



Bicyclists and Other Cyclists

In 2010, 618 pedalcyclists were killed and an additional 52,000 were injured in motor vehicle traffic crashes. Pedalcyclist deaths accounted for 2 percent of all motor vehicle traffic fatalities, and made up 2 percent of all the people injured in traffic crashes during the year.

For the purpose of this Traffic Safety Fact Sheet, 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 number of pedalcyclist fatalities in 2010 is 2 percent lower than the 628 pedalcyclists fatalities reported in 2009.

The 618 pedalcyclist deaths in 2010 accounted for 2 percent of all traffic fatalities during the year.

Table 1
Total Fatalities and Pedalcyclist Fatalities in Traffic Crashes, 2001–2010

Year	Total Fatalities	Pedalcyclist Fatalities	Percent of Total Fatalities
2001	42,196	732	1.7
2002	43,005	665	1.5
2003	42,884	629	1.5
2004	42,836	727	1.7
2005	43,510	786	1.8
2006	42,708	772	1.8
2007	41,259	701	1.7
2008	37,423	718	1.9
2009	33,883	628	1.9
2010	32,885	618	1.9

As shown in Table 2, the majority of pedalcyclist fatalities in 2010 occurred in urban areas (72%) and at non-intersections (67%).

The majority of pedalcyclist fatalities, 174 (28%) occurred between the hours of 4 p.m. and 7:59 p.m. The second highest number of fatalities, 152 (25%) occurred between the hours of 8 p.m. and 11:59 p.m. The fewest pedalcyclist fatalities occurred between the hours of midnight and 3:59 a.m. See Table 2.

Table 2

Percentage of Pedalcyclist Fatalities in Relation to Land Use, Non-Motorist Location and Time of Day

Pedalcyclists Killed	Percentage of the Pedalcyclists Killed	
	2009	2010
Land Use		
Rural	30%	28%
Urban	70%	72%
Non-Motorist Location		
Intersection	33%	33%
Non-Intersection	67%	67%
Time of Day		
Midnight – 3:59 a.m.	8%	7%
4 a.m. – 7:59 a.m.	12%	11%
8 a.m. – 11:59 a.m.	14%	13%
Noon – 3:59 p.m.	17%	17%
4 p.m. – 7:59 p.m.	29%	28%
8 p.m. – 11:59 p.m.	19%	25%

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.

Age

In 2010, the average age of pedalcyclists killed in traffic crashes was 42. During the past 10 years, there has been a steady increase in the average age of both pedalcyclists killed and injured (Table 3).

Table 3

Average Age of Pedalcyclists Killed and Injured, 2001–2010

Year	Pedalcyclists Killed Average Age	Pedalcyclists Injured Average Age
2001	36	26
2002	36	28
2003	36	27
2004	39	29
2005	39	29
2006	41	30
2007	40	30
2008	41	31
2009	41	31
2010	42	31
2001-2010	39	29

Pedalcyclists under age 16 accounted for 11 percent of all pedalcyclists killed and 21 percent of all those injured in traffic crashes in 2010. By comparison, pedalcyclists under age 16 accounted for 21 percent of all those killed and 38 percent of those injured in 2001.

Pedalcyclists ages 25 to 64 have made up an increasing proportion of all pedalcyclist deaths since 2001. The proportion of pedalcyclist fatalities among those ages 25 to 64 was 16% higher in 2010 as in 2001(65% and 56%, respectively).

About one-tenth (11%) of the pedalcyclists killed in traffic crashes in 2010 were between 5 and 15 years old. The pedalcyclist fatality rate for this age group in 2010 was 1.5 per million population—about 25 percent lower than the rate for all pedalcyclists (2.00 per million population). The injury rate for this age group was 231 per million population, compared with 167 per million population for pedalcyclists of all ages.

Gender

The majority of the pedalcyclists killed or injured in 2010 were males (86% and 75%, respectively). The highest number of male fatalities were between the ages of 45 and 54 (23%), and the most males injured were between 25 and 34 (21%).

