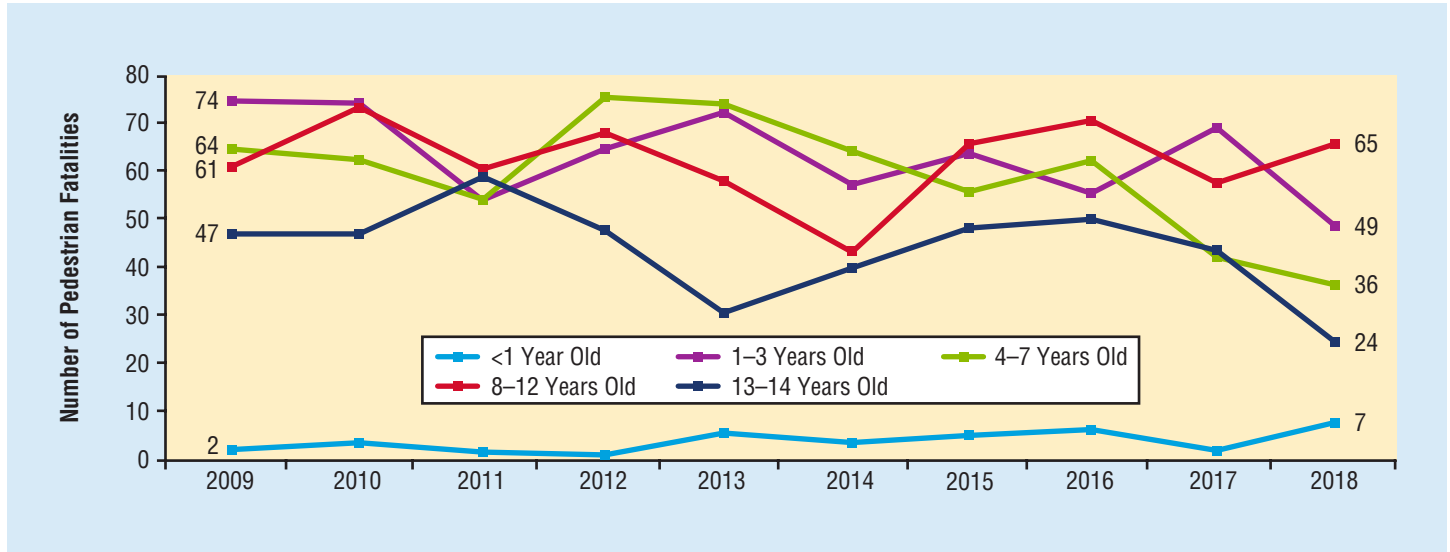


Source: FARS 2018 ARF
 Weekday—Monday 6 a.m. to Friday 5:59 p.m.
 Weekend—Friday 6 p.m. to Monday 5:59 a.m.

Figure 6 contains the child pedestrian fatality trends of five age groups from 2009 to 2018:

- The number of child pedestrian fatalities in traffic crashes decreased by 27 percent, from 248 fatalities to 181:
 - The under 1 age group increased by 250 percent, from 2 to 7—the highest in last 10 years.
 - The 1-to-3 age group decreased by 34 percent, from 74 to 49.
 - The 4-to-7 age group decreased by 44 percent, from 64 to 36.
 - The 8-to-12 age group increased by 7 percent, from 61 to 65.
 - The 13-to-14 age group decreased by 49 percent, from 47 to 24.

