



Research in Action

A bimonthly e-newsletter from the Center for Injury Research and Prevention at The Children's Hospital of Philadelphia

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New Research Focuses on Forgotten Victims of Teen Driver Crashes

Center researchers and State Farm Insurance Companies® recently released a national status report on teen driver safety that provides a framework to measure progress going forward. *Miles to Go: Establishing Benchmarks for Teen Driver Safety* shows the true impact crashes with teens behind the wheel have on communities, extending far beyond families and friends. In 2008, more than half a million (681,000) people were involved in these crashes, with more than 40,000 injured and nearly 30 percent that died not even in cars driven by teens.

The report mines the most credible data available from diverse federal and other data sources and establishes 11 indicators to help policymakers and safety practitioners determine the nation's status on improvements in teen driver safety. The inaugural report, *Miles to Go*, sets the baseline for future periodic comparisons to help those that set direction in public health and safety assess progress, set direction for improvements, and motivate action to further advance the safety of teens, passengers, and everyone on the road affected by teen crashes.

- [Read the Wall Street Journal's coverage.](#)
- [Watch a news video.](#)
- [Read the full report.](#)

Center Named Charter Member of Toyota's Research Center

[The Center for Injury Research and Prevention \(CIRP\) at CHOP](#) has been named a charter partner in Toyota's Collaborative Safety Research Center. The new center, launched in January 2011, will work with leading North American universities, hospitals, research institutions, federal agencies, and other organizations on projects to reduce crash-related injuries and fatalities. CIRP and Toyota will collaborate to continue to advance CIRP-led efforts to create [The National Child Occupant Special Study \(NCOSS\)](#), America's first publicly available national child-focused crash surveillance system.

Focus On: Mark Zonfrillo, MD, MSCE



Mark Zonfrillo, MD, MSCE wears many hats in the field of pediatric emergency medicine and injury prevention. An attending physician at The Children's Hospital of Philadelphia, Dr. Zonfrillo also is an investigator on our Center's Epidemiology team.

At CIRP, Dr. Zonfrillo focuses much of his research efforts on child passenger safety. In 2010, he served as the principal investigator for "The Association of Body Mass Index and Motor Vehicle Crash Injury Among 4- to 8-year-olds," a study funded by the [Center for Child Injury Prevention Studies \(CChIPS\)](#). This study aimed to determine the association between pediatric obesity and crash-related injury, and its results may have long-term implications for vehicle and child restraint design for overweight children. He also is a co-investigator on the [National Child Occupant Special Study \(NCOSS\)](#), a pilot study for the creation of a sustainable child passenger safety surveillance system to enhance the National Traffic Highway Safety

Such a system will be used to monitor trends in child passenger safety, to assess the performance of new safety technologies for children, and serve as a national resource to assist researchers, industry, and policymakers in setting the agenda for child passenger safety in the U.S.

"Toyota has been an important partner in our NCOSS efforts, and this support is critical to allow us to further advance efforts to broadly and accurately measure the burden of motor vehicle crashes on children's health and well-being on a national level," says Dennis Durbin, MD, MSCE, CIRP co-scientific director.

Dr. Durbin and his team created [Partners for Child Passenger Safety](#) in 1997, a unique industry/academic research partnership with State Farm Insurance Companies® that leveraged the State Farm claims infrastructure to support a large-scale child-focused crash surveillance data system. Building on this experience with funding from the National Science Foundation's [Center for Child Injury Prevention Studies](#), the Association of Global Automakers (formerly AIAM), and the Insurance Institute for Highway Safety, initial steps were taken to create a national data source for children in crashes. "With NCOSS we can continue the legacy of Partners, which informed new product development, test protocols and federal motor vehicle safety standards, public education and curricula, policy, and medical practice," says Dr. Durbin. NCOSS is being designed to become a module of the National Automotive Sampling System, a data resource of the National Highway Traffic Safety Administration.

- [Read the press release.](#)
- Learn more about NCOSS and how you can get involved in creating a sustained, national child-focused crash surveillance system [here](#).

