## **Celebrate, Collaborate, Continue the Journey...** 21 Years of Forging New Frontiers in Childhood Injury Prevention

The 2016 Annual Conference of the Injury Free Coalition for Kids® December 2 - 4, 2016

The 2016 Injury Free Coalition for Kids<sup>®</sup> Conference in Fort Lauderdale, FL, is bringing together medical experts and community leaders from around the country to exchange information and techniques designed to prevent injuries, reduce violence, and better understand the economic difference injury prevention makes in a healthcare conscious economy. Lessons learned and best practices of programs developed around the country will be discussed through scientific abstracts, lectures, panel discussions and workshops presented by the country's leading experts in the field of injury prevention and epidemiology.

Attendees of Forging New Frontiers include principal investigators (physicians), and program coordinators (nurses, health educators, social workers, community leaders and researchers). In addition to renewing their convictions, the conference is an opportunity for these childhood injury prevention advocates to network with representatives from around the country.

The objectives of the 2016 Annual Conference are to provide participants with an opportunity to:

- Study and encourage research in the field of injury prevention.
- Learn about designing, planning and building healthy communities.
- Share and explore challenges and successes in community-based injury prevention programming
   with a goal of helping trauma centers develop and improve injury prevention programs.
- Share information about innovative injury prevention best practices.
- 充 Describe how trauma centers can develop and evaluate community-based injury prevention programs.
- Identify opportunities for multi-city projects and research as well as opportunities to learn more about
   translating research into practice in minority and resource-limited communities.
- Provide attendees with the opportunity to revitalize their creative energies in order to continue to innovate and sustain healthy communities.

### Accreditation

### **Continuing Medical Education**

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Cincinnati Children's and the Injury Free Coalition for Kids at the Center for Injury Epidemiology and Prevention, Mailman School of Public Health, Columbia University. Cincinnati Children's is accredited by the ACCME to provide continuing medical education for physicians. Cincinnati Children's designates this live activity for a maximum of 14.5 AMA PRA Category 1 Credit(s)<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### Disclosure

Cincinnati Children's requires all clinical recommendations to be based on evidence that is accepted within the profession of medicine and all scientific research referred to, reported or used in support of or justification of patient care recommendations conform to the generally accepted standards of experimental design, data collection and analysis. All faculty will be required to complete a financial disclosure statement prior to the conference and to disclose to the audience any significant financial interest and/or other relationship with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in his/her presentation and/or commercial contributor(s) of this activity. All planning committee members and/or faculty members were determined to have no conflicts of interest pertaining to this activity.

## Table of Contents

ii-iii	Table of Contents
1	Welcome: Michael J. Mello, MD MPH
2	Welcome: Barbara Barlow, MD, MA
3	Keynote Speaker: Kim Wiley Schwartz
4	Keynote Speaker: David Hemenway, PhD
5	Keynote Speaker: Rod McClure, MBBS, PhD, FAFPHM
6	2016 Abstract of the Year Nominees
7	PC Lifetime Achievement Award
8	2016 Program Coordinator of the Year
9	Schedule at a Glance
11-20	Agenda
21-23	Acknowledgements & Disclosure
24	Abstracts:
25	The development and implementation of the NICU car seat program with occupational therapy and physical therapy
25	Establishing an algorithm to ensure the safety of pediatric patients involved in a motor vehicle crash discharged from the emergency department
26	Car Seat Assistant Program Implementation and Evaluation
27	Evaluation of an after-hours child passenger safety resource guide
27	Child Seat Belt Guidelines: Examining the 4'9" Rule as the Standard
28	Traffic-related Traumatic Injuries among Children in Texas, 2005-2014
29	A multi-year assessment of a hospital-school program to promote teen motor vehicle safety
30	Making Public-Private partnerships work for road safety
30	Teen Distracted Reality an Interactive Virtual Education (D.R.I.V.E.): Experience and Impact on Teenage Drivers
31	A Safer Place to Ride: Regulations and DNR enforcement in Off-Highway Vehicle Parks Increases Safety Behaviors
32	Recreational Off-Highway Vehicle (ROV) Crashes: An Emerging Pediatric Health and Safety Concern
32	Pediatric Moped-Related Injuries in the United States
33	Safe Summers: Adapting Evidence-based Injury Prevention to Zip Codes of High Trauma Incidence
34	Child Pedestrian Collisions, Walking to School and The Built Environment: A Case Control Study
35	Primary School Drop-off Zone Safety Analysis of Hazardous Road Conditions Utilizing Video Review
37	Dangerous Student Passenger Drop-Off, Pedestrian Behaviors and The Built Environment Near Schools
37	Violent Injuries in the United States: Emergency Care and Associated Costs, 2000-2010
38	Factors driving worse quality of life in youth victims of violence compared to non-injured matched controls
39	Fresh Check Day: A Novel Approach to Improve Suicide Prevention Among College Students
40	Child Welfare Professionals' Determination of When Certain Unsafe Activities and Lack of Child Protection Constitutes Child Neglect

## Table of Contents, Cont.

40	The Prevalence of Intimate Partner Violence Among Clients Receiving Services in Community Hair Salons
41	Increasing Safe Firearm Storage Awareness and Action through a Community-Based Giveaway Program
42	Barriers and Enablers to Enacting Injury Prevention Legislation in Canada
42	Working with Interns to Extend the Reach of Your Safety Program: Best Practices
43	Opportunities to Enhance Injury Prevention Services with Head Start Programs
44	Injury Free Coalition for Kids: Markers for success and sustainability
45	West Virginia University, Injury Control Research Center
45	Response of School Districts to the New York State Concussion Awareness and Management Act: A Review of Policies and Procedures
46	National Survey Results of Opioid Storage Practice in Households with and without Children
47	A Look at an Injury Prevention Research Center post CDC Funding: Surviving and Succeeding
47	A Comparative Effectiveness Study of Two Parent Programs Designed to Support Children After Traumatic Injury: A Patient- engaged Approach in Four Children's Hospitals in the Midwestern United States
48	Child Restraint and Injury in NYC Infants, Children and Teens: A Comparison of Taxis and Private Vehicles
49	Pediatric Water-Related Incidents: A Closer Look at Home Pool Supervision and Barrier Use for Children Ages 1 to 4
49	Home Safe Home: Evaluation of a Childhood Home Safety Program
50	Evaluation of a Home Safety Program for Family Homeless Shelters
52	Posters
53	Hitting the Road: Teen Driving Safety
53	Child Safety Seat Education & Distribution: Moving Beyond Outputs to Achieve Proper Child Restraint Use throughout Childhood
54	#URKeys2Drv
56	Faculty
66	Bios

80 Evaluation & CME Certification



#### Welcome!

We are so pleased that you are joining us for our 21st Annual Injury Free Coalition for Kids National Conference.

Under the leadership of Dr. Wendy Pomerantz, the program committee has worked hard to establish an exciting agenda for the next two and half days that will educate us, stimulate us and also allow us to network with others in the organization. We have outstanding keynote speakers and informative presentations each conference day from our membership presenting the amazing work they do to help keep children safe

We are delighted to have Dr. David Hemenway join us from the Harvard University. Dr. Hemenway will be honored with the Injury Free Coalition for Kids' Pioneer award for his national leadership and exemplary career in injury prevention. His last book, While We Were Sleeping, includes a discussion of Dr. Barlow's seminal work in developing the injury free model and is a must read for anyone interested in prevention.

At last year's conference we celebrated the 20th anniversary of Injury Free Coalition for Kids national conferences. This year's conference agenda sets us perfectly on course for another twenty years of interesting conferences. Many of us have been coming for many years and several for all twenty years. If you are new, I'm sure that you will find the conference rewarding and will continue to join us for the next twenty.

Best wishes for an enjoyable conference,

Michael J. Mello, MD MPH Injury Free Coalition for Kids Board President Professor of Emergency Medicine Professor of Health Services, Policy and Practice Professor of Medical Science Brown University Providence, Rhode Island



The National Program Staff looks forward to hearing all of the presentations to be made at the conference this year. The abstracts brought before the attendees of Forging New Frontiers are always enlightening and as are those of our keynote speakers. We are especially pleased to honor Dr. David Hemenway as our Pioneer awardee of 2015.

It is always wonderful to reconnect with all of you as we push on in this war to prevent injury. Please take time to greet the Injury Free attendees and to welcome our new Injury Free sites and members.

As always this conference is designed provide you program ideas, new information and Injury Free partners to help you in your daily mission to keep children and their families safe in their communities.

Please use our time together to renew your spirits and celebrate the progress we have all made this year and over the last twenty one years. Look for and find new partners for the important work that you do.

Sincerely,

Barbara Barlow MD, MA Professor of Surgery in Epidemiology Emerita Associate Director Center for Injury Epidemiology and Prevention Columbia University, Mailman School of Public Health Executive Director and Founder Injury Free Coalition for Kids



### Kim Wiley-Schwartz Assistant Commissioner for Education and Outreach New York City Department of Transportation

Kim Wiley-Schwartz has been working to make under-served communities stronger and safer in New York City for over 25 years. She began her teaching career bringing richer arts education to New York City public schools working for the Metropolitan Opera, the 92nd Street Y and the acclaimed TADA! Youth Theater and specializing in afterschool and middle school programs. Nine years ago, after a four-year-old boy was killed by an SUV just blocks away from her home, she took what she knew about arts and education and brought it directly to street safety. For the past six years, she has served as the Assistant Commissioner for Education and Outreach at the New York City Department of Transportation. There she oversees a team of 30 people working with over 700 schools, senior centers and community organizations each year to help bring the streets to their safest numbers in over 100 years. She has been thrilled to be on the front line of Vision Zero under Commissioner Polly Trottenberg. Kim is a graduate of Hampshire College and lives in Brooklyn with her two children and husband Andy Wiley-Schwartz who works for Bloomberg Associates in the Transportation group.



