

★ ★ ★ ★ Teen Driver Safety

Introduction

Motor vehicle crashes are by far the leading cause of death for young people in the U.S., claiming the lives of more 16, 17, and 18-year-olds than the next five leading causes of death combined: homicides, suicides, drowning, poisonings, cancer, and heart disease. There are more 18-year-old drivers involved in fatal crashes than drivers of any other single age, despite the fact that far fewer miles are driven by 18-year-olds than by, for example, 40-year-olds. Teenage drivers are not only dangerous to themselves, either. For every teenage driver killed in a crash, two more people -- their passengers, drivers of other vehicles, and pedestrians -- also perish in their crashes.

Everything we know about why young drivers are at such great risk behind the wheel points to two major factors: they are generally immature, and they lack experience driving. Unfortunately, the bulk of the evidence suggests that traditional driver education does not reduce crash rates, and many have taken this to mean simply that driver education does not work.

High quality research can tell us how best to educate teens to become skilled and safe, responsible drivers, and how to ensure that they are prepared for the risks and challenges that they will face on the road. For some 20 years, the Foundation has led efforts to ensure research drives development of methods and curricula for driver education.

In 1998 the Foundation took on the perplexing and deadly dilemma of teen driver education and teen crashes, and after careful research, published the *Novice Driver Education Model Curriculum Outline*, which identified several ways to restructure driver education to realize its potential for improving safety. Recommendations included:

- Greater use of technology for teaching and testing knowledge and skills in general, as well as hazard identification in particular, in a self-paced, individualized, automated way;
- Greater use of decision-making theory and learning theory to modify risk-taking styles and to demonstrate the consequences of risky decisions; and
- Development of tools, models, and instructional materials to promote parent involvement in driver education.

Teens have the highest crash rate of any group in the United States.



Since those research-based recommendations were released, few, if any, driver education programs have been successfully evaluated, and it remains unclear what, if anything, works, when educating teens on driving safety. Extensive evaluation must be pursued to determine how best to educate teens on driving skills, attitudes, and behaviors.

Beyond the generally limited and unevaluated driver education that exists in most (if not all) states, there is also no robust system of testing to ensure teens are truly ready to take their place on the roads. A typical driver licensing examination is a brief number of multiple choice questions, and a short drive around an unrealistic, minimally-demanding route to demonstrate the most basic of driving skills (e.g., using turn signals, obeying the speed limit, and executing simple maneuvers such as parallel parking). Neither reflect the real world challenges every driver faces on U.S. roads, and is at best a poor indicator of how a driver will behave.

The Foundation produced an ambitious and effective research report in early 2007 that identified all factors of various graduated driver licensing (GDL) programs in place in the U.S., and clearly indicated what was working to keep teen drivers and other road users safe. Those recommendations have been well-used at the state level to revise regulations affecting teen drivers and, as predicted, fatality rates have fallen. However, not all states have implemented each known countermeasure, and additional work can and should be taken in this area to improve road safety.

Proposal

From its vantage point as a leader on teen driving research, the Foundation recognizes the need for a concerted and focused effort to bring new research to the field and develop definitive guidelines to ensure teens are given the best chance to survive their early, and most risky, driving experiences. The Center of Excellence in Teen Driving Safety will take on that mission, conducting research into the impacts of traditional as well as more modern driver education and training programs, overhauling today's driver licensing examination protocols, and researching how to go beyond just "education" and really get through to teens.

Core Activities

Simply put, this program will identify what works, what doesn't work, and what is counterproductive. Results of this robust evaluation will include a checklist of strategies that can be used by any educator or agency to set standards and guidelines to ensure driver education meets the needs of the individual, and society at large.

The AAA Foundation is currently at the beginning of a large-scale evaluation of driver education programs in Michigan, Oregon and Manitoba, using the rigorous evaluation methodology developed in the Foundation's *Guidelines for Evaluating Driver Education Programs*. As its first order of business, the Center will take this evaluation to a new level. Additional evaluations will be undertaken on other types of driver education and training courses, including online programs and programs that use more advanced learning tools, such as driving simulators, are proposed for the next four years.

Of equal interest and concern is the effectiveness of post-license driver training programs targeting young drivers, including those that focus on defensive driving techniques, risk awareness, and advanced vehicle handling skills. There is no regulation of 'advanced driver training,' and research results to date are at odds with media and parental impressions of the real effectiveness of some of these programs. The Center's proposed research agenda will identify the components of post-license driver training programs that are helpful and those that may be counterproductive, and develop a recommended set of components for a model advanced driver training program.

Recent research suggests that attitudes toward driving and risk are formed well before teens are old enough to begin driving. The Center will investigate the informal lessons acquired by young people during their pre-driving years, the impacts of those lessons when young people begin driving, and possible approaches to reaching teens before they begin driving, such as AAA's Dare to Prepare, which involves parent and teen education when the teen is 14 or 15 years of age. Efforts in this area will build on current Foundation work to develop guidelines for effective parent-teen communication during the learner stage of driver licensing, and will identify educational and motivational aspects of novice drivers that go beyond learning the rules of the road and how to operate a vehicle.