Figure 6
Child Pedestrian Fatalities in Traffic Crashes, by Age Group, 2009-2018



Source: FARS 2009-2017 Final File, 2018 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 motor vehicle traffic crashes.⁶

In 2018:

- Of the 857 pedalcyclists killed in traffic crashes, 37 (4%) were children.
- Four percent (37) of the 1,038 children killed in traffic crashes were pedalcyclists.
- Of the 37 child pedalcyclists killed in traffic crashes, 29 (78%) were boys.
- Of the estimated 47,000 pedalcyclists injured in traffic crashes, 5,000 (11%) were children.
- Of the estimated 5,000 child pedalcyclists injured in traffic crashes, 4,000 (78%) were boys.
- Of the 37 child pedalcyclists killed in traffic crashes, 19 (51%) were helmeted, 4 (11%) were unhelmeted, and 14 (38%) were unknown.
- Of the 37 child pedalcyclists killed, 34 (92%) were killed in single-vehicle crashes and 3 (8%) were killed in multiple-vehicle crashes.

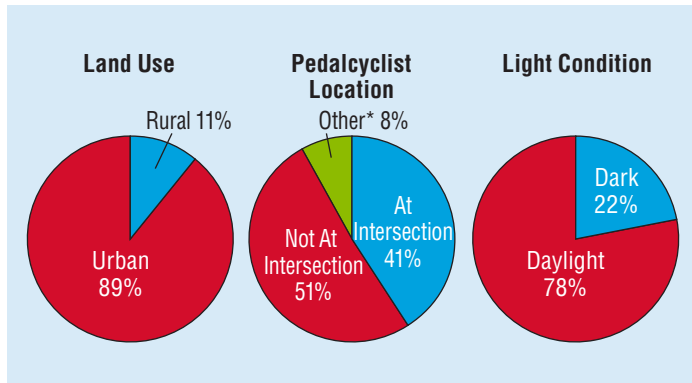
- Of the 34 child pedalcyclists killed in single-vehicle crashes, 97 percent (33) were killed in crashes where the first harmful event was collision with a pedalcyclist. Of these 33 fatalities:
 - 24 (72.7%) were struck by the front of the vehicle,
 - 3 (9.1%) were struck by the right side of the vehicle,
 - 2 (6.1%) were struck by the left side of the vehicle,
 - 1 (3.0%) was struck by the rear of the vehicle, and
 - 3 (9.1%) were unknowns.
- Of the 37 child pedalcyclists killed, 3 (8%) were struck by hit-and-run drivers.

Figure 7 contains information on three environmental characteristics (land use, pedalcyclist location, and light condition) where/when child pedalcyclist fatalities in traffic crashes occurred in 2018:

- Eleven percent (4) were killed in rural areas and 89 percent (32) were killed in urban areas.
- Fifty-one percent (19) occurred at non-intersection locations as compared to 41 percent (15) at intersections and 8 percent (3) at other locations (1 on driveway access and 2 on sidewalk).
- Seventy-eight percent (29) were killed during daylight compared to 22 percent (8) in the dark. Compared to all ages, more child pedalcyclists were killed during daylight than adult pedalcyclists.

⁶ A traffic crash is defined as an incident that involved one or more motor vehicles where at least one vehicle was in transport and the crash originated on a public trafficway, such as a road or highway. Crashes that occurred on private property, including parking lots and driveways, are excluded. Also excluded are pedalcyclist crashes that do not involve motor vehicles.

Figure 7
Percentage of Child Pedalcyclist Fatalities in Traffic Crashes in Relation to Land Use, Pedalcyclist Location, and Light Condition, 2018

