# **Traffic Safety Facts**

2017 Data

May 2019

DOT HS 812 719



#### **Key Findings**

- Of the 37,133 motor vehicle traffic fatalities in 2017 in the United States, 1,147 (3%) were children 14 and younger.
- There were 1,147 children killed in motor vehicle traffic crashes in 2017, an 8-percent decrease from 1,244 in 2016 and a 15-percent decrease from 1,350 in 2008.
- On average, 3 children were killed every day in traffic crashes in 2017.
- Based on known restraint use in 2017, when the drivers involved in fatal crashes were unrestrained, 71 percent of the children were also unrestrained.
- Of the 23,551 passenger vehicle occupants killed in 2017 in fatal crashes, 794 (3%) were children. Based on known restraint use, of these 721 child occupant fatalities, 267 (37%) were unrestrained.
- Of the 5,977 pedestrian traffic fatalities in 2017, 214 (4%) were children.
- · Of the 783 pedalcyclist traffic fatalities in 2017, 53 (7%) were children.
- Of the 1,147 children killed in traffic crashes in 2017, 220 children (19%) were killed in alcohol-impaireddriving crashes.



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

In this 2017 fact sheet, information on children is presented as follows:

- Overview
- Restraint Use and Effectiveness
- Pedestrians
- Pedalcyclists

- Children in Alcohol-Impaired-Driving Crashes
- Child Fatalities in Motor Vehicle Traffic Crashes, by State
- Important Safety Reminders

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, but at the time of publication, estimates for 2016 and 2017 were not available. For more information, read Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES) at the end of this publication.

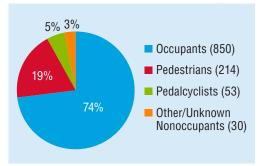
#### Overview

In 2017:

- There were 61 million children in the United States, 19 percent of the total U.S. population.
- Of the 37,133 motor vehicle traffic fatalities in the United States, 1,147 (3%) were children.
- Child motor vehicle traffic fatalities decreased by 8 percent from 1,244 in 2016 and declined by 15 percent from 1,350 in 2008.
- On average, 3 children were killed every day in the United States in traffic crashes.
- Boys accounted for 56 percent of child fatalities in traffic crashes.

Figure 1 displays the distribution of the 1,147 child motor vehicle traffic fatalities—74 percent (850) were occupants and 26 percent (297) were nonoccupants (pedestrians, pedalcyclists, and other) in 2017.

Figure 1 Child Motor Vehicle Traffic Fatalities. 2017



Source: FARS 2017 Annual Report File (ARF)

<sup>&</sup>lt;sup>1</sup> 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.

As shown in Figure 2, the number of child motor vehicle traffic fatalities decreased by 15 percent from 1,350 in 2008 to 1,147 in 2017,

and the child fatality rate per 100,000 child population decreased by 15 percent from 2.22 in 2008 to 1.88 in 2017.

Figure 2
Child Motor Vehicle Traffic Fatalities and Child Fatality Rates per 100,000 Child Population, 2008–2017



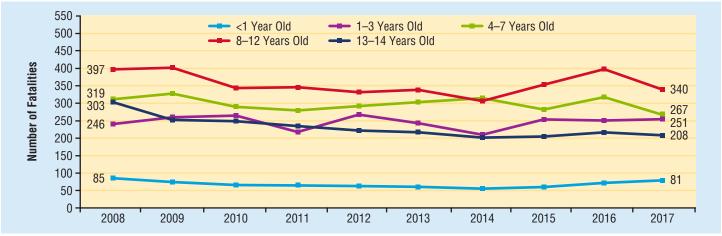
Sources: FARS 2008-2016 Final File, 2017 ARF; Population - U.S. Bureau of the Census.

Figure 3 displays the child motor vehicle traffic fatality trends of five age groups from 2008 to 2017.

- Under-1 age group 5-percent decrease from 85 to 81
- 1-to-3 age group 2-percent increase from 246 to 251
- 4-to-7 age group 16-percent decrease from 319 to 267
- 8-to-12 age group 14-percent decrease from 397 to 340
- 13-to-14 age group 31-percent decrease from 303 to 208.

