



Teen Driver Safety

FACT SHEET

Using Naturalistic Driving Data to Examine Teen Driver Behaviors Present in Motor Vehicle Crashes, 2007-2015

Background

- As the driving environment continues to evolve, researchers and safety advocates want to identify those crashes that teens are most frequently involved in, as well as the distractions or competing activities that teens are engaging in leading up to these crashes
- The latest government data reports that, in 2014, 10% of teen drivers involved in a fatal crash were reported to have been distracted at the time of the crash and proportionally, this is more than any other age group
 - Additionally, experts believe that the government statistics derived from police reports substantially underestimate the prevalence of driver distraction
 - A previous AAA Foundation study found that distraction was a factor in nearly 6 out of 10 moderate-to-severe teen crashes, which is four times as many as official estimates based on police reports

Objectives

- To examine the behavioral factors related to distracted driving in teen crashes and to analyze trends over time

Methods

- This study built on a previous study which examined 1,691 teen driver crashes captured on Lytx DriveCam in-vehicle videos cameras between August 2007 and July 2013. The current study includes an additional 538 crashes that occurred between August 2013 and April 2015
 - Drivers were ages 16-19 and were participating in a program using a DriveCam. Most lived in the Midwest region of the United States
 - Crashes occurred between August 2007 and April 2015
 - Results are based on examination of 2,229 eligible crashes
 - Video was examined for the six seconds preceding each crash
 - Major crash types examined were single-vehicle loss of control, single-vehicle road departure, rear-end, and angle (front-to-side)

Key Findings

- Between 2007 and 2015 an average of 59% of crashes contained some type of potentially distracting behavior during the six seconds leading up to a crash

(continued)



Teens have the highest crash rate of any group in the United States.



Key Findings (continued)

- As before, the most frequent potentially-distracting behaviors were conversing or otherwise interacting with passengers and cell phone use
- The proportion of cell phone-related crashes that involved operating or looking at the cell phone, as opposed to talking/listening, increased significantly from the beginning of the study period to the end
 - Passengers were present in 34% of all crashes
 - 84.8% of passengers were estimated to be ages 16-19
 - Driver was conversing or otherwise interacting with passenger in 15% of crashes.
 - The driver was engaged in cell phone use in 12% of crashes
 - Visibly using a cell phone (operating/looking) in 9% of all crashes;
 - Talking or listening to a cell phone in 3% of all crashes
 - Cell phone use varied significantly by crash type:
 - Operating/looking in 28% of road-departure crashes, talking/listening in additional 4.4%
 - Operating/looking in 19% of rear-end crashes, talking/listening in additional 1%
 - Least prevalent in single-vehicle loss-of-control crashes (most of these involved adverse weather or surface conditions)
 - Among rear-end crashes, the average eyes off road time significantly increased over time from 2.0 to 3.1 seconds, as did the duration of the longest glance, from 1.5 to 2.1 seconds
 - Additionally, the percent of crashes in which the driver had no reaction prior to the crash increased from 13% in 2008 to 25% in 2014

Implications

- Distraction due to cell phone use appears to be much more prevalent than is reflected in official government statistics derived from police reports
 - Official statistics from the National Highway Traffic Safety Administration indicate that 14% of all crashes involve driver distraction, with 7% of those (1% of all crashes) involving distraction related to cell phone use.
- Driver education and training should teach young drivers to avoid taking excessively long glances away from the forward roadway

Useful Resources

AAA and the AAA Foundation have developed several resources for families with teen drivers:

- [Driver-ZED](#) – Interactive risk-management training tool designed to help teens recognize how to react in a variety of driving scenarios.
- [StartSmart Online Parent Session](#) – Two-hour webinar that explains the licensing process and parents' role, and demonstrates how to reinforce what your teen is learning in DE and how to maximize the practice driving that you'll do with your teen.
- [TeenDriving.AAA.com](#) –AAA site that provides state-specific information to help parents and their teens navigate the learning-to-drive process, and includes links to the above programs.

For more information about the AAA Foundation's teen safety research, please visit www.AAAFoundation.org.

Established in 1947 by AAA, the AAA Foundation for Traffic Safety is a not-for-profit, publicly funded, 501(c)(3) charitable research and educational organization. The AAA Foundation's mission is to prevent traffic deaths and injuries by conducting research into their causes and by educating the public about strategies to prevent crashes and reduce injuries when they do occur. This research is used to develop educational materials for drivers, pedestrians, bicyclists and other road users. Visit www.AAAFoundation.org for more information.

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