

Findings released on real-world driver behavior, distraction, crash factors

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Driver inattention is the leading factor in most crashes and near-crashes, according to a landmark research report released today by the National Highway Traffic Safety Administration (NHTSA) and the Virginia Tech Transportation Institute (VTTI).

Nearly 80 percent of crashes and 65 percent of near-crashes involved some form of driver inattention within three seconds before the event. Primary causes of driver inattention are distracting activities, such as cell phone use, and drowsiness.

"This important research illustrates the potentially dire consequences that can occur while driving distracted or drowsy. It's crucial that drivers always be alert when on the road," said Jacqueline Glassman, acting administrator of NHTSA. Her remarks were made during a news conference today at VTTI in Blacksburg, Va.

The 100-Car Naturalistic Driving Study tracked the behavior of the drivers of 100 vehicles equipped with video and sensor devices for more than one year. During that time, the vehicles were driven nearly 2,000,000 miles, yielding 42,300 hours of data. The 241 drivers of the vehicles were involved in 82 crashes, 761 near crashes, and 8,295 critical incidents.

"The huge database developed through this breakthrough study is enormously valuable in helping us to understand--and prevent--motor vehicle crashes," said Tom Dingus, director of VTTI.

In addition, a follow-on analysis to the 100-Car Study has also been released. Focused on the types of driver inattention and their associated risk, key findings include:

-- Drowsiness is a significant problem that increases a driver's risk of a crash or near-crash by at least a factor of four. But drowsy driving may be significantly under-reported in police crash investigations.

-- The most common distraction for drivers is the use of cell phones. However, the number of crashes and near-crashes attributable to dialing is nearly identical to the number associated with talking or listening. Dialing is more dangerous but occurs less often than talking or listening.

-- Reaching for a moving object increased the risk of a crash or near-crash by 9 times; looking at an external object by 3.7 times; reading by 3 times; applying makeup by 3 times; dialing a hand-held device (typically a cell phone) by almost 3 times; and talking or listening on a hand-held device by 1.3 times.

-- Drivers who engage frequently in distracting activities are more likely to be involved in an inattention-related crash or near-crash. However, drivers are often unable to predict when it is safe to look away from the road to multi-task because the situation can change abruptly leaving the driver no time to react even when looking away from the forward roadway for only a brief time.

The 100-Car Study and its follow-on analysis were co-sponsored by NHTSA, the Virginia Transportation Research Council (the research division of the Virginia Department of Transportation) and Virginia Tech.

The background and results of both studies are available on NHTSA's website under Research and Development.

Source: Virginia Tech

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