Figure 3

Child Motor Vehicle Traffic Fatalities, by Age Group, 2008–2017



Source: FARS 2008-2016 Final File, 2017 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.<sup>2</sup>

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.<sup>3</sup>

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

<sup>&</sup>lt;sup>3</sup> 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). Washington, DC: National Highway Traffic Safety Administration. Available at crashstats. nhtsa.dot.gov/Api/Public/ViewPublication/809199.

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). In 2017:

- Of the 23,551 passenger vehicle occupants *killed* in fatal crashes, 794 (3.3%) were children.
  - Of these 794 child passenger vehicle occupants *killed* in fatal crashes, restraint use was known for 721, of whom 267 (37%) were unrestrained. This percentage (37%) was lower compared to all ages (47%).
- Of the 39,822 passenger vehicle occupants who *survived* in fatal crashes, 4,700 (11.8%) were children.
  - Of these 4,700 child passenger vehicle occupants who *survived* in fatal crashes, restraint use was known for 4,490, of whom 509 (11%) were unrestrained. This percentage (11%) was lower compared to all ages (13%).
- Of the 63,373 passenger vehicle occupants *involved* in fatal crashes, 5,494 (8.7%) were children.
  - Of these 5,494 child passenger vehicle occupants *involved* in fatal crashes, restraint use was known for 5,211, of whom 776 (15%) were unrestrained.

Table 1
Passenger Vehicle Occupants Involved in Fatal Crashes, by Survival Status, Age Group, and Restraint Use, 2017

				Restra	int Use							
Surviva	I Status/	Restr	ained	Unrest	rained	Unkr	nown	Total		Percent "Known"	Percent "Known"	
	Group	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Restrained	Unrestrained	
	<1	54	70%	18	23%	5	6%	77	100%	75%	25%	
	1–3	128	75%	32	19%	10	6%	170	100%	80%	20%	
	4–7	113	57%	64	32%	23	12%	200	100%	64%	36%	
	8–12	105	46%	102	45%	21	9%	228	100%	51%	49%	
Killed	13–14	54	45%	51	43%	14	12%	119	100%	51%	49%	
	<15	454	57%	267	34%	73	9%	794	100%	63%	37%	
	15-20	1,080	43%	1,170	47%	251	10%	2,501	100%	48%	52%	
	All Other	9,854	49%	8,639	43%	1,763	9%	20,256	100%	53%	47%	
	Total	11,388	48%	10,076	43%	2,087	9%	23,551	100%	53%	47%	
	<1	225	93%	12	5%	5	2%	242	100%	95%	5%	
	1–3	871	90%	70	7%	32	3%	973	100%	93%	7%	
	4–7	1,077	85%	145	11%	52	4%	1,274	100%	88%	12%	
	8-12	1,271	84%	166	11%	71	5%	1,508	100%	88%	12%	
Survived	13–14	537	76%	116	17%	50	7%	703	100%	82%	18%	
	<15	3,981	85%	509	11%	210	4%	4,700	100%	89%	11%	
	15-20	3,958	72%	1,041	19%	469	9%	5,468	100%	79%	21%	
	All Other	23,700	80%	3,241	11%	2,713	9%	29,654	100%	88%	12%	
	Total	31,639	79%	4,791	12%	3,392	9%	39,822	100%	87%	13%	
	<1	279	87%	30	9%	10	3%	319	100%	90%	10%	
	1–3	999	87%	102	9%	42	4%	1,143	100%	91%	9%	
	4–7	1,190	81%	209	14%	75	5%	1,474	100%	85%	15%	
T	8–12	1,376	79%	268	15%	92	5%	1,736	100%	84%	16%	
Total Involved	13–14	591	72%	167	20%	64	8%	822	100%	78%	22%	
mvorvou	<15	4,435	81%	776	14%	283	5%	5,494	100%	85%	15%	
	15–20	5,038	63%	2,211	28%	720	9%	7,969	100%	69%	31%	
	All Other	33,554	67%	11,880	24%	4,476	9%	49,910	100%	74%	26%	
	Total	43,027	68%	14,867	23%	5,479	9%	63,373	100%	74%	26%	

Table 2 presents the restraint use of child passenger vehicle occupants killed in traffic crashes and their respective drivers (killed or survived) in 2017. Based on known restraint use:

• When the drivers were restrained, 26 percent of the children were unrestrained.

• When the drivers were unrestrained, 71 percent of the children were also unrestrained.