In 2010, the pedalcyclist fatality rate per capita was almost seven times higher for males than for females, and the injury rate per capita was more than three times higher for males.

Seventy-two percent of all pedalcyclist deaths in 2010 occurred in urban areas.

Table 4

Pedalcyclists Killed and Injured and Fatality and Injury Rates by Age and Sex, 2010

Age (Years)	Male			Female			Total		
	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*
<5	1	10,318	0.10	0	9,883	0.00	1	20,201	0.05
5-9	12	10,407	1.15	6	9,975	0.60	18	20,382	0.88
10-15	40	12,767	3.13	8	12,174	0.66	48	24,941	1.92
16-20	34	11,411	2.98	8	10,858	0.74	42	22,269	1.89
21-24	30	8,729	3.44	9	8,383	1.07	39	17,111	2.28
25-34	54	20,739	2.60	8	20,508	0.39	62	41,247	1.50
35-44	71	20,396	3.48	10	20,585	0.49	81	40,981	1.98
45-54	125	22,149	5.64	21	22,864	0.92	146	45,013	3.24
55-64	103	17,739	5.81	7	19,028	0.37	110	36,766	2.99
65-74	38	10,161	3.74	6	11,681	0.51	44	21,841	2.01
75-84	20	5,486	3.65	1	7,578	0.13	21	13,063	1.61
85+	2	1,807	1.11	0	3,726	0.00	2	5,533	0.36
Total†	534	152,108	3.51	84	157,242	0.53	618	309,350	2.00
Age (Years)	Male			Female			Total		
	Injured	Population (thousands)	Injury Rate*	Injured	Population (thousands)	Injury Rate*	Injured	Population (thousands)	Injury Rate*
<5	**	10,318	10	**	9,883	6	**	20,201	8
5-9	2,000	10,407	172	1,000	9,975	67	2,000	20,382	121
10-15	6,000	12,767	484	2,000	12,174	150	8,000	24,941	321
16-20	4,000	11,411	365	2,000	10,858	216	7,000	22,269	292
21-24	4,000	8,729	471	2,000	8,383	278	6,000	17,111	377
25-34	8,000	20,739	363	2,000	20,508	100	10,000	41,247	232
35-44	5,000	20,396	247	2,000	20,585	80	7,000	40,981	163
45-54	6,000	22,149	267	1,000	22,864	37	7,000	45,013	150
55-64	3,000	17,739	148	1,000	19,028	34	3,000	36,766	89
65-74	1,000	10,161	74	**	11,681	20	1,000	21,841	45
75-84	1,000	5,486	127	**	7,578	12	1,000	13,063	60
85+	**	1,807	18	**	3,726	24	**	5,533	22
Total	39,000	152,108	256	13,000	157,242	81	52,000	309,350	167

* Rate per million population.

** Less than 500 injured, injury rate not shown.

† Total includes 4 killed of unknown gender.

Source: Fatalities — Fatality Analysis Reporting System, NHTSA. Injured — General Estimates System, NHTSA. Population — Bureau of the Census.

Alcohol Involvement

Almost one-fourth (24%) of the pedalcyclists killed in 2010 had a blood alcohol concentration (BAC) of .01 grams per deciliter (g/dL) or higher, and over one-fifth (21%) had a BAC of .08 g/dL or higher. Alcohol-involvement—either for the driver of a motor vehicle or the pedalcyclist—was reported in more than 34 percent of the traffic crashes that resulted in pedalcyclist fatalities in 2010. In 30 percent of the crashes, either the driver or the pedalcyclist was reported to have a BAC of .08 g/dL or higher. Lower alcohol levels (BAC .01 to .07 g/dL) were reported in an additional 4 percent of crashes.