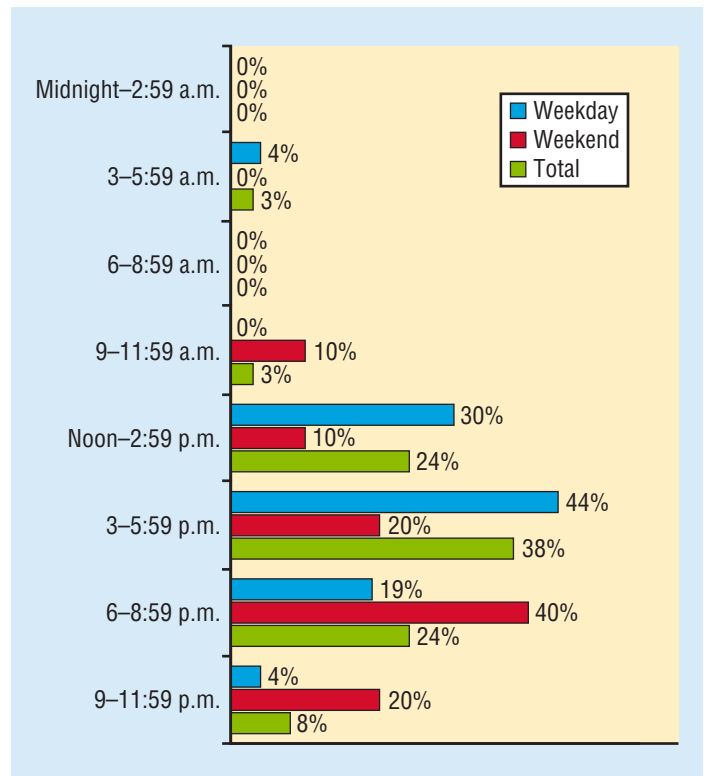


Source: FARS 2018 ARF
 *Based on location of pedalcyclist struck at the time of the crash. "Other" includes sidewalk, bicycle lane, median/crossing island, parking lane/zone, shoulder/roadside, driveway access, shared-use path, and non-traffic area, which may or may not have been at intersection, but 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.
 Note: Unknowns were removed before calculating percentages.

Seventy-three percent (27) of the child pedalcyclists in traffic crashes were killed during the weekday and 27 percent (10) were killed during the weekend in 2018. Figure 8 provides time of day and day of week information for the 2018 child pedalcyclist fatalities in traffic crashes:

- The highest total percentage (38%) occurred from 3 to 5:59 p.m., followed by 24 percent from 12 to 2:59 p.m. and also 6 to 8:59 p.m.
- The highest weekday percentage (44%) occurred from 3 to 5:59 p.m., followed by 30 percent from 12 to 2:59 p.m. and 19 percent from 6 to 8:59 p.m.
- The highest weekend percentage (40%) occurred from 6 to 8:59 p.m., followed by 20 percent from 3 to 5:59 p.m. and also 9 to 11:59 p.m.

Figure 8
Percentage of Child Pedalcyclist Fatalities in Traffic Crashes, by Time of Day and Day of Week, 2018

