U.S. Department of Transportation National Highway Traffic Safety Administration



Pedalcyclists



On the Road for a Healthier Future

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 43,000 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.

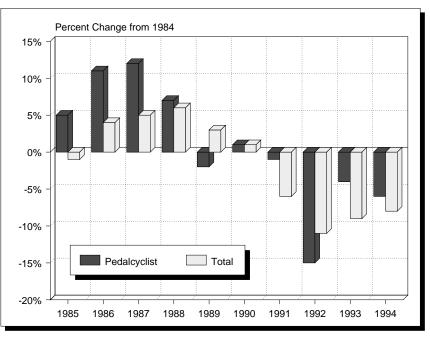
In 1994, 802 pedalcyclists were killed in traffic crashes. Pedalcyclist deaths accounted for 2 percent of all traffic fatalities during the year.

The number of pedalcyclist fatalities in 1994 was 6 percent lower than the 849 fatalities reported in 1984. The highest number of pedalcyclist fatalities ever recorded in the Fatal Accident Reporting System (FARS) was 1,003 in 1975.

The average age of pedalcyclist fatalities was 23.3 years in 1984; in 1994 the average age was 28.8 years.

"The 802 pedalcyclist deaths in 1994 accounted for 2 percent of all traffic fatalities during <u>the vear."</u>

Figure 1. Trends in Pedalcyclist and Total Traffic Fatalities, 1984-1994



National Center for Statistics & Analysis ▼ Research & Development ▼ 400 Seventh Street, S.W. ▼ Washington, D.C. 20590 *"Serving the Highway Safety Community by the Numbers"*

Traffic Safety Facts 1994 — Pedalcyclists

Pedalcyclists accounted for 12.6 percent of all nonmotorist traffic fatalities in 1994. Pedestrians accounted for 85.7 percent, and the remaining 1.7 percent were skateboard riders, roller skaters, etc.

| Year | Pedestrian | Pedalcyclist | Other | Total |
|------|------------|--------------|-------|-------|
| 1984 | 7,025 | 849 | 99 | 7,973 |
| 1985 | 6,808 | 890 | 84 | 7,782 |
| 1986 | 6,779 | 941 | 133 | 7,853 |
| 1987 | 6,745 | 948 | 132 | 7,825 |
| 1988 | 6,870 | 911 | 136 | 7,917 |
| 1989 | 6,556 | 832 | 107 | 7,495 |
| 1990 | 6,482 | 859 | 124 | 7,465 |
| 1991 | 5,801 | 843 | 124 | 6,768 |
| 1992 | 5,549 | 723 | 98 | 6,370 |
| 1993 | 5,649 | 816 | 111 | 6,576 |
| 1994 | 5,472 | 802 | 109 | 6,383 |

| Table 1. Nonoccupant Traffic Fatalities, 1984-1 | 994 |
|---|-----|
|---|-----|

"More than one-third of the pedalcyclists killed in traffic crashes in 1994 were between 5 and 15 <u>vears old."</u>

Pedalcyclist fatalities occurred more frequently in urban areas (60 percent), at nonintersection locations (70 percent), between the hours of 4:00 PM and 8:00 PM (35 percent), and during the months of July, August, and September (38 percent).

Most pedalcyclist fatalities in 1994 were males (86 percent), and most were between the ages of 5 and 44 years (76 percent).

The pedalcyclist fatality rate per capita was nearly 7 times as high for males as for females.

Pedalcyclists under age 16 accounted for 37 percent of all pedalcyclists killed in traffic crashes in 1994, compared with 49 percent in 1984.

Pedalcyclists 25 years of age and older have made up an increasing proportion of all pedalcyclist deaths since 1984. The proportion of pedalcyclist fatalities age 25 to 64 was twice as high in 1994 as in 1984 (41 percent and 21 percent, respectively).

More than one-third (35 percent) of the pedalcyclists killed in traffic crashes in 1994 were between 5 and 15 years old. The pedalcyclist fatality rate for this age group was 6.8 per million population—more than twice the rate for all pedalcyclists (3.1 per million population).

For 72 percent of the pedalcyclists killed in traffic crashes in 1994, police reported one or more errors or other factors related to the cyclist's behavior. The factor most often noted was "failure to yield right-of-way" (24 percent), followed by "walking with or against traffic, playing, working, sitting, lying, standing, etc., in roadway" (15 percent), and "improper crossing of the roadway or intersection" (12 percent). Fewer than half of the drivers involved were cited by police for driving errors or other factors related to driver behavior. The factors most often noted for drivers were "driving too fast for conditions or exceeding the speed limit" (17 percent), "vision obscured" (14 percent), and "failure to keep in proper lane or running off road" (13 percent).

