

2008 Large Truck Crash Overview



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

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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 37,261 people killed in motor vehicle crashes in 2008, 11% (4,229) died in crashes that involved a large truck. Another 90,000 people were injured in crashes involving large trucks. Only 16% of those killed and 26% of those injured were occupants of large trucks.

Trends

- **Fatal Crashes.** From 1999 to 2008, the number of large trucks involved in fatal crashes dropped from 4,920 to 4,066—down by 17.4%. The number of large trucks in fatal crashes per 100 million vehicle miles traveled by large trucks declined in these years from 2.43 to 1.79—down 26%. The corresponding rate for passenger vehicles fell from 1.94 to 1.45—down 25% (Figure 1).
- **Injury Crashes.** From 1999 to 2008, the number of large trucks involved in injury crashes per 100 million vehicle miles traveled by large trucks declined by 41%, while the rate for passenger vehicles dropped by 32% (Figure 2).

Vehicles

- In 2008, large trucks accounted for 8% 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

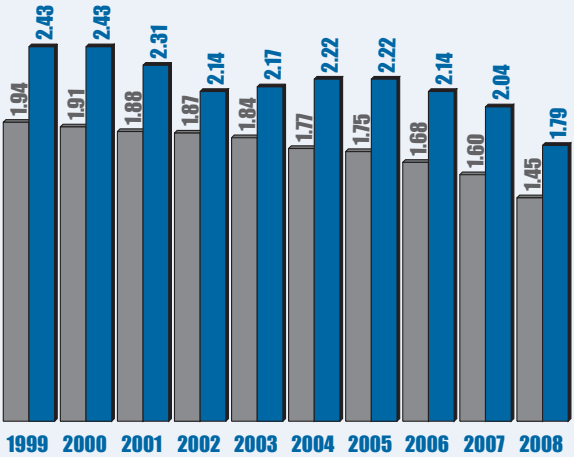
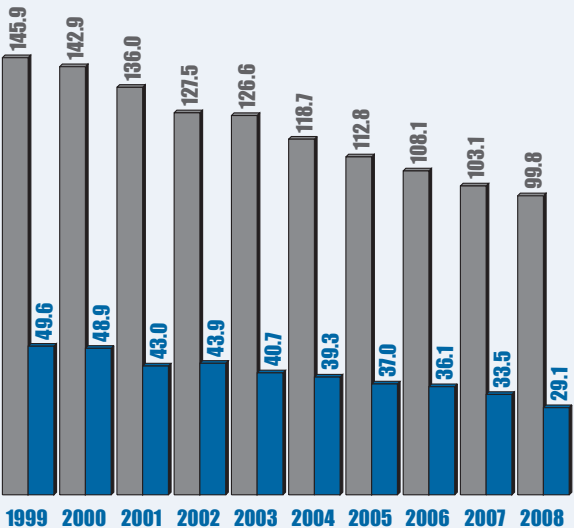


Figure 2

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 48% of the large trucks involved in nonfatal crashes.
- ▶ Doubles (truck tractors pulling a semi-trailer and a full trailer) accounted for only 3% of large trucks involved in fatal and nonfatal crashes. Triples (truck tractors pulling three trailers) accounted for less than 0.1% of all large trucks involved in fatal crashes.
- ▶ Only 3% 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 30% of the fatal crashes and 13% of the nonfatal crashes.

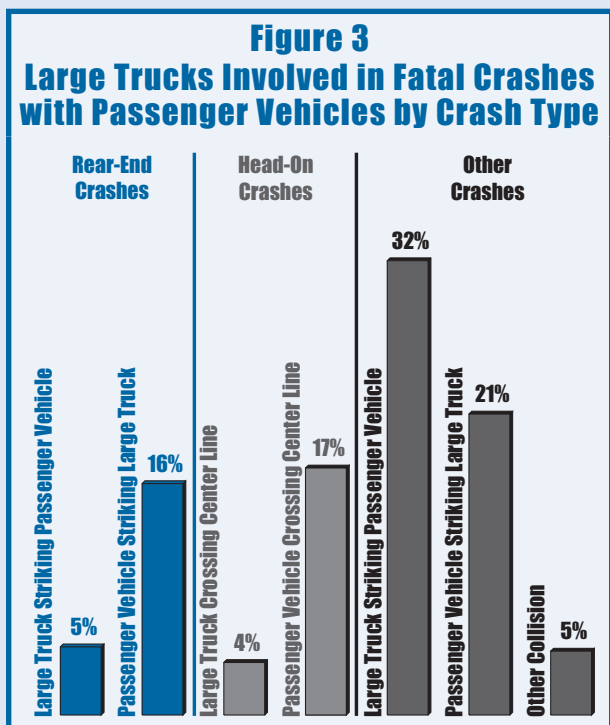
Drivers

- ▶ Only 2% of the drivers of large trucks involved in fatal crashes in 2008 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 3% of the drivers of large trucks involved in fatal crashes had any alcohol in their bloodstream.
- ▶ Eighty-one 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 recorded for 37% of the large truck drivers. In comparison, driver-related factors were recorded for 68% of passenger vehicle drivers involved in fatal crashes.
- ▶ The top two driver-related factors for large trucks and passenger vehicles in fatal crashes were the same: failure to keep in proper lane (11% for trucks, 26% for passenger vehicles) and driving too fast (8% and 23%,

respectively). The third most common were inattention for truck drivers (6%) and under the influence of alcohol, drugs, or medication for passenger vehicle drivers (16%).

Crashes

- No adverse weather conditions were reported for 85% of the fatal crashes and for 86% of the nonfatal crashes involving large trucks. Rain was the most common adverse weather condition.
- In 75% of the fatal crashes and 71% 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 fatal head-on crashes, passenger vehicles crossed the median and collided head-on with large trucks approximately four times more often than large trucks crossed the median and collided head-on with passenger vehicles—17% versus 4% (Figure 3).
- ▶ Rollover was the first harmful event for only 5% of the fatal crashes and only 2% of the nonfatal crashes involving large trucks.
- ▶ Fifteen 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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