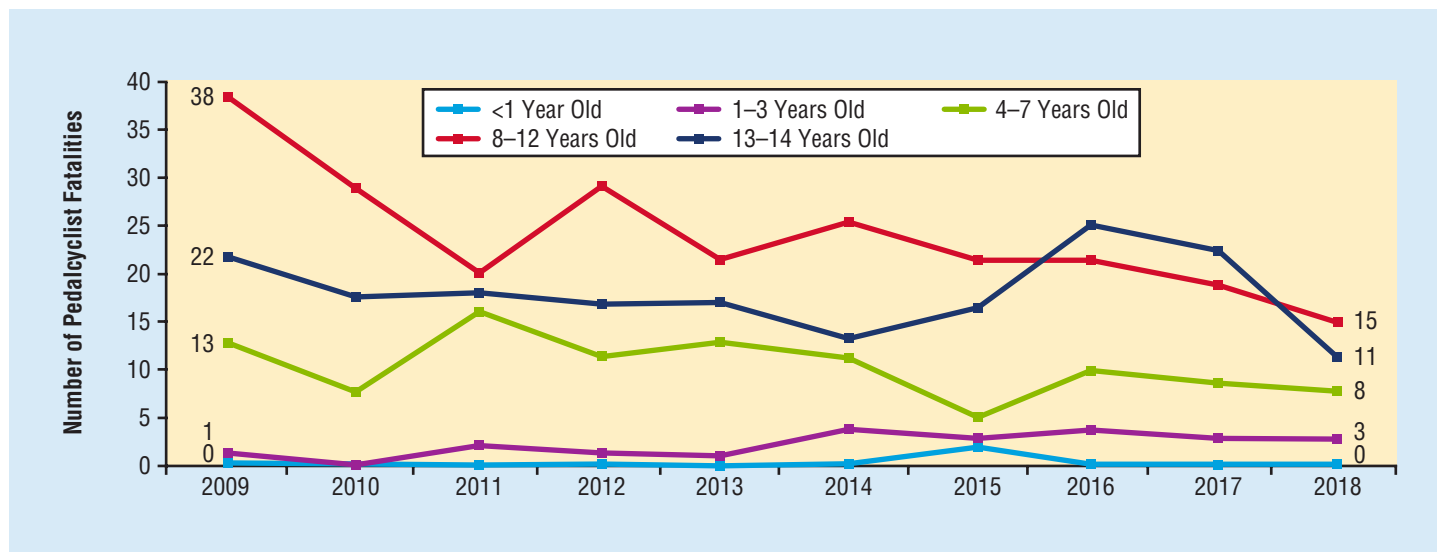


Source: FARS 2018 ARF
 Weekday—Monday 6 a.m. to Friday 5:59 p.m.
 Weekend—Friday 6 p.m. to Monday 5:59 a.m.

Figure 9 contains the child pedalcyclist fatality trends of five age groups from 2009 to 2018:

- The number of child pedalcyclist traffic fatalities in traffic crashes decreased by 50 percent, from 74 fatalities to 37:
 - The under 1 age group fatalities remained 0 for 2009 and 2018.
 - The 1-to-3 age group increased by 200 percent from 1 to 3.
 - The 4-to-7 age group decreased by 38 percent, from 13 to 8.
 - The 8-to-12 age group decreased by 61 percent, from 38 to 15.
 - The 13-to-14 age group decreased by 50 percent, from 22 to 11.

Figure 9
Child Pedalcyclist Fatalities in Traffic Crashes, by Age Group, 2009-2018



Source: FARS 2009-2017 Final File, 2018 ARF

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 a driver with a BAC of .08 g/dL or higher is considered to be an alcohol-impaired-driving crash.

In 2018, of the 1,038 children killed in traffic crashes, 231 children (22%) were killed in alcohol-impaired-driving crashes. Of these 231 deaths:

- 128 children (55%) were passengers of vehicles with alcohol-impaired drivers.
 - Of these 128 children killed, restraint use was known for 115, of whom 52 (45%) were unrestrained;
- 71 children (31%) were passengers of other vehicles in alcohol-impaired-driving crashes.
 - Of these 71 children killed, restraint use was known for 65, of whom 14 (22%) were unrestrained;
- 31 children (13%) were nonoccupants killed in alcohol-impaired-driving crashes; and
- 1 child (<1%) was the alcohol-impaired driver killed.

Fatalities by State

Table 5 contains the child traffic fatalities by State and age group in 2018. Included in this table is Puerto Rico, which is not included in the overall U.S. total. In 2018:

- Among all States, child traffic fatalities ranged from 0 (the District of Columbia) to 142 (Texas).
- Texas had the highest number of child traffic fatalities (142), followed by California (93), Florida (69), North Carolina (42) and Georgia (42).

