Traffic Safety Facts

2019 Data

October 2021

DOT HS 813 197

NHTSA

In this fact sheet for 2019 the information is presented as follows.

Bicyclists and Other Cyclists

Pedalcyclists, as defined for this fact sheet, are bicyclists and other cyclists including riders of two-wheel, nonmotorized vehicles, tricycles, and unicycles powered solely by pedals. This fact sheet does not include pedalcyclist crashes that do not involve motor vehicles.

Key Findings

- In 2019 there were 846 pedalcyclist fatalities, which accounted for 2.3 percent of all traffic fatalities during the year.
- The 846 pedalcyclists killed in 2019 are 3 percent lower than the 871 pedalcyclists killed in 2018.
- In 2019 an estimated 49,000 pedalcyclists were injured, a 5.4-percent increase from 47,000 pedalcyclists injured in 2018.
- In 2019 the pedalcyclist fatality rate per 100,000 people was 6 times higher for males than females. The injury rate for pedalcyclists per 100,000 people was almost 5 times higher for males than for females.
- Alcohol involvement (BAC=.01+ g/dL) – either for the motor vehicle driver involved in a fatal pedalcyclist crash and/or the killed pedalcyclist – was reported in 34 percent of all fatal pedalcyclist crashes in 2019.
- Twenty-five percent of the pedalcyclists who died in 2019 had blood alcohol concentrations (BACs) of .01 grams per deciliter (g/dL) or greater.
- Seventy-eight percent of pedalcyclists who died in traffic crashes in 2019 were in urban areas.

This fact sheet contains information on fatal motor vehicle traffic crashes based on data from the Fatality Analysis Reporting System (FARS) and non-fatal motor vehicle traffic crashes from the National Automotive Sampling System (NASS) General Estimates System (GES) and Crash Report Sampling System (CRSS). Refer to the end of this publication for more information on FARS, NASS GES, and CRSS.

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

U.S. Department of Transportation

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Overview

In 2019 there were 846 pedalcyclists killed in traffic crashes in the United States, a decline of 3 percent from 871 in 2018. Pedalcyclist deaths accounted for 2.3 percent of all traffic fatalities (Table 1) in 2019.

Table 1 presents the distribution of pedalcyclist fatalities as a percentage of total fatalities as well as pedalcyclists injured as a percentage of total people injured in the 10-year period from 2010 to 2019. Pedalcyclist deaths have accounted from a high of 2.4 percent to a low of 1.9 percent in those 10 years.

In 2019 an estimated 49,000 pedalcyclists were injured, a 5.4-percent increase from 47,000 pedalcyclists injured in 2018. Pedalcyclists injured made up of 1.8 percent of the total people injured in 2019.

Table 1
Total Fatalities and Pedalcyclist Fatalities, and Total Injured and Pedalcyclists Injured in Traffic Crashes, 2010–2019

		Pedalcyclist Fatalities				Pedalcyclists Injured	
Year	Total Fatalities	Number	Percentage of Total Fatalities	Year	Total Injured	Number	Percentage of Total Injured*
2010	32,999	623	1.9%	2010	2,248,000	52,000	2.3%
2011	32,479	682	2.1%	2011	2,227,000	48,000	2.2%
2012	33,782	734	2.2%	2012	2,369,000	49,000	2.1%
2013	32,893	749	2.3%	2013	2,319,000	48,000	2.1%
2014	32,744	729	2.2%	2014	2,343,000	50,000	2.2%
2015	35,484	829	2.3%	2015	2,455,000	45,000	1.8%
2016	37,806	853	2.3%	2016†	3,062,000	64,000	2.1%
2017	37,473	806	2.2%	2017†	2,745,000	50,000	1.8%
2018	36,835	871	2.4%	2018†	2,710,000	47,000	1.7%
2019	36,096	846	2.3%	2019†	2,740,000	49,000	1.8%

Sources: FARS 2010–2018 Final File, 2019 Annual Report File (ARF); NASS GES 2010–2015 and CRSS 2016–2019
*Percentages were calculated using injury estimates before rounding.
†CRSS estimates and NASS GES estimates are not comparable due to different sample designs. Refer to end of document for more information about CRSS.