Engage Parents and Teens with New Teen Driver Safety Curricula

The Center recently unveiled "Enhancing Education To Keep Teens Safe On The Road," a suite of evidence-based teen driver safety resources for educators. These free, downloadable ready-made lesson plans and easy-to-use materials are designed to help health educators in school, community, and workplace settings conduct learning events to address the number one cause of death for adolescents – car crashes. The frontline training materials can be used for both teen and parent audiences and meet National Health Education Standards and the US Department of Health and Human Services' Healthy People 2020 objectives related to teen driving. Each interactive parent and teen-focused module translates information from [teendriversource.org](#) and includes PowerPoint slides, handouts, and activities to engage participants.

Enhancing Education was released to the public during a two-part webinar hosted by the Society for Public Health Education (SOPHE) on February 1 and 2. The webinar was attended by an online audience of over 300 that included high school Health

Administration's (NHTSA) National Automotive Sampling System (NASS). NCOSS data will potentially impact vehicle design, child restraints (including booster seats), and driver guidance in maximizing child passenger safety.

To fund this line of disability research, Dr. Zonfrillo was recently named as a 2011 recipient of the Academic Pediatric Association (APA) Young Investigator's Award. "It is an honor to receive this award from the APA. The funding will allow our team to generate pilot data for this line of research in functional disability," he says. "The award is also a testament to the Center, as recipients must not only have a relevant research question, but also successful mentorship. I have had strong and consistent guidance by senior Center investigators, including Dr. Dennis Durbin who is my mentor for this project."

The mentoring atmosphere is just one aspect of CIRP that Dr. Zonfrillo enjoys: "I am very excited to be a part of CIRP, where there is a unique opportunity to have epidemiologists, behavioral scientists, engineers, and advocacy professionals all contributing to important and innovative injury research."

Dr. Zonfrillo earned his Bachelor of Science (ScB) in Behavioral Neuroscience from Brown University, his MD from Brown Medical School, and his Master of Science in Clinical Epidemiology (MSCE) from the University of Pennsylvania. He also is a member of the CHOP faculty as an assistant professor of Pediatrics at the University of Pennsylvania Medical School.

Center Directors Discuss Child Transportation Safety Issues on C-Span

In December 2010, the nation's top transportation safety officials, safety researchers, and transportation industry leaders gathered in Washington, DC to set the agenda for improving transportation safety. C-SPAN aired the full proceedings from the National Transportation Safety Board's Annual Meeting, with Dennis Durbin, MD, MSCE, CIRP co-scientific director, and Kristy Arbogast, PhD, CIRP director of engineering, among the presenters.

[Watch the full proceedings.](#)

(To skip directly to CIRP experts' comments,

teachers, workplace health promotion professionals, and others interested in bringing this content to their communities. It took attendees through the top factors for teen crashes, Graduated Driver Licensing (GDL) as an effective crash prevention strategy, and demonstrated the use of "Enhancing Education To Keep Teens Safe On The Road" materials.

- [Download the teen-focused educational resources.](#)
- [Download the parent-focused educational resources.](#)
- Missed the SOPHE webinar?
Watch both sessions in their entirety [here](#)

Web-based Interventions Can Help Families Through Child's Recovery

The CIRP researchers who created the award-winning website, [AfterTheInjury.org](#), recently published a study in *Health Education Research* that demonstrates that site's effectiveness in helping families recover after a child's injury. The study found that even parents with a reasonably high level of basic knowledge about post-injury recovery can significantly enhance their practical knowledge of how to respond to specific child traumatic stress reactions. Previous research has shown that knowledge of child recovery can prevent or help identify Post-Traumatic Stress Disorder (PTSD) in children. Enhancing this knowledge can help promote a more effective and complete recovery.

AfterTheInjury.org walks parents through best practices for helping their child – and themselves – cope after an injury occurs. Seventy-six percent of parents who participated in the study indicated they found the site's information helpful and would use the lessons learned in the future.

Three of the Center's researchers are also featured in a related editorial that appears in this month's *Annals of Emergency Medicine*. In the article they share how to integrate injury prevention interventions into hospital emergency rooms and mention AfterTheInjury.org as an example of a success story.

