



TRAFFIC SAFETY FACTS

2012 Data

DOT HS 812 018

April 2014

Bicyclists and Other Cyclists

In 2012, 726 pedalcyclists were killed and an additional 49,000 were injured in motor vehicle traffic crashes. Pedalcyclist deaths accounted for 2 percent of all motor vehicle traffic fatalities (Table 1), and made up 2 percent of 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. The term pedalcyclist will be used to identify these cyclists.

The number of pedalcyclists killed in 2012 is 6 percent higher than the 682 pedalcyclists killed in 2011.

The 726 pedalcyclist deaths in 2012 accounted for 2 percent of all traffic fatalities during the year.

Table 1

Total Fatalities and Pedalcyclist Fatalities in Traffic Crashes, 2003–2012

Year	Total Fatalities	Pedalcyclist Fatalities	Percent of Total Fatalities
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	32,999	623	1.9%
2011	32,479	682	2.1%
2012	33,561	726	2.2%

Sixty-nine percent of all pedalcyclist deaths in 2012 occurred in urban areas.

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 of 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, and at 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. (NHTSA's Office of Safety Programs)

Table 2 shows the majority of pedalcyclist fatalities in 2012 occurred in urban areas (69%) and at non-intersections (60%). Almost half of all pedalcyclist fatalities (48%) occurred from 4 p.m. to 11:59 p.m. The fewest pedalcyclist fatalities occurred from midnight to 3:59 a.m. (7%).

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	
	2011	2012
Land Use		
Rural	31%	31%
Urban	69%	69%
Non-Motorist Location		
Intersection	31%	30%
Non-Intersection	58%	60%
Other	10%	9%
Time of Day		
Midnight – 3:59 a.m.	9%	7%
4 a.m. – 7:59 a.m.	9%	12%
8 a.m. – 11:59 a.m.	14%	14%
Noon – 3:59 p.m.	18%	18%
4 p.m. – 7:59 p.m.	30%	24%
8 p.m. – 11:59 p.m.	21%	24%

Note: Percentage of unknown values are not displayed.

Age

In 2012, the average age of pedalcyclists killed in traffic crashes was 43. During the past 10 years, there has been a steady increase in the average age of pedalcyclists killed and injured (Table 3).

Table 3

Average Age of Pedalcyclists Killed and Injured, 2003–2012

Year	Pedalcyclists Killed Average Age	Pedalcyclists Injured Average Age
2003	36	27
2004	39	29
2005	39	29
2006	41	30
2007	40	29
2008	41	30
2009	41	30
2010	42	31
2011	43	32
2012	43	32
2003–2012	40	30

Pedalcyclists ages 45 to 54 had the highest fatality rate (3.93) based on population (Table 4). However, the highest injury rate (321) occurred in the 10-to-15 age group.

Children 15 and younger accounted for 9 percent of all pedalcyclists killed and 20 percent of all those injured in traffic crashes in 2012. Pedalcyclists ages 45 to 54 were 24 percent of those killed and 14 percent of those injured in that year.

Gender

The majority of the pedalcyclists killed or injured in 2012 were males (88% and 80%, respectively). The highest number of male fatalities were ages 45 to 54 (154), and the most males injured were between 10 and 15 (7,000). In 2012, the pedalcyclist fatality rate per capita was over 7 times higher for males than for females, and the injury rate per capita was over 4 times higher for males (Table 4).

Table 4

Pedalcyclists Killed and Injured and Fatality and Injury Rates by Age and Sex, 2012

Age (Years)	Male			Female			Total		
	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*	Killed	Population (thousands)	Fatality Rate*
<5	1	10,216	0.10	1	9,783	0.10	2	19,999	0.10
5–9	16	10,459	1.53	4	10,016	0.40	20	20,476	0.98
10–15	39	12,686	3.07	6	12,128	0.49	45	24,813	1.81
16–20	56	11,179	5.01	10	10,581	0.95	66	21,760	3.03
21–24	22	9,214	2.39	7	8,825	0.79	29	18,039	1.61
25–34	73	21,339	3.42	10	20,971	0.48	83	42,309	1.96
35–44	78	20,174	3.87	11	20,343	0.54	89	40,516	2.20
45–54	154	21,807	7.06	20	22,462	0.89	174	44,269	3.93
55–64	116	18,603	6.24	15	19,983	0.75	131	38,586	3.39
65–74	49	11,203	4.37	3	12,783	0.23	52	23,985	2.17
75–84	21	5,648	3.72	3	7,624	0.39	24	13,273	1.81
85+	5	1,964	2.55	0	3,923	0.00	5	5,887	0.85
Total†	634	154,492	4.10	90	159,422	0.56	724	313,914	2.31
Age (Years)	Male			Female			Total		
	Injured	Population (thousands)	Injury Rate*	Injured	Population (thousands)	Injury Rate*	Injured	Population (thousands)	Injury Rate*
<5	**	10,216	**	**	9,783	**	**	19,999	**
5–9	2,000	10,459	195	**	10,016	**	2,000	20,476	111
10–15	7,000	12,686	555	1,000	12,128	77	8,000	24,813	321
16–20	5,000	11,179	446	2,000	10,581	144	7,000	21,760	299
21–24	4,000	9,214	389	1,000	8,825	131	5,000	18,039	263
25–34	6,000	21,339	302	2,000	20,971	101	9,000	42,309	203
35–44	4,000	20,174	206	1,000	20,343	48	5,000	40,516	126
45–54	6,000	21,807	254	1,000	22,462	59	7,000	44,269	155
55–64	4,000	18,603	203	1,000	19,983	54	5,000	38,586	126
65–74	1,000	11,203	108	**	12,783	**	2,000	23,985	69
75–84	**	5,648	**	**	7,624	**	**	13,273	**
85+	**	1,964	**	**	3,923	**	**	5,887	**
Total	39,000	154,492	255	10,000	159,422	62	49,000	313,914	157

* Rate per million population.

