



Bicyclists and Other Cyclists

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.

In 2009, 630 pedalcyclists were killed and an additional 51,000 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.

The number of pedalcyclist fatalities in 2009 is 12 percent lower than the 718 pedalcyclists fatalities report in 2008.

The 630 pedalcyclist deaths in 2009 accounted for 2 percent of all traffic fatalities during the year.

Table 1
Total Fatalities and Pedalcyclist Fatalities in Traffic Crashes, 2000–2009

Year	Total Fatalities	Pedalcyclist Fatalities	Percent of Total Fatalities
2000	41,945	693	1.7
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	33,808	630	1.9

The majority of pedalcyclist fatalities in 2009 occurred in urban areas (70%). In respect to vehicle crash location in relation to an intersection, most pedalcyclist fatalities in 2009 occurred at non-intersections. Compared to 2008 these numbers increased by 5 percent.

Almost three-fourths (72%) of the pedalcyclist fatalities were killed during the daytime between the hours of 4 a.m. and 8 p.m., a 6-percent increase from the previous year. The remaining 27 percent were killed during the nighttime hours, a 13-percent decrease from the previous year. Table 2 shows the pedalcyclist fatalities by time of day for 2008 and 2009.

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	
	2008	2009
Land Use		
Rural	31%	30%
Urban	69%	70%
Non-Motorist Location		
Intersection	36%	33%
Non-Intersection	64%	67%
Time of Day		
Midnight – 3:59 a.m.	9%	8%
4 a.m. – 7:59 a.m.	12%	12%
8 a.m. – 11:59 a.m.	13%	14%
Noon – 3:59 p.m.	17%	17%
4 p.m. – 7:59 p.m.	26%	29%
8 p.m. – 11:59 p.m.	22%	19%

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 2009, the average age of pedalcyclists killed in traffic crashes was 41. During the past 10 years, there has been a steady increase in the average age of both pedalcyclists killed and those injured (Table 3).

Table 3

Average Age of Pedalcyclists Killed and Injured 2000–2009

Year	Pedalcyclists Killed Average Age	Pedalcyclists Injured Average Age
2000	35	25
2001	36	26
2002	37	28
2003	36	27
2004	39	29
2005	39	29
2006	41	30
2007	40	30
2008	41	31
2009	41	31
2000-2009	39	29

Pedalcyclists under age 16 accounted for 13 percent of all pedalcyclists killed and 20 percent of all those injured in traffic crashes in 2009. By comparison, pedalcyclists under age 16 accounted for 28 percent of all those killed and 40 percent of those injured in 2000.

Pedalcyclists ages 25 to 64 have made up an increasing proportion of all pedalcyclist deaths since 2000. The proportion of pedalcyclist fatalities among those ages 25 to 64 was 1.2 times higher in 2009 as in 2000 (64% and 52%, respectively).

About one-eighth (13%) of the pedalcyclists killed in traffic crashes in 2009 were between 5 and 15 years old. The pedalcyclist fatality rate for this age group in 2009 was 1.8 per million population—about 14 percent lower than the rate for all pedalcyclists (2.05 per million population). The injury rate for this age group was 223 per million population, compared with 165 per million population for pedalcyclists of all ages.

Gender

Most of the pedalcyclists killed or injured in 2009 were males (87% and 80%, respectively). The most killed were between the ages of 45 and 54 (20%), and the most injured were between 25 and 34 (20%).

In 2009, the pedalcyclist fatality rate per capita was seven times higher for males than for females, and the injury rate per capita was more than four times higher for males.

Seventy percent of all pedalcyclist deaths in 2009 occurred in urban areas.

Table 4

Pedalcyclists Killed and Injured and Fatality and Injury Rates by Age and Sex, 2009

Age (Years)	Male			Female			Total		
	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*
<5	3	10,887	0.28	0	10,413	0.00	3	21,300	0.14
5-9	12	10,536	1.14	6	10,074	0.60	18	20,610	0.87
10-15	50	12,340	4.05	14	11,767	1.19	64	24,107	2.65
16-20	32	11,166	2.87	5	10,578	0.47	37	21,744	1.70
21-24	23	8,861	2.60	6	8,339	0.72	29	17,200	1.69
25-34	60	21,224	2.83	11	20,343	0.54	71	41,566	1.71
35-44	93	20,857	4.46	12	20,673	0.58	105	41,530	2.53
45-54	124	21,973	5.64	15	22,619	0.66	139	44,592	3.12
55-64	82	16,782	4.89	6	18,005	0.33	88	34,787	2.53
65-74	49	9,593	5.11	4	11,199	0.36	53	20,792	2.55
75-84	18	5,447	3.30	2	7,700	0.26	20	13,148	1.52
85+	3	1,783	1.68	0	3,848	0.00	3	5,631	0.53
Total	549	151,449	3.62	81	155,557	0.52	630	307,007	2.05
Age (Years)	Male			Female			Total		
	Injured	Population (thousands)	Injury Rate*	Injured	Population (thousands)	Injury Rate*	Injured	Population (thousands)	Injury Rate*
<5	**	10,887	**	**	10,413	**	**	21,300	**
5-9	2,000	10,536	172	**	10,074	**	2,000	20,610	107
10-15	6,000	12,340	501	2,000	11,767	135	8,000	24,107	322
16-20	6,000	11,166	510	1,000	10,578	122	7,000	21,744	321
21-24	4,000	8,861	501	2,000	8,339	251	7,000	17,200	380
25-34	8,000	21,224	399	1,000	20,343	68	10,000	41,566	237
35-44	3,000	20,857	152	**	20,673	**	4,000	41,530	86
45-54	6,000	21,973	280	2,000	22,619	81	8,000	44,592	179
55-64	3,000	16,782	187	1,000	18,005	53	4,000	34,787	118
65-74	1,000	9,593	91	**	11,199	**	1,000	20,792	48
75-84	**	5,447	**	**	7,700	**	**	13,148	**
85+	**	1,783	**	**	3,848	**	**	5,631	**
Total	41,000	151,449	268	10,000	155,557	65	51,000	307,007	165

