

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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CPS Issue Report Highlights Child Crash Test Dummy Research

Developing A Better Child Crash Test Dummy, the latest in a series of reports highlighting important issues in child passenger safety, was recently released by the Center for Injury Research and Prevention at CHOP with generous support from the Association of International Automobile Manufacturers (AIAM). This *CPS Issue Report* summarizes the diverse research being conducted by CHOP and others to advance the field of pediatric biomechanics.

The report explores novel research underway to help improve the design of pediatric anthropomorphic test devices (ATDs), also known as child crash test dummies, to respond in a more biofidelic manner (as they would in a real child's body). Research in this area uses innovative methods to safely measure how children respond to forces seen in crashes and to provide accurate estimates of their bodies' tolerance to various types of forces. These data also are leading to improved vehicle safety and child restraint systems and better tools for industry and government to address motor vehicle crashes, the leading cause of death and disability for children.

To learn more about child crash test dummy research, download the January 2010 CPS Issue Report.

New Research Finds Parents Experience Traumatic Stress After Child's Injury

A study recently released in the *Journal of Traumatic Stress* conducted by Center behavioral researchers found that one month after their child was injured, 37 percent of parents experienced acute stress disorder or significant traumatic stress symptoms. These symptoms include re-experiencing the incident, avoiding reminders of it, and rising levels of general anxiety or jitters. Of those parents, 15 percent displayed longer-term symptoms of post traumatic stress disorder (PTSD) more than six months after the initial injury.

The researchers worked with 334 parents of children who had suffered road traffic injuries requiring hospital care to identify factors that predicted the severity of their acute traumatic stress symptoms (occurring in the first month) and PTSD (longer-lasting traumatic stress symptoms rated about six months later). The findings point to the importance of helping parents get the support and help they need after their children are injured. CHOP created an award-winning website, www.AfterTheInjury.org to help children (and their parents) recover, physically and emotionally, after an injury. The site is based on more than a decade of research on helping families recover from a child's traumatic injury, including self-care guidance for parents.

Read the press release.

[Download a fact sheet on helping parents cope.](#)

Future of Side Impact Protection For Children: Sign Up Now for Workshop

The Center for Child Injury Prevention Studies (CChIPS) will host a half-day international workshop on a critical issue facing the automotive industry regarding the safe transport of children. The workshop, "Future of Side Impact Protection for Children: Injury Analysis, Testing, and Technical Advances," will be held on Wednesday, March 17, 2010 from 8 am to 12 pm at CChIPS headquarters (3535 Market Street in Philadelphia).

Leaders from the National Highway Traffic Safety Administration (NHTSA), Transport Canada, child restraint manufacturers, crash test dummy manufacturers, and CChIPS faculty will share cutting-edge information on injuries sustained by children in side impact crashes, as well as targets for future advances in testing and regulation based on research. Attendees will also learn about research going on around the world and gain a better understanding of the proposed side impact test protocols for child restraint systems.

Those attending the workshop may also choose to attend the semiannual meeting of the CChIPS Industry Advisory Board (IAB), which will take place on March 18, 2010. CChIPS is a National Science Foundation Industry/University Cooperative Research Center (I/UCRC) that focuses exclusively on preventing injuries to children and adolescents. Through CChIPS, researchers from CHOP and the University of Pennsylvania work side-by-side with industry members and other academic partners to conduct translational research that is practical to industry.

The cost to attend the workshop is \$75 per person and \$200 per person to attend both the workshop and the CChIPS Semiannual Meeting. To sign up for this workshop, download the RSVP form and return to harrisp@email.chop.edu by February 24, 2010 to save your space.

For more details on the workshop, download the agenda.

Focus On: Karen Matthews, MPA



Karen Matthews, MPA, has a major role in supporting the science conducted at the Center for Injury Research and Prevention. As the Center's Administrative Director, Matthews is responsible for all administrative functioning, including the development and implementation of policies, overseeing recruitment and staff training, and administering grants and contracts. The "go-to" person for supporting the staff, funders, and CHOP's overall mission, Matthews handles administrative issues to help researchers concentrate on what's most important: finding ways to prevent child and young adult injuries.

