Car crash survival rates increase with being younger, male and driving a big vehicle

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Motor vehicle crashes are the most common cause of unintentional life lost around the world, with about 30,000 deaths occurring annually in the U.S. due to motor-vehicle crashes.

A study by a doctoral student in epidemiology at the Indiana University Richard M. Fairbanks School of Public Health at Indiana University-Purdue University Indianapolis showed that vehicle inequities have a significant impact on survivability in head-on collisions.

Uzay Kirbiyik conducted a study of risk factors associated with drivers' survival in head-on vehicle collisions by examining Fatality Analysis Reporting System database records in 1,108 crashes.

The results showed that the driver's chance of survival was increased by driving a vehicle with a higher mass, driving a newer vehicle, being younger, being a male, using a seatbelt and having the airbag deployed in the crash.

Kirbiyik said his study found that more women die in head-on collisions, but deferred to medical trauma experts to explain why.

The study concludes that vehicle inequity, which includes differences like height and rigidity as well as weight, was a major cause of drivers' fatalities. According to Kirbiyik, if you are in an automobile, given that other variables are equal, you are 17 times more likely to die compared to a driver of a light truck. This ratio is about nine times for a collision with an SUV.

According to the study, there were more young people between the ages of 15 and 24 involved in head-on collisions than any other age group. That age group accounts for 21 percent of the collisions, and the rate of death among that age group is 39 percent, the lowest among all age groups.

"An intervention that reduces the involvement of younger drivers will likely help reduce the death rate of other age groups," Kirbiyik said. "This shouldn't be a surprise, but it is not an easy task to do."

Kirbiyik presented his study, "Factors affecting survival in head-on vehicle collisions" on Nov. 17, at the annual meeting of the American Public Health Association in New Orleans.

Provided by Indiana University