Table 2
Child Passenger Vehicle Occupants Killed in Traffic Crashes, by Their Restraint Use and Their Driver's Restraint Use, 2017

	Child Restraint Use									
Driver	Restrained		Unrest	rained	Unkr	nown	To	tal	Percent "Known" Child	Percent "Known" Child
<b>Restraint Use</b>	Number	Percent	Number	Percent	Number	Percent	Number   Percent		Restrained	Unrestrained
Restrained	389	70%	136	25%	28	5%	553	100%	74%	26%
Unrestrained	47	28%	115	68%	7	4%	169	100%	29%	71%
Unknown	15	22%	15	22%	37	55%	67	100%	50%	50%
Total	451	57%	266	34%	72	9%	789	100%	63%	37%

Source: FARS 2017 ARF.

Table 3 contains the number of children killed in passenger vehicles by age group and type of restraint. In 2017:

- Of the 794 children killed in passenger vehicle crashes, restraint use was known for 721, of whom 267 (37%) were unrestrained.
  - Of the 77 infants (under 1 year old) killed, restraint use was known for 72, of whom 18 (25%) were unrestrained.
  - Of the 170 children 1 to 3 years old killed, restraint use was known for 160, of whom 32 (20%) were unrestrained.

- Of the 200 children 4 to 7 years old killed, restraint use was known for 177, of whom 64 (36%) were unrestrained.
- Of the 228 children 8 to 12 years old killed, restraint use was known for 207, of whom 102 (49%) were unrestrained.
- Of the 119 children 13 to 14 years old killed, restraint use was known for 105, of whom 51 (49%) were unrestrained.

Table 3
Children Killed in Passenger Vehicles, by Age Group and Type of Restraint, 2017

	Age Group											
	<	1	1-	-3	4-	-7	8-	12	13-	-14	To	tal
Type of Restraint	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
None Used	18	23%	32	19%	64	32%	102	45%	51	43%	267	34%
Child Restraint	52	68%	116	68%	71	36%	5	2%	0	0%	244	31%
Forward Facing	3	4%	46	27%	13	7%	0	0%	0	0%	62	8%
Rear Facing	29	38%	3	2%	1	1%	0	0%	0	0%	33	4%
Booster Seat	0	0%	9	5%	31	16%	3	1%	0	0%	43	5%
Unknown Child Restraint	20	26%	58	34%	26	13%	2	1%	0	0%	106	13%
Seat Belt Used	1	1%	11	6%	37	19%	99	43%	54	45%	202	25%
Lap Belt Only	1	1%	2	1%	6	3%	8	4%	2	2%	19	2%
Shoulder and Lap Belt	0	0%	9	5%	31	16%	91	40%	52	44%	183	23%
Restraint Used - Unknown	1	1%	1	1%	5	3%	1	0%	0	0%	8	1%
Unknown	5	6%	10	6%	23	12%	21	9%	14	12%	73	9%
Total	77	100%	170	100%	200	100%	228	100%	119	100%	794	100%

Analysis has shown that among children under 5 years old, an estimated 325 lives were saved in 2017 by restraint use. 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 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.

NHTSA conducted the National Survey of the Use of Booster Seats (NSUBS) in July 2018 and produced a technical report, *The 2017 National Survey of the Use of Booster Seats* (Report No. DOT HS 812 617) (latest available data).

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

Child Restraint Use, by Age Group and Race/Ethnicity in 2017

	Age Group (Years)							
Race/Ethnicity	<1	1–3	4–7	8–12				
Hispanic	99%	98%	95%	91%				
African-American Non-Hispanic	93%	87%	76%	80%				
White Non-Hispanic	98%	97%	87%	82%				
Asian Non-Hispanic	NA	99%	100%	91%				
Other Non-Hispanic	97%	92%	91%	83%				

Source: Li, H. R., Pickrell, T. M. (2018, September). *The 2017 National Survey of the Use of Booster Seats* (Report No. DOT HS 812 617). Washington, DC: National Highway Traffic Safety Administration. Available at crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812617

NA: Data not sufficient to produce a reliable estimate.

#### **Pedestrians**

A pedestrian is any person on foot, walking, running, jogging, hiking, sitting, or lying down, who is involved in a motor vehicle traffic crash.<sup>4</sup> This definition excludes people on personal conveyances like roller skates, in-line skates, skateboards, baby strollers, scooters, toy wagons, motorized skateboards, motorized toy cars, Segway-style devices, motorized and non-motorized wheelchairs, and scooters for those with disabilities or injuries.

