

STATUS INSURANCE INSTITUTE FOR HIGHWAY SAFETY REPORT

Vol. 32, No. 1

January 11, 1997

DRIVER EDUCATION DOES NOT EQUAL SAFE DRIVERS

The premise is simple. Teach teenagers to drive in a formal training program and they'll become safe drivers. Right?

Not really.

A good driver education course, emphasizing on-the-road driving, is an effective way to learn vehicle handling skills. But a new report by Daniel Mayhew and Herb Simpson of the Traffic Injury Research Foundation of Canada summarizes extensive international research showing driver education and training don't lead to lower crash involvement, compared with other ways of learning to drive.

This isn't the first study to question the merits of driver ed. Once considered a rite of passage for high school students, it began falling out of favor in the United States in the 1980s when school budgets were cut and research showed that formal instruction didn't reduce young drivers' crash risk. Some studies even showed that high school driver education had a negative impact on safety by increasing the number of licensed 16 year-olds.

Flash forward to the 1990s. In an attempt to lower young peoples' crash risk, many jurisdictions are introducing new licensing laws. These require beginners to "graduate" through stages of restricted driving before receiving unrestricted licenses (see *Status Report*, Vol. 31, No. 10, Aug. 10, 1996). And in some countries outside the United States, time spent in the graduated licensing system can be shortened by completing a driver education course.

The introduction of graduated licensing has revived questions about the effective-

ness of driver education in reducing crash risk and the role it should play in the licensing of young drivers. The Institute-sponsored Mayhew and Simpson report addresses these questions with a comprehensive review of driver ed program evaluations and recent developments in the field.

Theory vs. Practice: "Studies in the United States, Sweden, and Australia suggest that driver education produces no beneficial advantage in reducing collisions compared to informal training," the report

Highway Traffic Safety Administration report to the U.S. Congress, experts agree that "current novice driver education is not doing a very good job in motivating youngsters to drive safely."

History of Driver Ed: Driver ed became widely available in high schools in the 1950s. "Formal driver education was generally believed to be an effective means of reducing the crash risk of young drivers," the report states. "This commonly held belief was supported by early evaluations

"DeKalb data have been the object of intense scrutiny and sophisticated re-analyses over the years," the Mayhew and Simpson report states. "Taken together, the original ... study and subsequent analysis of the data show that the improved driver ed program was not associated with reliable or significant decreases in crash involvement."

As the researchers note, the conclusion that driver ed is not associated with decreases in crash involvement "has not



states. It includes motorcycle rider education and training as well as traditional driver education programs.

The value of driver education and training also was questioned in the 1980s on the grounds that they produce unexpected negative consequences. "Work supported by [the Institute] showed that the greater availability of driver ed stimulates earlier licensure among teenagers, which in turn leads to more crashes per capita," states the Mayhew and Simpson report.

Thus, the disappointing track record of driver education and training has long been known. As stated in a 1994 National

demonstrating the safety benefits of existing programs."

As a result, driver ed received federal funding in the United States, and about 80 percent of all eligible students were signed up by the late 1970s and early 1980s. But at the same time as enrollment was growing, researchers began to question the validity of the earlier, positive evaluations.

In response to growing doubts, the federal government set out to create and evaluate a state-of-the-art driver ed course — the Safe Performance Curriculum implemented in the DeKalb County, Georgia school system.

been altered by the results of evaluations of other driver education programs that have been conducted since then."

Improving Driver Ed: Notwithstanding the disappointing track record of driver ed, does formal training at least have the potential to be effective? "The answer to this question is speculative but some insights can be gained through a consideration of why driver instruction has not been effective and what current developments might help overcome these deficiencies," the researchers point out.

Among the possible reasons for driver ed's ineffectiveness, the report states, are

that specific crash-reducing skills aren't taught; not enough attention is paid to the importance of motivation in applying new skills or the overconfidence that may result from skills acquisition; lifestyle factors related to risky driving and the development process aren't addressed; and young drivers are treated as a homogeneous group rather than as individuals.

The researchers note that improvements are being implemented in many of these areas, but caution that "before any of these changes are implemented on a permanent basis, it is essential that [they] be evaluated to determine if they do in fact have a positive effect on crashes."

New Role for Driver Ed: Given the lack of demonstrable effectiveness of present-day driver education, the report advises against adding a driver ed component to new graduated licensing systems if there's no precedent for doing so.