A key member of the leadership team, Matthews ensures goals and objectives are set and monitored to assure CIRP's continued growth. She also serves as a key advisor to senior leadership on fiscal, strategic, operations, and compliance efforts.

Matthews also is closely involved with the important research and outreach conducted at CIRP. "An important part of my role is to support the science and our researchers by overseeing CIRP's infrastructure and administrative needs," she says. "Being aware of our scientific efforts helps me to be effective at my job and to provide better services and products to our team members."

She enjoys seeing how her efforts contribute to the Center's goals of creating awareness and saving lives. "Our research is unique because it is current and relevant—it touches everyday people," says Matthews. "My role gives me the opportunity to work on a multitude of projects, each one unique in its own right. I enjoy solving new problems and the critical thinking that comes with that."

Matthews received her BS in Science, Business Management and Technology from the University of Maryland and her MPA from the University of Baltimore. Before joining CIRP in 2004, Matthews spent 13 years at the University of Maryland School of Medicine (including as Administrator for the Division of Cardiology) and also worked as a Financial Markets Coordinator at Kidder, Peabody & Co. Inc. in Chicago.

CIRP at Lifesavers 2010

Center members will present at the annual Lifesavers Conference in Philadelphia (their home turf). Topics they will speak on include educating parents about teen driving, distractions and teen drivers, booster seat effectiveness, and creating a more effective

Standing Up for Improved Teen Driving Laws in Pennsylvania



Following the deaths of six teens in three teen driver-related crashes in just one month in suburban Philadelphia, Dr. Flaura Winston, MD, PhD, the Center's founder and co-scientific director, wrote an Op-Ed that appeared in the Sunday *Philadelphia Inquirer* to emphasize the need for Pennsylvania lawmakers to pass an improved Graduated Driver Licensing (GDL) bill to better protect teen drivers and their passengers. Following intense media and public outcry, the Pennsylvania Senate Transportation Committee moved to amend House Bill 67, also known as Lacey's Law, on January 27. Proponents of the bill are hopeful that the legislation will be considered in the Senate this Spring.

Read Dr. Winston's Op-Ed.

Listen for an interview with Dr. Winston on National Public Radio's *Radio Times*.

Read the first in a series of articles from *The Pottstown Mercury* on the impact of recent teen driving tragedies in Pennsylvania.

Read the rest of the series in "News Spotlight."

Webinar Series Promotes Pennsylvania Stakeholder Involvement in Teen Driver Safety

The newly formed Pennsylvania Teen Driver Safety Alliance, a coalition that empowers in-state stakeholders with a platform to address the issue of teen driver safety, is hosting a free Webinar series over the months of February and March, culminating in an in-person meeting at the Lifesavers Conference in Philadelphia. Each webinar covers different opportunities where stakeholders might join forces to improve teen driver safety and reduce crashes and injuries. These stakeholders include all those interested in saving teens' lives such as state legislators, school administrators, government agencies, law enforcement officers, hospital staff members, prevention specialists, driving education instructors, insurance industry professionals, public health advocates, and teens.

This alliance is being organized by the Center for Injury Research and Prevention at CHOP, the Lehigh Valley Health Network, and The Highway Safety Center at Indiana University of Pennsylvania. A February 3 Webinar addressed efforts to improve Graduated Drivers Licensing (GDL). Upcoming webinars include:

- February 17, 1-2 pm. Covering the status of formal driver education in Pennsylvania and opportunities for improving it.
- March 3, 1-2 pm. Discussing the latest research supporting parental involvement in reducing teen crash risk.

The agenda for the Saturday, April 10 pre-conference workshop at Lifesavers will seek to set priorities for the coalition and determine effective strategies to address the teen driver crash epidemic in Pennsylvania. This workshop is free but requires advance registration.

[Watch the February 3 webinar.](#)

Register now for the February 17 webinar and/or the March 3 webinar.

Register for the April 10 Pre-Conference Workshop at Lifesavers.

Center Expert Shares Parenting Knowledge in USA Today

Ken Ginsburg, MD, MSEd, an investigator with the Young Driver Research Initiative, emphasized the need for parents to be firm, yet supportive, in setting driving rules with their teens in a recent "Your Health" column in *USA Today*.

