# **Traffic Safety Facts**

2016 Data

April 2018 (Revised)

DOT HS 812 491



## **Key Findings**

- Of the 37,461 motor vehicle traffic fatalities in 2016 in the United States, 1,233 (3%) were children 14 and younger.
- There were 1,233 children killed in motor vehicle traffic crashes in 2016, an 8-percent increase from 1,144 in 2015 and a 27-percent decrease from 1,680 in 2007.
- On average, 3 children were killed every day in traffic crashes in 2016.
- Based on known restraint use in 2016, when the drivers involved in fatal crashes were unrestrained, 66 percent of the children were also unrestrained.
- Of the 23,714 passenger vehicle occupants killed in 2016 in fatal crashes, 826 (3%) were children. Based on known restraint use, of these 826 child occupant fatalities, 289 (38%) were unrestrained.
- Of the 5,987 pedestrian traffic fatalities, 245 (4%) were children in 2016.
- Of the 840 pedalcyclist traffic fatalities, 59 (7%) were children in 2016.
- Of the 1,233 children killed in traffic crashes, 214 children (17%) were killed in alcohol-impaired-driving crashes in 2016.

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## Children

Children are defined as 14 years old and younger. Motor vehicle traffic crashes are a leading killer of children.  $^{\rm 1}$ 

In this 2016 fact sheet, information on children is presented as follows:

- Overview
- Restraint Use and Effectiveness
- Pedestrians
- Pedalcyclists

- Children in Alcohol-Impaired-Driving Crashes
- Child Motor Vehicle Traffic Fatalities 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). FARS is a census of fatal crashes in the 50 States, the District of Columbia, and Puerto Rico (Puerto Rico is not included in U.S. totals). The 2016 CRSS data was released the last week of March 2018, and therefore injury estimates are not presented in this publication. For more information about injury estimates, 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 2016:

- There were 61 million children in the United States, 19 percent of the total U.S. population.
- Of the 37,461 motor vehicle traffic fatalities in the United States, 1,233 (3%) of those killed were children.
- While child motor vehicle traffic fatalities have decreased by 27 percent since 2007, the number increased by 8 percent from 1,144 in 2015 to 1,233 in 2016.
- On average, 3 children were killed every day in the United States in traffic crashes.
- Boys accounted for 54 percent of child fatalities in traffic crashes.

Figure 1 displays the distribution of the 1,233 child motor vehicle traffic fatalities—74 percent (908) were occupants and 26 percent (325) were nonoccupants (pedestrians, pedalcyclists, and other) in 2016.

Figure 1 Child Motor Vehicle Traffic Fatalities, 2016



Source: FARS 2016 Annual Report File (ARF)

<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 27 percent from 1,680 in 2007 to 1,233 in 2016, and the child fatality rate per 100,000 child population decreased by 27 percent from 2.77 in 2007 to 2.02 in 2016.

Figure 3 displays the child motor vehicle traffic fatality trends of five age groups from 2007 to 2016.

- Under-1 age group: 28-percent decrease from 100 to 72.
- 1-to-3 age group: 23-percent decrease from 315 to 244.
- 4-to-7 age group: 18-percent decrease from 377 to 311.
- 8-to-12 age group: 17-percent decrease from 477 to 396.
- 13-to-14 age group: 49-percent decrease from 411 to 210.

#### Figure 2

Child Motor Vehicle Traffic Fatalities and Child Fatality Rates per 100,000 Child Population, 2007–2016



Sources: FARS 2007-2015 Final File, 2016 ARF; Population - Bureau of the Census.

#### Figure 3 Child Motor Vehicle Traffic Fatalities, by Age Group, 2007–2016



Source: FARS 2007-2015 Final File, 2016 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.