However, the researchers acknowledge that "there is a well established precedent linking formal instruction with the licensing system" in many jurisdictions. In these cases, they recommend tailoring the driver ed program to the stages of graduated licensing.

"By definition, graduated licensing is multiphased — typically it involves a two- or three-stage licensing process that becomes progressively less restrictive as the novice moves toward full licensure," the researchers say. Yet driver ed typically is included only as part of the learner's stage in most graduated licensing systems.

"For some students, learning to drive and maintaining basic control of the vehicle are so demanding that safe driving concepts cannot be applied," the report explains. "Thus, it may be advisable to introduce more safety-oriented driver training following initial licensing and after some driving experience has been gained."

For example, the National Highway Traffic Safety Administration has recommended a basic driver education course during the learner stage of a graduated licensing system. Also recommended is a more advanced safety- (cont'd on p.6)



Europeans Echo Concerns About Training Young Drivers

"What we see across the European Union are training regimes which have demonstrably failed their largest client market — the young driver," the European Transport Safety Council (ETSC) says.

A recent ETSC briefing on driver training and testing reaches many of the same conclusions as the new Institute-supported report on driver education (see page 1).

"Every year, almost 15,000 15-24 year-olds are killed in traffic in European Union member states, the large majority ... in the first years after having obtained a driving license. Per distance travelled, the accident rate of young car drivers is several times higher than that of middle-aged drivers," the ETSC report states. "It is apparent that the current practice in driver training and licensing has failed in preparing youngsters to participate safely in motorised traffic."

Teenagers in European countries typically learn to drive in professional driving schools rather than in secondary schools, according to the report, but this training also is inadequate. "The goal of the training often seems to be to prepare the learner driver to pass the test in as little time as possible," the ETSC says. "The limited time available for training is insufficient for the pupil to acquire the basic skills, knowledge and procedures to deal safely with other circumstances, such as driving in bad weather conditions, during darkness and in extremely heavy traffic, conditions which will be difficult to avoid after licensing."

A variety of measures have been adopted in response to the problem. For example, there is a probationary license system in Germany and a process of "accompanied driving" or supervised practice in France, Belgium, Sweden, Norway, and Luxembourg. There also are restricted provisional licenses in Great Britain, Ireland, and Austria that resemble graduated licensing. But the report points out no comprehensive approach has been employed.

"Considering the great effort which is put into the everyday practical work of training and licensing new drivers and considering the astonishingly slight scientific basis which currently exists, funding research into the factors that are involved in learning to drive is warranted and should be encouraged by the EC. ... Only when these types of issues are properly understood can there be a scientific basis for the development of effective training and testing countermeasures to the relative lack of safety experienced by young drivers."

Photos Show It The Benefits of Airbags Outweigh Most Risks

As automakers, airbag suppliers, and the federal government work to find solutions to the airbag injury problem, it's important to remember that driver and passenger airbags in cars today do save lives and prevent serious injuries.

To illustrate how airbags protect people's heads and faces in frontal crashes, the Institute recently conducted a pair of 40 mph frontal offset crash tests involving passenger vans, one with the driver airbag connected and the other with it disconnected. The 50th percentile male dummies were belted in both tests.

In the test with the intact airbag, the head injury criterion (HIC) — a standard measure of serious injury risk — indicated little or no risk of serious head injury. In contrast, the driver dummy in the same van with the airbag disconnected sustained a HIC of 4,651, a level at which fatal head injury is almost certain. Federal Motor Vehicle Safety Standard 208, which specifies minimum performance for airbags, requires HICs of less than 1,000 in 30 mph flat-barrier tests.

"People who may be considering disconnecting their airbags should look carefully at potential benefits in relation to the potential risks," says Institute President Brian O'Neill. "Among belted drivers, those at risk of serious injury from inflating air-



bags sit very close to the steering wheel. With or without airbags, this position is risky because in serious crashes drivers' faces or chests will hit the steering wheel, and serious injuries are likely."

This is illustrated by another pair of Institute tests. Two 35 mph flat-barrier crash tests were conducted with 5th percentile female dummies (height: 5 feet) in the driver seats, which were moved almost all the way forward. One car was equipped with an airbag, which protected the dummy positioned very close to it. In the other car, the airbag was disconnected, and the belted dummy's face hit the steering wheel rim hard enough to bend it severely (see photos).

