

## Bicyclists and Other Cyclists

*“The 716 bicyclist deaths in 2008 accounted for 2 percent of all traffic fatalities during the year.”*

Bicyclists and other cyclists include riders of two-wheel nonmotorized vehicles, tricycles, and unicycles powered solely by pedals. Throughout the remainder of this fact sheet the term pedalcyclists will be used to identify these cyclists.

The first automobile crash in the United States occurred in New York City in 1896, when a motor vehicle collided with a pedalcycle rider (Famous First Facts, by Joseph Kane). About 53,000 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 2008, 716 pedalcyclists were killed and an additional 52,000 were injured in traffic crashes. Pedalcyclist deaths accounted for 2 percent of all traffic fatalities, and pedalcyclists made up 2 percent of all the people injured in traffic crashes during the year.

The number of pedalcyclist fatalities in 2008 is 6 percent lower than the 760 fatalities reported in 1998. The highest number of pedalcyclist fatalities ever recorded in the Fatality Analysis Reporting System (FARS) was 1,003 in 1975. Pedalcyclists accounted for 14 percent of all nonoccupant traffic fatalities in 2008.

Figure 1  
**Total Pedalcyclist Fatalities, 1998-2008**

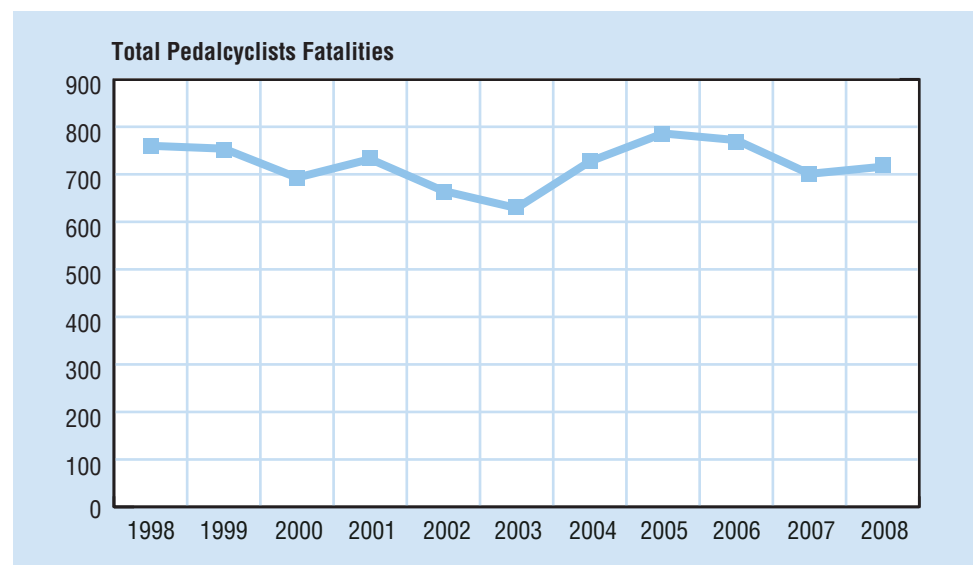


Table 1  
**Nonoccupant Traffic Fatalities, 1998-2008**

Year	Pedalcyclist	Pedestrian	Other	Total
1998	760	5,228	131	6,119
1999	754	4,939	149	5,842
2000	693	4,763	141	5,597
2001	732	4,901	123	5,756
2002	665	4,851	114	5,630
2003	629	4,774	140	5,543
2004	727	4,675	130	5,532
2005	786	4,892	186	5,864
2006	772	4,795	185	5,752
2007	701	4,699	158	5,558
2008	716	4,378	188	5,282

Pedalcyclist fatalities occurred more frequently in urban areas (69%), at non-intersection locations (64%), between the hours of 5 p.m. and 9 p.m. (28%), and during the months of June (9%) and September (12%).

*“One-seventh of the pedalcyclists killed in traffic crashes in 2008 were between 5 and 15 years old.”*

### Age

In 1998, the average age of pedalcyclists killed in traffic crashes was 32; in 2008 the average age of those killed was 41. In contrast, in 1998 the average age of those injured was 24 and the average age of those injured in 2008 was 31.

Table 2  
**Average Age of Pedalcyclists Killed and Injured, 1998-2008**

Year	Pedalcyclists Killed Average Age	Pedalcyclists Injured Average Age
1998	32	24
1999	33	24
2000	35	25
2001	36	26
2002	37	28
2003	36	27
2004	39	29
2005	39	29
2006	41	30
2007	40	31
2008	41	31
<b>1998-2008</b>	<b>37</b>	<b>28</b>

Pedalcyclists under age 16 accounted for 13 percent of all pedalcyclists killed and 25 percent of those injured in traffic crashes in 2008. By comparison, pedalcyclists under age 16 accounted for 30 percent of all those killed and 44 percent of those injured in 1998.