### David Hemenway, PhD Professor of Health Policy Harvard TH Chan School of Public Health

David Hemenway, Ph.D., is an economist and Professor at the Harvard T.H. Chan School of Public Health and a former James Marsh Visiting Professor at the University of Vermont. He is Director of the Harvard Injury Control Research Center, former director of the Harvard Youth Violence Prevention Center and former President of the Society for the Advancement of Violence and Injury Research. He received the Excellence in Science award from the American Public Health Association and fellowships from the Pew, Soros and Robert Wood Johnson foundations. In 2012 he was recognized by the CDC as one of the twenty "most influential injury and violence professionals over the past 20 years." In 2013 he received a Commissioner's Commendation from the Boston Police Commissioner for exemplary services to the people of Boston. Dr. Hemenway has written over 200 journal articles and five books including Private Guns Public Health (U Michigan Press 2006) and While We Were Sleeping: Success Stories in Injury and Violence Prevention (U California Press 2009). Dr. Hemenway has received ten Harvard teaching awards.



### Rod McClure, MBBS, PhD, FAFPHM Director Division of Analysis, Research and Practice Integration (DARPI) National Center for Injury Prevention and Control Centers for Disease Control and Prevention

Dr. McClure is a public health physician and injury epidemiologist with 30 years of experience in injury control that covers the research and practice continuum.

Dr. Rod McClure is currently the Director of the Division of Analysis, Research and Practice Integration (DARPI) at the National Center for Injury Prevention and Control. In this role, he leads a diverse portfolio of work that includes surveillance, data and economic analysis, information technology, policy research, evaluation, and technical assistance to state health departments.

Before coming to CDC in 2014, Dr. McClure was the Director of the Monash Injury Research Institute at Monash University. Dr. McClure received his medical degree from the University of Sydney in 1983 and a Doctor of Philosophy in epidemiology from the Australian National University in 1994. He is a Fellow of the Australian Institute of Company Directors and a Fellow of the Australasian Faculty of Public Health Medicine and sits on the Editorial Boards of Injury Prevention and Accident Analysis and Prevention.



## Congratulations to the 2016 Abstract of the Year Award Nominees

The abstracts below were selected and nominated to receive an award for abstract of the year. Each abstract was judged on the degree to which The abstracts below were selected for presentation at the conference and nominated to receive recognition as the 2016 abstract of the year. Each abstract was judged on the degree to which: the research topic identified a new area of study and/or addressed the topic in a novel and unique manner, the methodology of the research was scientifically valid, the research topic was relevant to injury control or violence prevention, the way the presenter articulated the research and responded to questions and critiques and the degree to which the author communicated the hypothesis, methodology, research, results, and conclusion of the research through written word. Scoring and ranking will take place during the conference and the award will be presented Sunday afternoon at the conclusion of the conference. There will be two awards: one for best original research abstract and one for best program design.

### **Original Research**

Child pedestrian collisions, walking to school and the built environment: a case control study Faculty of Health-School of Kinesiology and Health Science York University, Toronto, Ontario

Home safe home: evaluation of a childhood home safety program Trauma Program at LHSC & Children's Hospital, London, Ontario

Factors driving worse quality of life in youth victims of violence compared to non-injured matched control Medical College of Wisconsin's Section of Pediatric Emergency Medicine, Milwaukee, Wisconsin

A safer place to ride: regulations and DNR enforcement in off-highway vehicle parks increases safety behaviors University of Iowa Carver College of Medicine, Iowa City, Iowa

Child welfare professionals' determination of when certain unsafe activities and lack of child protection constitutes child neglect University of Iowa Carver College of Medicine, Iowa City, Iowa

### Program

Increasing safe firearm storage awareness and action through a community-based giveaway program Seattle Children's Hospital, Seattle, Washington

Injury Free Coalition for Kids: markers for success and sustainability Emory University School of Medicine, Atlanta, Georgia

A multi-year assessment of a hospital-school program to promote teen motor vehicle safety Monroe Carell Jr. Children's Hospital at Vanderbilt, Nashville, Tennessee

Fresh check day: a novel approach to improve suicide prevention among college students Connecticut Children's Medical Center, Hartford, Connecticut

Evaluation of a home safety program for family homeless shelters Children's Hospital Boston, Boston, Massachusetts

Car seat assistant program implementation and evaluation Children's Hospital Boston, Boston, Massachusetts





Esther Borer

## PC Lifetime Achievement Award

The Injury Free PC Service Award was developed to honor Program Coordinators who have provided no less than 5 years of service and made long-term change to their community through significant contributions of time, actions, talents and dedication.

The award recognizes and honors an exceptional individual who makes community service a way of life. One who exemplifies a sense of caring and responsibility for others that connects citizens and solves community problems.

Esther Borer is the recipient of the first Injury Free PC lifetime Achievement award. She has served in the position of Program Coordinator for Injury Free Worcester seven years. When she began, she worked with a Pediatric Injury Prevention Educator, a community health worker, and an administrative assistant who ran the child passenger safety system for Central Massachusetts. Esther absorbed the roles of all 4 positions in the wake budget cuts during the financial crisis of 2008-09. Despite the changes she seamlessly performed all of the functions she had to take on. She did so unflinchingly, uncomplainingly, and with excellent outcomes.

As the director of the Child Passenger Safety Program she established a program servicing about 180 infants and their families every year. More importantly, the city's nurseries, family and pediatric practices can all directly refer patients to the program as can several social service agencies for immigrants and refugees. In addition to the safe travel of infants, Ms. Borer has worked to establish a strong Teen Driving Program.

She runs two facets of the Teen Driving Education Program, one where the Worcester Juvenile Court Network assigns first time driving offenders to spend time with the Coalition and with the other she manages a Teen Driving Simulator Vehicle that travels to high schools throughout Central Massachusetts to teach about risky driving behaviors. The Teen Ride Program services approximately 100-120 first time driving offenders and their families and The Teen Drive program services 20- 30,000 high students a year.

One of her largest successes has been the development of Injury Free Worcester's gun buyback program. The program started as an annual event in Worcester and is now a bi-annual event. Last year it was featured in 11 retrieval sites that served 18 communities. This year it is slated to expand to three additional townships and to cities in Connecticut, Rhode Island, as well as Western and Eastern Massachusetts. In addition to collected guns she is spearheading an effort for a Guns-to-Art Program with Clark University to see if we can make art objects out of the guns that are returned.

In addition to her program development Esther has contributed to efforts to establish policy. She sat at the table and assisted with the development of the Community Health Improvement Plan between 2012-2016. In an effort to help establish a primary seat belt law, Ms. Borer has built a new project in the medical school. She has helped to establish a population health elective designed to see if better Central Massachusetts Data can energize the next legislative session. The committee accomplished 85 percent of its stated goals among which was the development of a comprehensive Injury Prevention program. Since 2013 she has also represented Injury Free Worcester and the University of Massachusetts on a Commonwealth collaborative effort called the Injury and Violence Prevention Task Force.

Beyond the aforementioned tasks, Esther has been a stalwart advocate for kids safety and she is counted on as the go to person when there are questions about how to engage the community or launch new programs.

## Congratulations and Thank You for Your Service: **2016 PC of the Year**





## Lyse Deus

Lyse Deus is not only the Injury Free Miami Program Coordinator, she is also South Florida's Injury Prevention Center, Forward and Defense.

Ms. Deus was hired with a Master's in Education and began with the Injury Free Coalition for Kids of Miami eleven years ago as an injury prevention educator. She has been particularly instrumental in the education of communities with specialized needs. Her native language of Haitian Creole has served as a great asset.

Whatever was needed, she found a way to make herself fit that need. Injury Free-Miami has a large red "Injury Free Bus." While Isidrio Perez is the main bus driver, a second bus driver was required and Lyse stepped up. She obtained her CDL license and she drives the big red bus where ever it has to go across Miami-Dade. She is also responsible for maintaining its educational exhibits and scheduling.

Lyse Deus continuously increases her education, as well as that of her staff. Early in her tenure, she sought training at Johns Hopkins Injury Summer Institute and became a CPT Instructor. Ms. Deus advanced to the leadership role of Miami's Program Coordinator.

Lyse connects with everyone in Miami Dade County. Literally, everyone. She trains all child service providers in Miami-Dade County in injury prevention, home visitors, early childcare providers, afterschool programs, child abuse and neglect counselors, camp programs, everyone in unintentional and intentional injury prevention. She has maintained grants with The Children's Trust, the site's lead local funder for over a decade. Under her leadership the site's performance scores are consistently well over 95%. The most important part of that is that these service providers never expected to do injury prevention. It wasn't in their plan or their contracts. They had to be convinced – persuaded really, by Lyse. She persuaded them through the statistics, the need for injury prevention, but mostly through her conviction, her manner, her expertise, her way with people.

