



NTSB 2017-2018  
**MOST WANTED LIST** OF  
 TRANSPORTATION SAFETY IMPROVEMENTS

**Strengthen Occupant Protection**



**HIGHWAY**

**MWL**  
 MOST WANTED LIST

**More than 50 percent of vehicle occupants killed were unrestrained, despite the fact that restraint use has been required in passenger cars in most states for more than 20 years.**

**What is the issue?**

**M**otor vehicle crashes are a leading cause of death for all Americans. In 2015, 35,092 people were killed on the nation's roadways. More than 50 percent of vehicle occupants killed were unrestrained, despite the fact that restraint use has been required in passenger cars in most states for more than 20 years.

We have investigated many crashes in which improved occupant protection systems (seat belts, child restraints, and other vehicle design features) could have reduced injuries and saved lives. Some of our recent investigations have also highlighted the importance of proper seat belt use and readily accessible and identifiable evacuation routes on larger passenger vehicles, such as school buses, motor coaches, and other commercial vehicles. For example, in 2014, a group of softball players was traveling home from a tournament on a 32-passenger medium-size bus equipped with seat belts. Their bus was struck by a truck-tractor on Interstate 35 near Davis, Oklahoma, and four unrestrained passengers were ejected from the bus and died. None of the injured passengers on the bus was wearing a seat belt.

We have also seen occupant ejections from school buses that might have been prevented if compartments were better designed to keep windows in place (and, therefore, passengers inside the vehicle). Additionally, our investigations have revealed that better evacuation procedures, including pre-trip passenger procedure briefings, could have minimized injuries and prevented deaths.

These issues, especially pre-trip briefings and evacuation, were important in the truck-tractor and motorcoach collision with post crash fire that occurred on Interstate 5 near Orland, California, in 2014.

**What can be done?**

To minimize deaths and injuries, we need to see increased use of existing restraint systems, and better design and implementation of occupant protection systems that preserve survivable space and ensure ease of evacuation. For children, the correct use of a child restraint system can mean the difference between



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life and death. When used correctly, child safety seats can reduce fatal injury by 71 percent for infants (under 1-year-old) and by 54 percent for toddlers (1 to 4 years old). Properly worn lap/shoulder seat belts reduce the risk of fatal injury to occupants ages 5 and older in passenger cars by about 45 percent.

To increase seat belt and child restraint use in motor vehicles, we must take a three-pronged approach: legislation, enforcement, and education. Strong occupant restraint laws are critical. Although the daytime seat belt use rate for front seat occupants in the United States is 87 percent, seat belt use is significantly lower in states without primary enforcement laws and for laws addressing passengers seated in the rear seats. Primary enforcement sends a message to motorists that seat belt use is an important safety issue for all seating positions within a vehicle.

Education campaigns about the benefits of seat belt and child restraint use enhance understanding of these issues and encourage proper use in all vehicles. For larger passenger vehicles, pre-trip briefings and training on the proper use of available restraints and evacuation routes are vital. ■



The NTSB Most Wanted List highlights safety issues identified from the NTSB's accident investigations to increase awareness about the issues and promote recommended safety solutions.

The NTSB is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant accidents in other modes of transportation – railroad, highway, marine and pipeline. The NTSB determines the probable cause of the accidents and issues safety recommendations aimed at preventing future accidents. In addition, the NTSB carries out special studies concerning transportation safety and coordinates the resources of the federal government and other organizations to provide assistance to victims and their family members impacted by major transportation disasters.

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Date	Location	Accident ID
<a href="#">March 2, 2013</a>	<a href="#">Elizabethtown, KY</a>	<a href="#">HWY13FH008</a>
<a href="#">January 27, 2014</a>	<a href="#">Naperville, IL</a>	<a href="#">HWY14FH002</a>
<a href="#">September 21, 2014</a>	<a href="#">Red Lion, DE</a>	<a href="#">HWY14FH013</a>
<a href="#">December 2, 2014</a>	<a href="#">Knoxville, TN</a>	<a href="#">HWY15FH002</a>
<a href="#">March 30, 2015</a>	<a href="#">Moore Haven, FL</a>	<a href="#">HWY15FH008</a>

\*For detailed accident reports visit [www.nts.gov](http://www.nts.gov)

**NTSB**

**MWL**  
MOST WANTED LIST

**Critical changes needed to reduce transportation accidents and save lives.**