Table 5
Child Fatalities in Traffic Crashes, by State and Age Group, 2018

| State | Age Group | | | | | Total |
|----------------------|-----------|------------|------------|------------|------------|--------------|
| | <1 | 1-3 | 4-7 | 8-12 | 13-14 | |
| Alabama | 5 | 7 | 9 | 12 | 3 | 36 |
| Alaska | 0 | 0 | 2 | 4 | 0 | 6 |
| Arizona | 4 | 8 | 6 | 9 | 5 | 32 |
| Arkansas | 0 | 5 | 4 | 5 | 2 | 16 |
| California | 9 | 23 | 16 | 31 | 14 | 93 |
| Colorado | 2 | 4 | 9 | 7 | 3 | 25 |
| Connecticut | 0 | 0 | 1 | 0 | 0 | 1 |
| Delaware | 0 | 1 | 1 | 1 | 2 | 5 |
| District of Columbia | 0 | 0 | 0 | 0 | 0 | 0 |
| Florida | 5 | 14 | 18 | 21 | 11 | 69 |
| Georgia | 2 | 9 | 14 | 10 | 7 | 42 |
| Hawaii | 0 | 0 | 1 | 1 | 0 | 2 |
| Idaho | 0 | 2 | 1 | 2 | 0 | 5 |
| Illinois | 0 | 7 | 5 | 3 | 4 | 19 |
| Indiana | 0 | 2 | 7 | 7 | 6 | 22 |
| Iowa | 0 | 1 | 1 | 2 | 3 | 7 |
| Kansas | 0 | 6 | 1 | 6 | 2 | 15 |
| Kentucky | 2 | 4 | 4 | 6 | 3 | 19 |
| Louisiana | 1 | 7 | 7 | 5 | 2 | 22 |
| Maine | 0 | 0 | 1 | 1 | 0 | 2 |
| Maryland | 2 | 3 | 5 | 4 | 2 | 16 |
| Massachusetts | 2 | 1 | 2 | 1 | 1 | 7 |
| Michigan | 1 | 7 | 6 | 7 | 10 | 31 |
| Minnesota | 0 | 5 | 4 | 3 | 2 | 14 |
| Mississippi | 1 | 5 | 5 | 12 | 1 | 24 |
| Missouri | 1 | 5 | 4 | 4 | 2 | 16 |
| Montana | 0 | 2 | 2 | 4 | 1 | 9 |
| Nebraska | 0 | 1 | 2 | 3 | 3 | 9 |
| Nevada | 0 | 0 | 1 | 4 | 2 | 7 |
| New Hampshire | 0 | 0 | 2 | 0 | 1 | 3 |
| New Jersey | 0 | 2 | 2 | 5 | 3 | 12 |
| New Mexico | 1 | 1 | 5 | 7 | 2 | 16 |
| New York | 1 | 3 | 5 | 7 | 5 | 21 |
| North Carolina | 6 | 8 | 6 | 16 | 6 | 42 |
| North Dakota | 0 | 1 | 1 | 1 | 0 | 3 |
| Ohio | 4 | 7 | 11 | 7 | 3 | 32 |
| Oklahoma | 0 | 10 | 2 | 3 | 2 | 17 |
| Oregon | 0 | 3 | 5 | 8 | 0 | 16 |
| Pennsylvania | 4 | 4 | 6 | 9 | 1 | 24 |
| Rhode Island | 0 | 0 | 2 | 0 | 1 | 3 |
| South Carolina | 0 | 6 | 9 | 11 | 5 | 31 |
| South Dakota | 1 | 3 | 2 | 1 | 0 | 7 |
| Tennessee | 1 | 7 | 6 | 7 | 5 | 26 |
| Texas | 8 | 24 | 31 | 56 | 23 | 142 |
| Utah | 0 | 2 | 1 | 6 | 5 | 14 |
| Vermont | 0 | 0 | 1 | 0 | 0 | 1 |
| Virginia | 1 | 2 | 7 | 7 | 1 | 18 |
| Washington | 2 | 1 | 5 | 3 | 2 | 13 |
| West Virginia | 1 | 2 | 3 | 3 | 0 | 9 |
| Wisconsin | 0 | 3 | 3 | 6 | 1 | 13 |
| Wyoming | 0 | 1 | 1 | 1 | 1 | 4 |
| U.S.Total | 67 | 219 | 255 | 339 | 158 | 1,038 |
| Puerto Rico | 0 | 3 | 0 | 2 | 2 | 7 |