Lyse speaks before large and small groups, on radio and television, she has done live broadcasts and she has done them in in both English and Spanish. Lyse was educated in English, Creole and Spanish. She has been a media magnet even for national outlets such as Univision and Telemundo.

The Injury Free Coalition for Kids of Miami has always been committed to the prevention of both unintentional and intentional injury. Intentional injury is something the site must focuses on, for firearm injury is a very real and present issue for us in Miami. Unfortunately, Lyse has had up close and personal experience of firearm injury. Even while serving as Program Coordinator, she lost her brother to firearm injury. While unarmed and walking away from an argument, he was fatally shot in the back. Despite her loss, Lyse did not lose her focus. She has kept her team together, continues to keep the community moving forward, and takes on increasing responsibility while mentoring others in injury prevention.



### Annual Injury Free Coalition for Kids® Conference

## Forging New Frontiers: Looking into the Future of Childhood Injury Prevention

	2016 Schedule at a Glance	Room
Thursday. De	cember 1, 2016	Koom
12:00-5:00	Poster set-up & Registration	Gulfstream
Friday, Dece	nber 2, 2016	
7:00-8:30	Registration & Poster set-up	Gulfstream
7:00-8:30	Breakfast	Atrium
8:40-8:50	Welcome Michael Mello, MD, MPH	Salons A-D
8:50-9:00	Introduction of Keynote Kim Wiley Schwartz	Salons A-D
9:00-10:00	Keynote Kim Wiley Schwartz: The Vision Zero Initiative, YC's Approach to Reducing Traffic	Salons A-D
	Fatalities and Injuries	
10:00-10:15	Break	
10:15-11:45	Panel Discussion: Examining Hospital Based Approaches to CPS and the 4'9" Rule	Salons A-D
11:45-1:00	Lunch	Atrium
1:00-2:30	Panel Discussion: Motorized Vehicle Safety: Cars, ATVs and Mopeds	Salons A-D
2:30-2:45	Break	
2:45-3:45	Panel Discussion: Lessons Learned: Recent Advances in Child Pedestrian Injury Prevention	Salons A-D
4:00-5:00	PI Meeting	Salons A-B
0 00 7 00		Salons C-D
6:00-7:30	Welcome Reception/Site Posters (6:45-7:15 Author Attended)	Iarra/Aqua
7:30-10:00	Board Meeting	Causeway 3
Saturday, De	Cember 3, 2016	A tai
7.00-0.00	Diedkidsi DC Mosting	Atrium
8.00 8.05	Welcome	Salons A-D
8.05 8.15	Welcome Dianeer Award Presentation and Introduction of Keynote Sneaker Michael Hirsh, MD	Salons A-D
8.15-0.15	Keynote Speaker Pioneer Award Recipient: David Hemenway, PhD	Salons A-D
9·15-9·10	Reghole opearier, honeer Award Neoplent. David Hemenway, hind Break	Salons A-D
9:30-11:00	Panel Discussion: The Burden of Violence and How Injury Prevention Can Make an Impact?	Salons A-D
11:00-11:15	Break	Salons A-D
11.15-12.15	Panel Discussion: General Injury Prevention	Guiono / D
12:15-1:15	Lunch	Atrium
1:15-2:45	Workshop I	
	Topic A: Injury Control Research Centers - Looking into the Future of Childhood Injury Prevention	Salon A
	Topic B: Developing an Injury Free Coalition for Kids Site	Salon B
	Topic C: Volunteer Driven Home Safety Program	Salon C
3:00-4:30	Workshop II	
	Topic A: Getting Your Work on Paper and then to Presentation: How to Write a Scientific Abstract	Salons A
	Topic B: Developing an Inpatient Injury Prevention Consult Program	Salons B
	Topic C: Intimate Partner Violence and Its Impact on Children: Research, Education and Training,	Salons C
	Community Outreach Programs, and Policy/Advocacy Opportunities for Injury Free Coalitions	
5:30-6:30	Posters/Reception (6:00-6:30 Author Attended)	Gulfstream
6:30-9:00	Dinner	Causeway 1-3
Sunday, Dec	ember 4, 2016	• - •
7:00	Grab breakfast and join us in the business meeting	Atrium
7:30 -9:00	Business meeting.	Salons A-D
0.00-9.00	Diedkidsi Introduction of Kounota Dad MaClura, MPDS, DhD, EAEDUM	
9.00-9.00 0.05 10.05	Introduction of Reynole Rou MCOURE, MDDO, MDD, FAFMIM Kovnoto: Rod McCluro, MRRS, RhD, EAEDEM, The Systemic Approach to Inium Proventier	Salons A-D
5.00-10.05 10:05 10:00	Regnole, nou inicolure, inicial, rhid, rarrhivi, rhe systemic Approach to injury Prevention Ricale	Salons A D
10.00-10.20	Panel Discussion: Injuny Control Research Centers: Dest. Dresent and Future Injuny Drevention	Saluns A-D
11.15-11.3	Rreak	
11.30-12.30	Panel Discussion: Three E's of Home Safety: Enidemiology Education, and Environmental Change	1
12:45	Box Lunch	
· _ · · •		

## NOTES



### 2016 Agenda

Annual Injury Free Coalition for Kids® Conference

### Forging New Frontiers: Looking into the Future of Childhood Injury Prevention

2016 Agenda

### Time & Room

### Thursday, December 1 2016

12:00-5:00 **Poster Set-up** Gulfstream

### Friday, December 2, 2016

7:00-8:30 Gulfstream Atrium	Registration Breakfast
8:30-8:40	Logistics
Salons A-D 8:40-8:50 Salons A-D	Welcome Mike Mello, MD, MPH
8:50-9:00 Salons A-D	Introduction of Keynote Speaker Kim Wiley Schwartz, Michael Mello, MD MPH
9:00-10:00	Keynote Kim Wiley Schwartz: Vision Zero and Injury Prevention: Driving down traffic fatalities and injuries in NYC
Salons A-D	Since adopting a Vision Zero strategy in New York City at the beginning of 2014, NYC has seen a drop in traffic fatalities and injuries safer streets and put more emphasis on dangerous driving behavior. This presentation will discuss creating powerful messaging and making sense of the data to begin a culture change on NYC streets.
	Participants in this session will learn to:
	1. Recognize the core principals of Vision Zero and how they work;
	<ol><li>Describe how to use data to craft messaging;</li></ol>
	<ol> <li>Identify resources on dangerous driving behaviors;</li> </ol>
	<ol> <li>Identify collaborative approaches to injury prevention;</li> </ol>
	5. Describe ways to work with advocates for change.

### 10:00-10:15 Break

## 10:15-11:45 Panel Discussion: Child Passenger Safety; Examining Hospital Based Approaches To CPS and the 4'9" Rule Salons A-D

Motor vehicle crashes are a leading cause of unintentional injury death for children from the ages of 1 -18. Proper use of car seats and booster seats reduce the risk of death in the event of a crash by as much as 71%. Unfortunately, many children continue to travel improperly restrained, or even unrestrained. In this panel we will discuss different approaches to providing CPS education as well as car seats in the hospital setting. We will also discuss the value of using a height of 4'9" as a general recommendation for when a child can safely use a seat belt without a booster seat.

### Participants in this session will learn to:

- 1. Describe a NICU based child passenger safety program involving occupational and physical therapists;
- 2. Discuss why the 4'9" standard for no longer using a booster seat may not always predict when a child fits an adult seatbelt;
- 3. Describe ways to increase CPS screening on inpatient units;
- 4. Describe how a resource guide can help deliver CPS services to ED patients after hours;
- 5. Describe the epidemiology of traffic related injuries among children in Texas.

### Time & Room

### Moderators: Dina Burstein, MD, MPH, CPSTI, FAAP

Research Associate, The Injury Prevention Center at Rhode Island Hospital Asst. Professor of Emergency Medicine, Warren Alpert Medical School of Brown University Coordinator, Safe Kids Rhode Island Injury Free Coalition for Kids of Providence

### Andrew W. Kiragu, MD, FAAP

Interim Chief, Department of Pediatrics Medical Director, Pediatric Intensive Care Unit Hennepin County Medical Center Assistant Professor of Pediatrics University of Minnesota

### Presenters:

Yun Kim, OT, CPST: The development and implementation of the NICU car seat program with occupational therapy and physical therapy
 Pina Violano, PhD, MSPH, RN-BC, CCRN, CPS-T: Establishing an algorithm to ensure the safety of pediatric patients involved in a motor vehicle crash discharged from the emergency department
 Catherine Cavallaro, BA: Car seat assistant program implementation and evaluation
 Lindsay Pollok, MPH, CPSTI: Evaluation of an after-hours child passenger safety resource guide
 Amber Morse, MD: Child seat belt guidelines: examining the 4'9" rule as the standard
 Ping Ma, PhD: Traffic-related traumatic injuries among children in Texas, 2005-2014

### 11:45-1:00 Lunch

#### Atrium 1:00-2:30

### Salons A-D

### Panel Discussion: Motorized Vehicle Safety: Cars, ATVs and Mopeds

Injuries are the leading cause of death for children over the age of one according to the Centers for Disease Control and Prevention. Motor vehicle related injuries are in the top two reasons for death for all ages over one year and are the number one reason children between the ages of five and twenty-four die. This panel will reveal injuries and injury prevention strategies to protect and improve the care of children in regard to motor vehicles.

