

2007 Large Truck Crash Overview



**Analysis Division
Federal Motor Carrier Safety Administration
U.S. Department of Transportation**

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The mission of the Federal Motor Carrier Safety Administration (FMCSA) is to promote the safe operation of commercial vehicles on our Nation's highways. Of the 41,059 people killed in motor vehicle crashes in 2007, 12% (4,808) died in crashes that involved a large truck. Another 101,000 people were injured in crashes involving large trucks. Only about 17% of those killed and 22% of those injured in large truck crashes were occupants of large trucks.

Trends

- **Fatal Crashes.** From 1998 to 2007, the number of large trucks involved in fatal crashes dropped from 4,955 to 4,584—down by 7.5%. The number of large trucks in fatal crashes per 100 million vehicle miles traveled by large trucks declined in these years from 2.52 to 2.02—down 20%. The corresponding rate for passenger vehicles fell from 2.00 to 1.60—also down 20% (Figure 1).
- **Injury Crashes.** From 1998 to 2007, the number of large trucks involved in injury crashes per 100 million vehicle miles traveled declined by 26%, while the rate for passenger vehicles dropped by 31% (Figure 2).

Vehicles

- In 2007, large trucks accounted for 7% of all vehicle miles traveled and 4% of all registered vehicles in the United States. In motor vehicle crashes, large trucks represented:
 - 8% of vehicles in fatal crashes
 - 2% of vehicles in injury crashes
 - 4% of vehicles in property-damage-only crashes.

Figure 1

Vehicles Involved in Fatal Crashes per 100 Million Vehicle Miles Traveled

■ Passenger Vehicles ■ Large Trucks

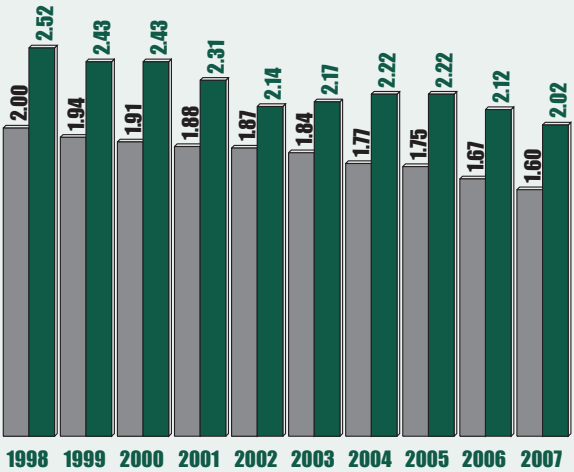
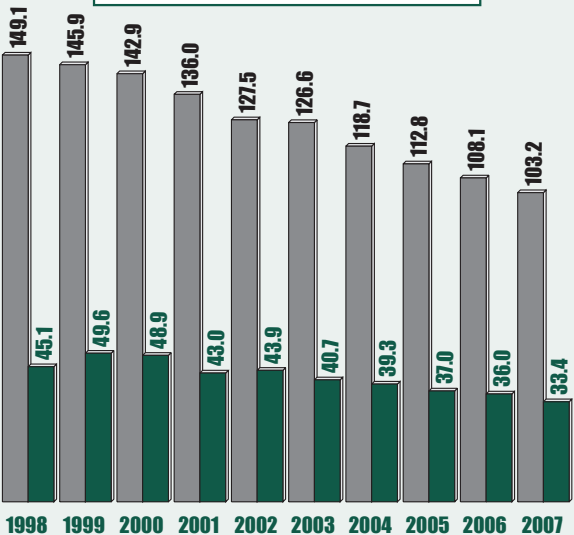


