

INSURANCE INSTITUTE FOR HIGHWAY SAFETY

NEWS RELEASE

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CAR HEAD RESTRAINTS WITH DESIGNS RATED GOOD REDUCE NECK INJURIES IN ON-THE-ROAD CRASHES

ARLINGTON, VA – Car head restraints that are high and positioned close to the backs of drivers' heads reduce whiplash-type neck injuries in crashes, a new study shows. The research was conducted jointly by the Insurance Institute for Highway Safety and State Farm Mutual Automobile Insurance Company.

Institute researchers earlier measured head restraint height in relation to the top of an average-size driver's head and horizontal distance from the restraint to the back of the head in all popular passenger vehicles. Based on these measurements, the researchers rated each restraint's geometry from "good" to "poor."

The new study, based on detailed analyses of more than 5,000 State Farm claims involving recent model midsize cars struck in the rear by other vehicles, confirms that head restraints rated good offer superior protection in real-world crashes while those rated poor offer less protection. Key findings:

- Drivers in cars with head restraints rated good are 24 percent less likely to suffer neck injuries in rear-end crashes than drivers with head restraints rated poor. Percentages of drivers with neck injuries ranged from 22 percent of those with good head restraints to 27 percent of those with poor head restraints.
- Female drivers have higher neck injury rates overall than male drivers – 30 percent versus 23 percent.
- Neck injury likelihood was 36 percent lower among female drivers with good head restraints than among females with poor restraints. Among male drivers, the risk reduction was 10 percent with good head restraints.
- Drivers 65 and older have lower neck injury rates overall than younger drivers – 13 percent versus 27 percent among drivers 50 to 64 years old and 33 percent among drivers 49 and younger.

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- The overall neck injury rate in Michigan, the study's only no-fault state, was 13 percent compared with 26 percent in other states, which have either a liability system or an "add on" system under which motorists may collect medical costs from their own insurers while waiting for settlements from at-fault drivers' insurers.

"Neck and other soft-tissue injuries are more likely to be reported and to turn into sizable insurance claims in liability and add-on states, where attorney involvement is more probable, than in no-fault states where drivers file claims with their own insurers," says Wayne Sorenson, State Farm's research vice president.

As the nation's largest auto insurer, "State Farm pays about \$2 billion a year to people who have suffered neck soft-tissue injuries in crashes. Even modest progress toward improved head restraint designs would prevent many injuries and result in less pressure on insurance rates," Sorenson adds.

Institute president Brian O'Neill says the new study "shows that most automakers need to do much more to give motorists effective protection from whiplash-type injuries. Our 1995 study showed that about 70 percent of head restraints are rated poor, while only 3 percent are rated good. Results of a follow-up study in 1997 weren't much different. Until recently, only a handful of carmakers paid serious attention to this issue. This is beginning to change, and we hope the results of this study will spur even more progress.

State Farm and the Institute will share findings of the study at the World Congress on Whiplash-Associated Disorders in Vancouver, British Columbia, February 7-11, 1999. Professionals from the fields of healthcare, traffic safety, automotive engineering, and insurance will focus on research, education, and ways to handle treatment of such injuries more effectively.

The study covers claims from 38 states and the District of Columbia from 1993 through most of 1996.

End 2-page release. Videotape is available (2:08 min. B-roll).

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