Age and Sex

Over the 10-year period from 2010 to 2019, the average age of pedalcyclists killed in traffic crashes has steadily increased from 42 in 2010 to 48 in 2019.

Table 2 contains the number of pedalcyclists killed and injured in 2019 by age group and sex. For each sex and the total, fatality and injury rates per 100,000 population are calculated by age group. In 2019 the majority of pedalcyclists killed (86%) were males. The population-based pedalcyclist fatality rate was 6 times higher for males than for females. The pedalcyclist injury rate was almost 5 times higher for males than for females. The overall male pedalcyclist injury rate was 25, compared with 5 for females.

The largest number of pedalcyclist fatalities were in the 55-to-59 age group. Pedalcyclists in the 55-to-59 and 65-to-69 age groups each had the highest fatality rate (0.46 per 100,000 people) based on population. The highest pedalcyclist injury rate by age group were those 15-to-20 followed by 21-to-24 (32 and 25 per 100,000 population, respectively).

In 2019 children 14 and younger accounted for 5 percent of all pedalcyclists killed. The population-based injury rate for children 14 and younger was 11 per 100,000 population.

Table 2

Pedalcyclists Killed and Injured in Traffic Crashes, and Fatality and Injury Rates per 100,000 Population, by Age Group and Sex, 2019

	Male			Female			Total*		
Age Group	Killed	Population	Fatality Rate	Killed	Population	Fatality Rate	Killed	Population	Fatality Rate
<5	3	10,009,207	0.03	2	9,567,476	0.02	5	19,576,683	0.03
5-9	10	10,322,762	0.10	0	9,873,133	0.00	10	20,195,895	0.05
10-14	22	10,618,261	0.21	3	10,180,007	0.03	25	20,798,268	0.12
Children (≤14)	*35*	*30,950,230*	*0.11*	*5*	*29,620,616*	*0.02*	*40*	*60,570,846*	*0.07*
15-20	38	12,928,746	0.29	8	12,395,507	0.06	46	25,324,253	0.18
21-24	29	8,881,613	0.33	3	8,481,644	0.04	32	17,363,257	0.18
25-29	36	12,004,570	0.30	12	11,504,446	0.10	48	23,509,016	0.20
30-34	46	11,354,610	0.41	13	11,076,695	0.12	59	22,431,305	0.26
35-39	49	10,884,941	0.45	11	10,852,580	0.10	60	21,737,521	0.28
40-44	40	9,907,139	0.40	12	10,014,484	0.12	52	19,921,623	0.26
45-49	55	10,085,355	0.55	6	10,312,396	0.06	61	20,397,751	0.30
50-54	72	10,086,611	0.71	10	10,390,540	0.10	82	20,477,151	0.40
55-59	92	10,642,489	0.86	9	11,234,902	0.08	101	21,877,391	0.46
60-64	77	9,856,730	0.78	13	10,714,416	0.12	90	20,571,146	0.44
65-69	72	8,199,773	0.88	7	9,255,228	0.08	80	17,455,001	0.46
70-74	32	6,499,806	0.49	5	7,528,626	0.07	37	14,028,432	0.26
75-79	22	4,318,499	0.51	3	5,334,166	0.06	25	9,652,665	0.26
80+	27	5,056,212	0.53	2	7,865,953	0.03	29	12,922,165	0.22
Ages 65+	*153*	*24,074,290*	*0.64*	*17*	*29,983,973*	*0.06*	*171*	*54,058,263*	*0.32*
Total[1]	**725**	**161,657,324**	**0.45**	**119**	**166,582,199**	**0.07**	**846**	**328,239,523**	**0.26**