Pedalcyclists age 25 and older have made up an increasing proportion of all pedalcyclist deaths since 1998. The proportion of pedalcyclist fatalities age 25 to 64 was 1.3 times higher in 2008 as in 1998 (64% and 50%, respectively).

About one-seventh (12%) of the pedalcyclists killed in traffic crashes in 2008 were between 5 and 15 years old. The pedalcyclist fatality rate for this age group in 2008 was 2.01 per million population — about 14 percent lower than the rate for all pedalcyclists (2.35 per million population). The injury rate for this age group was 293 per million population, compared with 172.3 per million population for pedalcyclists of all ages.

## Alcohol-Related Data

Alcohol involvement — either for the driver or the pedalcyclist — was reported in more than one-third (37%) of the traffic crashes that resulted in pedalcyclist fatalities in 2008. In 31 percent of the crashes, either the driver or the pedalcyclist was reported to have a blood alcohol concentration (BAC) of .08 grams per deciliter (g/dL) or higher. Lower alcohol levels (BAC .01 to .07 g/dL) were reported in an additional 8 percent of crashes. Over one-fourth (28%) of the pedalcyclists killed had a BAC of .01 g/dL or higher, and nearly one-fourth (23%) had a BAC of .08 g/dL or higher.

*“Alcohol involvement was reported in more than one-third of all pedalcyclist fatalities in 2008.”*

## Gender

Most of the pedalcyclists killed or injured in 2008 were males (87% and 79%, respectively), and most were between the ages of 5 and 44 (48% and 77%, respectively).

In 2008, the pedalcyclist fatality rate per capita was eight times higher for males than for females, and the injury rate per capita was more than four times higher for males.

Table 3

### Pedalcyclists Killed and Injured and Fatality and Injury Rates by Age and Sex, 2008

Age (Years)	Male			Female			Total		
	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*
<5	5	10,748	0.47	1	10,258	0.10	6	21,006	0.29
5-9	13	10,259	1.27	10	9,806	1.02	23	20,065	1.15
10-15	55	12,415	4.43	11	11,839	0.93	66	24,255	2.72
16-20	47	11,039	4.26	5	10,492	0.48	52	21,531	2.42
21-24	37	8,681	4.26	5	8,162	0.61	42	16,842	2.49
25-34	61	20,900	2.92	13	20,032	0.65	74	40,932	1.81
35-44	77	21,314	3.61	13	21,187	0.61	90	42,501	2.12
45-54	161	21,853	7.37	19	22,519	0.84	180	44,372	4.06
55-64	103	16,251	6.34	9	17,436	0.52	112	33,686	3.32
65-74	34	9,265	3.67	2	10,858	0.18	36	20,123	1.79
75-84	21	5,336	3.94	3	7,689	0.39	24	13,025	1.84
85+	5	1,864	2.68	2	3,858	0.52	7	5,722	1.22
<b>Total</b>	<b>623</b>	<b>149,925</b>	<b>4.16</b>	<b>93</b>	<b>154,135</b>	<b>0.60</b>	<b>716</b>	<b>304,060</b>	<b>2.35</b>
Age (Years)	Male			Female			Total		
	Injured	Population (thousands)	Injury Rate*	Injured	Population (thousands)	Injury Rate*	Injured	Population (thousands)	Injury Rate*
<5	0	10,748	8.01	**	10,258	3.49	**	21,006	5.80
5-9	2,000	10,259	235.8	1,000	9,806	54.56	3,000	20,065	147.2
10-15	7,000	12,415	579.7	3,000	11,839	221.9	10,000	24,255	405.1
16-20	7,000	11,039	601.1	2,000	10,492	150.9	8,000	21,531	381.7
21-24	4,000	8,681	409.4	2,000	8,162	203.7	5,000	16,842	309.7
25-34	5,000	20,900	239.1	2,000	20,032	93.13	7,000	40,932	167.7
35-44	5,000	21,314	237.5	2,000	21,187	103.0	7,000	42,501	170.5
45-54	5,000	21,853	232.0	1,000	22,519	40.20	6,000	44,372	134.7
55-64	4,000	16,251	218.4	**	17,436	17.42	4,000	33,686	114.4
65-74	1,000	9,265	127.7	**	10,858	3.71	1,000	20,123	60.80
75-84	1,000	5,336	141.7	**	7,689	7.12	1,000	13,025	62.24
85+	**	1,864	47.48	**	3,858	0.00	**	5,722	15.46
<b>Total</b>	<b>41,000</b>	<b>149,925</b>	<b>270.8</b>	<b>12,000</b>	<b>154,135</b>	<b>76.54</b>	<b>52,000</b>	<b>304,060</b>	<b>172.3</b>

\* Rate per million population.

