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MEDIA STILL DISTORTING HLDI DATA ON AIR BAGS, ANTILOCKS

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A recent *Wall Street Journal* article distorts and misinterprets findings from two Highway Loss Data Institute (HLDI) studies, one on air bags and one on antilock brakes. This isn't the first time a *Journal* reporter has misrepresented HLDI data (see *Advisory* No. 15, Dec. 1993). It's important to continue to set the record straight on HLDI findings, especially because the *Journal* is such a widely read publication.

Distortion of Air Bag Data

According to Krystal Miller's "Insurance Claims Data Don't Show Advantage of Some Auto Devices" (March 17, 1994), it's "unclear how much protection air bags offer from injuries short of death." But there's no lack of clarity on this point at all. HLDI studies show air bags are reducing the severity of injuries reported to insurers and the frequency of hospitalizations. Plus, a U.S. Department of Transportation study concludes that "air bags alone are estimated to be 42 percent effective in reducing moderate-to-critical injury; air bags plus manual lap/shoulder belts are estimated to reduce this risk by 68 percent."

Given such information, how is it possible for Ms. Miller to conclude a lack of clarity on whether air bags are preventing and reducing nonfatal injuries? To make her case, she cites two Virginia Commonwealth University economists who claim to have found from HLDI data that the relative frequency of personal injury claims increased in cars after air bags became standard equipment. But this so-called finding is wrong. It's based on invalid arithmetic. Correct analysis of the data shows there was no such increase, so there's no basis for Ms. Miller's speculation that air bags may not be reducing nonfatal injuries.

What's important to remember is that overall injury claim frequencies are very broad statistics that include injuries sustained in crashes in which air bags aren't designed to work, injuries to body parts not protected by air bags, and relatively minor injuries like cuts and bruises. Air bags aren't designed to prevent any of these injury types. They're designed to prevent serious injuries and deaths in frontal crashes, and the evidence is clear that they're doing just that.

Misunderstanding of HLDI's Antilock Brake Study

Ms. Miller also misunderstands a HLDI study of antilock brakes which found that, despite their impressive performance on the test track, antilocks aren't reducing the frequency of insurance claims for damage to cars in crashes, compared with otherwise similar cars

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without antilocks. Ms. Miller claims the HLDI study isn't comprehensive. Yet it's based on extensive data — 19 pairs of car models, each with and without antilocks.

The fact is that antilock brakes can be very effective in helping drivers maintain control during emergency braking on very slippery surfaces. This is their principal advantage. In circumstances in which a vehicle with regular brakes may skid out of control, antilocks can help prevent the skid and allow the driver to steer away from a possible collision. But these circumstances are rare for the average motorist, which is probably why HLDI found no reduction in claim frequencies for cars with antilocks.

Because antilocks have been promoted as a wonder technology enabling motorists to stop on a dime and thus avoid collisions, expectations for them have been unrealistic. Antilocks do *not* offer substantially improved stopping distances on most road surfaces. Only on sheer ice or otherwise very slippery surfaces are there pronounced improvements for cars with antilock brakes and, on some surfaces such as gravel or loosely packed snow, antilocks can actually *increase* stopping distances.

Resurrecting the Discredited Risk-Compensation Hypothesis

By citing the conclusion of a 1975 study “that risk taking behavior completely offset[s] the lifesaving effects of mandated safety equipment,” Ms. Miller resurrects the discredited risk-compensation hypothesis. According to this hypothesis, people adjust their behavior and take more risks behind the wheel to offset the car safety improvements mandated by federal standards.

The risk-taking hypothesis has been repeatedly discredited. Overwhelming evidence in the scientific literature shows that mandated safety features — as well as features now being offered in response to consumer demand — have substantially reduced crash deaths and serious injuries. There isn't a shred of empirical evidence to support the hypothesis that drivers take more risks when operating cars with features that reduce the likelihood of injury or death in a crash. Indeed, it is a strange view that holds, “I have a new car with more safety equipment in it than my old car, so I will drive more aggressively and not care whether or not I get into a collision because if I do, my chances of being killed or seriously injured are reduced.”

It may be the case that, if you provide a driver with more acceleration or better brakes, behavior may change because of the *direct and immediate feedback* provided by the vehicle. But no such feedback is provided by air bags, energy-absorbing steering columns, high-penetration-resistant laminated windshields, or other injury-reducing features mandated by federal standards. Therefore, it's extremely unlikely that such features could be influencing drivers to take more risks.

Yet the risk-compensation hypothesis persists. According to *The Armchair Economist's* jacket blurb, for example, “seat belts cause accidents because well protected drivers take more risks. This widely documented fact comes as a surprise to most people, but not to economists.” Then economists are ignoring scientific research from around the world pointing to the fact that belts don't cause crashes and that, when used voluntarily or because they're mandated, they do save lives and prevent injuries.

The Institute and HLDI will continue to correct misinformation such as that in Ms. Miller's article. In addition, a correction has been requested in *The Wall Street Journal*. Taking these steps helps keep the highway safety field on a scientific basis.

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