



Pedalcyclists



A Public Information Fact Sheet on Motor Vehicle and Traffic Safety Published by the National Highway Traffic Safety Administration's National Center for Statistics and Analysis

The first automobile crash in the United States occurred in New York City in 1896, when a motor vehicle collided with a pedalcyclist rider (*Famous First Facts*, by Joseph Kane).

More than 47,000 pedalcyclists have died in traffic crashes in the United States since 1932 — the first year in which estimates of pedalcyclist fatalities were recorded. The 350 pedalcyclists killed in 1932 accounted for 1.3 percent of the 27,979 persons who died in traffic crashes that year.

In 2001, 728 pedalcyclists were killed and an additional 45,000 were injured in traffic crashes. Pedalcyclist deaths accounted for 2 percent of all traffic fatalities, and pedalcyclists made up 1 percent of all the people injured in traffic crashes during the year.

The number of pedalcyclist fatalities in 2001 was 14 percent lower than the 843 fatalities reported in 1991. The highest number of pedalcyclist fatalities ever recorded in the Fatality Analysis Reporting System (FARS) was 1,003 in 1975.

Pedalcyclists accounted for 13 percent of all nonmotorist traffic fatalities in 2001. Pedestrians accounted for 85 percent, and the remaining 2 percent were skateboard riders, roller skaters, etc.

“The 728 pedalcyclist deaths in 2001 accounted for 2 percent of all traffic fatalities during the year.”

Figure 1. Trends in Pedalcyclist and Total Traffic Fatalities, 1991-2001

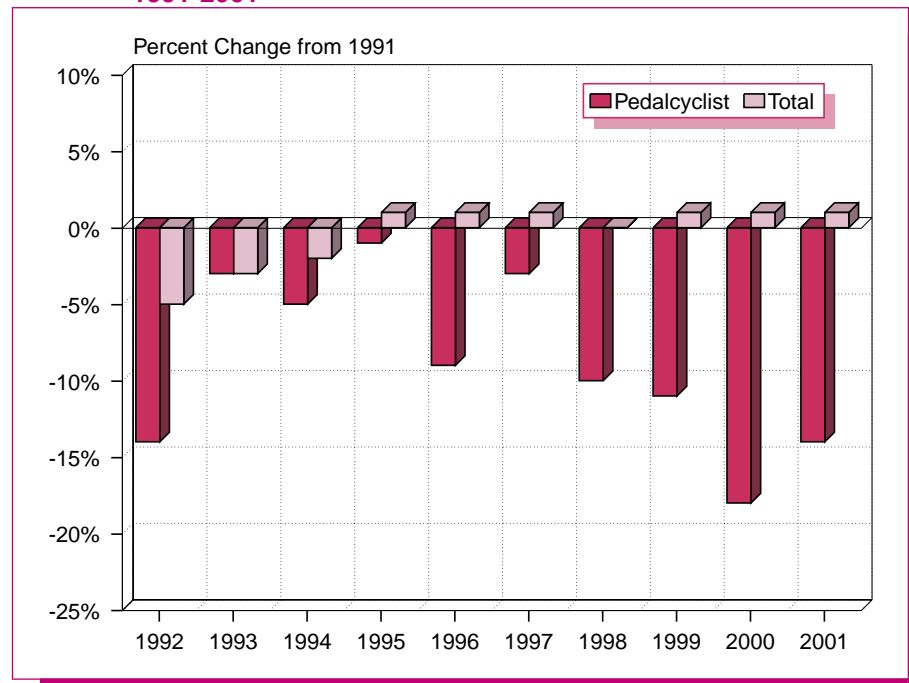


Table 1. Nonoccupant Traffic Fatalities, 1991-2001

Year	Pedestrian	Pedalcyclist	Other	Total
1991	5,801	843	124	6,768
1992	5,549	723	98	6,370
1993	5,649	816	111	6,576
1994	5,489	802	107	6,398
1995	5,584	833	109	6,526
1996	5,449	765	154	6,368
1997	5,321	814	153	6,288
1998	5,228	760	131	6,119
1999	4,939	754	149	5,842
2000	4,763	693	141	5,597
2001	4,882	728	120	5,730

“More than one-fifth of the pedalcyclists killed in traffic crashes in 2001 were between 5 and 15 years old.”

Pedalcyclist fatalities occurred more frequently in urban areas (64 percent), at nonintersection locations (70 percent), between the hours of 4:00 PM and 8:00 PM (28 percent), and during the months of July, August, and September (31 percent).

In 1991, the average age of pedalcyclists killed in traffic crashes was 28.4 years; in 2001 the average age of those killed was 36.0 years, and the average age of those injured was 26.5 years.