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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 2016:

- Of the 23,741 passenger vehicle occupants *killed* in fatal crashes, 826 (3.5%) were children.
  - Of these 826 child passenger vehicle occupants *killed* in fatal crashes, restraint use was known for 751, of whom 289 (38%) were unrestrained. This percentage (38%) was lower compared to all ages (48%).
- Of the 40,329 passenger vehicle occupants who *survived* in fatal crashes, 4,826 (12%) were children.
  - Of these 4,826 child passenger vehicle occupants who *survived* in fatal crashes, restraint use was known for 4,579, of whom 607 (13%) were unrestrained. This percentage (13%) was lower compared to all ages (14%).
- Of the 60,043 passenger vehicle occupants *involved* in fatal crashes, 5,652 (9%) were children.
  - Of these 5,652 child passenger vehicle occupants *involved* in fatal crashes, restraint use was known for 5,330, of whom 896 (17%) were unrestrained.

Table 1

Survival Status/				Restra	int Use							
		Restr	ained	Unrest	trained	Unkı	nown	Total		Percent "Known"	Percent "Known"	
Age	Age Group		Percent	Number Percent		Number	Percent	Number Percent		Restrained	Unrestrained	
	<1	48	76%	9	14%	6	10%	63	100%	84%	16%	
	1–3	117	67%	36	21%	22	13%	175	100%	76%	24%	
	4–7	139	62%	67	30%	17	8%	223	100%	67%	33%	
	8–12	124	47%	116	44%	22	8%	262	100%	52%	48%	
Killed	13–14	34	33%	61	59%	8	8%	103	100%	36%	64%	
	<15	462	56%	289	35%	75	9%	826	100%	62%	38%	
	15–20	1,102	42%	1,278	49%	243	9%	2,623	100%	46%	54%	
	All Other	9,718	48%	8,861	44%	1,686	8%	20,265	100%	52%	48%	
	Total	11,282	48%	10,428	44%	2,004	8%	23,714	100%	52%	48%	
	<1	253	90%	9	3%	18	6%	280	100%	97%	3%	
	1–3	908	89%	71	7%	42	4%	1,021	100%	93%	7%	
	4–7	1,040	82%	168	13%	63	5%	1,271	100%	86%	14%	
	8–12	1,253	80%	241	15%	74	5%	1,568	100%	84%	16%	
Survived	13–14	518	76%	118	17%	50	7%	686	100%	81%	19%	
	<15	3,972	82%	607	13%	247	5%	4,826	100%	87%	13%	
	15–20	3,951	71%	1,178	21%	470	8%	5,599	100%	77%	23%	
	All Other	23,610	79%	3,369	11%	2,925	10%	29,904	100%	88%	12%	
	Total	31,533	78%	5,154	13%	3,642	9%	40,329	100%	86%	14%	
	<1	301	88%	18	5%	24	7%	343	100%	94%	6%	
	1–3	1,025	86%	107	9%	64	5%	1,196	100%	91%	9%	
	4–7	1,179	79%	235	16%	80	5%	1,494	100%	83%	17%	
Total Involved	8–12	1,377	75%	357	20%	96	5%	1,830	100%	79%	21%	
	13–14	552	70%	179	23%	58	7%	789	100%	76%	24%	
	<15	4,434	78%	896	16%	322	6%	5,652	100%	83%	17%	
	15–20	5,053	61%	2,456	30%	713	9%	8,222	100%	67%	33%	
	All Other	33,328	66%	12,230	24%	4,611	9%	50,169	100%	73%	27%	
	Total	42,815	67%	15,582	24%	5,646	9%	64,043	100%	73%	27%	

#### Passenger Vehicle Occupants Involved in Fatal Crashes, by Survival Status, Age Group, and Restraint Use, 2016

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Source: FARS 2016 ARF.

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<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 2 presents the restraint use of child passenger vehicle occupants killed in traffic crashes and their respective drivers (killed or survived) in 2016. Based on known restraint use:

- When the drivers were unrestrained, 66 percent of the children were also unrestrained.
- When the drivers were restrained, 28 percent of the children were unrestrained.