In this session we will hear information about efforts to improve teen driving safety including partnerships (hospital/school and public private) as well as virtual reality training to decrease distracted driving. Recreational vehicle safety (ATV and Moped) will be discussed with presentations ranging from epidemiology to the effects of regulations.

We will learn the core components of two outreach programs, BITZ and teen D.R.I.V.E, to improve driver safety among high school teens. We will learn how one site was able to create an educational road safety program and fostered community engagement between public and private sectors. Participants will learn about the utilization of motion capture cameras in performing injury prevention-related research. The major characteristics and injuries associated with recreational off-highway vehicle crashes will be discussed and participants will gain insights for injury prevention related to evidence based public policy. Finally, we will learn the differences in mechanisms and patterns of moped-related injuries between adolescents and younger children and injury prevention strategies to address moped injuries in children.

### Participants in this session will learn to:

- 1. Describe the components of two Teen driving safety programs (BITZ and D.R.I.V.E.);
- 2. Recognize the value of motion capture cameras in injury prevention;
- 3. Describe public and private collaboration in road safety programs;
- 4. Identify insights for prevention in off highway vehicle injuries using evidence based public policy;
- 5. Recognize differences in mechanism and patterns of moped related injuries between adolescents and younger children.

### Moderators: Kathy Monroe, MD

Professor of Pediatrics University of Alabama Children's of Alabama

### Joseph O'Neil, MD, MPH, FAAP

Associate Professor of Clinical Pediatrics Developmental Pediatrics Riley Hospital for Children Indiana University School of Medicine

#### Presenters:

Purnima Unni, MPH, CHES: A multi-year assessment of a hospital-school program to promote teen motor vehicle safety Jane Edwards, BSc, MSc: Making public-private partnerships work for road safety

Jonathan Green, MD: Teen distracted reality an interactive virtual education (d.r.i.v.e.): experience and impact on teenage drivers

Jessica Waters, BA, MPH: A safer place to ride: regulations and dnr enforcement in off-highway vehicle parks increases safety behaviors

Charles Jennissen, MD: Recreational off-highway vehicle (rov) crashes: an emerging pediatric health and safety concern Benjamin Wilkinson, BA: Pediatric moped-related injuries in the united states

#### 2:30-2:45 Break

#### 2:45-3:45 Panel Discussion: Lessons Learned: Recent Advances in Child Pedestrian Injury Prevention

Salons A-D Motor vehicle related injury is a leading cause of death in children, and pedestrian trauma makes up 1 in 5 crash deaths for kids. In recent years, approximately 700 children and youth under 20 years die annually as pedestrians in motor vehicle crashes. The number of child pedestrian deaths have been slowly decreasing over the past few decades, but this is thought to largely be due to less walking rather than safer walking environments. How do we encourage walking to school without increasing the risk of child pedestrian trauma? The abstract presentations in this session will focus on research on child pedestrian knowledge and behaviors, walking to school, pedestrian and driver behaviors at school drop off and the built environment as it relates to pedestrian injury risk. Innovative work in using the tools of injury mapping and video surveillance will be presented. These studies have meaningful implications for addressing the current challenges in the prevention of child pedestrian injury.

#### Participants of this session will learn to:

- 1. Describe evaluation methods for determining effectiveness of safety education programming;
- Recognize certain built and social environment features that are associated with higher child pedestrian motor vehicle collisions near school;
- 3. Recognize how often dangerous driver and pedestrian behaviors are observed at elementary schools during school morning drop-off time;
- 4. Describe correlates of child pedestrian-motor vehicle collisions related to dangerous drop- off and pedestrian behavior;
- 5. Describe the value of the use of video surveillance in school-based child pedestrian injury prevention.

### Moderator: Kyran Quinlan MD, MPH

Associate Professor of Pediatrics Rush University Medical Center Chair, Council on Injury Violence and Poison Prevention American Academy of Pediatrics

### Presenters:

Melody Schaeffer, MPH: Safe summers: adapting evidence-based injury prevention to zip codes of high trauma incidence Linda Rothman, BScOT, MHSc, PhD: Child pedestrian collisions, walking to school and the built environment: a case control study Jillian Savino, CHES: Primary school drop-off zone safety analysis of hazardous road conditions

utilizing video review

Alison Macpherson, PhD: Dangerous student passenger drop-off, pedestrian behaviors and the built environment near schools

4:00-5:00 Group Meetings Salon A-B PI meeting Salon C-D PC meeting

### Time & Room

6:00-7:30 Welcome Reception/Site Posters (6:45-7:15 Manned) Tarra/Aqua 7:30-10:00 Board Meeting Causeway 3

### Saturday, December 3, 2016

7:00-8:00 Atrium Salons A-D	Breakfast PC meeting
8:00-8:05 Salons A-D 8:05-8:15 Salons A-D 8:15-9:15 Salons A-D	Welcome
	Award Presentation & Intro of Keynote Speaker David Hemenway, PhD, Mike Hirsh, MD
	<b>Keynote David Hemenway, PhD: A Half Century of Injury Prevention Research: Personal Reflections</b> Injury is the number one cause of hospitalization and death for young people. Acknowledging it is often useful to step back from day- to-day activities and take a view from 50,000 feet, during this session Harvard Professor Dr. David Hemenway will discuss the many lessons learned during his 20 year highly acclaimed career in injury and violence prevention. He will provide tips for injury researchers and practitioners, and he will reveal successes and failures. In addition, knowing experience can be the best teacher, he will share a historical perspective of the field of injury prevention.
	<ol> <li>Participants in this session will learn to:</li> <li>Recognize some of the major advances in the field;</li> <li>Describe some of the biggest challenges yet to be accomplished;</li> <li>Identify some of the most important surveillance needs in the field;</li> <li>Recognize some of the crucial research issues to be addressed;</li> <li>Recognize are some of the most important implementation needs.</li> </ol>
9:15-9:30	Break
9:30-11:00 Salons A-D	<b>Panel Discussion:</b> The Burden of Violence and How Injury Prevention Can Make an Impact? Our country is burdened with 33,000 gun fatalities yearly. 2016 it is expected that motor vehicle fatality will be superseded by gun fatality for the first time in modern history. 60% of these fatalities come from suicide. As we learned from Dr. David Hemenway's seminal work, "Private Guns, Public Health", this is a uniquely American dilemma. This panel will explore various aspects of the

### Participants in this session will learn to:

1. Describe background data on gun violence in our country;

problem that the attendees can take home to their regions.

- 2. Recognize suicide prevention as low hanging fruit in gun violence prevention;
- 3. Identify child neglect prevention/recognition efforts;
- 4. Identify intimate partner violence as part of the gun violence problem;
- 5. Describe a provider tool kit for having safe storage conversations with gun owning families.

### Moderators: Mike Hirsh, MD

Peds Surgery/Trauma/ Injury Prevention, UMASS Memorial Children's Medical Center Medical Director, Worcester DPH

### Judy Schaechter, MD, MBA

Professor and Chair, Department of Pediatrics University of Miami Miller School of Medicine Chief of Service, Holtz Children's Hospital at UMiami/Jackson Health Systems

### **Presenters:**

Lois Lee, MD, MPH: Violent injuries in the United States: emergency care and associated costs, 2000-2010 Michael Levas, MD, MSCT: Factors driving worse quality of life in youth victims of violence compared to non-injured matched controls

Steven Rogers, MD, MS-CTR: Fresh check day: a novel approach to improve suicide prevention among college students Erin Evans, MS: Child welfare professionals' determination of when certain unsafe activities and lack of child protection constitutes child neglect

Maureen Dunn, MD: The prevalence of intimate partner violence among clients receiving services in community hair salons Cassie King, BS: Increasing safe firearm storage awareness and action through a community-based giveaway program

### 11:00-11:15 Break

### 11:15-12:15 Panel Discussion: Injury Prevention Practices

Salons A-D Injury is the leading cause of pediatric mortality, and primary prevention activities have been shown to decrease injury and are cost-effective. Yet, the challenges of providing programming to those who need it the most remain. In this panel we will have a presentation on the various models of prevention programming that are used in Injury Free sites. A second discussion will examine ways to incorporate prevention material into Head Start, a federally funded child development program targeting high risk children. The critical role of mentoring young prevention specialists will be explored in a third presentation. Finally, there will be a discussion on legislating prevention from our Canadian colleagues.

### Participants of this session will learn to:

- 1. Recognize the variety of programming in Injury Free sites;
- 2. Identify key factors associated with sustainability within Injury Free sites;
- 3. Discuss the opportunities and barriers to incorporating injury prevention topics into existing programs targeting high risk populations;
- 4. Discuss the importance of a training program to maximize the experience of young injury prevention workers;
- 5. Describe how to develop collaborative relationships among injury professionals and policy makers to ultimately impact the legislative process.