Beyond the question of how to prepare novice drivers for the risks of the road, it is also clear that current tests for determining when these drivers are ready for the road are inadequate. European countries are already moving toward upgrading their driver license examination protocols, and harmonizing across Europe. England and the Netherlands, for example, both recently instituted new, more comprehensive testing protocols. The Center will study the effectiveness of existing driver licensing examinations in the United States and abroad to identify best practices and knowledge gaps, ultimately leading to the development of a model licensing test that would more effectively assure that newly-licensed drivers are capable of driving safely under real world driving conditions. Traditional "paper and pencil" and in-vehicle tests, along with tests using more advanced technologies such as simulators, will be considered.

Finally, significant Foundation research has already demonstrated the lifesaving benefits of Graduated Driver Licensing programs, and this research has been instrumental in the passage of state licensing laws that have already saved thousands of lives. Yet there is much room to further improve laws and to enhance the parent – teen interactions throughout the driver learning process. Additional research is needed to induce states that are lagging behind to "catch up," to continue to make graduated licensing programs more effective, and to be able to recommend "best practices" to protect teen drivers and the general public.

The Center will also conduct research to identify means of effectively and persuasively communicating with teens, including identifying how parents should communicate risk to their teens. Recent groundbreaking research on the development of the teenage brain, for example, suggests that simply educating an immature person about statistical risk or the possibility of grim consequences may be completely ineffective, and other studies suggest that emphasizing social consequences (e.g., the disapproval of one's peers) rather than physical danger may be a more promising avenue. Additional research will evaluate the interaction of parents and teens during the supervised driving phase, as well as in their ongoing communications vis-à-vis restrictions, risk management, etc. after the supervised phase has concluded.

Strategic Communications and Public Education

To ensure that the research results are translated into practice, a strategic, evidence-based communications and public education effort will be launched. Prevailing circumstances at the time of research completion will ultimately define the type and scope of outreach. Illustrative examples of projects may include:

- Providing guidance and direction for promoting 'best practices' for driver education development, revision, and implementation.
- Development of one or more multimedia campaigns using messages and delivery mechanisms proven to be effective for the selected target audience.
- Guiding strategic development of novice driver training supplements using state of the art technologies that engage students and aid parents. This may include developing a next generation Driver-ZED (the Foundation's proven risk-focused education program) to capitalize on new technologies.
- Providing guidance and research-based messages for development of participatory classroom units for peer-focused seminars, individual study projects, and group work to clarify health and safety values and to enhance personal motivation and social responsibility.
- Cultivating a national partnership to promote and distribute Driver-ZED to teens, parents, and educators.
- Providing the scientific basis for AAA and other teen driving safety proponents to advocate for fair, effective, and publicly acceptable driver licensing policies, including testing, and to promote effective parent-teen interactions.

'State of the art' marketing and communications strategies will be applied as "best practices" on an ongoing basis for the Center, and will include vital fundamentals such as release of regular press releases when research milestones occur, development and distribution of radio PSA scripts to enhance awareness of Center issues and impact on society at large, website development and content management, as well as site optimization for increasing traffic and visit duration and deployment of a strategic web marketing campaign to drive traffic to the website. The media will be engaged through regular updates of an online media resource 'kit', and ongoing outreach to media will extend the reach and impact of all research projects. Sophisticated and unique message development will leverage research findings to enhance impact in the real world.

Outputs, Measurement and Evaluation

The Center's long-term evaluation of existing driver education programs will result in a catalogue of what works, what doesn't work, and what may be harmful.

By year four, the Center will have completed research and evaluation of advanced driver training programs and will be able to identify the components that may work, may not work, or are detrimental to a novice driver's education. Outcomes will include a policy and position paper to guide regulation of advanced driver training, to inform parents, and to correctly educate media and opinion leaders.

The Center will take a new tack on novice driving with an exploration of motivations, behaviors and attitudes of those drivers, as well as review of multi-disciplinary strategies, to better understand how to implement a public health model approach focused on novice driving. By year four, the Center will provide guidance on an intervention concept that promotes a new and comprehensive approach to changing motivations and behaviors in novice drivers.

Also by year four, the Center will have developed a more rigorous licensing test that will better distinguish between drivers that possess adequate skills and abilities to be safe independent drivers under realistic conditions and those who still need more training or more practice. In support of this new testing strategy, the Center will provide state agencies and teen driver safety advocates with the research foundation to support enhanced, effective, and acceptable driver license examination protocol.

The Center will also continue to evaluate innovative new driver licensing policies adopted by the states. As Foundation research has been instrumental in the passage of the most effective Graduated Driver Licensing programs known to date, the Center will continue to provide the research base for continuing to improve licensing policies for novice drivers in the future.

Based on specific research as regards communications strategies for teens, the Center will develop message points, guidelines, etc. to inform parents on “best practices” for speaking with their teens to communicate driving risk.