#### Table 2

#### Child Passenger Vehicle Occupants Killed in Traffic Crashes, by Their Restraint Use and Their Driver's Restraint Use, 2016

	Child Restraint Use									
Driver	Restrained		Unrestrained		Unknown		Total		Percent "Known" Child	Percent "Known" Child
<b>Restraint Use</b>	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Restrained	Unrestrained
Restrained	380	68%	146	26%	36	6%	562	100%	72%	28%
Unrestrained	64	34%	124	65%	3	2%	191	100%	34%	66%
Unknown	17	25%	19	28%	33	48%	69	100%	47%	53%
Total	461	<b>56%</b>	289	35%	72	9%	822	100%	<b>61</b> %	39%

Source: FARS 2016 ARF.

Table 3 contains the number of children killed in passenger vehicles by age group and type of restraint. In 2016:

- Of the 826 children killed in passenger vehicle crashes, restraint use was known for 751, of whom 289 (39%) were unrestrained.
  - Of the 63 infants (under 1 year old) killed, restraint use was known for 57, of whom 9 (16%) were unrestrained.
  - Of the 175 children 1 to 3 years old killed, restraint use was known for 153, of whom 36 (24%) were unrestrained.

- Of the 223 children 4 to 7 years old killed, restraint use was known for 206, of whom 67 (33%) were unrestrained.
- Of the 262 children 8 to 12 years old killed, restraint use was known for 240, of whom 116 (48%) were unrestrained.
- Of the 103 children 13 to 14 years old killed, restraint use was known for 95, of whom 61 (64%) were unrestrained.

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#### Children Killed in Passenger Vehicles, by Age Group and Type of Restraint, 2016

		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 Used	9	14%	36	21%	67	30%	116	44%	61	59%	289	35%
Child Restraint	43	68%	108	62%	88	39%	4	2%	0	0	243	26%
Forward Facing	4	6%	42	24%	23	10%	0	0	0	0	69	8%
Rear Facing	13	21%	6	3%	1	0%	0	0	0	0	20	2%
Booster Seat	1	2%	10	6%	25	11%	3	1%	0	0	39	5%
Unknown Child Restraint	25	40%	50	29%	39	17%	1	0%	0	0	115	14%
Seat Belt Used	1	2%	7	4%	48	22%	116	44%	33	32%	205	25%
Shoulder Belt Only	0	0	0	0	1	0%	2	1%	1	1%	4	0%
Lap Belt Only	0	0	1	1%	2	1%	9	3%	1	1%	13	2%
Shoulder and Lap Belt	1	2%	6	3%	45	20%	105	40%	31	30%	188	23%
Restraint Used - Unknown	4	6%	2	1%	3	1%	4	2%	1	1%	14	2%
Unknown	6	10%	22	13%	17	8%	22	8%	8	8%	75	9%
Total	63	100%	175	100%	223	100%	262	100%	103	100%	826	100%

Source: FARS 2016 ARF.

Analysis has shown that among children under 5 years old, an estimated 328 lives were saved in 2016 by restraint use.<sup>4</sup> Of these 328 lives saved, 313 were associated with the use of child safety seats and 15 with the use of adult seat belts. At 100-percent car seat use for those under 5 years old, an estimated 370 lives (that is, an additional 42) could have been saved in 2016.

From 1975 to 2016 an estimated 11,274 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/August 2015 and produced a technical report, The 2015 National Survey of the Use of Booster Seats (Report No. DOT HS 812 309) (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 2015. Child restraints include child safety seats, seat belts, and booster seats.

## Table 4

Child Restraint Use, by Age Group and Race/Ethnicity in 2015\*

	Age Group (Years)							
Race/Ethnicity	<1	1–3	4–7	8–12				
Hispanic	100%	92%	81%	79%				
African-American Non-Hispanic	91%	85%	78%	72%				
White Non-Hispanic	99%	99%	95%	92%				
Asian Non-Hispanic	NA	99%	94%	92%				
Other Non-Hispanic	NA	93%	91%	83%				

Source: Li, H. R., Pickrell, T. M., & KC, S. (2016, September). The 2015 National Survey of the Use of Booster Seats (Report No. DOT HS 812 309). Washington, DC: National Highway Traffic Safety Administration. Available at crashstats.nhtsa.dot.gov/ Api/Public/ViewPublication/812309

NA: 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, baby strollers, scooters, toy wagons, motorized skateboards, motorized toy cars, Segway-style devices, motorized and non-motorized wheelchairs, and scooters for those with disabilities.