### Moderator: Barbara A. Gaines, MD

Professor of Surgery University of Pittsburgh School of Medicine Clinical Director Pediatric General and Thoracic Surgery Director, Trauma and Injury Prevention Children's Hospital of Pittsburgh of UPMC

### **Presenters:**

Workshop I

Ian Pike, PhD: Barriers and enablers to enacting injury prevention legislation in Canada Amanda Davani, MS, CPST: Working with interns to extend the reach of your safety program: best practices Eileen McDonald, MS: Opportunities to enhance injury prevention services with head start programs Sofia Chaudhary, MD: Injury Free Coalition for Kids: markers for success and sustainability

12:15-1:15 Lunch

#### Atrium 1:15-2:45

### Salon A Topic A: Injury Control Research Centers - Looking into the Future of Childhood Injury Prevention

This exploratory meeting will provide an opportunity for injury control research center representatives to have a dialogue about current injury control projects and allow for a question and answer session from other participants interested in learning about and/or becoming an ICRC. We will also encourage discussion of planned work as well as discussion of the "future of childhood injury prevention". This type of communication will help improve injury prevention efforts by allowing us to learn from leaders in our field. This workshop will provide a forum for collaboration and guidance by these leaders and help to break down the "silos" of injury prevention efforts.

We also hope that the ICRCs will take advantage of this meeting to discuss benefits and problems working as an Injury Control Research Center and share solutions to those problems in a closed door or private meeting to follow the question and answer session. Finally, we will lead a discussion of the potential benefits of participating in the Injury Free Coalition National Conference annually to present progress and plan future collaborative projects. This will also allow an Injury Free representative to discuss future

### Time & Room

### Agenda, cont.

needs of the ICRC and how Injury Free may assist in providing an annual meeting place.

#### Participants in this session will learn to:

- 1. Obtain guidance on current injury research efforts by leaders in the field;
- 2. Recognize injury control projects as well as planned/future projects;
- 3. Identify opportunities for collaboration;
- 4. Identify benefits and problems working as an Injury Control Research Center;
- 5. Describe future Injury Free Coalition National Conference benefits and needs for ICRCs.

### Presenter/Moderator: Steven C. Rogers, MD, MS-CTR

Attending Physician - Division of Emergency Medicine Director - Emergency Mental Health Services Connecticut Children's Medical Center Research Scientist Connecticut Children's Injury Prevention Center Associate Professor University of Connecticut School of Medicine

### Salon B Topic B: Developing an Injury Free Coalition for Kids Site

Forging New Frontiers, The Annual Conference of the Injury Free Coalition for Kids, is one of the longest running injury prevention focused meetings designed to foster collaborative research, develop best practices and address challenges in the field of injury prevention. It is a centerpiece in the arsenal of injury prevention efforts made by the Injury Free Coalition for Kids. This workshop will provide attendees a brief history of the establishment and challenges of forming a 20-year old organization designed to stop the number one killer and cause of hospitalization of young people. It will look at the changes the organizational focus has gone through in order to best serve its membership and their efforts to address issues within the field of injury prevention. In addition, it will look at resources available to members and the challenges of serving membership needs.

### Participants in this session will learn to:

- Describe the challenges of building a nationwide hospital based community oriented organization designed to address needs within the local communities of its membership;
- 2. Identify resources available to assist in injury prevention efforts;
- 3. Recognize roles individuals across the country can play in the formation of a national effort;
- 4. Describe the importance of relationships between organizations addressing injury prevention;
- 5. Recognize the importance of support for organizations and individuals in the field of injury prevention.

#### Moderator: Estell Lenita Johnson, MA

Programming, Marketing & Communications Director Injury Free Coalition for Kids

#### Presenters:

Barbara Barlow, MD, Founder & Executive Director of the Injury Free Coalition for Kids Beverly Miller, MEd, Associate Director, Injury Prevention Center, Arkansas Children's Hospital and University of Arkansas for Medical Sciencesar DiLenny Roca Dominguez, MPH, Senior Cluster Administrator, Department of Epidemiology

Columbia University, Mailman School of Public Health, Injury Free Administrator Walter Rice, MSE, Injury Free Webmaster

### Salon C Topic C: Volunteer Driven Home Safety Program

As part of our injury journey to go from great ideas to learning, spread and population change, we were faced with a few challenges. Three of the top challenges being 1) very few examples of changing health at the population level 2) age and environment variance in injury mechanisms and therefore prevention strategies and 3) lack of manpower to successfully reach engagement numbers that would move the data dial. We found it necessary to start small and narrow outreach focus to create a program model that was sustainable, effective and expandable to affect change on a population level.

Following injury trends reported thru the hospital trauma registry to identify top injury mechanism, location of injury, high-risk age group and top community effected, Injury Free Cincinnati create a community and volunteer driven program model for home safety for

children <5 living in the high risk community of Norwood, Ohio. This model has been proven to successfully disseminate important injury prevention education, build Injury Free community partnerships, reduce PC efforts to distribute product on a measurable scale and if needed, supports the provision of product installation. Collaboration and interdependent leadership with community leaders, volunteers and local agency resources resulted in successful dissemination of evidence-based home safety education and equipment installation intervention; significantly reducing the expected number of children with medically-attended home injuries in the targeted high risk neighborhood by up to 60%.

### Participants in this session will learn to:

- 1. Recognize a sustainable and effective method of injury prevention outreach that can create change at a population level while reducing PC manpower;
- 2. Describe how to use interdependent leadership and the Organizing Theory of Change to build and maximize the efforts of community collaboration and volunteers;
- 3. Describe how to use the program structure model to create a program that can be expandable and adaptable to the specific needs of Injury Free targeted populations and injury prevention focuses;
- 4. Identify networks within a community that build a platform to effectively and continuously promote injury prevention outreach;
- 5. Describe how to engage targeted families to become injury prevention champions.

### Presenter/Moderator: Dawne Gardner, MBA, CPST

Comprehensive Children's Injury Center (CCIC) Injury Prevention Specialist Cincinnati Children's Hospital Medical Center

### 3:00-4:30 Workshop II

### Salon A Topic A: Getting Your Work on Paper and then to Presentation: How to Write a Scientific Abstract

Writing a scientific abstract can be a daunting task for those who have limited experience in medical writing. This is an important skill to learn in order to be able to present your program or research study at professional meetings, as being accepted for presentation at these meetings is contingent on the clarity and quality of your writing. The basic format typically includes: Background (including objectives of program/study), Methods, Results, and Conclusions. In this workshop we will explain the content that should be included in each of these sections. We will review various examples of abstracts of differing quality. In this workshop we will also break up into small groups to practice writing each section of the abstract. Participants will be asked to bring some information or data related to a program/study on which they are currently working to use for their abstract writing practice. Study examples will also be provided for participants to use for abstract writing practice, if they are not able to provide their own.

### Participants in this session will learn to:

- 1. Recognize the format behind writing a scientific abstract;
- 2. Describe the important components to include in the sections of the abstract;
- 3. Identify skills to clearly state the objectives, methods, results, and conclusions of your abstract;
- 4. Demonstrate writing a medically scientific abstract;
- 5. Discuss a framework to critically review an abstract.

### Moderator: Lois K. Lee, MD, MPH

Attending physician Division of Emergency Medicine Boston Children's Hospital Assistant Professor of Pediatrics and Emergency Medicine Harvard Medical School

### Presenters:

Marlene Melzer-Lange, MD, FAAP, Professor of Pediatrics Medical College of Wisconsin Dina B. Burnstein, MD, MPH, CPSTI, FAAP, Research Associate, The Injury Prevention Center at Rhode Island Hospital, Assistant Professor of Emergency Medicine, Warren Alpert Medical School of Brown University, Coordinator, Safe Kids Rhode Island Alison Riese, MD, MPH, Assistant Professor of Pediatrics. Division of General Pediatrics, Assistant Professor of Medical Science, Section of Medical Education, Alpert Medical School of Brown University

Pina Violano, PhD, MSPH, RN-BC, CCRN, CPS-T, Manager, Injury Prevention, Community Outreach & Research, Yale-New Haven Hospital, Injury Free Coalition for Kids of New Haven, Co-Director & Co-Principle Investigator, Yale-New Haven Children's Hospital, Emergency Medical Services for Children Program Director and Co-Principal Investigator

### Salon B Topic B: Developing an Inpatient Injury Prevention Consult Program

The Injury Prevention Center at Phoenix Children's Hospital has been conducting injury prevention consultations with children admitted inpatient since 2008. In 2015, the team successfully completed over 600 consultations addressing the needs of families through education, behavioral intervention and product distribution methods. Focus areas include: home, water, child passengers, motorized and non-motorized vehicles, and pedestrians.

During this workshop, participants will hear the history of Injury Prevention's consultation program. Barriers, challenges and outcomes related to program growth and increased needs will be discussed. The presentation will review the structure and function of other injury prevention consult programs throughout the United States in order to provide varying options for hospitals looking to develop their own consultation programs. Participants will learn techniques for creating and delivering effective content and best practices for communication with families. The workshop will also cover models for program sustainability and how to engage other departments within the hospital.

### Participants in this session will learn to:

- 1. Discuss the development and purpose of injury prevention consultation programs;
- 2. Describe skills related to clinical health education;
- 3. Identify opportunities for injury prevention program development;
- 4. Describe a supportive educational environment after a trauma;
- 5. Recognize attributes of injury prevention consultations.

### Presenter/Moderator: Carrie Cantrell, LMSW, MPH

Injury Prevention Specialist Triple P Practitioner Center for Family Health and Safety Phoenix Children's Hospital

### Salon C Topic C: Intimate Partner Violence and Its Impact on Children: Research, Education and Training, Community Outreach Programs, and Policy/Advocacy Opportunities for Injury Free Coalitions

This workshop will describe the epidemiology of IPV with a focus on the short and long term health consequences for children. Intimate partner violence (IPV) is frequent and its outcomes severe. In the U.S., one in four women will report IPV in her lifetime. Roughly half of men who abuse their female partner also abuse her children. Children exposed to IPV often face life-long negative consequences, including a host of physical and psychological impairments that compromise healthy child development and constitute a serious public health issue. Best practices are not consistently implemented by systems serving these children, and there is a need to strengthen the evidence base for child-focused interventions.

