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NEWS RELEASE

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SIDE AIRBAGS SUBSTANTIALLY REDUCE DEATH RISK IN CARS & SUVS; THOSE THAT PROTECT PEOPLE'S HEADS ARE ESPECIALLY EFFECTIVE

ARLINGTON, VA — Side airbags that protect people's heads are reducing driver deaths in cars struck on the near (driver) side by an estimated 37 percent. Airbags that protect only the chest and abdomen but not the head are reducing deaths by 26 percent.

"We found lower fatality risks across the board — among older and younger drivers, male and female drivers, and drivers of both small cars and larger passenger vehicles," says Anne McCartt, Institute vice president for research and an author of the study.

Head-protecting side airbags reduce driver fatality risk when cars are struck by SUVs and pickups, not just other cars. This is important because risks go up for occupants of cars struck in the side by the higher riding vehicles. In particular, the car occupants' heads are vulnerable to being struck. The Institute's study confirms that side airbags are reducing fatality risk in these crashes. Automakers are cooperating to reduce vehicle incompatibilities in both side and front collisions that lead to car occupant injuries, and a big part of this is to equip vehicles with side airbags.

The overall research findings echo those of a 2003 Institute study of side airbag effectiveness in cars. Data weren't sufficient then to compute fatality risk reductions for drivers of SUVs, but this time around there were enough data. Fatality risk in SUVs went down 52 percent with head-protecting side airbags and 30 percent with airbags that protect the chest and abdomen but not the head.

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The study includes three sets of effectiveness estimates. One is based on the same car models as the Institute's 2003 study. Researchers also analyzed the effectiveness of side airbags in newer cars (2001-04s during 2000-04) and in a combination of newer and older cars (1997-2004 models). Estimates of side airbag effectiveness in SUVs are based on newer models only (2001-04s during 2000-04). Data are from the federal Fatality Analysis Reporting System and General Estimates System. The authors calculated fatality risk in cars without side airbags, with head-protecting side airbags, and with airbags that protect the chest and abdomen but not the head (almost all vehicles with head-protecting airbags provide torso protection too). Compared with the 2003 study, researchers used a refined method of accounting for driver differences and for vehicle differences besides the presence or absence of side airbags.

Both the 2003 study and the new one reveal side airbag benefits, but the estimates of effectiveness differ. The best estimates from the new analyses, based on the combined set of vehicles (1997-2004 models), show somewhat smaller benefits of head-protecting side airbags and larger benefits of torso airbags, compared with the earlier study. The difference in effectiveness for these two airbag types was smaller when researchers looked at newer cars only (2001-04s during 2000-04).

"These variations in the findings depending on the datasets of vehicles aren't surprising. Side airbags are relatively new, and the datasets still are small. This means fluctuations in the results are to be expected," McCartt says. "What's important is the consistency of the overall pattern. Regardless of what vehicle model years we included, the benefits of side airbags were revealed — and the benefits were greater for head-protecting side airbags than for ones that protect the chest and abdomen but not the head."

Findings track results of the Institute's side crash tests conducted since 2003 for consumer information. All 33 current models with good ratings in this test are equipped with head-protecting side airbags. Very few poor performers are (to compare vehicle ratings based on front, side, and rear tests, go to iihs.org/ratings).

Although federal regulations don't require side airbags in passenger vehicles, more and more manufacturers are installing them. In part this is the result of a voluntary agreement among automakers, forged in 2003, to improve occupant protection in side impacts with SUVs and pickups — an agreement that essentially will result in all cars, SUVs, and pickups being equipped with side airbags with head protection by the 2010 model year.

About four of every five new car and SUV models already have standard or optional side airbags that include head protection. This is a huge increase since side airbags were introduced in a handful of models in the mid-1990s (for model-by-model information on side airbag availability in 1996-2006 models, go to iihs.org/ratings/side_airbags/side_airbags.aspx).

The airbags vary by design. Some descend from the vehicle roof to protect the heads of occupants in both front and back seats. Combination side airbags inflate from the vehicle seat or sometimes the door. These protect occupants' torsos and heads too.

Pickup trucks aren't matching the pattern of rapidly being equipped with side airbags. Head-protecting ones are standard in only one 2006 model pickup. Fewer than half of all pickups have side airbags at all, standard or optional.

"Once every passenger vehicle on the road has side airbags that include head protection for front-seat occupants, we can save as many as 2,000 lives per year," McCartt concludes.

End 3-page news release on effectiveness of side airbags

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