#### In 2016:

- Of the 5,987 pedestrian fatalities in traffic crashes, 245 (4%) were children.
- Over one-fifth (20%) of the 1,233 children killed in traffic crashes were pedestrians.
- Of the 245 child pedestrian fatalities in traffic crashes, 143 (61%) were boys.
- Of the 245 child pedestrians killed, 229 (93%) were killed in single-vehicle crashes and 16 (7%) were killed in multiple-vehicle crashes.
- Of the 229 child pedestrians killed in single-vehicle crashes,
  - 177 children (77.3%) were struck by the front of the vehicle,
  - 10 (4.4%) were struck by the right side of the vehicle,
  - 6 (2.6%) were struck by the left side of the vehicle,
  - 7 (3.1%) were struck by the rear of the vehicle, and
  - 29 (12.7%) were unknowns.
- Of the 245 child pedestrians killed, 35 (14%) were struck by a hit-and-run driver.

<sup>&</sup>lt;sup>4</sup> National Center for Statistics and Analysis. (2016, August). *Lives saved in 2015 by restraint use and minimum-drinking-age laws* (Traffic Safety Facts Crash•Stats. Report No. DOT HS 812 319). Washington, DC: National Highway Traffic Safety Administration. Available at crashstats.nhtsa.dot.gov/Api/Public/ ViewPublication/812319.

<sup>&</sup>lt;sup>5</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 traffic way, 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 2016:

- Twenty-five percent (54) were killed in rural areas and 75 percent (163) were killed in urban areas.<sup>67</sup>
- Sixty-Nine percent (166) did not occur at intersection locations as compared to 18 percent (42) that occurred at intersections and 13 percent (31) at other locations (9 on shoulder/roadside, 8 on sidewalk, 2 on non-trafficway area, 11 on driveway access, and 1 on shared-use lane).<sup>7</sup>
- Fifty-five percent (134) were killed during daylight compared to 39 percent (95) in the dark, 5 percent (11) during dusk, and 1 percent (3) during dawn.<sup>7</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, 2016



Source: FARS 2016 ARF.

Note: Unknown values were removed before calculating percentages. \*Based on location of pedestrian struck at the time of 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 an intersection, but were not distinguished by collected data. Thus, "At Intersection" and "Not At Intersection" does not include those in the "Other" category that were at an intersection or not at an intersection.

Sixty-three percent (155) of child pedestrian fatalities in traffic crashes were killed during the weekday (6 a.m. Monday to 5:59 p.m. Friday) and 37 percent (90) were killed during the weekend (6 p.m. Friday to 5:59 a.m. Monday) in 2016. 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 2016 child pedestrian fatalities in traffic crashes:

- The highest weekday percentage (30%) occurred from 6 to 8:59 p.m., followed by 27 percent from 3 to 5:59 p.m. and 18 percent from 6 to 8:59 a.m.
- The highest weekend percentage (32%) occurred from 6 to 8:59 p.m., followed by 27 percent from 3 to 5:59 p.m. and 17 percent from 9 to 11:59 p.m.
- The highest total percentage (31%) occurred from 6 to 8:59 p.m., followed by 27 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, 2016



Source: FARS 2016 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 2007 to 2016:

- The number of child pedestrian fatalities in traffic crashes decreased by 19 percent, from 304 fatalities to 245:
  - The under-1 age group increased by 200 percent, from 2 to 6.
  - The 1-to-3 age group decreased by 28 percent, from 76 to 55.
  - The 4-to-7 age group decreased by 26 percent, from 85 to 63.
  - The 8-to-12 age group decreased by 11 percent, from 80 to 71.
  - The 13-to-14 age group decreased by 18 percent, from 61 to 50.