Injury Free coalitions are well positioned to take an active role in reducing the costs of this major public health problem. This workshop will provide an overview of strategies and best practices for Injury Free coalitions to address IPV. Potential research activities including the evaluation of IPV screening in pediatric clinical settings and community based settings (such as local hair salons) will be examined. Strategies for supporting research and evaluation within key state agencies (e.g. child protective services) will be described. Opportunities for students and practicing community medical providers will be outlined and examples of education and training programs and fellowships will be illustrated. The workshop will also provide information on establishing and maintaining partnerships with state and local IPV providers and why these partnerships are fundamental for supporting and implementing primary prevention community outreach education programs such as Safe Dates will be explained. The workshop will provide information on state based policy and advocacy initiatives and changes, such as legislative enactment that would remove the firearms of an abuser when he or she is the subject of a temporary, ex parte restraining order. Finally, IPV resources available to Injury Free coalitions will be highlighted.

### Participants in this session will learn to:

- 1. Describe the epidemiology of intimate partner violence;
- 2. Describe the short and long term health consequences of IPV exposure to children;
- 3. Describe domestic violence research, education and training opportunities for Injury Free coalitions;
- 4. Describe current community based domestic violence service providers and their scope of work;
- 5. Describe domestic violence community outreach programs, and policy/advocacy opportunities for Injury Free coalitions.

### Presenter/Moderator: Garry Lapidus, PA-C, MPH

Injury Free Hartford Director, Connecticut Injury Prevention Center Connecticut Children's Medical Center & Hartford Hospital Associate Professor, Pediatrics & Public Health, UCONN School of Medicine

5:30-6:30 Posters/Reception (6:00-6:30 author attended) Gulfstream 6:30-9:00 Dinner Causeway 1-3

### Sunday, December 4, 2016

7:00 AM	Grab breakfast and join us in the business meeting.
Atrium	
7:30 -9:00	Business meeting, 8:00-9:00
Salons A-D	ŭ
8:00-9:00	Breakfast
Atrium	
9:00-9:05	Introduction of Keynote Rod McClure, MBBS, PhD, FAFPHM, Steven Rogers, MD, MS-CTR
Salons A-D	
9:05-10:05	Keynote: Rod McClure, MBBS, PhD, FAFPHM: The Systemic Approach to Injury Prevention
Salons A-D	Society is the system within which populations exist. Sustained change made at the societal level to reduce population-level indicators
	approach to injury and violence prevention, to a systemic approach more consistent with the principles of ecological public health. We

approach to injury and violence prevention, to a systemic approach more consistent with the principles of ecological public health. We consider the extent to which the logic of the systematic model, and the related misconceptions about the role of uncertainty in science, limit local, national, and global efforts to minimize injury related harm. The shift from an individual to a population perspective has substantial implications for the way we perceive, direct, undertake, and evaluate injury prevention research and practice. The analogy of "the population as patient" provides a clear illustration of the foundational truths that underpin the preferred public health approach to the prevention of injury.

### Participants in this session will learn to:

- 1. Identify the scope that still remains for reducing injury related harm;
- 2. Recognize the differences between the systematic and systemic approaches to injury prevention;
- 3. Recognize a range of qualitative tools for facilitating systems thinking;
- 4. Describe the value of quantitative tools that support a systemic approach;
- 5. Describe how to implement and evaluate systemic interventions for the prevention of childhood injury.

### 10:05-10:20 Break

### 10:20-11:30 Panel Discussion: Injury Control Research Centers: Past, Present and Future Injury Prevention

Salons A-D The Center for Disease Control has been funding Injury Control Research Centers (ICRCs) throughout the United States to study ways to prevent injuries and disabilities since 1987. Injury Control Research Centers conduct research in all three core phases of injury control (prevention, acute care, and rehabilitation) and serve as training centers as well as information centers for the public. Research design in these centers is interdisciplinary and incorporates the fields of medicine, engineering, epidemiology, law, and criminal justice, behavioral and social sciences, biostatistics, public health, and biomechanics. During this panel session we will hear from leaders in our field about their cutting-edge research and exciting programs from current and past ICRCs.

### Participants in this session will learn to:

- 1. Describe the variety of injury prevention efforts being conducted by CDC sponsored ICRCs across the United States;
- 2. Recognize the importance of designing and conducting region specific programs and research activities;
- 3. Identify current research and program priorities being conducted by ICRCs;
- 4. Describe complexities of designing meaningful injury control research and programs;
- 5. Recognize the challenges of transitioning from an ICRC to an independent Injury Prevention Center.

### Moderator: Steven Rogers, MD, MS-CTR

Attending Physician - Division of Emergency Medicine Director - Emergency Mental Health Services Connecticut Children's Medical Center Research Scientist Connecticut Children's Injury Prevention Center Associate Professor University of Connecticut School of Medicine

### Presenters:

Robert M. Bossarte, PhD, West Virginia University, Injury Control Research Center

Maria Kajankova, PhD, Icahn School of Medicine at Mount Sinai: Response of school districts to the

New York State Concussion Awareness and Management Act: A Review of Policies and Procedures

- Eileen McDonald, MS, Johns Hopkins Center for Injury Research and Policy: National Survey Results of Opioid Storage Practice in Households with and without Children
- Sofia Chaudhary, MD, Emory University School of Medicine: A Look at an Injury Prevention Research Center post CDC Funding: Surviving and Succeeding
- Lisa Roth, BS, University of Iowa Injury Prevention Research Center: A comparative effectiveness study of two parent programs designed to support children after traumatic injury: a patient engaged approach in four children's hospitals in the Midwestern United States
- Joyce Pressley, PhD, MPH, Columbia University of New York: Child restraint and injury in NYC infants, children and teens: A comparison of taxis and private vehicles

### 11:15-11:45 Break

### 11:30-12:45 Panel Discussion: Three E's of Home Safety: Epidemiology, Education, and Environmental Change

Salons A-D Injuries in the home are leading cause of for young children but many can be prevented. But first we need to better understand the circumstances. In the first paper, the authors will present the epidemiology and events surrounding drownings in home pools so that they can design an effective intervention. Education, along with the distribution of safety products, can be an effective strategy to decrease injury. In the second paper, the authors will present their innovative class room based home fire safety curriculum which included the installation of smoke detectors. In the third paper, the authors will present their rigorous evaluation of a home safety curriculum directed toward first time parents. In the final paper, the authors discuss the challenges of protecting the most vulnerable children—those who are homeless and are living in shelters.

### Participants in this session will learn to:

- 1. Describe the epidemiology of home drownings
- 2. Identify ways to use the epidemiology of home drownings to develop programming to reduce risks from drowning
- Describe the components of an effective program to reduce childhood home injuries and articulate a rigorous approach to evaluating the program's effectiveness
- 4. Recognize different home safety intervention strategies for family homeless shelters and discuss their effectiveness
- 5. Recognize partners from other disciplines who can collaborate on home injury prevention activities

### Moderator: Karen Sheehan MD, MPH

Mary Ann and J. Milburn Smith Child Health Research Program Stanley Manne Children's Research Institute Attending, Ann & Robert H. Lurie Children's Hospital of Chicago Professor of Pediatrics & Preventive Medicine, Northwestern University's Feinberg School of Medicine

### Presenters:

Tiffaney Isaacson, BS: Pediatric water-related incidents: a closer look at home pool supervision and barrier use for children ages 1 to 4

Tanya Charyk Stewart, MSc: Home safe home: evaluation of a childhood home safety program Maria McMahon, MS, cPNP-AC: Evaluation of a home safety program for family homeless shelters

#### 12:45 Box Lunch

### Accreditation

### **Continuing Medical Education**

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Cincinnati Children's and the Injury Free Coalition for Kids at the Center for Injury Epidemiology and Prevention, Mailman School of Public Health, Columbia University. Cincinnati Children's is accredited by the ACCME to provide continuing medical education for physicians. Cincinnati Children's designates this live activity for a maximum of 14.5 AMA PRA Category 1 Credit(s)<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### Disclosure

Cincinnati Children's requires all clinical recommendations to be based on evidence that is accepted within the profession of medicine and all scientific research referred to, reported or used in support of or justification of patient care recommendations conform to the generally accepted standards of experimental design, data collection and analysis. All faculty will be required to complete a financial disclosure statement prior to the conference and to disclose to the audience any significant financial interest and/or other relationship with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in his/her presentation and/or commercial contributor(s) of this activity. All planning committee members and/or faculty members were determined to have no conflicts of interest pertaining to this activity.