Figure 2

Vehicles Involved in Injury Crashes per 100 Million Vehicle Miles Traveled

■ Passenger Vehicles ■ Large Trucks



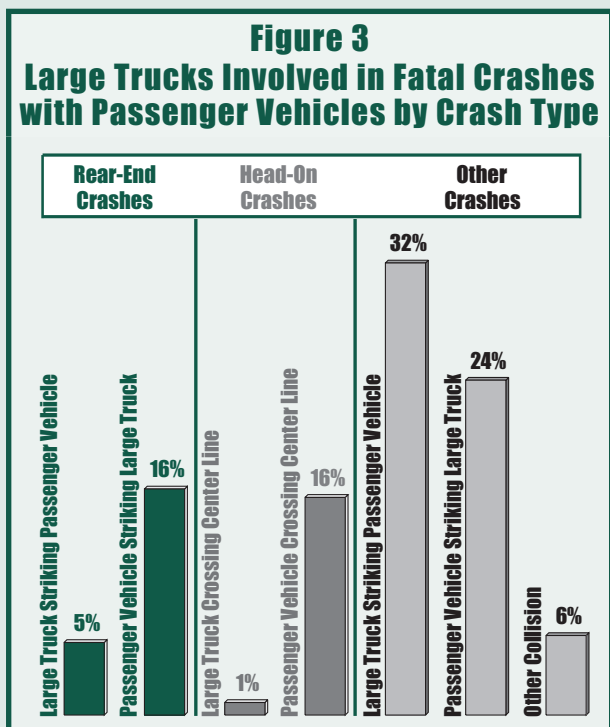
- Large truck tractors pulling semi-trailers accounted for 62% of the large trucks involved in fatal crashes and 46% of the large trucks involved in nonfatal crashes.
- Doubles (truck tractors pulling a semi-trailer and a full trailer) were only 3% of large trucks involved in fatal and nonfatal crashes. Triples (truck tractors pulling three trailers) accounted for 0.1% of all large trucks involved in fatal crashes.
- Only 4% of large trucks involved in fatal crashes and 2% of large trucks involved in nonfatal crashes were carrying hazardous materials (HM). HM was released from the cargo compartment in 36% of fatal crashes and 12% of nonfatal crashes.

Drivers

- Only 1% of the drivers of large trucks involved in fatal crashes in 2007 were legally intoxicated (blood alcohol content of 0.08 grams per deciliter or higher), as compared with 23% of passenger vehicle drivers in fatal crashes. Only 2% of the drivers of large trucks involved in fatal crashes had any alcohol in their bloodstream.
- Seventy-nine percent of the drivers of large trucks involved in fatal crashes were reported by police as wearing their safety belts, compared with 62% of passenger vehicle drivers involved in fatal crashes.
- In fatal crashes involving large trucks, driver-related factors were cited for 38% of the large truck drivers. In comparison, driver-related factors were noted for 67% of passenger vehicle drivers involved in fatal crashes. Some of the most common factors cited for drivers of large trucks and drivers of passenger vehicles were the same: driving too fast, failure to keep in proper lane, inattention, and failure to yield the right of way.

Crashes

- Speeding (exceeding the speed limit or driving too fast for conditions) was a factor in 25% of the fatal crashes involving a large truck, compared with 33% of all fatal crashes.
- No adverse weather conditions were reported for 87% of the fatal crashes and for 89% of the nonfatal crashes involving large trucks. Rain was the most common adverse weather condition.
- In 75% of the fatal crashes and 70% of the nonfatal crashes involving large trucks, the first harmful event was a collision with another vehicle in transport.
- In two-vehicle fatal rear-end crashes, passenger vehicles struck large trucks in the rear approximately three times more often than large trucks struck passenger vehicles in the rear—16% versus 5% (Figure 3).



- In two-vehicle head-on fatal crashes involving a large truck and a passenger vehicle, the passenger vehicle crossed the median and collided head-on with the large truck approximately 16 times more often than the large truck crossed the median and collided head-on with the passenger vehicle—16% versus 1% (Figure 3).
- Rollover was the first harmful event for only 5% of the fatal crashes and only 3% of the nonfatal crashes involving large trucks.
- Twenty-four percent of fatal crashes that took place in work zones—areas of construction, maintenance, or utility activity—involved a large truck.

Definitions

Large Trucks: Trucks over 10,000 pounds gross vehicle weight rating (GVWR).

Passenger Vehicles: Passenger cars and light trucks—vans, sport utility vehicles, and pickup trucks—with 10,000 pounds GVWR or less.

Data Sources

Fatal Crash Data: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS).

Nonfatal Crash Data: National Highway Traffic Safety Administration, General Estimates System (GES); and FMCSA, Motor Carrier Management Information System (MCMIS) crash file.

Vehicle Miles Traveled and Registered Vehicles: Federal Highway Administration.

For more information, contact the Analysis Division at (202) 366-0324, or visit our web sites at www.fmcsa.dot.gov and ai.fmcsa.dot.gov.

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