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

## Large Trucks

##  <br> People Saving People

http://www.nhtsa.dot.gov DOT HS 808766
"One out of eight traffic fatalities in 1997 resulted from a collision involving a large truck."

In 1997, 444,000 large trucks (gross vehicle weight rating greater than 10,000 pounds) were involved in traffic crashes in the United States; 4,871 were involved in fatal crashes. A total of 5,355 people died (13 percent of all the traffic fatalities reported in 1997) and an additional 133,000 were injured in those crashes.

Large trucks accounted for 3 percent of all registered vehicles, 7 percent of total vehicle miles traveled, 9 percent of all vehicles involved in fatal crashes, and 3 percent of all vehicles involved in injury and property-damage-only crashes in 1996 (1997 registered vehicle and vehicle miles traveled data not available).

One out of eight traffic fatalities in 1997 resulted from a collision involving a large truck.

Table 1. Involvement in Fatal and Injury Crashes and Involvement Rates for Large Trucks, 1987-1997

| Year | Number of Large Trucks Involved in Fatal Crashes | Number of Large Trucks Registered | Vehicle Involvement Rate * | Vehicle Miles Traveled (millions) | Vehicle Involvement Rate ** |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1987 | 5,108 | 5,303,094 | 96.3 | 135,601 | 3.8 |
| 1988 | 5,241 | 5,433,560 | 96.5 | 141,397 | 3.7 |
| 1989 | 4,984 | 5,840,466 | 85.3 | 148,318 | 3.4 |
| 1990 | 4,776 | 5,854,337 | 81.6 | 149,810 | 3.2 |
| 1991 | 4,347 | 5,854,673 | 74.2 | 150,729 | 2.9 |
| 1992 | 4,035 | 5,970,925 | 67.6 | 152,803 | 2.6 |
| 1993 | 4,328 | 6,191,889 | 69.9 | 159,402 | 2.7 |
| 1994 | 4,644 | 6,303,314 | 73.7 | 170,216 | 2.7 |
| 1995 | 4,472 | 6,719,421 | 66.6 | 178,156 | 2.5 |
| 1996 | 4,755 | 7,006,408 | 67.9 | 182,756 | 2.6 |
| 1997 | 4,871 | -- | -- | -- | -- |
| Year | Number of Large Trucks Involved in Injury Crashes | Number of Large Trucks Registered | Vehicle Involvement Rate | Vehicle Miles Traveled (millions) | Vehicle Involvement Rate ** |
| 1988 | 96,000 | 5,433,560 | 1,764 | 141,397 | 68 |
| 1989 | 110,000 | 5,840,466 | 1,887 | 148,318 | 74 |
| 1990 | 107,000 | 5,854,337 | 1.830 | 149,810 | 72 |
| 1991 | 78,000 | 5,854,673 | 1,332 | 150,729 | 52 |
| 1992 | 95,000 | 5,970,925 | 1,586 | 152,803 | 62 |
| 1993 | 97,000 | 6,191,889 | 1,564 | 159,402 | 61 |
| 1994 | 96,000 | 6,303,314 | 1,523 | 170,216 | 56 |
| 1995 | 84,000 | 6,719,421 | 1,250 | 178,156 | 47 |
| 1996 | 94,000 | 7,006,408 | 1,342 | 182,756 | 51 |
| 1997 | 97,000 | -- | -- | -- | -- |

[^0]"In 1997, large trucks were 3 times as likely as other vehicles to be struck in the rear in two-vehicle fatal crashes."

Of the fatalities that resulted from crashes involving large trucks, 78 percent were occupants of another vehicle, 8 percent were nonoccupants, and 13 percent were occupants of a large truck.

Of the injuries that resulted from crashes involving large trucks, 75 percent were occupants of another vehicle, 2 percent were nonoccupants, and 24 percent were occupants of a large truck.