Read the article.

Recent Publications from the Injury Center

- Kirley BB, Teoh ER, Lund AK, Arbogast KB, Kallan MJ, Durbin DR. Making the Most of the Worst-Case Scenario: Should Belt-Positioning Booster Seats be Used in Lap-Belt-Only Seating Positions? *Traffic Injury Prevention*. December 2009.
- Marsac ML & Alderfer M. *Psychometric Properties of the FACES-IV in a Pediatric Oncology Population*. *Journal of Pediatric Psychology*. February 2010.
- Stacey S, Forman J, Woods W, Arbogast K, Kent R. Pediatric Abdominal Injury Patterns Generated by Lap Belt Loading. *The Journal of Trauma: Injury, Infection, and Critical Care*. December 2009.

Recent Presentations from the Injury Center

- Durbin DR. *National Child Occupant Special Study: Extension of the National Automotive Sampling System*. 89th Annual Transportation Research Board Meeting, Washington, DC. January 13, 2010.
- Seacrist T, Balasubramanian S, Maltese MR, Arbogast KB, Hopely T, Constans E. *Kinematic Comparison of Human and ATD Responses for Children in Low Speed Frontal Crash Conditions*. 2010 Society of Automotive Engineering Government and Industry Meeting, Washington, DC. January 28, 2010.
- Winston FK. *Positive Parenting: Translating Evidence into Practical Advice*. American Academy of Pediatrics CME Practical Pediatrics Course, Breckenridge, CO. January 14, 2010.
- Winston FK. *Evidence-Based Advocacy: How to Create and Deliver an Effective Message*. American Academy of Pediatrics CME Practical Pediatrics Course, Breckenridge, CO. January 15-17, 2010.
- Winston FK. *Top Injuries and What Works in Prevention: Impactful Anticipatory Guidance*. American Academy of Pediatrics CME Practical Pediatrics Course, Breckenridge, CO. January 15, 2010.
- Winston FK. *Teen Driver Safety: What You Don't Tell Your Patients and Their Families Could Risk Your Patient's Life*. American Academy of Pediatrics CME Practical Pediatrics Course, Breckenridge, CO. January

pediatric crash test dummy. Lifesavers is the premier national highway traffic safety meeting dedicated to reducing the number of deaths and injuries on our roadways. This year's meeting will be held April 10 to 13. For a detailed listing of the Center's talks at Lifesavers, as well as other CHOP initiatives at this very important meeting, be sure to read the next *Research In Action* sent to your e-mail address on April 5.

For conference specifics, click [here](#).

Violence Center Awarded for Community Involvement

On January 21st, the Philadelphia Collaborative Violence Prevention Center (PCVPC) was recently honored at the University of Pennsylvania's 2010 Dr. Martin Luther King, Jr. Community Involvement Awards. Tara Hayden, MHSA, a Core Director with PCVPC and the co-founder of the Philadelphia Area Research Community Coalitions (PARCC), also was awarded for her commitment to nonviolence and community-building in West Philadelphia. Pictured (left to right) at the Interfaith Program and Commemoration receiving their award are: G. Anthony Moore, a tireless community volunteer in North Philadelphia, Joel S. Fein, MD, director of PCVPC, Tara Hayden, and Samuel Adelsberg, a senior at U of P and former co-chair of PRISM (The Program in Religious, Interfaith, and Spirituality Matters).



Injury Center Research Featured in *The Penn Current*

Flaura Koplin Winston, MD, PhD, CIRP founder and co-scientific director, shares details on how Center research data are used to create practical interventions to reduce the impact of injury on children in this feature article, which also includes insight from Dennis Durbin, MD, MSCE, co-scientific director of CIRP.

[Read the article.](#)

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 for Injury Research and Prevention Family of 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)
- Keeping Young Drivers Safe (www.chop.edu/youngdrivers)
- National Teen Driver Safety Week (www.ntds2010.org)



- Philadelphia Collaborative Violence Prevention Center (PCVPC) (www.chop.edu/pcvpc)
- After The Injury: Helping Parents Help Their Kids Recover (www.AfterTheInjury.org)