#### In 2017:

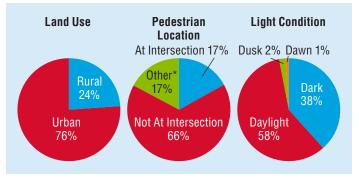
- Of the 5,977 pedestrian fatalities in traffic crashes, 214 (3.6%) were children.
- Thirteen percent of the 1,147 children killed in traffic crashes were pedestrians.
- Of the 214 child pedestrians killed in traffic crashes, 128 (60%) were boys.
- Of the 214 child pedestrians killed, 202 (94%) were killed in single-vehicle crashes and 12 (6%) were killed in multiple-vehicle crashes.
- Of the 202 child pedestrians killed in single-vehicle crashes:
  - 167 children (82.7%) were struck by the front of the vehicle;
  - 1 (0.5%) was struck by the right side of the vehicle;
  - 3 (1.5%) were struck by the left side of the vehicle;
  - 10 (5.0%) were struck by the rear of the vehicle; and
  - 21 (10.4%) were unknowns.
- Of the 214 child pedestrians killed, 36 (17%) were struck by a hit-and-run driver.

<sup>&</sup>lt;sup>4</sup> 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.

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 2017:

- Twenty-four percent (49) were killed in rural areas, and 76 percent (153) were killed in urban areas.<sup>56</sup>
- Sixty-six percent (140) occurred at non-intersection locations, compared to 17 percent (36) at intersections and 17 percent (36) at other locations (8 on shoulder/roadside, 12 on sidewalk, 11 on non-trafficway areas and 5 on driveway access).<sup>6</sup>
- Fifty-eight percent (125) were killed during daylight compared to 38 percent (81) in the dark, 2 percent (5) during dusk, and 1 percent (3) during dawn.<sup>6</sup> Compared to all ages, more child pedestrians were killed during daylight when compared to adult pedestrians.

Figure 4
Percentage of Child Pedestrian Fatalities in Traffic
Crashes in Relation to Land Use, Pedestrian Location,
And Light Condition, 2017



Source: FARS 2017 ARF.

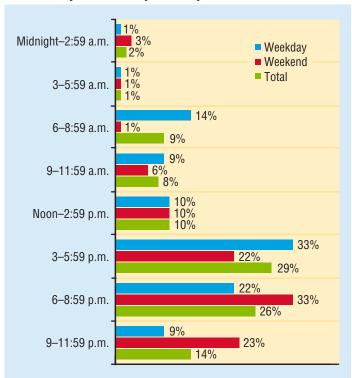
Note: Unknown values were removed before calculating percentages. \*Based on location of pedestrian struck at the time of crash. Other includes parking lane/zone, bicycle lane, shoulder/roadside, sidewalk, median/crossing island, driveway access, shared-use path/trail, non-trafficway area, and other, 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.

Sixty-four percent (136) of child pedestrian fatalities in traffic crashes occured during weekdays (6 a.m. Monday to 5:59 p.m. Friday), and 36 percent (78) occured during the weekend (6 p.m. Friday to 5:59 a.m. Monday) in 2017. 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 2017 child pedestrian fatalities in traffic crashes:

The highest weekday percentage (33%) occurred from 3 to 5:59 p.m., followed by 22 percent from 6 to 8:59 p.m. and 14 percent from 6 to 8:59 a.m.;

- The highest weekend percentage (33%) occurred from 6 to 8:59 p.m., followed by 23 percent from 9 to 11:59 p.m. and 22 percent from 3 to 5:59 p.m.; and
- The highest total percentage (29%) occurred from 3 to 5:59 p.m., followed by 26 percent from 6 to 8:59 p.m.

Figure 5
Percentage of Child Pedestrian Fatalities in Traffic Crashes, by Time of Day and Day of Week, 2017



Source: FARS 2017 ARF.

Weekday: 6 a.m. Monday to 5:59 p.m. Friday; Weekend: 6 p.m. Friday to 5:59 a.m. Monday.

Unknown values were removed before calculating percentages.