<sup>&</sup>lt;sup>6</sup> 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>7</sup> Unknown values were removed before calculating percentages.

#### Figure 6 Child Pedestrian Fatalities in Traffic Crashes, by Age Group, 2007–2016



Source: FARS 2007-2015 Final File, 2016 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>8</sup>

In 2016:

- Of the 840 pedalcyclists killed in traffic crashes, 59 (7%) were children.
- Five percent of the 1,233 children killed in traffic crashes were pedalcyclists.
- Of the 59 child pedalcyclists killed in traffic crashes, 47 (80%) were boys.
- Of the 59 child pedalcyclists killed in traffic crashes, 7 (12%) were helmeted, 34 (58%) were unhelmeted, and 18 (31%) were unknown.
- All the 59 child pedalcyclists killed were killed in single-vehicle crashes.
- Of the 59 child pedalcyclists killed in single-vehicle crashes,
  - 48 (81.4%) were struck by the front of the vehicle,
  - 5 (8.5%) were struck by the right side of the vehicle,
  - 2 (3.4%) were struck by the left side of the vehicle,
  - 3 (5.1%) were struck by the rear of the vehicle, and
  - 1 (1.7%) were unknowns.
- Of the 59 child pedalcyclists killed, 8 (14%) was struck by a hitand-run driver.

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 2016:

- Forty-two percent (24) were killed in rural areas and 58 percent (33) were killed in urban areas.<sup>910</sup>
- Fifty-three percent (31) did not occur at intersection locations as compared to 40 percent (23) that occurred at intersections and 7 percent (4) at other locations (3 on driveway access and 1 on shoulder/roadside).
- Seventy-three percent (43) were killed during daylight compared to 24 percent (14) in the dark, 2 percent (1) during dusk and 2 percent (1) during dawn. Compared to all ages, more child pedalcyclists than adult pedalcyclists were killed during daylight.

<sup>&</sup>lt;sup>8</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 traffic way, 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.

<sup>&</sup>lt;sup>9</sup> 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>10</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, 2016



Source: FARS 2016 ARF.

Note: Unknown values were removed before calculating percentages.

\*Based on location of pedalcyclist struck at the time of 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 an intersection, but were not distinguished by collected data. Thus, "At Intersection" and "Not At Intersection" does not include those in the "Other" category that were at an intersection or not at an intersection.

Sixty-six percent (39) of the child pedalcyclists in traffic crashes were killed during the weekday and 34 percent (20) were killed during the weekend in 2016. Figure 8 provides time of day and day of week information for the 2016 child pedalcyclist fatalities in traffic crashes:

- The highest weekday percentage (38%) occurred from 3 to 5:59 p.m., followed by 33 percent from 6 to 8:59 p.m. and 13 percent from 12 to 2:59 p.m.
- The highest weekend percentage (45%) occurred from 6 to 8:59 p.m., followed by 20 percent from 12 to 2:59 p.m.
- The highest total percentage (37%) occurred from 6 to 8:59 p.m., followed by 32 percent from 3 to 5:59 p.m. and 12 percent from 12 to 2:59 p.m.

#### Figure 8

#### Percentage of Child Pedalcyclist Fatalities in Traffic Crashes, by Time of Day and Day of Week, 2016



Source: FARS 2016 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 2007 to 2016.

- The number of child pedalcyclist traffic fatalities in traffic crashes decreased by 35 percent, from 91 fatalities to 59:
  - The under-1 age group fatalities remained 0 for 2007 and 2016.
  - The 1-to-3 age group increased from 0 to 4.
  - The 4-to-7 age group decreased by 9 percent, from 11 to 10.
  - The 8-to-12 age group decreased by 57 percent, from 47 to 20.
  - The 13-to-14 age group decreased by 24 percent, from 33 to 25.