	Male			Female			Total		
Age Group	Injured	Population	Injury Rate[2]	Injured	Population	Injury Rate[2]	Injured	Population	Injury Rate[2]
0-4	**	10,009,207	**	**	9,567,476	**	**	19,576,683	**
5-9	1,000	10,322,762	10	**	9,873,133	**	2,000	20,195,895	8
10-14	4,000	10,618,261	39	1,000	10,180,007	9	5,000	20,798,268	24
Children (≤14)	*5,000*	*30,950,230*	*17*	*1,000*	*29,620,616*	*5*	*7,000*	*60,570,846*	*11*
15-20	7,000	12,928,746	51	1,000	12,395,507	12	8,000	25,324,253	32
21-24	3,000	8,881,613	38	1,000	8,481,644	11	4,000	17,363,257	25
25-29	4,000	12,004,570	36	1,000	11,504,446	8	5,000	23,509,016	22
30-34	3,000	11,354,610	27	1,000	11,076,695	6	4,000	22,431,305	17
35-39	2,000	10,884,941	23	1,000	10,852,580	5	3,000	21,737,521	14
40-44	2,000	9,907,139	19	1,000	10,014,484	5	2,000	19,921,623	12
45-49	2,000	10,085,355	23	**	10,312,396	**	3,000	20,397,751	14
50-54	3,000	10,086,611	29	1,000	10,390,540	6	3,000	20,477,151	17
55-59	3,000	10,642,489	28	**	11,234,902	**	3,000	21,877,391	15
60-64	2,000	9,856,730	23	**	10,714,416	**	3,000	20,571,146	13
65-69	2,000	8,199,773	20	**	9,255,228	**	2,000	17,455,001	10
70-74	1,000	6,499,806	10	**	7,528,626	**	1,000	14,028,432	6
75-79	**	4,318,499	**	**	5,334,166	**	**	9,652,665	**
80+	**	5,056,212	**	**	7,865,953	**	**	12,922,165	**
Ages 65+	*3,000*	*24,074,290*	*12*	**	*29,983,973*	**	*3,000*	*54,058,263*	*6*
Total[3]	**40,000**	**161,657,324**	**25**	**9,000**	**166,582,199**	**5**	**49,000**	**328,239,523**	**15**

Sources: FARS 2019 ARF; CRSS 2019; Population – Census Bureau
*Includes fatalities of unknown sex.
**Less than 500 injured; injury rate not shown.
[1]Includes fatalities of unknown age.
[2]Were calculated using injured estimates before rounding.
[3]Injured totals may not equal sum of components due to independent rounding.

Important Safety Reminders

- All bicyclists should wear properly fitted bicycle helmets every time they ride. A helmet is the single most effective way to prevent head injury resulting from a bicycle crash. www.youtube.com/watch?time_continue=22&v=hLlXswx0VvQ&feature=emb_logo
- Bicyclists are considered vehicle operators; they are required to obey the same rules of the road as other vehicle operators, including obeying traffic signs, signals, and lane markings. When cycling in the street, cyclists must ride in the same direction as traffic.
- Drivers of motor vehicles need to share the road with bicyclists. Be courteous – allow at least 3 feet of clearance when passing a bicyclist on the road, look for cyclists before opening a car door or pulling from a parking space, and yield to cyclists at intersections and as directed by signs and signals. Be especially watchful for cyclists when making turns, either left or right.
- Bicyclists should increase their visibility to drivers by wearing fluorescent or brightly colored clothing during the day, and at dawn and dusk. To be noticed when riding at night, use a front light and a red reflector or flashing rear light, and use retro-reflective tape or markings on equipment or clothing.
- Consult State and local laws for safety reminders as they may differ from the ones above.

For more information on Bicycle Safety visit www.nhtsa.gov/Driving-Safety/Bicycles

— NHTSA's Research and Program Development

Fatality Analysis Reporting System

FARS contains data on every fatal motor vehicle traffic crash within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a traffic crash must involve a motor vehicle traveling on a public trafficway that results in the death of a vehicle occupant or a nonoccupant within 30 days of the crash. The Annual Report File (ARF) is the FARS data file associated with the most recent available year, which is subject to change when it is finalized the following year to the final version known as the Final File. The additional time between the ARF and the Final File provides the opportunity for submission of important variable data requiring outside sources, which may lead to changes in the final counts. More information on FARS can be found at www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system.

The updated final counts for the previous data year will be reflected with the release of the recent year's ARF. For example, along with the release of the 2019 ARF, the 2018 Final File was released to replace the 2018 ARF. The final fatality count in motor vehicle traffic crashes for 2018 was 36,835, which was updated from 36,560 in the 2018 ARF. The number of pedalcyclist fatalities from the 2018 Final File was 871, which was updated from 857 from the 2018 ARF.

The 2016 and 2017 Final Files have been amended, but this amendment did not change the overall number of fatal crashes or fatalities.