- [Read the press release.](#)
- [Read the study.](#)
- [Read the editorial.](#)

Sign Up Now for 'Advances in Child Injury Prevention' 2011 Conference

The Center for Child Injury Prevention Studies (CChIPS) at CHOP is hosting a conference for child occupant safety professionals in industry, government, and research to learn about advances in child passenger safety research on May 12-13, 2011 in Plymouth, MI. Formerly known as the "Manufacturers Briefing Conference," this event will feature David Champion, senior director of

use the "transcript" menu to scroll down. It is organized by speaker.)

Beyond Distracted Driving

In two in-depth pieces from *USA Today* that appeared in mid-January 2011, Flaura Winston, MD, PhD, CIRP co-scientific director, stressed the need for policymakers to continue support for "bread and butter" traffic safety policies, as well as distracted driving issues. Dr. Winston applauded Transportation Secretary Ray LaHood's success at raising awareness of traffic crashes as preventable tragedies through his efforts to reduce distracted driving.

- [Read the USA Today article.](#)
- [Read the related USA Today blog.](#)

Advice to Parents: Buckle Kids in Their Own Seats on Flights

Dennis Durbin, MD, CIRP co-scientific director, says there's no question that children on airplanes are safer when securely fastened in their own seats — even though federal law does not yet require it. His comments aired on *KYW-AM* late last year.

[Listen to radio broadcast/read accompanying article.](#)

Preventing Sports-related Concussions in Children

In this *Philadelphia Inquirer* "Letter to the Editor," CHOP's top injury experts recommend delaying heavy contact in sports for kids, especially from ages 11 to 15, when youth have the highest risk of suffering a sports-related concussion.

- [Read the article](#)

Follow Key Child Injury Prevention Research on Twitter



Stay up-to-date on important child and teenager injury prevention research and news via Twitter with regular postings from our very own "[safetymd](#)",

[Flaura Winston, MD, PhD](#), co-scientific director at the Center for Injury Research and Prevention at CHOP and a professor at The University of Pennsylvania Medical School. Think of this as your interactive "Headline News" for injury prevention, compiled, reviewed

Consumers Union's Automotive Test Division, as the keynote speaker, and sponsorships are still available. Many thanks to Gold sponsor Volkswagen Group of America Inc., Silver sponsors Britax Child Safety Inc., Diversified Technical Systems Inc. (DTS), General Motors Holding LLC, and Nissan Technical Center North America Inc. for making the event possible.

- [Register now for the conference.](#)

Giving China a Boost with Child Passenger Safety

CIRP researchers recently found that a video-based intervention that they originally developed for American parents was also effective for use in China when dubbed in Mandarin. The researchers conducted a study to see if videos, already proven effective in the U.S. to increase belt-positioning booster seat (BPB) use among at-risk populations of parents with 3 to 8-year-olds, would be useful and acceptable to a Chinese population. The study findings, recently published in *Injury Prevention* as the issue's "Editor's Choice" selection, found that particular safety messages in the intervention could be successfully adapted to the Chinese culture without having to change their context.

The researchers believe this was achieved because parents in China and the US held similar beliefs or barriers that prevented the adoption of BPB use that were addressed in the intervention, including access to them, little or no knowledge of the benefits of correctly placing children in them, and myths about child passenger safety.

"The success of this individual intervention should be seen as a call-to-action to public health professionals to evaluate existing interventions and to determine if they can be used to address public health issues emerging abroad," says Flora K. Winston, MD, PhD, co-scientific director of CIRP and the study's lead author. "At the end of the day, parenting knows no boundaries. Safety is universal – all parents care."

- [Listen to the podcast.](#)
- [Download a free copy of the paper.](#)

Countdown2Drive

and summarized by one of the leading experts in the field.

As a vital part of their work, Dr. Winston and her colleagues at CIRP scan the literature and the Web for credible, scientific and other noteworthy contributions. Realizing that much of this information is not widely known, Dr. Winston posts summaries, with links to the original abstract or article when available, several times per week to Twitter. "I hope these posts will stimulate thought and discussion and that the scientific foundation for injury prevention will reach those who can affect change," says Dr. Winston. "I also look forward to learning from those who read my posts and share their knowledge and experience with me."

