# **Traffic Safety Facts**

NHTSA www.nhtsa.gov

2007 Data

DOT HS 810 986

# **Bicyclists and Other Cyclists**

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.

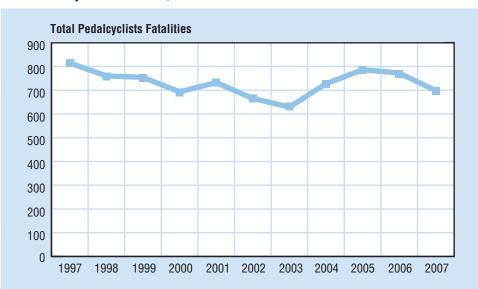
The first automobile crash in the United States occurred in New York City in 1896, when a motor vehicle collided with a pedalcycle rider (Famous First Facts, by Joseph Kane). More than 52,000 pedalcyclists have died in traffic crashes in the United States since 1932 — the first year in which estimates 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 2007, 698 pedalcyclists were killed and an additional 44,000 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 2007 is 14 percent lower than the 814 fatalities reported in 1997. 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 nonoccupant traffic fatalities in 2007.





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Table 1
Nonoccupant Traffic Fatalities, 1997-2007

Year	Pedalcyclist	Pedestrian	Other	Total
1997	814	5,321	153	6,288
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	698	4,654	152	5,504

Pedalcyclist fatalities occurred more frequently in urban areas (72%), at non-intersection locations (64%), between the hours of 5 and 9 p.m. (26%), and during the months of June (11%) and September (11%).

### Age

In 1997, the average age of pedalcyclists killed in traffic crashes was 31; in 2007 the average age of those killed was 40. In contrast, in 1997 the average age of those injured was 24 and the average age of those injured in 2007 was 30.

Table 2
Average Age of Pedalcyclists Killed and Injured by Year

Year	Pedalcyclists Killed Average Age	Pedalcyclists Injured Average Age		
1997	31	24		
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	30		
1997-2007	36	27		

Pedalcyclists under age 16 accounted for 15 percent of all pedalcyclists killed and 29 percent of those injured in traffic crashes in 2007. By comparison, pedalcyclists under age 16 accounted for 31 percent of all those killed and 44 percent of those injured in 1997.

Pedalcyclists age 25 and older have made up an increasing proportion of all pedalcyclist deaths since 1997. The proportion of pedalcyclist fatalities age 25 to 64 was 1.4 times higher in 2007 as in 1997 (64% and 46%, respectively).

One-seventh (15%) of the pedalcyclists killed in traffic crashes in 2007 were between 5 and 15 years old. The pedalcyclist fatality rate for this age group in 2007 was 2.40 per million population — about 4 percent higher than the rate for all pedalcyclists (2.31 per million population). The injury rate for this age group was 281 per million population, compared with 144.2 per million population for pedalcyclists of all ages.

"One-seventh of the pedalcyclists killed in traffic crashes in 2007 were between 5 and 15 years old."

# **Alcohol-Related Data**

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 2007. In 33 percent of the crashes, either the driver or the cyclist 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 10 percent of crashes. Over one-fourth (31%) of the pedalcyclists killed had a BAC of .01 g/dL or higher, and nearly one-fourth (25%) had a BAC of .08 g/dL or higher.

"Alcohol involvement was reported in more than one-third of all pedalcyclist fatalities in 2007."

#### Gender

Most of the pedalcyclists killed or injured in 2007 were males (88% and 83%, respectively), and most were between the ages of 5 and 44 (55% and 79%, respectively).

In 2007, the pedalcyclist fatality rate per capita was eight times higher for males than for females, and the injury rate per capita was more than five times higher for males.

Table 3
Pedalcyclists Killed and Injured and Fatality and Injury Rates by Age and Sex, 2007

