

Distracted drivers 29 times more likely to wreck in a highway work zone

March 5 2019, by Eric Stann



Credit: CC0 Public Domain

A vehicle traveling at 55 mph covers a distance greater than a football



field in five seconds. With the average text taking approximately five seconds to read, that's at least a football field's worth of driver inattention. Texting while driving is dangerous, and possibly even fatal, especially in a highway work zone.

Now, researchers at the University of Missouri say <u>drivers</u> not paying attention—such as answering a <u>phone call</u>, a text message, or being distracted by a passenger—for any length of time are 29 times more likely to be involved in a collision or near collision in a highway work zone.

The results from this study could provide recommendations on "behavioral countermeasures" to state transportation agencies and the Federal Highway Administration, which are implementing countermeasures to decrease injuries and fatalities in a highway work zone. These recommendations include better <u>public education</u>, laws to ban texting and driving, and policies that deter driver distractions. The results could also be used when developing new technology, such as driverless vehicles.

"Prior to our study, researchers analyzed data on work zone safety by looking at one checkbox among 70-80 different fields on a police officer's crash report to see if the crash occurred inside a work zone," said Praveen Edara, a professor of civil and environmental engineering at the MU College of Engineering. "Unfortunately, crash reports do not include detailed information about driver behavior prior to a crash. What's unique about our <u>research project</u> is that we used naturalistic driving <u>study data</u> that provides information about how driver, vehicle, roadway and environmental factors contribute to a crash. In other words, we reconstructed a driver's actions and the surrounding environment prior to the <u>crash</u> from a firsthand account."

The study uses data from the Transportation Research Board's second



Strategic Highway Research Program's Naturalistic Driving Study. During 2006—2015, researchers collected data from more than 3,000 drivers traveling more than 50 million miles. With this information, researchers can now see a detailed firsthand account of a driver's interaction with the vehicle, roadway and surrounding environment. Of the seven current Federal Highway Administration funded projects using this data, only MU is using the data to specifically look at highway work zones.

"Prior to this study, we knew that narrow lanes in work zones are less safe than wider lanes and similarly, speeding in work zones is correlated with injury severity," Edara said. "With this unique data set, it also allows us to see the responsibility the driver has in increasing work zone safety."

The study, "Risk Factors in Work Zone Safety Events: A Naturalistic Driving Study Analysis," was published in the National Academies of Sciences, Engineering and Medicine's *Transportation Research Record: Journal of the Transportation Research Board*.

More information: Nipjyoti Bharadwaj et al. Risk Factors in Work Zone Safety Events: A Naturalistic Driving Study Analysis, *Transportation Research Record: Journal of the Transportation Research Board* (2019). DOI: 10.1177/0361198118821630

Provided by University of Missouri-Columbia

Citation: Distracted drivers 29 times more likely to wreck in a highway work zone (2019, March 5) retrieved 28 April 2024 from https://phys.org/news/2019-03-distracted-drivers-highway-zone.html



This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.