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 1994. In 25.7 percent of the crashes, either the driver or the cyclist was intoxicated, with blood alcohol concentrations (BAC) of 0.10 grams per deciliter (g/dl) or greater. Lower alcohol levels (BAC 0.01 to 0.09 g/dl) were reported in an additional 7.6 percent. More than one-fifth (21.3 percent) of the pedalcyclists killed had a BAC of 0.01 g/dl or greater, and 16.1 percent were intoxicated.

Table 2 presents summary statistics for 1994 pedalcyclist fatalities by age and sex, and Table 3 presents detailed data by state.

| | Male | | | Female | | | Total | | |
|----------------|------------|------------------------|-------------------|------------|---------------------------|-------------------|------------|------------------------|-------------------|
| Age (years) | Fatalities | Population (thousands) | Fatality Rate* | Fatalities | Population (thousands) | Fatality Rate* | Fatalities | Population (thousands) | Fatality Rate* |
| <5 | 10 | 10,094 | 0.99 | 7 | 9,632 | 0.73 | 17 | 19,726 | 0.86 |
| 5-9 | 85 | 9,657 | 8.80 | 22 | 9,201 | 2.39 | 107 | 18,859 | 5.67 |
| 10-15 | 153 | 11,450 | 13.36 | 22 | 10,905 | 2.02 | 175 | 22,355 | 7.83 |
| 16-20 | 57 | 8,965 | 6.36 | 12 | 8,530 | 1.41 | 69 | 17,495 | 3.94 |
| 21-24 | 34 | 7,536 | 4.51 | 7 | 7,311 | 0.96 | 41 | 14,847 | 2.76 |
| 25-34 | 86 | 20,676 | 4.16 | 16 | 20,677 | 0.77 | 102 | 41,353 | 2.47 |
| 35-44 | 105 | 20,647 | 5.09 | 9 | 21,010 | 0.43 | 114 | 41,657 | 2.74 |
| 45-54 | 67 | 14,571 | 4.60 | 7 | 15,281 | 0.46 | 74 | 29,852 | 2.48 |
| 55-64 | 36 | 9,983 | 3.61 | 4 | 11,032 | 0.36 | 40 | 21,015 | 1.90 |
| 65-69 | 15 | 4,500 | 3.33 | 3 | 5,471 | 0.55 | 18 | 9,971 | 1.81 |
| 70-79 | 22 | 6,445 | 3.41 | 1 | 8,870 | 0.11 | 23 | 15,315 | 1.50 |
| 80+ | 14 | 2,530 | 5.53 | 0 | 5,342 | 0.00 | 14 | 7,872 | 1.78 |
| Unknown | 8 | | | 0 | | | 8 | | |
| Total | 692 | 127,076 | 5.45 | 110 | 133,265 | 0.83 | 802 | 260,341 | 3.08 |

Table 2. Pedalcyclist Fatalities and Fatality Rates by Age and Sex, 1994

* Rate per million population.

Source: Population-Bureau of the Census projections.

For more information:

"Alcohol involvement

—either for the driver

reported in more than

pedalcyclist fatalities

or the cyclist—was

one-third of the

in 1994 "

Information on pedalcyclist traffic fatalities is available from the National Center for Statistics and Analysis, NRD-31, 400 Seventh Street, S.W., Washington, D.C. 20590. Telephone inquiries should be addressed to Ms. Louann Hall at (202) 366-4198. FAX messages should be sent to (202) 366-7078. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Auto Safety Hotline at 1-800-424-9393.

"Serving the Highway Safety Community by the Numbers"

| Table 3. Pedalcy | clist Traffic Fatalities | and Fatality Rates b | y State, 1994 |
|------------------|--------------------------|----------------------|---------------|
|------------------|--------------------------|----------------------|---------------|