[Click here to follow safetymd.](#) Join the injury prevention conversation and stay connected to stakeholders around the world who care about protecting children and teenagers. If you don't have a Twitter account, [set one up now.](#)

Support Our Center

The dedicated doctors, researchers, and outreach professionals at the Center for Injury Research and Prevention at CHOP are fighting to save the lives of children of all ages. But we need your help. To make a secure, on-line donation, please visit [The Children's Hospital of Philadelphia Foundation Donation Page](#) and select "Center for Injury Research and Prevention" in the drop-down menu. You also may telephone the CHOP Foundation at 267-426-6500. For more information on our research and programs, please visit www.chop.edu/injury.

The Center's Websites

The Center for Injury Research and Prevention (www.chop.edu/injury)

Keeping Kids Safe in Crashes-English language – English language (www.chop.edu/carseat)

Cómo Mantener a los Niños Fuera de Peligro Durante los Choques – Spanish language (www.chop.edu/asientos_infantiles)



Philadelphia Collaborative Violence Prevention Center (PCVPC)

(www.phillyviolenceprevention.org)

After The Injury: Helping Parents Help Their Kids Recover (www.AfterTheInjury.org)

Ride Like A Friend

(www.ridelikeafriend.org)

teendriversource.org

(www.teendriversource.org)

*Flaura Winston, MD, PhD, CIRP co-scientific director (left), and Suzanne Hill, CIRP director of Advocacy and Outreach, traveled to Washington, DC to celebrate the launch of **Countdown2Drive**, a nationwide web-based program for young teens and their parents created by SafeKidsUSA and the General Motors Foundation. Dr. Winston and Ms. Hill provided consultation to SafeKidsUSA during the campaign's formative stages. The program promotes safe passenger behavior among pre-driving teens.*

Recent Center Publications

- Bohman K , Arbogast KB, and Boström O. [Head Injury Causation Scenarios for Belted, Rear-Seated Children in Frontal Impacts](#) *Traffic Injury Prevention*, 12: 1, 62-70.
- Marsac ML, Kassam-Adams N, Hildenbrand AK, Kohser KL, and Winston FK. [After the Injury: Initial Evaluation of a Web-based Intervention for Parents of Injured Children](#) *Health Education Research*. January 2011.
- Zonfrillo MR, Nelson KA, Durbin DR, Kallan MJ. [The Association of Weight Percentile and Motor Vehicle Crash Injury Among 3 to 8-year-old Children](#) *Annals of Advances in Automotive Medicine*. 2010;54:193-9.

Recent Center Presentations

- Arbogast KB. [Booster Seats: Evidence Behind Best Practice Recommendations](#). Let's Talk...a telephone conference on Child Passenger Safety sponsored by the Pennsylvania Chapter American Academy of Pediatrics and the University of Pittsburgh School of Medicine, Center for Continuing Education in the Health

Sciences. Philadelphia, PA. February 9, 2011.

- Bohman K, Arbogast, Kristy B. and Boström, O. Head Injury Causation Scenarios for Belted, Rear-Seated Children in Frontal Impacts, *Traffic Injury Prevention*, 12:1, 62-70
- Durbin DR. Turning Research Into Action: A Child Passenger Safety Success Story. Department of Pediatrics Grand Rounds, New York University. New York City. January 25, 2011.
- Winston FK. Improving Booster Seat Use in the United States, China, and Israel. Transportation Research Board Annual Meeting. Washington, DC. January 25, 2011.
- Winston FK. Strategic Thinking: Building and Re-visioning Your Center's Research Plan. National Science Foundation Industry/University Cooperative Research Center Meeting. Arlington, VA. January 13, 2011.
- Zonfrillo MR. Academics to Action. Jefferson School of Population Health, Master of Public Health (MPH) Program. Philadelphia, PA. January 17, 2011.
- Zonfrillo MR. Pediatric Trauma-related Long-term Disability as a Measurement of Injury Burden Society of Automotive Engineers (SAE) International Government/Industry Meeting. Washington, DC. January 28, 2011.