### Annual Injury Free Coalition for Kids® Conference Forging New Frontiers: Looking into the Future of Childhood Injury Prevention

Acknowledgements & Disclosures:

Kim Wiley Schwartz Michael Mello, MD MPH Dina Burstein, MD, MPH, CPSTI, FAAP Andrew W. Kiragu, MD, FAAP Yun Kim, OT, CPST Pina Violano, PhD, MSPH, RN-BC, CCRN, CPS-T Catherine Cavellerano, BA Lindsay Pollok, MPH, CPSTI Amber Morse, MD Ping Ma, PhD Kathy Monroe, MD Joseph O'Neil, MD, MPH, FAAP Purnima Unni, MPH, CHES Jane Edwards, BSc, MSc Jonathan Green, MD Jessica Waters, BA, MPH Charles Jennissen, MD Benjamin Wilkinson, BA Kyran Quinlan MD, MPH Melody Schaeffer, MPH Linda Rothman, BScOT, MHSc, PhD Jillian Savino, CHES Alison Macpherson, PhD David Hemenway, PhD Mike Hirsh, MD Judy Schaechter, MD, MBA Lois Lee, MD, MPH Michael Levas, MD, MSCT Steven Rogers, MD, MS-CTR Erin Evans, MS Maureen Dunn, MD Cassie King, BS

Ian Pike, PhD Amanda Davani, MS, CPST Eileen McDonald, MS Sofia Chaudhary, MD Joyce Pressley, PhD, MPH Estell Lenita Johnson, MA Barbara Barlow, MD Beverly Miller, Med DiLenny Roca Dominguez, MPH Walter Rice, MSE Dawne Gardner, MBA, CPST Lois K. Lee, MD, MPH Marlene Melzer-Lange, MD, FAAP Alison Riese Pina Violano, PhD, MSPH, RN-BC, CCRN, CPS-T Carrie Cantrell, Garry Lapidus, PA-C, MPH Rod McClure Robert M. Bossarte, PhD Maria Kajankova, PhD Eileen McDonald, MS Lisa Roth, BS Karen Sheehan MD, MPH Tiffaney Isaacson, BS Tanya Charyk Stewart, MSc Maria McMahon, MS, cPNP-AC

### Celebrate, Collaborate, Continue the Journey...

### 21 Years of Forging New Frontiers in Childhood Injury Prevention

The 2016 Annual Conference of the Injury Free Coalition for Kids® December 2 - 4, 2016

### ACKNOWLEDGEMENT

### This conference is supported by

### **RWJF Special Contributions Fund of the Princeton Area Community Foundation**

and Little Tikes Commercial The Bloomberg Foundation I'm Safe! Inc.

### DISCLOSURE

Cincinnati Children's requires all clinical recommendations to be based on evidence that is accepted within the profession of medicine and all scientific research referred to, reported or used in support of or justification of patient care recommendations conform to the generally accepted standards of experimental design, data collection and analysis. All faculty will be required to complete a financial disclosure statement prior to the conference and to disclose to the audience any significant financial interest and/or other relationship with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in his/her presentation and/or commercial contributor(s) of this activity. All planning committee members and/or faculty members were determined to have no conflicts of interest pertaining to this activity.



## 21 Years of Forging New Frontiers:

# Looking into the Future of Childhood Injury Prevention

Celebrate, Collaborate, Continue the Journey...



# ABSTRACTS

### The development and implementation of the NICU car seat program with occupational therapy and physical therapy

Joan Jung-D'Amico, OT, CPST, Yun Kim, OT, CPST, Emily Rogers, PT, CPST, Megan Hauer, OT, CPST

### Background:

Occupational therapists (OT) and physical therapists (PT) are regularly consulted in the NICU for positioning infants to promote musculoskeletal alignment and hemodynamic stability. This experience makes OT and PT uniquely qualified to develop a NICU car seat program and to educate parents on the use of their car seats. Studies have supported the effectiveness of keeping children safe in child safety seats, however 95% of car seats are misused. Therefore, early education on child safety seats is critical in the neonatal intensive care unit (NICU) despite budget and time constraints. As a solution, OT and PT developed a child safety seat policy for the NICU, which has shown positive results.

### Methods:

Development and implementation of the car seat program was multi-disciplinary and multi-faceted. OT, PT, and NICU nursing staff collaborated on the policy as well as educational materials for families. Based on the policy, occupational and physical therapy were consulted for NICU patients that were on the unit for greater than 7 days and planned to discharge home. In conjunction with the program development, car seat technicians created parent education handouts. To assess the effectiveness of the policy, occupational and physical therapy car seat consults were tracked from December 1, 2015 to March 31, 2016.

### **Results:**

Prior to December 1, 2015, no car seat education was provided by OT and PT. From December 1, 2015 to March 31, 2016, the therapists saw 34 NICU patients for car seat education. In addition, there was an increase in overall occupational and physical therapy referrals.

### Conclusions:

The involvement of OT and PT in the NICU car seat program has significantly increased the number of families receiving comprehensive car seat education.

### Objectives:

Attendees will learn:

1. To understand the statistics of misused car seats.

2. To describe the limitations in car seat education in the NICU prior to OT and PT involvement.

3. To describe the development and implementation of the NICU car seat program.

### Establishing an algorithm to ensure the safety of pediatric patients involved in a motor vehicle crash discharged from the emergency department

Pina Violano, PhD, MSPH, RN-BC, CCRN, CPS-T, Patricia Morrell, BSN, RN-BC, April Alfano, MA, BSN, RN, NR-P, CPEN, Monica Lucas, BA, MBA, CPS-I, Denine Baxter, MHA, BSN, RN, CNML, Kirsten Bechtel, MD

### Background:

According to the NHTSA, placing children in age-and size-appropriate safety restraint systems can reduce serious and fatal injuries by more than 50%. From 1975 through 2011, the NHTSA estimated that approximately 10,000 lives were saved by child restraints for children under the age of 5 in passenger vehicles with more than 260 young lives saved in the year 2011 alone. Furthermore, an estimated additional 51 lives could have been saved if 100% of the children were placed in child safety restraint seats. The purpose of this program is to establish an organized process to evaluate the need, and distribution of appropriate child safety restraint systems (CSRS) for patients who present to the emergency department (ED) following a motor vehicle crash (MVC).

### Methods:

An algorithm to assess the need for a CSRS for patients being discharged from the ED after being involved in a MVC was implemented at a Level 1 Trauma Center. National evidence based guidelines, were used to determine proper CSRS recommendations. A brief educational intervention on state legislation, proper installation and best practices was provided to caregivers prior to distribution of the CSRS. A data base was established to collect CSRS registration data, waiver and disclaimer information, as well as demographic information. Quality assurance was conducted monthly to screen for any missed opportunities.

### **Results:**

From September 1, 2015-April 30, 2016, 187 patients under the age of 7 (the age that by state law are required to be in a child safety seat) were identified at triage in the PED of a level 1 trauma center as having been involved in an MVC. Once identified that the child was involved in an MVC the algorithm was implemented. 44 patients were identified meeting criteria for a CSRS (as a result of having no CSRS, needing a replacement CSRS due to damage from the impact of the MVC, or having an incorrect CSRS based national guidelines). During this 7-month pilot, 36 registration forms, 43 waiver and disclaimer forms were completed and 58 car seats were distributed to children who would have been previously discharged

without screening for state mandated CPS regulations.

### **Conclusions:**

It is evident that an organized CSRS screening process in the pediatric emergency department has a positive impact on the overall safety of pediatric patients being transported in motor vehicles. Having a systematic process and appropriate CSRS readily available contributes to the success of children discharged home after being involved in a MVC.

### **Objectives:**

Attendees will learn:

 To understand the importance of program evaluation for hospital based child passenger safety programs.
 To describe the steps for screening of child safety seats needs for patients served by hospital based child passenger safety programs.

3. To identify differences in compliance by types of computerized screening for child passenger safety.

## Car seat assistant program implementation and evaluation

Rebekah Coelho, BS, David Mooney, MD, MPH, Lois Lee, MD, MPH Maria McMahon, MSN, RN, PNP-AC/PC

### Background:

To encourage best practices regarding child passenger safety for our patients, our institution has implemented a child passenger safety (CPS) program on the inpatient units. This program has relied on nursing staff to screen all admitted children < 8 years old for car seat usage with a Car Seat Safety (CSS) survey form in the admission assessment of the electronic medical record (EMR). Answers to this survey can identify the need for a car seat consult, and it is expected that the treating nurse contacts the CPS Program for a consult. To improve screening compliance we implemented a pilot program to have Clinical Nurse Assistants (CNAs), supervised by nurses, serve as Car Seat Assistants who can conduct the CPS screening. The objective of this program evaluation was to determine the effectiveness of using CNAs for CPS screening and any barriers for the CNAs in the program.

### Methods:

In this pilot nine CNAs on one inpatient unit were educated on CPS knowledge and practices and were trained to complete the CSS survey. These Car Seat Assistants are expected to screen children < 8 years old admitted to this inpatient unit with the CSS survey, deliver appropriate car seats to caregivers, play a child passenger safety educational video for families, and page the CPS Program staff as needed. For evaluation of this program, focus groups were held with the Car Seat Assistants and anonymously completed surveys were distributed to learn about their understanding of this pilot CNA CPS program. Frequencies were calculated of CPS screening 60 days before and 60 days after the pilot.

### **Results:**

Over a four months, a total of 292/394 eligible children on the pilot inpatient unit had a CSS survey done. Data collected for screening in the 60 days prior to the pilot revealed 111/186 (60%) eligible children had a CSS survey completed. Data collected in the 60 days after the pilot revealed 181/208 (87%) eligible children had a CSS survey completed. For the CNA survey, when asked "How comfortable do you feel with the overall car seat screening process?" 5/9 (56%) reported "very comfortable," and 4/9 (44%) reported "somewhat comfortable." Barriers for CNAs to complete the CPS screening included: asking the parent the screening question (3/9), obtaining the car seat (3/9), and getting the liability waiver signed (2/9).

