Outsmarting smartphones: Technology reduces distracted driving among teens

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Technology can bolster efforts by parents, lawmakers and insurance companies to reduce distracted driving among novice teen drivers, according to a study to be presented Monday, April 27 at the Pediatric Academic Societies (PAS) annual meeting in San Diego.

Motor vehicle crashes are the leading cause of accidental death for teens, according to the Centers for Disease Control and Prevention. Studies suggest that the use of voice/text devices while driving is associated with crash risks up to 24 times higher than when cell phones are not used to talk or text while driving.

"The risks of electronic distraction for young drivers are very real, but facts and figures have not done enough to change driver behavior," said lead author Beth Ebel, MD, MSc, MPH, FAAP, director of the Harborview Injury Prevention & Research Center and associate professor of pediatrics, University of Washington School of Medicine.

Dr. Ebel and her colleagues wanted to find out if technology could reduce distracted driving, high-risk driving events (e.g., hard braking, swerving) and injuries among adolescent drivers. They conducted a pilot study of two interventions. The first was an in-vehicle camera system triggered by hard braking, fast cornering or an impact that exceeds a certain g-force. A video recorder captures events, which parents and teens can review to improve driving behavior. The second was a device that blocks incoming and outgoing calls/texts on cell phones when the vehicle is being operated. Both systems are commercially available.

Twenty-nine teens were randomized to one of three groups: camera only, camera plus cell phone blocking or control group. Using a program installed on the driver's smartphone, researchers could see how many minutes teens spent talking and how many texts they sent while driving over a six-month period.

Results showed teens in both intervention groups had lower cell phone use and fewer high-risk driving behaviors than the control group. The reduction in distracted driving was greatest for drivers with the blocking program installed on their smartphone.

In addition, teens and parents in the intervention groups did not disable the technology during the study, indicating that cameras and cell phone blocking programs are feasible outside the research setting, said Dr. Ebel, who also is an attending physician at Seattle Children's Hospital.

"The results of our study suggest that technological programs that may help limit exposure to distraction for novice drivers are accepted by teens and lowered risky driving," she concluded.

More information: Dr. Ebel will present "Randomized Trial of Cell Phone Blocking and In-Vehicle Camera to Reduce Distracted Driving Among Novice Drivers" from 4:45-5 p.m. PT Monday, April 27. To view the study abstract, go to www.abstracts2view.com/pas/vie … hp?nu=PAS15L1_2175.2

Dr. Ebel and Laura Blanar, MPH, will present a related study titled "Crash Risk Associated with Distracted Driving Citations Among Young Drivers," from 8:00-10 a.m. PT Sunday, April 26. To view the study abstract, go to www.abstracts2view.com/pas/vie … hp?nu=PAS15L1_2175.1

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