Table 2. Fatalities and Injuries in Crashes Involving Large Trucks, 1997

| Type of Fatality | Number | Percentage of Total |
| :---: | :---: | :---: |
| Occupants of Large Trucks | 717 | 13 |
| Single-Vehicle Crashes | 496 | 9 |
| Multiple-Vehicle Crashes | 221 | 4 |
| Occupants of Other Vehicles |  |  |
| in Crashes Involving Large Trucks | 4,189 | 78 |
| Nonoccupants |  | 8 |
| (Pedestrians, Pedalcyclists, etc.) | 449 | $\mathbf{1 0 0}$ |
| Total | $\mathbf{5 , 3 5 5}$ | 24 |
| Type of Injury | Number | Percentage of Total |
| Occupants of Large Trucks | 31,000 | 11 |
| Single-Vehicle Crashes | 14,000 | 13 |
| Multiple-Vehicle Crashes | 17,000 | 75 |
| Occupants of Other Vehicles | 99,000 | 2 |
| in Crashes Involving Large Trucks | 2,000 | $\mathbf{1 0 0}$ |
| Nonoccupants | $\mathbf{1 3 3 , 0 0 0}$ |  |
| (Pedestrians, Pedalcyclists, etc.) |  |  |
| Total |  |  |

Large trucks were much more likely to be involved in a fatal multiple-vehicle crash - as opposed to a fatal single-vehicle crash than were passenger vehicles ( 82 percent of all large trucks involved in fatal crashes, compared with 62 percent of all passenger vehicles).

In 30 percent of the two-vehicle fatal crashes involving a large truck and another type of vehicle, both vehicles were impacted in the front. The truck was struck in the rear 3 times as often as the other vehicle (18 percent and 6 percent, respectively).

Table 3. Principal Impact Points in Two-Vehicle Fatal Crashes Involving Large Trucks, 1997

| Impact Point <br> on Large Truck | Impact Point on Other Vehicle |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Front | Left Side | Right Side | Rear | Total |
|  | $30 \%$ | $17 \%$ | $13 \%$ | $6 \%$ | $66 \%$ |
| Left Side | $9 \%$ | $<1 \%$ | $<1 \%$ | $<1 \%$ | $10 \%$ |
| Right Side | $4 \%$ | $<1 \%$ | $<1 \%$ | $<1 \%$ | $6 \%$ |
| Rear | $17 \%$ | $<1 \%$ | $<1 \%$ | $<1 \%$ | $18 \%$ |
| Total | $60 \%$ | $20 \%$ | $14 \%$ | $6 \%$ | $100 \%$ |

In half of the two-vehicle fatal crashes involving a large truck and another type of vehicle, both vehicles were proceeding straight at the time of the crash. In 10 percent of the crashes, the other vehicle was turning. In 9 percent, either the truck or the other vehicle was negotiating a curve. In 8 percent, either the truck or the other vehicle was stopped or parked in a traffic lane ( 6 percent and 2 percent, respectively).

Most of the fatal crashes involving large trucks occurred in rural areas (67 percent), during the daytime ( 66 percent), and on weekdays (79 percent). During the week, 73 percent of the crashes occurred during the daytime (6:00 AM to 5:59 PM). On weekends, 62 percent occurred at night (6:00 PM to 5:59 AM).

The percentage of large truck drivers involved in fatal crashes who were intoxicated - with blood alcohol concentrations (BAC) of 0.10 grams per deciliter ( $\mathrm{g} / \mathrm{dl}$ ) or greater - was 1.1 percent in 1997. These drivers have also shown the largest decrease in intoxication rates since 1987 ( 59 percent). Intoxication rates for drivers of other types of vehicles involved in fatal crashes in 1997 were 18.2 percent for passenger cars, 20.2 percent for light trucks, and 27.9 percent for motorcycles.

Figure 1. Estimated Proportions of Drivers in Fatal Crashes With BAC $0.10 \mathrm{~g} / \mathrm{dl}$ or Greater, 1987-1997


Drivers of large trucks were less likely to have a previous license suspension or revocation than were passenger car drivers ( 7 percent and 12 percent, respectively).

Almost 30 percent of all large truck drivers involved in fatal crashes in 1997 had at least one prior speeding conviction, compared to just under 20 percent of the passenger car drivers involved in fatal crashes.

Figure 2. Previous Driving Records of Drivers Involved in Fatal Traffic Crashes, by Type of Vehicle, 1997


## For more information:

Information on large truck 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 1-800-934-8517. FAX messages should be sent to (202) 366-7078. General information on highway traffic safety can be accessed by Internet users at http://www.nhtsa.dot.gov/people/ncsa. To report a safety-related problem or to inquire about motor vehicle safety information, contact the Auto Safety Hotline at 1-800-424-9393.