Pedalcyclists under age 16 accounted for 22 percent of all pedalcyclists killed and 38 percent of those injured in traffic crashes in 2001.

In comparison, pedalcyclists under age 16 accounted for 36 percent of all those killed in 1991.

Pedalcyclists 25 years of age and older have made up an increasing proportion of all pedalcyclist deaths since 1991. The proportion of pedalcyclist fatalities age 25 to 64 was 1.3 times as high in 2001 as in 1991 (56 percent and 42 percent, respectively).

More than one-fifth (21 percent) of the pedalcyclists killed in traffic crashes in 2001 were between 5 and 15 years old. The pedalcyclist fatality rate for this age group in 2000 was 4.1 per million population — nearly double the rate for all pedalcyclists (2.5 per million population). The injury rate for this age group was 453 per million population, compared with 182 per million population for pedalcyclists of all ages (2001 population data by age group not available).

*In 2001, NHTSA began using a revised method — **multiple imputation** — to estimate missing information about blood alcohol concentration (BAC) levels for persons involved in fatal crashes. The alcohol estimates in this fact sheet are based on the new imputation method. More information on the new multiple imputation method, including detailed tabulations of alcohol involvement in various categories (age, sex, time of day, etc.), is available in NHTSA Technical Report DOT HS 809 403, Transitioning to Multiple Imputation: A New Method to Estimate Missing Blood Alcohol Concentration (BAC) Values in FARS.*

Alcohol involvement — either for the driver or the pedalcyclist — was reported in more than one-third of the traffic crashes that resulted in pedalcyclist fatalities in 2001. In 32 percent of the crashes, either the driver or the cyclist was intoxicated, with blood alcohol concentrations (BAC) of 0.08 grams per deciliter (g/dl) or greater. Lower alcohol levels (BAC 0.01 to 0.07 g/dl) were reported in an additional 8 percent. More than one-fourth (28 percent) of the pedalcyclists killed had a BAC of 0.01 g/dl or greater, and almost one-fourth (24 percent) were intoxicated.

“Alcohol Involvement was reported in more than one-third of the pedalcyclist fatalities in 2001.”

Most of the pedalcyclists killed or injured in 2001 were males (91 percent and 79 percent, respectively), and most were between the ages of 5 and 44 years (65 percent and 81 percent, respectively).

In 2000, the pedalcyclist fatality rate per capita was more than 8 times as high for males as for females, and the injury rate per capita was nearly 4 times as high for males as for females (2001 data not available).

Table 2. Pedalcyclists Killed and Injured and Fatality and Injury Rates by Age and Sex, 2000

Age (years)	Male			Female			Total		
	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*
0-4	7	9,811	0.71	2	9,365	0.21	9	19,176	0.47
5-9	50	10,523	4.75	13	10,026	1.30	63	20,550	3.07
10-15	107	12,585	8.50	14	11,962	1.17	121	24,547	4.93
16-20	42	10,397	4.04	5	9,853	0.51	47	20,250	2.32
21-24	25	7,617	3.28	3	7,298	0.41	28	14,915	1.88
25-34	53	20,121	2.63	12	19,771	0.61	65	39,892	1.63
35-44	121	22,448	5.39	7	22,701	0.31	128	45,149	2.84
45-54	95	18,497	5.14	10	19,181	0.52	105	37,678	2.79
55-64	54	11,645	4.64	5	12,629	0.40	59	24,275	2.43
65-69	19	4,400	4.32	1	5,133	0.19	20	9,534	2.10
70-79	27	6,947	3.89	3	9,326	0.32	30	16,273	1.84
80+	14	3,062	4.57	2	6,123	0.33	16	9,185	1.74
Unknown	2	—	—	—	—	—	2	—	—
Total	616	138,054	4.46	77	143,368	0.54	693	281,422	2.46

Age (years)	Male			Female			Total		
	Injured	Population (thousands)	Injury Rate*	Injured	Population (thousands)	Injury Rate*	Injured	Population (thousands)	Injury Rate*
0-4	**	9,811	17	**	9,365	3	**	19,176	10
5-9	5,000	10,523	507	3,000	10,026	257	8,000	20,550	385
10-15	10,000	12,585	773	3,000	11,962	231	12,000	24,547	509
16-20	4,000	10,397	369	2,000	9,853	173	6,000	20,250	274
21-24	3,000	7,617	429	**	7,298	40	4,000	14,915	239
25-34	6,000	20,121	287	2,000	19,771	89	8,000	39,892	188
35-44	6,000	22,448	272	1,000	22,701	52	7,000	45,149	161
45-54	3,000	18,497	159	1,000	19,181	33	4,000	37,678	95
55-64	2,000	11,645	172	**	12,629	11	2,000	24,275	88
65-69	**	4,400	84	**	5,133	**	**	9,534	39
70-79	**	6,947	59	**	9,326	8	**	16,273	30
80+	**	3,062	31	**	6,123	**	**	9,185	10
Total	40,000	138,054	290	11,000	143,368	78	51,000	281,422	182

* Rate per million population.