Source: FARS 2018 ARF

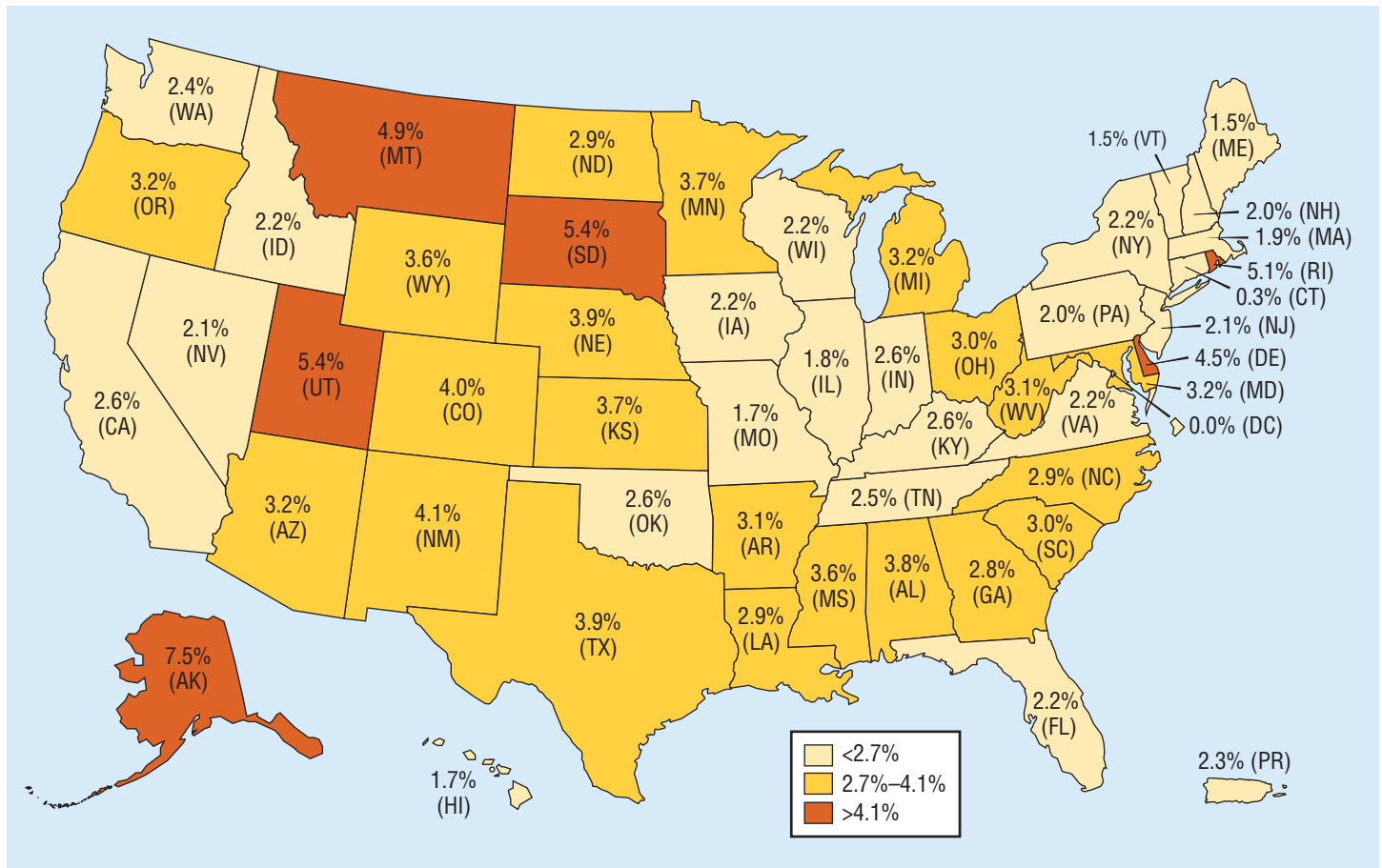
For each State in 2018, Table 6 contains the total traffic fatalities, child motor vehicle traffic fatalities, percentage of child motor vehicle traffic fatalities divided by total traffic fatalities, child population, and child fatality rate per 100,000 child population. Included in this table is Puerto Rico, which is not included in the overall U.S. total. Figure 10 contains a color-coded map of the percentage of children fatalities by State in 2018.