#### Figure 9 Child Pedalcyclist Traffic Fatalities in Traffic Crashes, by Age Group, 2007–2016



## **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 2016, of the 1,233 children killed in traffic crashes, 214 children (17%) were killed in alcohol-impaired-driving crashes. Of these 214 deaths:

- 115 children (54%) were passengers of vehicles with alcoholimpaired drivers.
  - Of these 115 children killed, restraint use was known for 98, of whom 45 (46%) were unrestrained;
- 61 children (29%) were passengers of other vehicles in alcoholimpaired-driving crashes.
  - Of these 61 children killed, restraint use was known for 57, of whom 20 (35%) were unrestrained;
- 36 children (11%) were nonoccupants killed in alcohol-impaireddriving crashes; and
- 2 children (<1%) were alcohol-impaired drivers killed.

## **Child Motor Vehicle Traffic Fatalities by State**

Table 5 contains the child motor vehicle traffic fatalities by State and age group in 2016. Included in this table is Puerto Rico, which is not included in the overall U.S. total. In 2016:

- Among all States, child motor vehicle traffic fatalities ranged from 0 (the District of Columbia and New Hampshire) to 150 (Texas).
- Texas had the highest number of child motor vehicle traffic fatalities (150), followed by California (95), Florida (91), Georgia (63), and North Carolina (56).

### Table 5

#### Child Motor Vehicle Traffic Fatalities, by State and Age Group, 2016

			Age Group			
State	<1	1–3	4–7	8–12	13–14	Total
Alabama	3	7	12	9	3	34
Alaska	0	0	0	3	0	3
Arizona	3	6	8	11	7	35
Arkansas	0	4	4	7	1	16
California	8	25	20	27	15	95
Colorado	1	2	2	11	5	21
Connecticut	1	0	4	1	2	8
Delaware	0	0	1	0	1	2
District of Columbia	0	0	0	0	0	0
Florida	1	18	30	28	14	91
Georgia	5	8	15	20	15	63
Hawaii	1	0	0	1	0	2
Idaho	0	2	4	4	1	11
Illinois	2	6	8	6	3	25
ndiana	0	7	1	4	2	14
lowa	0	3	4	8	9	24
Kansas	1	2	3	8	3	17
Kentucky	3	4	6	11	3	27
Louisiana	2	7	10	5	8	32
Vaine	1	0	1	1	1	4
		1				15
Maryland	1		6	4	3	
Massachusetts	2	1	1	3	2	9
Vichigan	2	4	5	14	9	34
Vinnesota	0	2	4	6	2	14
Mississippi	2	10	6	11	6	35
Missouri	4	9	8	9	7	37
Montana	1	2	0	2	2	7
Nebraska	1	4	0	4	1	10
Nevada	0	4	0	1	1	6
New Hampshire	0	0	0	0	0	0
New Jersey	1	1	6	2	2	12
New Mexico	1	6	5	7	1	20
New York	2	3	6	7	5	23
North Carolina	2	11	18	14	11	56
North Dakota	0	1	1	2	2	6
Ohio	1	4	8	13	7	33
Oklahoma	1	10	8	8	2	29
Dregon	0	2	3	9	3	17
Pennsylvania	1	8	14	8	5	36
Rhode Island	0	0	0	0	0	0
South Carolina	2	6	10	3	6	27
South Dakota	0	2	2	2	1	7
Tennessee	2	6	11	10	7	36
Texas	5	25	38	62	20	150
Jtah	3	3	5	8	2	21
/ermont	0	0	0	0	1	1
/irginia	3	7	6	3	2	21
Washington	2	3	1	7	3	16
	1	2	1	3	0	7
West Virginia Wisconsin		6		3	3	
	0		4			20
Nyoming	0	0	1	2	1	4
U.S.Total	72	244	311	396	210	<b>1,233</b> 3
Puerto Rico Source: FARS 2016 ARF.	0	0	3	0	0	

For each State in 2016, 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. In 2016:

- The States with the highest percentages of child motor vehicle traffic fatalities by total traffic fatalities compared to the 3.3 percent in the United States were Utah (7.5%), South Dakota (6%), and Iowa (5.9%).
- The States with the highest child fatality rates compared to the U.S. child fatality rate of 2.02 were Mississippi (5.88), New Mexico (4.92), and North Dakota (3.99).