Table 4. Large Truck Involvement in Fatal Crashes by State, 1997

| State | Total Vehicles Involved in Fatal Crashes | Large Trucks Involved in Fatal Crashes |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Percentage of Total Vehicles | Percentage of U.S. Total for Large Trucks |
| Alabama | 1,633 | 166 | 10.2 | 3.4 |
| Alaska | 94 | 7 | 7.4 | 0.1 |
| Arizona | 1,263 | 72 | 5.7 | 1.5 |
| Arkansas | 859 | 113 | 13.2 | 2.3 |
| California | 4,909 | 369 | 7.5 | 7.6 |
| Colorado | 813 | 75 | 9.2 | 1.5 |
| Connecticut | 450 | 23 | 5.1 | 0.5 |
| Delaware | 189 | 15 | 7.9 | 0.3 |
| District of Columbia | 96 | 3 | 3.1 | 0.1 |
| Florida | 3,968 | 284 | 7.2 | 5.8 |
| Georgia | 2,178 | 218 | 10.0 | 4.5 |
| Hawaii | 181 | 3 | 1.7 | 0.1 |
| Idaho | 305 | 30 | 9.8 | 0.6 |
| Illinois | 1,915 | 166 | 8.7 | 3.4 |
| Indiana | 1,353 | 159 | 11.8 | 3.3 |
| lowa | 652 | 75 | 11.5 | 1.5 |
| Kansas | 652 | 80 | 12.3 | 1.6 |
| Kentucky | 1,165 | 108 | 9.3 | 2.2 |
| Louisiana | 1,189 | 122 | 10.3 | 2.5 |
| Maine | 267 | 21 | 7.9 | 0.4 |
| Maryland | 920 | 88 | 9.6 | 1.8 |
| Massachusetts | 589 | 38 | 6.5 | 0.8 |
| Michigan | 2,065 | 127 | 6.2 | 2.6 |
| Minnesota | 848 | 88 | 10.4 | 1.8 |
| Mississsippi | 1,110 | 99 | 8.9 | 2.0 |
| Missouri | 1,612 | 139 | 8.6 | 2.9 |
| Montana | 298 | 24 | 8.1 | 0.5 |
| Nebraska | 404 | 46 | 11.4 | 0.9 |
| Nevada | 486 | 27 | 5.6 | 0.6 |
| New Hampshire | 173 | 12 | 6.9 | 0.2 |
| New Jersey | 1,072 | 77 | 7.2 | 1.6 |
| New Mexico | 571 | 51 | 8.9 | 1.0 |
| New York | 2,219 | 142 | 6.4 | 2.9 |
| North Carolina | 2,017 | 195 | 9.7 | 4.0 |
| North Dakota | 131 | 12 | 9.2 | 0.2 |
| Ohio | 1,999 | 203 | 10.2 | 4.2 |
| Oklahoma | 1,105 | 96 | 8.7 | 2.0 |
| Oregon | 673 | 76 | 11.3 | 1.6 |
| Pennsylvania | 2,203 | 166 | 7.5 | 3.4 |
| Rhode Island | 100 | 2 | 2.0 | 0.0 |
| South Carolina | 1,186 | 89 | 7.5 | 1.8 |
| South Dakota | 180 | 15 | 8.3 | 0.3 |
| Tennessee | 1,673 | 129 | 7.7 | 2.6 |
| Texas | 4,732 | 410 | 8.7 | 8.4 |
| Utah | 460 | 46 | 10.0 | 0.9 |
| Vermont | 141 | 15 | 10.6 | 0.3 |
| Virginia | 1,350 | 117 | 8.7 | 2.4 |
| Washington | 882 | 77 | 8.7 | 1.6 |
| West Virginia | 528 | 52 | 9.8 | 1.1 |
| Wisconsin | 967 | 80 | 8.3 | 1.6 |
| Wyoming | 153 | 24 | 15.7 | 0.5 |
| U.S. Total | 56,978 | 4,871 | 8.5 | 100.0 |
| Puerto Rico | 739 | 31 | 4.2 | -- |

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


[^0]:    * Rate per 100,000 registered vehicles.
    ** Rate per 100 million vehicle miles traveled.
    -- = not available.
    Source: Vehicle miles traveled and registered vehicles - Federal Highway Administration.