Figure 6 contains the child pedestrian fatality trends of five age groups from 2008 to 2017:

- The number of child pedestrian fatalities in traffic crashes decreased by 20 percent, from 269 fatalities to 214:
  - The under-1 age group decreased by 33 percent, from 3 to 2.
  - The 1-to-3 age group decreased by 3 percent, from 70 to 68.
  - The 4-to-7 age group decreased by 41 percent, from 73 to 43.
  - The 8-to-12 age group decreased by 17 percent, from 69 to 57.
  - The 13-to-14 age group decreased by 19 percent, from 54 to 44.

See the U.S. Census Bureau link to define rural and urban areas: www.census.gov/geo/reference/ua/urban-rural-2010.html.

<sup>&</sup>lt;sup>6</sup> Unknown values were removed before calculating percentages.

120 4-7 Years Old <1 Year Old 1-3 Years Old 110 **Number of Pedestrian Fatalities** 8-12 Years Old 13-14 Years Old 100 90 80 70 60 50 40 30 20 10 0 2010 2011 2012 2013 2014 2015 2016 2008 2009 2017

Figure 6
Child Pedestrian Fatalities in Traffic Crashes, by Age Group, 2008–2017

Source: FARS 2008-2016 Final File, 2017 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.<sup>7</sup>

In 2017:

- Of the 783 pedalcyclists killed in traffic crashes, 53 (7%) were children.
- Five percent of the 1,147 children killed in traffic crashes were pedalcyclists.
- Of the 53 child pedalcyclists killed in traffic crashes, 43 (81%) were boys.
- Of the 53 child pedalcyclists killed in traffic crashes, 31 (58%) were helmeted, 4 (8%) were unhelmeted, and 18 (34%) were unknown.
- Of the 53 child pedalcyclists killed, 52 (98%) were killed in single-vehicle crashes and 1 (2%) was killed in multiple-vehicle crashes.
- Of the 52 child pedalcyclists killed in single-vehicle crashes,
  - 41 (78.8%) were struck by the front of the vehicle,
  - 4 (7.7%) were struck by the right side of the vehicle,
  - 1 (1.9%) was struck by the left side of the vehicle,
  - 2 (3.8%) were struck by the rear of the vehicle, and
  - 4 (7.7%) were unknowns.
- Of the 53 child pedalcyclists killed, 3 (6%) were struck by a hitand-run driver.

- Forty percent (24) were killed in rural areas, and 60 percent (36) were killed in urban areas.<sup>89</sup>
- Fifty-three percent (28) occurred at non-intersection locations, compared to 41 percent (22) at intersections and 6 percent (3) at other locations (1 on driveway access and 2 on sidewalks).
- Seventy percent (37) were killed during daylight, compared to 25 percent (13) in the dark and 6 percent (3) during dusk. Compared to all ages, more child pedalcyclists were killed during daylight than adult pedalcyclists.

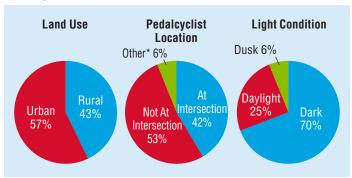
Figure 7 contains information on three environmental characteristics (land use, pedalcyclist location, and light condition) where/when child pedalcyclist fatalities in traffic crashes occurred in 2017:

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.

See the U.S. Census Bureau link to define rural and urban areas: www.census.gov/geo/reference/ua/urban-rural-2010.html.

<sup>&</sup>lt;sup>9</sup> Unknown values were removed before calculating percentages.

Figure 7
Percentage of Child Pedalcyclist Fatalities in Traffic
Crashes in Relation to Land Use, Pedalcyclist Location,
and Light Condition, 2017



Source: FARS 2017 ARF.

Note: Unknown values were removed before calculating percentages.

\*Other includes parking lane/zone, bicycle lane, shoulder/roadside, sidewalk, median/crossing island, driveway access, shared-use path/trail, non-trafficway area, and other, 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.