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

## **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 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. The 2016 CRSS data was released the last week of March 2018. For more information, 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.

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U.S. Department of Transportation

National Highway Traffic Safety Administration

## For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis (NCSA), 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/NCSA. 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 Comparisons 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 from the Fatality Analysis Reporting System and the General Estimates System. The fact sheets and annual Traffic Safety Facts report can be found at https://crashstats.nhtsa.dot.gov/.

## Table 6Child Motor Vehicle Traffic Fatalities and Fatality Rates, by State, 2016

	Child Resident	Total Traffic	Child Motor Vehicle	Percentage of Total	Child Motor Vehicle Traffic Fatalities
State	Population	Fatalities	Traffic Fatalities	Traffic Fatalities	per 100,000 Child Population
Alabama	902,563	1,038	34	3.3%	3.77
Alaska	157,237	84	3	3.6%	1.91
Arizona	1,352,500	962	35	3.6%	2.59
Arkansas	584,338	545	16	2.9%	2.74
California	7,549,473	3,623	95	2.6%	1.26
Colorado	1,050,483	608	21	3.5%	2.00
Connecticut	610,072	293	8	2.7%	1.31
Delaware	168,903	119	2	1.7%	1.18
District of Columbia	105,325	27	0	0	0
Florida	3,423,335	3,174	91	2.9%	2.66
Georgia	2,075,877	1,554	63	4.1%	3.03
Hawaii	260,336	120	2	1.7%	0.77
Idaho	363,094	253	11	4.3%	3.03
Illinois	2,412,416	1,082	25	2.3%	1.04
Indiana		821	14	1.7%	1.04
	1,300,309				
lowa	607,020	404	24	5.9%	3.95
Kansas	595,053	429	17	4.0%	2.86
Kentucky	836,943	834	27	3.2%	3.23
Louisiana	926,601	757	32	4.2%	3.45
Maine	207,561	161	4	2.5%	1.93
Maryland	1,117,097	505	15	3.0%	1.34
Massachusetts	1,127,415	389	9	2.3%	0.80
Michigan	1,791,477	1,064	34	3.2%	1.90
Minnesota	1,072,998	392	14	3.6%	1.30
Mississippi	595,739	690	35	5.1%	5.88
Missouri	1,147,730	945	37	3.9%	3.22
Montana	189,864	190	7	3.7%	3.69
Nebraska	396,601	218	10	4.6%	2.52
Nevada	564,061	328	6	1.8%	1.06
New Hampshire	211,343	136	0	0	0
New Jersey	1,631,199	601	12	2.0%	0.74
New Mexico	406,557	402	20	5.0%	4.92
New York	3,456,331	1,025	23	2.2%	0.67
North Carolina	1,899,183	1,450	56	3.9%	2.95
North Dakota	150,503	113	6	5.3%	3.99
Ohio	2,148,401	1,132	33	2.9%	1.54
Oklahoma	803,241	683	29	4.2%	3.61
Oregon	720,183	495	17	3.4%	2.36
Pennsylvania	2,197,884	1,188	36	3.0%	1.64
Rhode Island	170,395	51	0	0.070	0
South Carolina	909,577	1,015	27	2.7%	2.97
South Dakota	179,688	116	7	6.0%	3.90
Tennessee	1,242,807	1,041	36	3.5%	2.90
		,			
Texas	6,086,552	3,776	150	4.0%	2.46
Utah	773,697	281	21	7.5%	2.71
Vermont	96,558	62	1	1.6%	1.04
Virginia	1,551,740	760	21	2.8%	1.35
Washington	1,358,873	537	16	3.0%	1.18
West Virginia	309,619	269	7	2.6%	2.26
Wisconsin	1,061,521	607	20	3.3%	1.88
Wyoming	116,796	112	4	3.6%	3.42
U.S. Total	60,975,069	37,461	1,233	3.3%	2.02
Puerto Rico	556,281	279	3	1.1%	0.54