** Less than 500 injured.

Source: Population — Bureau of the Census projections. 2001 population data by age group not available.

For more information:

Information on pedalcyclist traffic fatalities is available from the National Center for Statistics and Analysis, NPO-121, 400 Seventh Street, S.W., Washington, D.C. 20590. NCSA information can also be obtained by telephone or by fax-on-demand at 1-800-934-8517. FAX messages should be sent to (202) 366-7078. General information on highway traffic safety can be accessed by Internet users at <http://www-nrd.nhtsa.dot.gov/people/nca>. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Auto Safety Hotline at 1-800-424-9393.

Other fact sheets available from the National Center for Statistics and Analysis are *Overview, Alcohol, Occupant Protection, Older Population, Speeding, Young Drivers, Pedestrians, Children, Large Trucks, Motorcycles, School Transportation-Related Crashes, State Traffic Data, and State Alcohol Estimates*. 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*.

Table 3. Pedalcyclist Traffic Fatalities and Fatality Rates by State, 2001

State	Total Traffic Fatalities	Resident Population (thousands)	Pedalcyclist Fatalities	Percent of Total	Pedalcyclist Fatalities per Million Population
Alabama	994	4,464	6	0.6	1.34
Alaska	85	635	1	1.2	1.57
Arizona	1,048	5,307	28	2.7	5.28
Arkansas	611	2,692	1	0.2	0.37
California	3,956	34,501	105	2.7	3.04
Colorado	736	4,418	11	1.5	2.49
Connecticut	312	3,425	2	0.6	0.58
Delaware	136	796	2	1.5	2.51
District of Columbia	68	572	2	2.9	3.50
Florida	3,011	16,397	127	4.2	7.75
Georgia	1,615	8,384	20	1.2	2.39
Hawaii	140	1,224	7	5.0	5.72
Idaho	259	1,321	2	0.8	1.51
Illinois	1,414	12,482	27	1.9	2.16
Indiana	909	6,115	12	1.3	1.96
Iowa	447	2,923	3	0.7	1.03
Kansas	494	2,695	2	0.4	0.74
Kentucky	845	4,066	8	0.9	1.97
Louisiana	954	4,465	23	2.4	5.15
Maine	192	1,287	4	2.1	3.11
Maryland	660	5,375	11	1.7	2.05
Massachusetts	477	6,379	9	1.9	1.41
Michigan	1,328	9,991	24	1.8	2.40
Minnesota	568	4,972	7	1.2	1.41
Mississippi	784	2,858	8	1.0	2.80
Missouri	1,098	5,630	6	0.5	1.07
Montana	230	904	1	0.4	1.11
Nebraska	246	1,713	5	2.0	2.92
Nevada	313	2,106	4	1.3	1.90
New Hampshire	142	1,259	1	0.7	0.79
New Jersey	747	8,484	26	3.5	3.06
New Mexico	463	1,829	7	1.5	3.83
New York	1,548	19,011	41	2.6	2.16
North Carolina	1,530	8,186	24	1.6	2.93
North Dakota	105	634	0	0.0	0.00
Ohio	1,378	11,374	16	1.2	1.41
Oklahoma	676	3,460	2	0.3	0.58
Oregon	488	3,473	15	3.1	4.32
Pennsylvania	1,530	12,287	14	0.9	1.14
Rhode Island	81	1,059	1	1.2	0.94
South Carolina	1,059	4,063	24	2.3	5.91
South Dakota	171	757	1	0.6	1.32
Tennessee	1,251	5,740	5	0.4	0.87
Texas	3,724	21,325	46	1.2	2.16
Utah	292	2,270	3	1.0	1.32
Vermont	92	613	0	0.0	0.00
Virginia	935	7,188	13	1.4	1.81
Washington	649	5,988	8	1.2	1.34
West Virginia	376	1,802	3	0.8	1.66
Wisconsin	763	5,402	9	1.2	1.67
Wyoming	186	494	1	0.5	2.02
U.S. Total	42,116	284,797	728	1.7	2.56
Puerto Rico	481	3,840	16	3.3	4.17

Note: Totals may not equal sum of components due to independent rounding.

Sources: Fatalities — Fatality Analysis Reporting System, NHTSA. Population — Bureau of the Census.