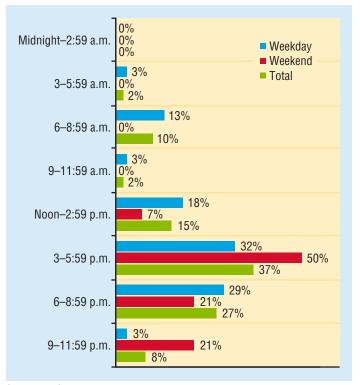
Seventy-two percent (38) of the child pedalcyclists in traffic crashes were killed during the weekday, and 26 percent (14) were killed during the weekend in 2017. Figure 8 provides time of day and day of week information for the 2017 child pedalcyclist fatalities in traffic crashes:

- The highest weekday percentage (32%) occurred from 3 to 5:59 p.m., followed by 29 percent from 6 to 8:59 p.m. and 18 percent from noon to 2:59 p.m.
- The highest weekend percentage (50%) occurred from 6 to 8:59 p.m., followed by 21 percent from noon to 2:59 p.m and also 9 to 11:59 p.m.
- The highest total percentage (37%) occurred from 3 to 5:59 p.m., followed by 27 percent from 6 to 8:59 p.m. and 15 percent from noon to 2:59 p.m.

Figure 8

Percentage of Child Pedalcyclist Fatalities in Traffic

Crashes, by Time of Day and Day of Week, 2017



Source: FARS 2017 ARF.

Weekday: 6 a.m. Monday to 5:59 p.m. Friday; Weekend: 6 p.m. Friday to 5:59 a.m. Monday.

Figure 9 contains the child pedalcyclist fatality trends of five age groups from 2008 to 2017.

- The number of child pedalcyclist traffic fatalities in traffic crashes decreased by 35 percent, from 81 fatalities to 53:
  - The under-1 age group fatalities remained at 0 for 2008 and 2017.
  - The 1-to-3 age group **increased** by 50 percent from 2 to 3.
  - The 4-to-7 age group decreased by 53 percent, from 19 to 9.
  - The 8-to-12 age group decreased by 49 percent, from 37 to 19.
  - The 13-to-14 age group decreased by 4 percent, from 23 to 22.

50 --- 4-7 Years Old <1 Year Old 1-3 Years Old 45 **Number of Pedalcyclist Fatalities** 8-12 Years Old 13-14 Years Old 40 35 30 25 20 15 10 5 0 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Figure 9

Child Pedalcyclist Traffic Fatalities in Traffic Crashes, by Age Group, 2008–2017

Source: FARS 2008-2016 Final File, 2017 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 2017, of the 1,147 children killed in traffic crashes, 220 children (19%) were killed in alcohol-impaired-driving crashes. Of these 220 deaths:

- 118 children (54%) were passengers of vehicles with alcoholimpaired drivers.
  - Of these 118 children killed, restraint use was known for 105, of whom 49 (42%) were unrestrained;
- 71 children (32%) were passengers of other vehicles in alcoholimpaired-driving crashes.
  - Of these 71 children killed, restraint use was known for 65, of whom 17 (26%) were unrestrained;
- 29 children (10%) were nonoccupants killed in alcohol-impaireddriving crashes; and
- 2 children (<1%) were alcohol-impaired drivers killed.

# Child Fatalities in Motor Vehicle Traffic Crashes, by State

Table 5 contains the child fatalities in motor vehicle traffic crashes by State and age group in 2017. Included in this table is Puerto Rico, which is not included in the overall U.S. total.

In 2017:

- Among all States, child fatalities in motor vehicle traffic crashes ranged from 0 (Vermont) to 127 (Texas).
- Texas had the highest number of child fatalities in motor vehicle traffic crashes (127), followed by California (102), Florida (72), North Carolina (56), and Georgia (48).

Table 5
Child Fatalities in Motor Vehicle Traffic Crashes, by State and Age Group, 2017