* Rate per million population.

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

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

Alcohol Involvement

Over one-fourth (28%) of the pedalcyclists killed in 2009 had a blood alcohol concentration (BAC) of .01 grams per deciliter (g/dL) or higher, and nearly one-fourth (24%) had a BAC of .08 g/dL or higher. Alcohol-involvement—either for the driver or the pedalcyclists—was reported in more than 40 percent of the traffic crashes that resulted in pedalcyclist fatalities in 2009. In 33 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 6 percent of crashes.

Table 5

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

Year	.00 BAC		.01-.07 BAC		.08+ BAC		.01+ BAC		Total
	#	%	#	%	#	%	#	%	#
2008	448	63	45	6	218	31	263	37	711
2009	378	60	39	6	210	33	249	40	627

Alcohol involvement was reported in more than 40 percent of all fatal pedalcyclist crashes in 2009.

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.

Table 6

Total and Pedalcyclist Traffic Fatalities and Fatality Rates by State, 2009

State	Total Traffic Fatalities	Resident Population (thousands)	Pedalcyclist Fatalities	Percent of Total	Pedalcyclist Fatalities per Million Population
Alabama	848	4,709	6	0.7	1.27
Alaska	64	698	2	3.1	2.86
Arizona	807	6,596	25	3.1	3.79
Arkansas	585	2,889	5	0.9	1.73
California	3,081	36,962	99	3.2	2.68
Colorado	465	5,025	10	2.2	1.99
Connecticut	223	3,518	1	0.4	0.28
Delaware	116	885	6	5.2	6.78
District of Columbia	29	600	0	0	0
Florida	2,558	18,538	107	4.2	5.77
Georgia	1,284	9,829	21	1.6	2.14
Hawaii	109	1,295	3	2.8	2.32
Idaho	226	1,546	7	3.1	4.53
Illinois	911	12,910	20	2.2	1.55
Indiana	693	6,423	7	1.0	1.09
Iowa	372	3,008	2	0.5	0.66
Kansas	386	2,819	5	1.3	1.77
Kentucky	791	4,314	5	0.6	1.16
Louisiana	821	4,492	13	1.6	2.89
Maine	159	1,318	0	0	0
Maryland	547	5,699	11	2.0	1.93
Massachusetts	334	6,594	6	1.8	0.91
Michigan	871	9,970	19	2.2	1.91
Minnesota	421	5,266	10	2.4	1.90
Mississippi	700	2,952	10	1.4	3.39
Missouri	878	5,988	2	0.2	0.33
Montana	221	975	1	0.5	1.03
Nebraska	223	1,797	3	1.3	1.67
Nevada	243	2,643	6	2.5	2.27
New Hampshire	110	1,325	1	0.9	0.75
New Jersey	583	8,708	13	2.2	1.49
New Mexico	361	2,010	3	0.8	1.49
New York	1,156	19,541	29	2.5	1.48
North Carolina	1,314	9,381	16	1.2	1.71
North Dakota	140	647	1	0.7	1.55
Ohio	1,021	11,543	19	1.9	1.65
Oklahoma	738	3,687	11	1.5	2.98
Oregon	377	3,826	8	2.1	2.09
Pennsylvania	1,256	12,605	15	1.2	1.19
Rhode Island	83	1,053	0	0	0
South Carolina	894	4,561	11	1.2	2.41
South Dakota	131	812	0	0	0
Tennessee	989	6,296	9	0.9	1.43
Texas	3,071	24,782	48	1.6	1.94
Utah	244	2,785	5	2.0	1.80
Vermont	74	622	0	0	0
Virginia	757	7,883	11	1.5	1.40
Washington	492	6,664	9	1.8	1.35
West Virginia	356	1,820	0	0	0
Wisconsin	561	5,655	7	1.2	1.24
Wyoming	134	544	2	1.5	3.67
U.S. Total	33,808	307,007	630	1.9	2.05
Puerto Rico	365	3,967	17	4.7	4.29

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