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

† Total includes 4 males killed of unknown age. Two pedalcyclists of unknown gender are not included.

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

Alcohol involvement was reported in more than 37 percent of all fatal pedalcyclist crashes in 2012.

Alcohol Involvement

More than one-fourth (28%) of the pedalcyclists killed in 2012 had blood alcohol concentrations (BACs) of .01 grams per deciliter (g/dL) or higher, and almost one-fourth (24%) had BACs of .08 g/dL or higher. Alcohol involvement—either for the driver of a motor vehicle or the pedalcyclist—was reported in more than 37 percent of the traffic crashes that resulted in pedalcyclist fatalities in 2012. In 32 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 5 percent of the crashes (Table 5).

Table 5

Crashes Involving Pedalcyclist Fatalities 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
2011	429	63%	43	6%	208	31%	251	37%	680
2012	452	63%	36	5%	234	32%	270	37%	722

Table 6 shows total traffic fatalities, pedalcyclist fatalities, population, and fatality rates by State in 2012. Among all States, fatalities in motor vehicle traffic crashes in 2012 ranged from 3,398 (highest) to 59 (lowest) depending on the size and population of the State. Pedalcyclists fatalities were highest in California (124), followed by Florida (122), and Texas (56). There were no pedalcyclist fatalities in Nebraska, New Hampshire, North and South Dakota, Vermont, Wyoming, and the District of Columbia. The proportion of pedalcyclist fatalities among total fatalities in States ranged from a high of 5 percent (Florida) to a low of 0.5 percent (Montana). The highest fatality rate per million population was in Florida (6.32) followed by Louisiana (5.22).

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.



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**National Highway
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Table 6

Total and Pedalcyclist Traffic Fatalities and Fatality Rates by State, 2012

State	Total Traffic Fatalities	Resident Population (thousands)	Pedalcyclist Fatalities	Percent of Total	Pedalcyclist Fatalities per Million Population
Alabama	865	4,822	9	1.0%	1.87
Alaska	59	731	1	1.7%	1.37
Arizona	825	6,553	18	2.2%	2.75
Arkansas	552	2,949	6	1.1%	2.03
California	2,857	38,041	124	4.3%	3.26
Colorado	472	5,188	13	2.8%	2.51
Connecticut	236	3,590	4	1.7%	1.11
Delaware	114	917	4	3.5%	4.36
Dist of Columbia	15	632	0	—	—
Florida	2,424	19,318	122	5.0%	6.32
Georgia	1,192	9,920	17	1.4%	1.71
Hawaii	126	1,392	2	1.6%	1.44
Idaho	184	1,596	2	1.1%	1.25
Illinois	956	12,875	29	3.0%	2.25
Indiana	779	6,537	15	1.9%	2.29
Iowa	365	3,074	3	0.8%	0.98
Kansas	405	2,886	7	1.7%	2.43
Kentucky	746	4,380	6	0.8%	1.37
Louisiana	722	4,602	24	3.3%	5.22
Maine	164	1,329	1	0.6%	0.75
Maryland	505	5,885	5	1.0%	0.85
Massachusetts	349	6,646	15	4.3%	2.26
Michigan	938	9,883	19	2.0%	1.92
Minnesota	395	5,379	7	1.8%	1.30
Mississippi	582	2,985	4	0.7%	1.34
Missouri	826	6,022	6	0.7%	1.00
Montana	205	1,005	1	0.5%	0.99
Nebraska	212	1,856	0	—	—
Nevada	258	2,759	3	1.2%	1.09
New Hampshire	108	1,321	0	—	—
New Jersey	589	8,865	14	2.4%	1.58
New Mexico	365	2,086	7	1.9%	3.36
New York	1,168	19,570	45	3.9%	2.30
North Carolina	1,292	9,752	27	2.1%	2.77
North Dakota	170	700	0	—	—
Ohio	1,123	11,544	18	1.6%	1.56
Oklahoma	708	3,815	5	0.7%	1.31
Oregon	336	3,899	10	3.0%	2.56
Pennsylvania	1,310	12,764	16	1.2%	1.25
Rhode Island	64	1,050	2	3.1%	1.90
South Carolina	863	4,724	13	1.5%	2.75
South Dakota	133	833	0	—	—
Tennessee	1,014	6,456	8	0.8%	1.24
Texas	3,398	26,059	56	1.6%	2.15
Utah	217	2,855	3	1.4%	1.05
Vermont	77	626	0	—	—
Virginia	777	8,186	11	1.4%	1.34
Washington	444	6,897	12	2.7%	1.74
West Virginia	339	1,855	1	0.3%	0.54
Wisconsin	615	5,726	11	1.8%	1.92
Wyoming	123	576	0	—	—
U.S. Total	33,561	313,914	726	2.2%	2.31
Puerto Rico	347	3,667	14	4.0%	3.82

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