Age Group									
State	<1	1–3	4–7	8–12	13–14	Total			
Alabama	1	11	8	9	4	33			
Alaska	0	1	1	2	0	4			
Arizona	2	0	9	13	5	29			
Arkansas	2	3	2	5	2	14			
California	5	23	31	34	9	102			
Colorado	0	3	3	8	4	18			
Connecticut	0	1	0	1	0	2			
Delaware	1	0	1	0	1	3			
District of Columbia	0	0	1	0	0	1			
Florida	3	11	14	25	19	72			
Georgia	5	9	13	14	7	48			
Hawaii	0	1	0	0	1	2			
daho	1	1	1	4	4	11			
Illinois	2	9	9	13	8	41			
Indiana	5	5	13	8	8	39			
	1	3	13	5	6	16			
OWa Canada	·	3	-						
Kansas	0		4	4	3	14			
Kentucky	4	10	3	10	0	27			
Louisiana	1	12	11	3	8	35			
Maine	0	2	1	1	0	4			
Maryland	1	3	1	2	2	9			
Massachusetts	0	0	3	4	1	8			
Vlichigan	4	5	10	6	7	32			
Vinnesota	0	4	1	2	0	7			
Mississippi	2	8	4	4	4	22			
Missouri	1	12	7	14	4	38			
Montana	2	1	1	4	1	9			
Nebraska	1	0	1	4	3	9			
Nevada	0	2	0	5	5	12			
New Hampshire	0	0	0	2	0	2			
New Jersey	0	1	2	2	4	9			
New Mexico	1	2	4	4	4	15			
New York	2	8	7	5	8	30			
North Carolina	5	10	13	17	11	56			
North Dakota	0	1	1	1	1	4			
Ohio	4	9	12	8	6	39			
Oklahoma	2	5	3	10	6	26			
Oregon	1	4	4	5	4	18			
Pennsylvania	0	7	7	11	4	29			
Rhode Island	0	0	0	1	1	2			
South Carolina	1	7	6	9	0	23			
South Dakota	1	1	3	3	1	9			
Tennessee	1	8	3	5	4	21			
Texas	15	27	32	31	22	127			
Jtah	0	4	3	4	4	15			
/ermont	0	0	0	0	0	0			
/irginia	2	5	6	9	4	26			
Vashington	1	2	3	1	1	8			
West Virginia	0	3	0	3	3	9			
Visconsin	1	1	3	4	2	11			
	0	3	1	1	2	7			
Nyoming J.S.Total	81	251	267	340	208	1,147			
Puerto Rico	0	3	1	2	0	6			

For each State in 2017, Table 6 contains the child resident population, total traffic fatalities, child motor vehicle traffic fatalities, percentage of child motor vehicle traffic fatalities divided by total traffic fatalities, and child fatality rate (child motor vehicle traffic fatalities per 100,000 child resident 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 child fatalities by State in 2017.

#### In 2017:

- The States with the highest percentages of child motor vehicle traffic fatalities by total traffic fatalities compared to the 3.1 percent in the United States were South Dakota (7.0%), Wyoming (5.7%), and Utah (5.5%).
- The States with the highest child fatality rates in traffic crashes, compared to the U.S. child traffic fatality rate of 1.88, were Wyoming (6.10), South Dakota (4.96), and Montana (4.71).

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 Motor Vehicle Traffic Crashes by State, 2017

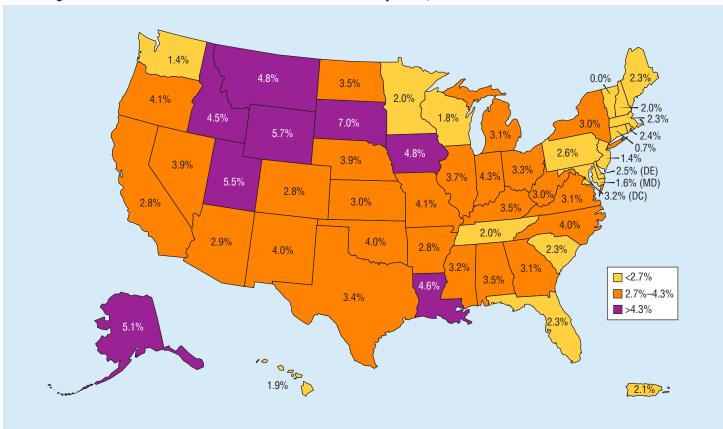


Table 6
Child Fatalities and Fatality Rates in Motor Vehicle Traffic Crashes, by State, 2017