	Sts Killed and Injured and I atality and injury hates by Age and Sex, 2007								
			Male Female		Total				
Age (Years)	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*
<5	0	0	0	0	0	0	0	0	0
5-9	18	10,149	1.77	6	9,701	0.62	24	19,850	1.21
10-15	69	12,582	5.48	14	11,997	1.17	83	24,579	3.38
16-20	41	10,966	3.74	5	10,411	0.48	46	21,378	2.15
21-24	24	8,711	2.76	5	8,152	0.61	29	16,863	1.72
25-34	79	20,683	3.82	9	19,908	0.45	88	40,591	2.17
35-44	99	21,619	4.58	18	21,543	0.84	117	43,161	2.71
45-54	132	21,595	6.11	13	22,280	0.58	145	43,875	3.30
55-64	86	15,775	5.45	8	16,937	0.47	94	32,712	2.87
65-74	42	8,887	4.73	4	10,465	0.38	46	19,352	2.38
75-84	17	5,313	3.20	0	7,711	0.00	17	13,024	1.31
85 +	2	1,777	1.13	0	3,735	0.00	2	5,512	0.36
Unknown	7	0	0	0	0	0	7	0	0
Total	616	148,659	4.14	82	152,962	0.54	698	301,621	2.31
		Male		Female			Total		
		Population			Population		Population		
Age (Years)	Injured	(thousands)	Injury Rate*	Injured	(thousands)	Injury Rate*	Injured	(thousands)	Injury Rate*
<5	0	10,603	1.32	0	10,121	0.00	0	20,724	0.67
5-9	3,000	10,149	274.0	0	9,701	40.94	3,000	19,850	160.1
10-15	8,000	12,582	614.6	2,000	11,997	130.9	9,000	24,579	378.5
16-20	5,000	10,966	417.1	1,000	10,411	67.55	5,000	21,378	246.9
21-24	3,000	8,711	299.9	1,000	8,152	138.8	4,000	16,863	222.0
25-34	6,000	20,683	276.2	2,000	19,908	84.42	7,000	40,591	182.2
35-44	5,000	21,619	223.8	1,000	21,543	28.88	5,000	43,161	126.5
45-54	4,000	21,595	208.1	0	22,280	21.20	5,000	43,875	113.2
55-64	2,000	15,775	99.21	1,000	16,937	34.03	2,000	32,712	65.46
65-74	1,000	8,887	143.6 104.0	0	10,465	12.90	1,000	19,352	72.91
	4 000		1 11/1 11	0	7,711	1.91	1,000	13,024	43.58
75-84	1,000	5,313			0.705	0.00	^	E E40	
75-84 85 +	0	1,777	13.89	0	3,735	0.00	0	5,512	4.48
75-84					3,735 0 <b>152,962</b>	0.00 0 <b>47.74</b>	0 0 <b>43,000</b>	5,512 0 <b>301,621</b>	

<sup>\*</sup> Rate per million population.

Source: Population — Bureau of the Census projections. Injury data is based on the General Estimates System (GES).

Note 1: Fatality rates lower than 0.5 per million population are rounded to zero.

Note 2: Injuries fewer than 500 are rounded to zero.

Table 4 Pedalcyclist Traffic Fatalities and Fatality Rates by State, 2007

State	Total Traffic Fatalities	Resident Population (thousands)	Pedalcyclist Fatalities	Percent of Total	Pedalcyclist Fatalities per Million Population	
Alabama	1,110	4,628	9	0.8	1.94	
Alaska	84	683	1	1.2	1.46	
Arizona	1,066	6,339	21	2.0	3.31	
Arkansas	650	2,835	3	0.5	1.06	
California	3,974	36,553	109	2.7	2.98	
Colorado	554	4,862	11	2.0	2.26	
Connecticut	277	3,502	4	1.4	1.14	
Delaware	117	865	0	0	0	
District of Columbia	44	588	1	2.3	1.70	
Florida	3,214	18,251	119	3.7	6.52	
Georgia	1,641	9,545	16	1.0	1.68	
Hawaii	138	1,283	4	2.9	3.12	
Idaho	252	1,499	2	0.8	1.33	
Illinois	1,249	12,853	18	1.4	1.40	
Indiana	898	6,345	15	1.7	2.36	
lowa	445	2,988	7	1.6	2.34	
Kansas	416	2,776	2	0.5	0.72	
Kentucky	864	4,241	3	0.3	0.71	
Louisiana	985	4,293	22	2.2	5.12	
Maine	183	1,317	1	0.5	0.76	
Maryland	614	5,618	7	1.1	1.25	
Massachusetts	417	6,450	10	2.4	1.55	
Michigan	1,088	10,072	17	1.6	1.69	
Minnesota	504	5,198	4	0.8	0.77	
Mississippi	884	2,919	8	0.9	2.74	
Missouri	992	5,878	9	0.9	1.53	
Montana	277	958	4	1.4	4.18	
Nebraska	256	1,775	1	0.4	0.56	
Nevada	373	2,565	10	2.7	3.90	
New Hampshire	129	1,316	3	2.3	2.28	
New Jersey	724	8,686	13	1.8	1.50	
New Mexico	413	1,970	7	1.7	3.55	
New York	1,333	19,298	51	3.8	2.64	
North Carolina	1,675	9,061	18	1.1	1.99	
North Dakota	111	640	0	0	0	
Ohio	1,257	11,467	17	1.4	1.48	
Oklahoma	754	3,617	3	0.4	0.83	
Oregon	455	3,747	15	3.3	4.00	
Pennsylvania	1,491	12,433	20	1.3	1.61	
Rhode Island	69	1,058	1	1.4	0.95	
South Carolina	1,066	4,408	20	1.9	4.54	
South Dakota	1,000	796	0	0	0	
Tennessee	1,210	6,157	6	0.5	0.97	
Texas	3,363	23,904	48	1.4	2.01	
Utah	299	23,904	6	2.0	2.01	
Vermont	299 66	2,645 621	0	2.0		
	1,027	7,712	7	0.7	0.91	
Virginia	1,027		14			
Washington		6,468		2.5	2.16	
West Virginia	431	1,812	1	0.2	0.55	
Wisconsin	756	5,602	10	1.3	1.79	
Wyoming	150	523	0	0	0	
U.S. Total	41,059	301,621	698	1.7	2.31	
Puerto Rico	452	3,941	6	1.3	1.52	

**Note:** 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/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 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.