Distracted Driving Among Newly Licensed Teen Drivers

The Situation

- With teen crash rates roughly four times higher than those of adult drivers, traffic crashes remain the leading cause of death for the age group.
- To date there has been little concrete information or research available on distracted driving among teens specifically.
- Teenage drivers are believed to be at risk for distracted driving-related crashes, as they are avid users of cell phones and other technologies, are inexperienced drivers, and are still undergoing development in areas of the brain responsible for decision-making and risk management.

The Study

- Part of an in-depth naturalistic three-phase study of 50 families in North Carolina with a novice teenage driver.
- Follows two previous studies which collected in-vehicle video clips while teens progressed through the first two stages of Graduated Driver Licensing (GDL):
  - The first study looked at how parents supervise their teens during the learner’s stage of GDL.
  - The second examined how teen behaviors and driving conditions shift during the transition to unsupervised driving.
- The current study re-analyzed clips from the first six months of unsupervised driving to determine the nature and prevalence of distracted driving behaviors among teenagers and their relation to various aspects of driving performance.

The Findings: Answers to Six Key Questions

Which distracted driver behaviors are most common among teenage drivers? Use of electronic devices was the leading behavior, followed by adjusting controls, personal grooming, and eating or drinking.

- Use of electronic devices was the most common distracted driving behavior and was found in 7% of the 7,858 clips that were recorded when a pre-determined g-force threshold was exceeded in the vehicle.
  - Nearly twice as many teens were observed or suspected of operating an electronic device (e.g., texting) than were seen talking on a hand-held phone.
- Excluding electronic device use, teens were observed engaging in distracting behaviors in 15.1% of video clips: adjusting controls was the most common (6.2%), followed by personal grooming (3.8%), and eating or drinking (2.8%).
Do males and females differ in how often they engage in distracted behaviors, or the kinds of distractions they experience? Yes.

- Females were nearly twice as likely as males to be using an electronic device
- Males were roughly twice as likely to turn their bodies around while driving
- Excluding use of electronic devices, females were slightly more likely to be observed engaging in a distracted behavior (15.6% of clips vs. 13.9% for males), such as reaching for an object in the vehicle

Do distracted driver behaviors vary based on the number of passengers and the characteristics of those passengers (e.g., teens vs. adults vs. young siblings)? Yes.

- Electronic device use was most common when drivers carried no passengers, and were least common when a parent or other adult was in the vehicle
- Drivers were 60% less likely to use an electronic device when carrying one teenage peer than when driving alone
- Loud conversation and horseplay were more than twice as likely to occur when teens were carrying multiple teenage peers than when they were only carrying one; these behaviors were significantly less likely in the presence of a sibling or parent

Are distracted driver behaviors more common during certain times of day or week (e.g., weekday vs. weekend), and do these behaviors bear any relation to the amount of traffic or other characteristics of the driving environment? Not necessarily.

- No clear pattern emerged in the frequency of distracted driving behaviors on weekdays vs. weekends
- Loud conversation and horseplay were particularly common when teens drove on weekend nights with multiple teen passengers (found in 20.2% and 11.2% of clips, respectively)
- No clear relationship was found between the frequency of distracted driving and the amount of traffic present, suggesting teens were not adapting their behaviors to traffic conditions (though heavy traffic conditions were rarely observed)
- There was some indication that teens limited distracted driving behaviors during periods of rain, but the differences were small

Do drivers who engage in distracted behaviors spend more time looking away from the roadway than drivers who are not distracted? Yes.

- Drivers were three times as likely to look away from the road when using an electronic device, and two-and-a-half times as likely to look away when engaging in other distracted behaviors
- Drivers using an electronic device looked away from the roadway, on average, for a full second longer than drivers not using such a device
- Overall, drivers looked away from the road in 45% of clips; in 10% of these, the longest continuous glance was more than two seconds – enough to cover nearly 2/3 of a football field at 65 mph

Are distracted driver behaviors associated with serious incidents such as near-collisions, or events involving hard braking or swerving? Yes.

- Drivers were six times as likely to have a serious incident when there was loud conversation in the vehicle, and were more than twice as likely to have a high g-force event when there was horseplay

For more information about teen driver safety and the AAA Foundation’s research in this area, please visit www.AAAFoundation.org.