"These tests clearly demonstrate why it's better to drive a car with airbags than without them," O'Neill explains.

"The simple act of buckling up and making sure you are seated 10 to 12 inches away from the steering wheel virtually eliminates the risk of serious airbag inflation injury for drivers. Except for those extremely rare instances when a driver can't move back from the wheel, even with pedal extenders, disconnecting a driver airbag makes no sense."

The National Highway Traffic Safety Administration in November announced plans to allow automakers to depower airbags 20 to 35 percent but didn't issue a formal proposal until December 30 (see *Status Report*, Vol. 31, No. 10, Dec. 7, 1996). The agency anticipates that depowered airbags will be in cars before model year 1998.

The agency also may allow auto dealers and repair shops to deactivate airbags at vehicle owners' request. Following an expedited comment period, which ends February 5, new airbag rules are slated to be issued this spring.

Reprinted from *The Washington Post*
Sunday, December 1, 1996

The Washington Post

Brian O'Neill

... And the Dangers of Disconnecting

After weeks of intense media coverage of the risks of serious injury from inflating air bags, the federal government is proposing to allow repair shops to disconnect bags if car owners want this done. Now that motorists' fears about air bags have been stoked, many are asking, "Should I get my air bag disconnected?"

The decision should be made with more rationality than passion. This doesn't mean discounting air bag risks. But it does mean getting beyond the panic about air bag inflation injuries and deaths and figuring out whether it really makes sense to disconnect the bags in your car.

Start with the fact that air bag inflation deaths aren't happening randomly to unlucky people. Almost all of them involve people who weren't using their belts, were using them incorrectly, or weren't positioned properly in the vehicle. Before deciding to get your air bag disconnected, understand that the risk of an inflation injury to people positioned correctly and using their belts is close to zero, while the potential benefit from air bags in serious crashes is large.

For infants and young children, eliminating the air bag risk means riding properly restrained in the back seat, where it's safer than the front and where youngsters are clear of inflating air bags.

Rear facing infant restraints should never be put in front of an air bag. Older children are better off in the back seat, too. There's no risk in front if the seat is all the way back, if the kids are using belts and if they're sitting back in their seat. But as all parents know, kids often don't sit still. They like to wriggle around and, for example, fiddle with the radio dials. Then they can be at risk.

So should parents ever consider disconnecting a passenger air bag? Only rarely — for example, when infants have medical problems that demand frequent observation, and the driver is the only adult in the car. Then the baby would need to ride in the front seat, and if there's a passenger air bag, there's a risk. (At the same time, parents should realize that paying attention to an infant is a distraction from driving and involves its own risks.) A baby who needs watching is precisely the circumstance for which the air bag disconnect option has been proposed. Only in such rare cases does it make sense to disconnect.

But what about very short drivers? Should they disconnect their air bags? Don't rush into it. Amy Olyniec, a 4'7" college student in Cedarburg, Wis., says she got scared after reading an article about air bags harming short women. "Oh, my God," she thought, "what if my air bag ever goes off?" She was going to

try to get it disconnected, but just two days after reading the article, she was in a serious crash in which the air bag protected her. Without it, "if I hadn't gone through the windshield, I would at least have smashed into the steering wheel very, very hard," she said.

Amy is short. Still, the air bag kept her from injury. Most short drivers can get far enough away from the wheel — 10 or 12 inches is enough — and still reach the pedals. If not, pedal extenders should be considered, because sitting so close to the wheel, with or without an air bag, puts drivers at high risk. Only if there's no practical way for a driver to get back from the wheel should disconnecting an air bag be considered.

The dilemma about whether to disconnect isn't going to be with us forever. Technology will provide solutions. So-called "smart" air bags will detect occupant characteristics and crash severity, tailoring deployment for optimal protection. In the meantime, buckle up, move back from the steering wheel and get kids buckled up in the back seat. And remember that air bags, despite their recent bad press, are doing a good job of preventing deaths and serious injuries in crashes. If an air bag is disconnected, it can't protect you.

The writer is president of the Insurance Institute for Highway Safety.



Young People Still Able to Buy Alcohol From Outlets, Bars

Liquor stores and bars continue to sell alcohol to young people, a new University of Minnesota study finds.