In 2018:

- The States with the highest percentages of child motor vehicle traffic fatalities by total traffic fatalities compared to the 2.8 percent in the United States were Alaska (7.5%), Utah (5.4%), South Dakota (5.4%), and Rhode Island (5.1%).
- The States with the highest child fatality rates compared to the U.S. child fatality rate of 1.70 were Montana (4.70), Mississippi (4.10), and New Mexico (4.01).

Additional State/county-level data is available at NHTSA’s State Traffic Safety Information website (<https://cdan.nhtsa.gov/stsi.htm>).

Figure 10
Percentage of Child Fatalities in Traffic Crashes, by State, 2018



Source: FARS 2018 ARF

Important Safety Reminders

- Every car and every car seat or booster seat has different installation instructions, so make sure you read both.
- 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 size.
- Remember that children in rear-facing seats should never be placed in front of an active passenger air bag.
- Use either lower anchors and tether (the LATCH system) or the seat belt and tether when installing forward-facing seats.
- Keep children in the back seat until at least age 13. It’s the safest place to ride.
- Remember to register your car seat or booster seat so you can be notified in the event of a safety recall.

Table 6
Child Fatalities and Fatality Rates in Traffic Crashes, by State, 2018

| State | Total Fatalities | Child Fatalities | | Child Population | Child Fatality Rate Per 100,000 Child Population |
|----------------------|------------------|------------------|--------------------------------|-------------------|--|
| | | Number | Percentage of Total Fatalities | | |
| Alabama | 953 | 36 | 3.8% | 901,598 | 3.99 |
| Alaska | 80 | 6 | 7.5% | 154,930 | 3.87 |
| Arizona | 1,010 | 32 | 3.2% | 1,364,083 | 2.35 |
| Arkansas | 516 | 16 | 3.1% | 584,413 | 2.74 |
| California | 3,563 | 93 | 2.6% | 7,478,175 | 1.24 |
| Colorado | 632 | 25 | 4.0% | 1,050,185 | 2.38 |
| Connecticut | 294 | 1 | 0.3% | 597,042 | 0.17 |
| Delaware | 111 | 5 | 4.5% | 168,712 | 2.96 |
| District of Columbia | 31 | 0 | 0.0% | 111,812 | 0.00 |
| Florida | 3,133 | 69 | 2.2% | 3,507,017 | 1.97 |
| Georgia | 1,504 | 42 | 2.8% | 2,071,076 | 2.03 |
| Hawaii | 117 | 2 | 1.7% | 256,527 | 0.78 |
| Idaho | 231 | 5 | 2.2% | 370,340 | 1.35 |
| Illinois | 1,031 | 19 | 1.8% | 2,357,869 | 0.81 |
| Indiana | 858 | 22 | 2.6% | 1,297,240 | 1.70 |
| Iowa | 318 | 7 | 2.2% | 607,897 | 1.15 |
| Kansas | 404 | 15 | 3.7% | 587,402 | 2.55 |
| Kentucky | 724 | 19 | 2.6% | 837,926 | 2.27 |
| Louisiana | 768 | 22 | 2.9% | 915,944 | 2.40 |
| Maine | 137 | 2 | 1.5% | 205,113 | 0.98 |
| Maryland | 501 | 16 | 3.2% | 1,113,454 | 1.44 |
| Massachusetts | 360 | 7 | 1.9% | 1,119,313 | 0.63 |
| Michigan | 974 | 31 | 3.2% | 1,778,233 | 1.74 |
| Minnesota | 381 | 14 | 3.7% | 1,086,377 | 1.29 |
| Mississippi | 664 | 24 | 3.6% | 585,371 | 4.10 |
| Missouri | 921 | 16 | 1.7% | 1,142,600 | 1.40 |
| Montana | 182 | 9 | 4.9% | 191,343 | 4.70 |
| Nebraska | 230 | 9 | 3.9% | 398,790 | 2.26 |
| Nevada | 330 | 7 | 2.1% | 574,624 | 1.22 |
| New Hampshire | 147 | 3 | 2.0% | 209,494 | 1.43 |