State	Child Resident Population	Total Traffic Fatalities	Child Motor Vehicle Traffic Fatalities	Percentage of Total Traffic Fatalities	Child Motor Vehicle Traffic Fatalities per 100,000 Child Population
Alabama	903,298	948	33	3.5%	3.65
Alaska	155,618	79	4	5.1%	2.57
Arizona	1,354,324	1,000	29	2.9%	2.14
Arkansas	585,736	493	14	2.8%	2.14
California	7,528,645	3,602	102	2.8%	1.35
Colorado		648	18	2.8%	1.72
Connecticut	1,049,246 602,794	278	2	0.7%	0.33
Delaware	169,267	119	3	2.5%	1.77
Dist of Columbia	108,761	31	1	3.2%	
	,				0.92
Florida	3,470,863	3,112	72	2.3%	2.07
Georgia	2,076,045	1,540	48	3.1%	2.31
Hawaii	258,899	107	2	1.9%	0.77
Idaho	368,289	244	11	4.5%	2.99
Illinois	2,389,800	1,097	41	3.7%	1.72
Indiana	1,299,589	914	39	4.3%	3.00
lowa	608,299	330	16	4.8%	2.63
Kansas	593,228	461	14	3.0%	2.36
Kentucky	838,293	782	27	3.5%	3.22
Louisiana	924,199	760	35	4.6%	3.79
Maine	206,402	172	4	2.3%	1.94
Maryland	1,116,908	550	9	1.6%	0.81
Massachusetts	1,121,237	350	8	2.3%	0.71
Michigan	1,783,444	1,030	32	3.1%	1.79
Minnesota	1,082,731	357	7	2.0%	0.65
Mississippi	590,257	690	22	3.2%	3.73
Missouri	1,146,250	930	38	4.1%	3.32
Montana	191,072	186	9	4.8%	4.71
Nebraska	398,315	228	9	3.9%	2.26
Nevada	570,870	309	12	3.9%	2.10
New Hampshire	210,003	102	2	2.0%	0.95
New Jersey	1,628,904	624	9	1.4%	0.55
New Mexico	404,457	379	15	4.0%	3.71
New York	3,440,745	999	30	3.0%	0.87
North Carolina	1,901,425	1,412	56	4.0%	2.95
North Dakota	149,953	115	4	3.5%	2.67
Ohio	2,145,937	1,179	39	3.3%	1.82
Oklahoma	800,624	655	26	4.0%	3.25
Oregon	725,223	437	18	4.1%	2.48
Pennsylvania	2,192,936	1,137	29	2.6%	1.32
Rhode Island	169,742	83	2	2.4%	1.18
South Carolina	915,372	988	23	2.3%	2.51
South Dakota	181,434	129	9	7.0%	4.96
Tennessee	1,248,141	1,040	21	2.0%	1.68
Texas	6,138,042	3,722	127	3.4%	2.07
Utah	776,531	273	15	5.5%	1.93
Vermont	95,508	69	0	0	0
Virginia	1,551,365	839	26	3.1%	1.68
Washington	1,374,816	565	8	1.4%	0.58
West Virginia	305,206	303	9	3.0%	2.95
Wisconsin	1,057,846	613	11	1.8%	1.04
Wyoming	114,663	123	7	5.7%	6.10
U.S. Total	61,021,552	37,133	1,147	3.1%	1.88
Puerto Rico	523,966	290	6	2.1%	1.15
. 45110 11100	1 020,000	200		L. 1 / U	1.10

Sources: FARS 2017 ARF; Population – U.S. Bureau of the Census.

### **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 age and size.
- 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.
- 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.

# Crash Report Sampling System (CRSS) Replaces 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. NCSA released the 2016 CRSS data in March 2018, but is currently reassessing this data, which is subject to change. NCSA plans to release the updated 2016 and new 2017 CRSS files in early 2019. Thus, no CRSS estimates will be presented in this fact sheet. For more information on CRSS, see the Additional Resources section of the CRSS web page at www.nhtsa.gov/national-center-statistics-and-analysis-ncsa/crash-report-sampling-system-crss.

### Fatality Analysis Reporting System (FARS):

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

The updated final counts for a given previous calendar year will be reflected with the release of the recent year's Annual Report File. For example, along with the release of the 2017 ARF this year, the 2016 Final file was also released to replace last year's 2016 ARF. The final fatality count for 2016 is 37,806, which is updated from 37,461 from the 2016 ARF a year ago. The children fatality count from the 2016 Final file is 1,244 versus 1,233 from the 2016 ARF.

The suggested APA format citation for this document is:

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#### For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis, NSA-230, 1200 New Jersey Avenue SE, Washington, DC 20590. NCSA can be contacted at 800-934-8517 or by e-mail at NCSArequests@dot.gov. General information on highway traffic safety can be found at www.nhtsa.gov/research-data/. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Vehicle Safety Hotline at 888-327-4236.

Other fact sheets available from the National Center for Statistics and Analysis are Alcohol-Impaired-Driving, Bicyclists and Other Cyclists, 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 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