Women older than 21 who were judged by a panel to appear younger than 21 were able to buy beer 138 times out of 300 attempts at alcohol outlets in northeastern Minnesota. The women weren't required to show proper identification.

Three purchase attempts were made at each outlet. At least one buy was made at nearly 80 percent of the retail establishments, and at 21 outlets all three attempts were successful.

Alcohol retailers have argued for many years that young people's use of false identification impedes efforts to prohibit underage purchases. This study refutes that charge, says Alexander Wagenaar, one of the Minnesota researchers who authored the study. "The prevalence of using false identification is very low," he says. "It is not as big a problem as outlets make it out to be." The real problem is "the high rate at which outlets are still selling to minors without requesting identification."

Wagenaar and associates found that bars were less likely than liquor stores to sell beer without checking first for proper identification. The researchers also found that measures such as an on-site manager and formal staff training significantly reduced the purchases.

Institute research has shown that young people's easy access to alcohol is a problem in other parts of the country as well. For example, a 1992 study found that young men 19 and 20 years old successfully purchased a six-pack of beer in 97 out of 100 attempts in Washington, D.C. (see *Status Report*, Vol. 26, No. 3, March 16, 1991).

"Characteristics, Policies and Practices of Alcohol Outlets and Sales to Underage Persons" by Mark Wolfson et al. appears in the *Journal of Studies on Alcohol*, 57:6, 670-674 (1996).

(cont'd from p.3) oriented course in the intermediate stage of graduated licensing.

Driver Ed and Graduated Licensing: Michigan is first in the United States to adopt the highway safety administration's recommendation. The state recently enacted a three-stage graduated licensing system that, beginning in April, will require two stages of driver education (see *Status Report*, Vol. 31, No. 9, Nov. 9, 1996).

"The first, basic control skills segment would be required before an instructional or Level I license is issued, while the second safe driving segment would be required before a restricted or Level II license is issued," the report states. For a full-privilege license, drivers must pass a performance-based road test.

Future Preview? The report also reviews new driver ed programs in other countries. Developments in New Zealand may provide a testing ground for the effectiveness of integrating revamped driver ed curricula into a graduated licensing system.

Since 1987, New Zealand has offered a graduated licensing system with time discounts that cut the learning stages in half. The first 6-month period can be reduced to 3 months by completing a driver training course, and the second 18-month period can be cut to 9 months if a defensive or advanced driving course is completed.

More recently, a new driver education curriculum was developed in New Zealand. Star Driver "combines practical driving

skills training with self-management training. ... Students are given factual information on road risks, meet peers who have suffered major crash injuries, learn techniques to manage themselves and others in relation to alcohol and driving, and are oriented to seek personal challenges other than risky driving," the report states.

The program also teaches students to detect and correct in themselves key dangerous attitudes such as thrill-seeking and impulsiveness.

No Time Discounts: No matter how good a driver education course may be, it's no substitute for maturity and experience. The report notes there's no empirical evidence driver ed yields safety benefits equivalent to on-the-road driving experience gained under low-risk conditions, a feature of graduated licensing. Furthermore, when training leads to earlier licensure, higher crash rates can result.

While leaving open the possibility that driver ed can be improved and integrated into a graduated licensing system, the researchers "do not recommend that the length of time in the system be reduced for successful completion of the course of instruction."

For a copy of the executive summary of "Effectiveness and Role of Driver Education In a Graduated Licensing System" by D.R. Mayhew and H.M. Simpson, write: Publications, Insurance Institute for Highway Safety, 1005 N. Glebe Rd., Arlington, VA 22201.



Driver Airbags for Big Trucks Debut in '97

Truck manufacturers Freightliner and Volvo plan to offer optional driver airbags on selected models beginning with the 1997 and 1998 model years.

Freightliner will offer driver airbags in its 1997 Century Class trucks. These trucks also will be equipped with standard daytime running lights.

The four new models in Volvo's VN series will have optional driver airbags in 1998 models as well as standard daytime running lights.

Kenworth plans to introduce driver airbags sometime in early 1997, although a company spokesman declined to say when and in what models.

The U.S. government requires driver and passenger airbags in passenger cars and pickups but not big trucks. Daytime running lights aren't mandated, but some automakers voluntarily equip their models with the lights that help prevent daytime multiple-vehicle crashes by making vehicles more conspicuous.

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Vol. 32, No. 1, January 11, 1997

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ISSN 0018-988X

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