Table 5

Crashes Involving a Pedalcyclist Fatality by the Highest BAC of Involved Riders and Drivers

Year	BAC=.00		BAC=.01-.07		BAC=.08+		BAC=.01+		Total
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
2009	380	61	39	6	207	33	245	39	625
2010	410	66	24	4	183	30	207	34	617

Alcohol involvement was reported in more than 34 percent of all fatal pedalcyclist crashes in 2010.

For more information:

Information on traffic fatalities is available from the National Center for Statistics and Analysis (NCSA), NVS-424, 1200 New Jersey Avenue SE., Washington, DC 20590. NCSA can be contacted at 800-934-8517 or via the following e-mail address: ncsaweb@dot.gov. General information on highway traffic safety can be accessed by Internet users 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, Children, Large Trucks, Motorcycles, Occupant Protection, Older Population, Overview, Passenger Vehicles, 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.



U.S. Department
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**National Highway
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Table 6

Total and Pedalcyclist Traffic Fatalities and Fatality Rates by State, 2010

State	Total Traffic Fatalities	Resident Population (thousands)	Pedalcyclist Fatalities	Percent of Total	Pedalcyclist Fatalities per Million Population
Alabama	862	4,785	6	0.7	1.25
Alaska	56	714	0	0	0
Arizona	762	6,414	19	2.5	2.96
Arkansas	563	2,922	1	0.2	0.34
California	2,715	37,349	99	3.6	2.65
Colorado	448	5,049	8	1.8	1.58
Connecticut	319	3,577	7	2.2	1.96
Delaware	101	900	3	3.0	3.33
District of Columbia	24	604	2	8.3	3.31
Florida	2,445	18,843	83	3.4	4.40
Georgia	1,244	9,713	18	1.4	1.85
Hawaii	113	1,364	3	2.7	2.20
Idaho	209	1,571	4	1.9	2.55
Illinois	927	12,843	24	2.6	1.87
Indiana	754	6,491	13	1.7	2.00
Iowa	390	3,050	8	2.1	2.62
Kansas	431	2,859	1	0.2	0.35
Kentucky	760	4,346	7	0.9	1.61
Louisiana	710	4,544	10	1.4	2.20
Maine	161	1,328	1	0.6	0.75
Maryland	493	5,786	8	1.6	1.38
Massachusetts	314	6,557	6	1.9	0.92
Michigan	942	9,878	29	3.1	2.94
Minnesota	411	5,311	9	2.2	1.69
Mississippi	641	2,970	4	0.6	1.35
Missouri	819	5,996	7	0.9	1.17
Montana	189	991	0	0	0
Nebraska	190	1,830	2	1.1	1.09
Nevada	257	2,705	6	2.3	2.22
New Hampshire	128	1,317	0	0	0
New Jersey	556	8,802	12	2.2	1.36
New Mexico	346	2,066	8	2.3	3.87
New York	1,200	19,392	36	3.0	1.86
North Carolina	1,319	9,562	23	1.7	2.41
North Dakota	105	674	1	1.0	1.48
Ohio	1,080	11,536	11	1.0	0.95
Oklahoma	668	3,762	9	1.3	2.39
Oregon	317	3,839	7	2.2	1.82
Pennsylvania	1,324	12,710	21	1.6	1.65
Rhode Island	66	1,053	2	3.0	1.90
South Carolina	810	4,636	14	1.7	3.02
South Dakota	140	816	2	1.4	2.45
Tennessee	1,031	6,357	4	0.4	0.63
Texas	2,998	25,257	42	1.4	1.66
Utah	236	2,776	7	3.0	2.52
Vermont	71	626	1	1.4	1.60
Virginia	740	8,025	12	1.6	1.50
Washington	458	6,744	6	1.3	0.89
West Virginia	315	1,854	3	1.0	1.62
Wisconsin	572	5,691	9	1.6	1.58
Wyoming	155	564	0	0	0
U.S. Total	32,885	309,350	618	1.9	2.00
Puerto Rico	340	3,722	15	4.4	4.03

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