| New Jersey | 564 | 12 | 2.1% | 1,610,804 | 0.74 |
| New Mexico | 391 | 16 | 4.1% | 399,009 | 4.01 |
| New York | 943 | 21 | 2.2% | 3,377,638 | 0.62 |
| North Carolina | 1,437 | 42 | 2.9% | 1,902,430 | 2.21 |
| North Dakota | 105 | 3 | 2.9% | 152,549 | 1.97 |
| Ohio | 1,068 | 32 | 3.0% | 2,140,724 | 1.49 |
| Oklahoma | 655 | 17 | 2.6% | 798,336 | 2.13 |
| Oregon | 506 | 16 | 3.2% | 726,003 | 2.20 |
| Pennsylvania | 1,190 | 24 | 2.0% | 2,183,844 | 1.10 |
| Rhode Island | 59 | 3 | 5.1% | 168,074 | 1.78 |
| South Carolina | 1,037 | 31 | 3.0% | 918,200 | 3.38 |
| South Dakota | 130 | 7 | 5.4% | 183,776 | 3.81 |
| Tennessee | 1,041 | 26 | 2.5% | 1,249,028 | 2.08 |
| Texas | 3,642 | 142 | 3.9% | 6,163,292 | 2.30 |
| Utah | 260 | 14 | 5.4% | 778,881 | 1.80 |
| Vermont | 68 | 1 | 1.5% | 94,714 | 1.06 |
| Virginia | 820 | 18 | 2.2% | 1,553,743 | 1.16 |
| Washington | 546 | 13 | 2.4% | 1,392,419 | 0.93 |
| West Virginia | 294 | 9 | 3.1% | 300,688 | 2.99 |
| Wisconsin | 588 | 13 | 2.2% | 1,053,529 | 1.23 |
| Wyoming | 111 | 4 | 3.6% | 112,863 | 3.54 |
| U.S. Total | 36,560 | 1,038 | 2.8% | 60,885,444 | 1.70 |
| Puerto Rico | 308 | 7 | 2.3% | 474,560 | 1.48 |

Sources: FARS 2018 ARF; Population – Census Bureau

Crash Report Sampling System (CRSS) Replaced the National Automotive Sampling System (NASS) General Estimates System (GES)

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 NASS GES in 2016. For more information on CRSS, see the Additional Resources section of the CRSS web page at www.nhtsa.gov/crash-data-systems/crash-report-sampling-system.

Methodology Change for Estimating People Injured

NCSA has changed the methodology of estimating people nonfatally injured in motor vehicle traffic crashes. The new approach is to combine 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 nonfatal injury crashes from NASS GES/CRSS. The old approach was to extract people injured from only NASS GES/CRSS by selecting people nonfatally injured in all crashes, regardless of crash severity. This change in methodology caused some estimates of people injured to change for some prior years.

Fatality Analysis Reporting System (FARS)

The 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 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 final 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 crashes for 2017 was 37,473, which was updated from 37,133 from the 2017 ARF. The number of children fatalities from the 2017 Final file was 1,158 which was updated from 1,147 from the 2017 ARF.

The suggested APA format citation for this document is:

National Center for Statistics and Analysis. (2021, January). Children: 2018 data. (Traffic Safety Facts. Report No. DOT HS 812 887). National Highway Traffic Safety Administration.

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/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*, *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*, and *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 annual Traffic Safety Facts report can be found at <https://crashstats.nhtsa.dot.gov/>.



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**