\*\* Less than 500 injured.

Source: Population — Bureau of the Census projections.

Table 4

**Pedalcyclist Traffic Fatalities and Fatality Rates by State, 2008**

State	Total Traffic Fatalities	Resident Population (thousands)	Pedalcyclist Fatalities	Percent of Total	Pedalcyclist Fatalities per Million Population
Alabama	966	4,662	4	0.4	0.86
Alaska	62	686	1	1.6	1.46
Arizona	937	6,500	19	2.0	2.92
Arkansas	600	2,855	5	0.8	1.75
California	3,434	36,757	109	3.2	2.97
Colorado	548	4,939	12	2.2	2.43
Connecticut	264	3,501	5	1.9	1.43
Delaware	121	873	6	5.0	6.87
District of Columbia	34	592	1	2.9	1.69
Florida	2,978	18,328	125	4.2	6.82
Georgia	1,493	9,686	20	1.3	2.06
Hawaii	107	1,288	2	1.9	1.55
Idaho	232	1,524	2	0.9	1.31
Illinois	1,043	12,902	27	2.6	2.09
Indiana	814	6,377	18	2.2	2.82
Iowa	412	3,003	5	1.2	1.67
Kansas	385	2,802	6	1.6	2.14
Kentucky	826	4,269	6	0.7	1.41
Louisiana	912	4,411	11	1.2	2.49
Maine	155	1,316	4	2.6	3.04
Maryland	591	5,634	6	1.0	1.07
Massachusetts	363	6,498	10	2.8	1.54
Michigan	980	10,003	25	2.6	2.50
Minnesota	456	5,220	13	2.9	2.49
Mississippi	783	2,939	4	0.5	1.36
Missouri	960	5,912	3	0.3	0.51
Montana	229	967	3	1.3	3.10
Nebraska	208	1,783	0	0	0
Nevada	324	2,600	7	2.2	2.69
New Hampshire	139	1,316	2	1.4	1.52
New Jersey	590	8,683	20	3.4	2.30
New Mexico	366	1,984	7	1.9	3.53
New York	1,231	19,490	42	3.4	2.15
North Carolina	1,433	9,222	32	2.2	3.47
North Dakota	104	641	1	1.0	1.56
Ohio	1,190	11,486	18	1.5	1.57
Oklahoma	749	3,642	4	0.5	1.10
Oregon	416	3,790	10	2.4	2.64
Pennsylvania	1,468	12,448	8	0.5	0.64
Rhode Island	65	1,051	1	1.5	0.95
South Carolina	920	4,480	14	1.5	3.13
South Dakota	119	804	0	0	0
Tennessee	1,035	6,215	7	0.7	1.13
Texas	3,382	24,327	53	1.6	2.18
Utah	275	2,736	4	1.5	1.46
Vermont	73	621	0	0	0
Virginia	824	7,769	13	1.6	1.67
Washington	521	6,549	9	1.7	1.37
West Virginia	380	1,814	2	0.5	1.10
Wisconsin	605	5,628	9	1.5	1.60
Wyoming	159	533	1	0.6	1.88
<b>U.S. Total*</b>	<b>37,261</b>	<b>304,060</b>	<b>716</b>	<b>1.9</b>	<b>2.35</b>
<b>Puerto Rico</b>	<b>399</b>	<b>3,954</b>	<b>12</b>	<b>3.0</b>	<b>3.03</b>

\* Totals may not equal sum of components due to independent rounding.

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

## 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.

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 three feet clearance when passing a bicyclist on the road, look for cyclists before opening a car door or pulling out 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, 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.

## For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis, NVS-424, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted at 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 [www.nhtsa.gov/portal/site/nhtsa/nca](http://www.nhtsa.gov/portal/site/nhtsa/nca). 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 *Overview, Alcohol, African American, Children, Hispanic, Large Trucks, Motorcycles, Occupant Protection, Older Population, Pedestrians, Race and Ethnicity, Rural/Urban Comparisons, School Transportation-Related Crashes, Speeding, State Alcohol Estimates, State Traffic Data, 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 accessed online at [www-nrd.nhtsa.dot.gov/CATS/index.aspx](http://www-nrd.nhtsa.dot.gov/CATS/index.aspx).