Optimism Results from Expert Panel on Teen Driver Safety

The Children's Hospital of Philadelphia releases an evidence-based roadmap to guide development of effective programs to reduce teen-driver-related crash and injury risk

PHILADELPHIA -- Researchers at The Children's Hospital of Philadelphia's Center for Injury Research and Prevention are optimistic that there are effective ways to reduce crash and injury risk for young novice drivers. Today, they released the results of a nine month-long scientific review by an international interdisciplinary Expert Panel to characterize the epidemic of teen-driver-related crash and injury risk and set the agenda for action. Recommendations are detailed in a special supplement called "The Science of Safe Driving Among Adolescents" in this month's issue of Injury Prevention.

“If we continue with our current policies and programs, more than 100,000 US youth and young adults will die in crashes over the next 10 years,” says Dr. Flaura K. Winston, M.D., Ph.D., co-scientific director and founder of the Center for Injury Research and Prevention at Children's Hospital. “Recent research points to an optimistic future if we apply these findings to programs, policy, and technology that guide learner drivers to safe independent driving.”

The Expert Panel, sponsored by Children's Hospital and State Farm Insurance Companies®, drew on the latest developments internationally and includes experts from the US, Sweden and Great Britain in education, training, licensing, adolescent development and diversity, cognitive and experimental psychology, epidemiology, engineering and technology, social marketing, public health and legislative policy.

Traffic crashes occur disproportionately among newly driving teens and young adults, with one in four crash fatalities in the US involving 16-to-24 year olds. The first six months of licensure are the most dangerous for any driver and the crash risk remains twice as high as that for adult drivers until age 25.

Expert Panel members highlighted the latest research which shows the most promise for improving safety for teen drivers, such as increased seat belt use, hazard perception skills training, minimizing distractions and time with eyes off the road, and addressing drowsy driving.
When you look at the whole picture—adolescence, driving and adolescent driving—four key areas for action emerge: 1/ strong public policy for graduated drivers licensing (GDL) in all states; 2/ training to optimize the few second sequence just prior to a crash with improved hazard detection and response skills among novice drivers; 3/ tools to enhance the teen-parent relationship which heavily influences teen behavior; and 4/ incorporation of the teen perspective before intervention development to ensure future efforts will "make sense" to teens.

The Expert Panel concluded that GDL laws should be the foundation for comprehensive interventions. GDL laws have been proven effective at reducing crashes, fatalities and serious injuries across multiple studies. Currently, 44 states and the District of Columbia have some form of a GDL system but the systems vary among states and none are considered optimal.

"GDL has been successful because it removes the novice driver from high-risk scenarios until they are better able to manage them," says Dr. Teresa Senserrick, Ph.D., a developmental psychologist at the Children's Hospital's injury research center who specializes in teens and driving. "With GDL in place, communities then need to enhance understanding and compliance with GDL as well as to develop a novice driver’s skills in higher risk situations."

Utilizing previous research, panel members have pinpointed the two-second sequence just prior to a crash as an opportunity to help teens avoid or minimize the severity of a crash. “Two seconds is the minimum time needed to successfully avoid or lessen the severity of a collision once a hazard is detected,” says Dr. Senserrick. “Earlier detection and more efficient decision-processing after detection can allow for successful crash avoidance.”

Novice drivers often detect a hazard later than experienced drivers because their search skills are under-developed. This detection lag is compounded by their inexperience to manage the detected hazard to avoid the crash. Add in a distraction, like passengers or a cell phone, and even more time is lost. These lost fractions of a second can make all the difference between a severe crash and a minor crash or near crash.

The research team at the Children's Hospital and Expert Panel members see optimism in comprehensive approaches that draw on a recent scientific explosion in the understanding of both adolescent development and the risk and skills associated with driving, coupled with advances in vehicle technologies that can specifically reduce teen driver risks.

"The challenge before us," says Laurrette Stiles, Vice President Strategic Resources at State Farm, "is to guide youth from passengers, dependent on parents and friends for rides, to independent drivers who make safe decisions, manage their passengers, and avoid hazards."
The time is now to effectively guide this transition without losing thousands of our youth every year."

Parents and teens can learn more about the latest research and recommendations on safe driving for teens at www.chop.edu/injury.

About The Center for Injury Research and Prevention at The Children's Hospital of Philadelphia
The Center for Injury Research and Prevention at The Children's Hospital of Philadelphia, formerly known as TraumaLink, is a comprehensive pediatric injury research center based at The Children's Hospital of Philadelphia and the University of Pennsylvania. The center consists of a multidisciplinary team of experts who conduct and disseminate research on the causes of childhood, adolescent, and young adult injury and develop and evaluate interventions to prevent injury and its psychological effects. For more information on the Center, www.chop.edu/injury.

The Children's Hospital of Philadelphia was founded in 1855 as the nation's first pediatric hospital. Through its long-standing commitment to providing exceptional patient care, training new generations of pediatric healthcare professionals and pioneering major research initiatives, Children's Hospital has fostered many discoveries that have benefited children worldwide. Its pediatric research program is among the largest in the country, ranking second in National Institutes of Health funding. In addition, its unique family-centered care and public service programs have brought the 430-bed hospital recognition as a leading advocate for children and adolescents. For more information, visit www.chop.edu.

About State Farm®
State Farm® insures more cars than any other insurer in North America and is the leading U.S. home insurer. State Farm's 17,000 agents and 76,000 employees serve nearly 73 million auto, fire, life and health policies in the United States and Canada. State Farm also offers financial services products. State Farm Mutual Automobile Insurance Company is the parent of the State Farm family of companies. State Farm is ranked No. 18 on the Fortune 500 list of largest companies. For more information, please visit http://www.statefarm.com or in Canada http://www.statefarm.ca.

###