

2009 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 33,808 people killed in motor vehicle crashes in 2009, 10% (3,380) died in crashes that involved a large truck. Another 74,000 people were injured in crashes involving large trucks. Only 15% of those killed and 22% of those injured were occupants of large trucks.

Trends

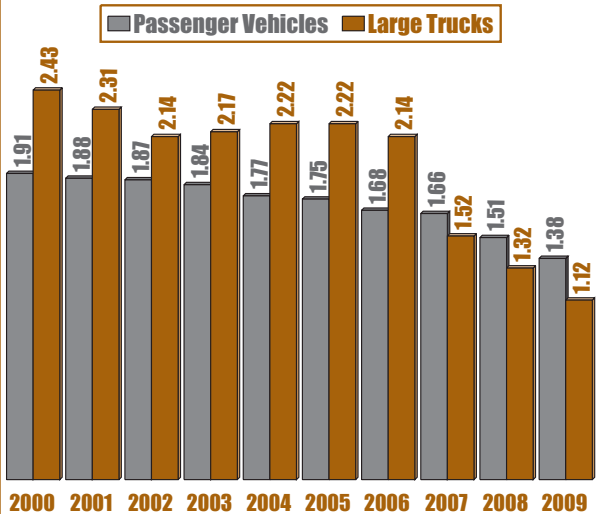
- **Fatal Crashes.** From 2007 to 2009, the number of large trucks involved in fatal crashes dropped from 4,633 to 3,215—down by 31%. The number of large trucks in fatal crashes per 100 million vehicle miles traveled by large trucks declined in these years from 1.52 to 1.12—down 26%. The corresponding rate for passenger vehicles fell from 1.66 to 1.38—down 17% (Figure 1).
- **Injury Crashes.** From 2007 to 2009, the number of large trucks involved in injury crashes per 100 million vehicle miles traveled by large trucks declined by 26%, while the rate for passenger vehicles dropped by 8% (Figure 2).

Vehicles

- In 2009, large trucks accounted for 10% of all vehicle miles traveled and 4% of all registered vehicles in the United States. In motor vehicle crashes, large trucks represented:
 - 7% of vehicles in fatal crashes
 - 2% of vehicles in injury crashes
 - 3% of vehicles in property-damage-only crashes.

Figure 1

Vehicles Involved in Fatal Crashes per 100 Million Vehicle Miles Traveled

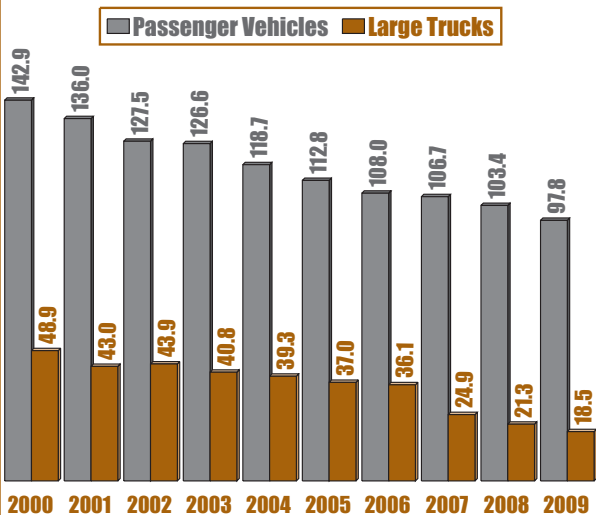


2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

Note: The Federal Highway Administration implemented an enhanced methodology for estimating registered vehicles and vehicle miles traveled by vehicle type for the years 2007-2009. As a result, involvement rates may differ, and in some cases significantly, from previously published rates.

Figure 2

Vehicles Involved in Injury Crashes per 100 Million Vehicle Miles Traveled



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

Note: The Federal Highway Administration implemented an enhanced methodology for estimating registered vehicles and vehicle miles traveled by vehicle type for the years 2007-2009. As a result, involvement rates may differ, and in some cases significantly, from previously published rates.

- Large truck tractors pulling semi-trailers accounted for 61% of the large trucks involved in fatal crashes and 47% 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 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 31% of the fatal crashes and 10% of the nonfatal crashes.

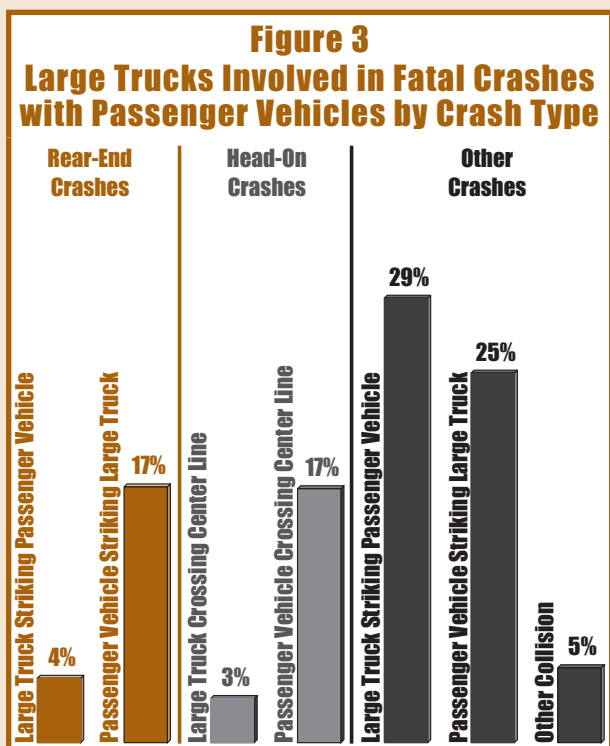
Drivers

- Only 2% of the drivers of large trucks involved in fatal crashes in 2009 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-two percent of the drivers of large trucks involved in fatal crashes were reported by police as wearing their safety belts, compared with 63% of passenger vehicle drivers involved in fatal crashes.
- In fatal crashes involving large trucks, driver-related factors were recorded for 31% of the large truck drivers. In comparison, driver-related factors were recorded for 62% 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: driving too fast (7% for trucks, 19% for passenger vehicles) and failure to keep in proper lane (6% and 18%).

The third most common were inattention for truck drivers (6%) and being under the influence of alcohol, drugs, or medication for passenger vehicle drivers (17%).

Crashes

- No adverse weather conditions were reported for 86% of the fatal crashes and for 85% of the nonfatal crashes involving large trucks in 2009. Rain was the most common adverse weather condition.
- In 75% of the fatal crashes and 67% 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 four times more often than large trucks struck passenger vehicles in the rear—17% versus 4% (Figure 3).



- In two-vehicle fatal head-on crashes, passenger vehicles crossed the median and collided head-on with large trucks approximately six times more often than large trucks crossed the median and collided head-on with passenger vehicles—17% versus 3% (Figure 3).
- Rollover was the first harmful event for only 4% of the fatal crashes and only 2% of the nonfatal crashes involving large trucks.
- Thirteen 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. See Figures 1 and 2 for notes on methodology enhancements.

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.