| | | - | | | |
|----------------------|--------------------------------|---------------------------------------|----------------------------|------------------------|---|
| State | Total Traffic Fatalities | Resident Population (thousands) | Pedalcyclist Fatalities | Percent of Total | Pedalcyclist Fatalities per Million Population |
| Alabama | 1,083 | 4,219 | 8 | 0.7 | 1.90 |
| Alaska | 85 | 606 | 3 | 3.5 | 4.95 |
| Arizona | 903 | 4,075 | 22 | 2.4 | 5.40 |
| Arkansas | 610 | | 8 | 1.3 | 3.26 |
| | | 2,453 | - | | |
| California | 4,226 | 31,431 | | 2.7 | 3.63 |
| Colorado | 585 | 3,656 | 8 | 1.4 | 2.19 |
| Connecticut | 310 | 3,275 | 6 | 1.9 | 1.83 |
| Delaware | 112 | 570 | 5 | 4.5 | 8.77 |
| District of Columbia | 69 | 706 | 2 | 2.9 | 2.83 |
| Florida | 2,687 | 13,953 | 120 | 4.5 | 8.60 |
| Georgia | 1,426 | 7,055 | 19 | 1.3 | 2.69 |
| Hawaii | 122 | 1,179 | 4 | 3.3 | 3.39 |
| Idaho | 249 | 1,133 | 5 | 2.0 | 4.41 |
| Illinois | 1,554 | 11,752 | 25 | 1.6 | 2.13 |
| Indiana | 974 | 5,752 | 12 | 1.2 | 2.09 |
| | 478 | | | | 3.89 |
| lowa | | 2,829 | 11 | 2.3 | |
| Kansas | 442 | 2,554 | 1 | 0.2 | 0.39 |
| Kentucky | 778 | 3,827 | 5 | 0.6 | 1.31 |
| Louisiana | 838 | 4,315 | 27 | 3.2 | 6.26 |
| Maine | 188 | 1,240 | 4 | 2.1 | 3.23 |
| Maryland | 651 | 5,006 | 13 | 2.0 | 2.60 |
| Massachusetts | 440 | 6,041 | 8 | 1.8 | 1.32 |
| Michigan | 1,419 | 9,496 | 30 | 2.1 | 3.16 |
| Minnesota | 644 | 4,567 | 16 | 2.5 | 3.50 |
| Mississippi | 791 | 2,669 | 11 | 1.4 | 4.12 |
| Missouri | 1,089 | 5,278 | 8 | 0.7 | 1.52 |
| Montana | 202 | 856 | 2 | 1.0 | 2.34 |
| Nebraska | 271 | 1,623 | 2 | 0.7 | 1.23 |
| Nevada | 294 | | 10 | 3.4 | 6.86 |
| | | 1,457 | 1 | | |
| New Hampshire | 119 | 1,137 | | 0.8 | 0.88 |
| New Jersey | 761 | 7,904 | 19 | 2.5 | 2.40 |
| New Mexico | 447 | 1,654 | 8 | 1.8 | 4.84 |
| New York | 1,658 | 18,169 | 46 | 2.8 | 2.53 |
| North Carolina | 1,431 | 7,070 | 28 | 2.0 | 3.96 |
| North Dakota | 88 | 638 | 0 | 0.0 | 0.00 |
| Ohio | 1,371 | 11,102 | 14 | 1.0 | 1.26 |
| Oklahoma | 687 | 3,258 | 6 | 0.9 | 1.84 |
| Oregon | 490 | 3,086 | 13 | 2.7 | 4.21 |
| Pennsylvania | 1,441 | 12,052 | 20 | 1.4 | 1.66 |
| Rhode Island | 63 | 997 | | 1.6 | 1.00 |
| South Carolina | 847 | | 14 | 1.7 | 3.82 |
| | 154 | 3,664 721 | | | |
| South Dakota | | | 0 | 0.0 | 0.00 |
| Tennessee | 1,214 | 5,175 | 7 | 0.6 | 1.35 |
| Texas | 3,186 | 18,378 | 58 | 1.8 | 3.16 |
| Utah | | 1,908 | | 2.0 | 3.67 |
| Vermont | 77 | 580 | 2 | 2.6 | 3.45 |
| Virginia | 930 | 6,552 | 19 | 2.0 | 2.90 |
| Washington | 638 | 5,343 | 14 | 2.2 | 2.62 |
| West Virginia | 356 | 1,822 | 6 | 1.7 | 3.29 |
| Wisconsin | 712 | 5,082 | 9 | 1.3 | 1.77 |
| Wyoming | 144 | 476 | 1 | 0.7 | 2.10 |
| U.S. Total | 40,676 | 260,341 | 802 | 2.0 | 3.08 |
| Puerto Rico | 598 | * 3,622 | 19 | 3.2 | 5.25 |

* 1993 resident population for Puerto Rico.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Fatalities—Fatal Accident Reporting System, NHTSA. Population—Bureau of the Census.