Survey Process Questions Survey Answers % yes (n/N) 1. Is the "car seat screen" in the EMR easy to understand? 100% (9/9) 2. Is it clear what paperwork needs to be completed 56% (5/9) by you, the RN, and parents when you get a seat? 3. Do you think another training would be useful? 66% (6/9)

### **Conclusions:**

Screening increased significantly when the role for CPS screening transitioned from nursing to CNAs. Future directions should consider increased education for the CNA's, modifications to the pilot to increase screening compliance rate, and expansion to other floors.

### **Objectives:**

Attendees will learn to:

 To describe the process of incorporating clinical nurse assistants into a child passenger safety program.
 To recognize barriers for clinical nurse assistants to conduct child passenger safety screenings with families.

3. To identify how using clinical nurse assistants can expand the services of a child passenger safety program on an inpatient unit.

## Evaluation of an after-hours child passenger safety resource guide

Lindsay Pollok, MPH, Lauren Van Winkle, MPH, Amanda N. Barczyk, PhD, MSSW, Karen Piper, BS, Karla Lawson, PhD, MPH, Stewart Williams, BS, and Nilda Garcia, MD

### Background:

Texas law requires vehicle passengers younger than 8 years old, unless they are taller than 4'9", to be restrained in an appropriate restraint system. Our Injury Prevention (IP) team consults children under 8 years old, admitted to the Dell Children's Medical Center's Trauma Service, to assess appropriateness of their current restraint system. Children admitted post motor vehicle collision are offered restraint systems at no cost. Families seen in the Emergency Department (ED) outside of IP operational hours historically did not have the same opportunity to obtain a restraint system due to the unavailability of IP staff to facilitate consults. To aid in closing this gap in services, a resource guide was created for the ED outlining a stepby-step process by which staff could efficiently and accurately assess restraint appropriateness and request a restraint system. The objective of this study was to evaluate the effectiveness of the resource guide at aiding ED staff to screen and provide the appropriate restraint system.

### Methods:

Two retrospective cohort analyses were conducted to assess: 1.) Patients seen in the ED who were eligible to be screened through the resource guide. 2.) Patients who were screened and received a restraint system through the resource guide. Records for both cohorts were reviewed from May 1, 2015 - February 29, 2016. Descriptive statistics were used to describe characteristics of each cohort.

### **Results:**

In cohort one, only 10.6% of the 113 patients meeting criteria were screened for a restraint system. The majority of patients meeting screening criteria were male (54%) and Hispanic (47%), with 9% speaking only Spanish. The average age was 3.4 years and the average length of stay (LOS) was 2.6 hours.

In cohort two, 20 patients received a restraint system through the resource guide (35% convertible, 35% combination, 30% booster), and 90% of these received the appropriate restraint system for their age and weight. The majority were female (60%) and Hispanic (70%), with 40% speaking only Spanish. The average age was 2.6 years and the average LOS was 3.5 hours.

### Conclusions:

Given that only 10.6% of eligible patients were

screened, our results demonstrate the need for an algorithm to increase consistency of the resource guide's utilization. The resource guide impressively facilitated identification of appropriate restraint systems for 90% of patients screened. Further investigation into the 10% of patients who did not receive appropriate restraint systems is necessary to ensure greater effectiveness. Additionally, the 58 minute longer average LOS for patients who met criteria and received a restraint system warrants consideration of the tool's assessment completion time and ED throughput constraints. Algorithm development to identify screening candidates, further refinement of the guide's restraint identification process, and staff training may improve this tool to ensure all patients, despite their LOS or the availability of IP staff, are screened for the appropriate restraint system.

### **Objectives:**

Attendees will learn:

1. To describe the strengths and weaknesses of the child passenger safety resource guide.

2. To identify the appropriate restraint system needed for hospital patients.

3. To recognize the need for a child passenger safety algorithm.

## Child seat belt guidelines: examining the 4'9" rule as the standard

Amber Morse MD, Mary Aitken MD, Hope Mullins MPH, Mindy Pomtree MD, Jeffrey Montgomery MD, Erin Ulloa MD

### Background:

Current American Academy of Pediatrics (AAP) recommendations regarding transition from child safety seat/booster seat to adult safety belt use indicate that children should be at least 4'9", 8 years old, or 80 pounds to ride safely. Other recommendations suggest that proper fit in the vehicle seat, assessed with a 5-point fit test, should be considered when graduating to an adult safety belt. Children who do not meet the 5-point fit criteria are at increased risk for injury during a motor vehicle collision and require a booster seat for maximum safety. While most children reach 4'9" around age 8, each child and vehicle presents a unique combination; thus a child may not fit appropriately in all vehicle types using only the 4'9" requirement. We assessed the utility of the 4'9" criteria in a community sample of children across multiple vehicle types.

### Methods:

We enrolled school-aged children, 6-12 years of age, from two local elementary schools. Height, weight and

demographic data were obtained on each child using a validated measurement tool. A Child Passenger Safety Technician (CPS-T) then performed the 5-point fit test in each of a uniform lineup of 5 vehicles including compact car, small SUV, large SUV, pickup truck, and mini-van. Data was collected on fit in the standard vehicle seat and also with use of a booster seat in each vehicle. We set 90% as the threshold proportion of children who meet all criteria for proper fit to validate current recommendations of a height of 4'9".

### **Results:**

Data was collected on 370 students, 48% female and 52% male. A height of 4'9" was reached in 42% of students and 83% were 8 years old. The percentage of 90% proper fit was met in the compact car, small SUV, and minivan. However, only 83/106 students (78%; p-value 0.0005) that were 4'9" fit properly in the standard seat of the large SUV and only 87/105 students (83%; p-value 0.0215) fit properly in the pickup truck. All but one child who did not achieve proper fit in a standard seat fit properly when using a booster seat (p-value <0.0001, McNemar's test).

### **Conclusions:**

All children meeting current height guidelines for an adult seat belt do not adequately fit in the standardized seat in the car, specifically in larger vehicles (large SUVs and trucks). They are at risk for serious injuries and may need a booster seat to achieve proper seat belt positioning. This emphasizes the need for fit tailored to family vehicles and/or standardized back seat dimensions in all vehicles for maximum safety.

### **Objectives:**

Attendees will learn:

1. To describe American Academy of Pediatrics seat belt guidelines.

2. To identify key components of the 5-point fit test.

3. To demonstrate limitations of seat belt fit guidelines in a community sample of children across differing vehicle types.

## Traffic-related traumatic injuries among children in Texas, 2005-2014

Ping Ma, PhD, Nazia Hussain, MA, Marisa Abbe, PhD

### Background:

Traffic-related injuries are the leading fatal injury among children in the US. Although Texas is home to one of the largest and diverse populations of children in the country, to our best knowledge, there is no published study yet to compare the different types of traffic-related injuries here. Thus, the first objective of this study was to examine 10 years' injury trend of traffic-related incidence rates among children in Texas, specifically, North Texas. The second aim of this study is to assess if there were differences in types of trafficrelated pediatric injuries.

### Methods:

All the data were drawn from the trauma registry at a Level 1 Pediatric Trauma hospital in North Texas from 1/1/2005-12/31/2014. Demographic characteristics and socioeconomic indicators (i.e., age, gender, race, and insurance status), length of stay in hospital (LOS) and patient type were included. Injury Severity Score (ISS), was dichotomized as higher injury severity (ISS>15) and low injury severity (ISS?15). The fatality was categorized into dead vs. alive. The traffic-related injury mechanism including motor vehicle collisions (MVC), motor pedestrian collisions (MPC) and motorcycle/moped related injuries were used as dependent variable. Frequencies and Chisquare analysis were used to assess the demographic description and crude analyses. The multi-nominal logistic regressions were conducted to examine the factors associated with the type of motorized related injuries adjusting for covariates. All of analyses were conducted by STATA 14.0.

### Results:

Of 18,287 pediatric injuries, there were 3,743 (20.4%) traffic-related injuries 2005-2014. The mean age was 6.3 years (standard deviance/SD =4.3); the majority of patients were boys (62.5%) and Caucasian (40%). Hispanic and African-Americans were 37% and 18%, respectively. The percentage of traffic related injuries slightly decreased 2005-2013 but had a sudden increase in 2014. The trend of MVC and motorcycle injuries was decreasing 2005-2009 and became more stable in the most recent five years, while MPC injuries had been decreasing greatly since 2009. Demographic disparities did exist. Younger children were more likely to experience MVC injuries than older age children. Compared with MVC, Hispanic and African Americans were significantly more likely to have an MPC but less likely to have a motorcycle injury (ps'<.05). Moreover, boys and low socioeconomic status patients had significantly higher odds of experiencing MPC injuries (adjust Odds Ratio/aOR=1.9, 95% Confident Interval/ CI=1.6-2.2; aOR=1.3, 95% CI=1.1-1.6 respectively). Although there was no significant difference in injury severity, MPC had higher fatalities than MVC after controlling for covariates and ISS. There was no fatality injury caused by motorcycles, and motorcycle injuries had a significantly lower ISS compared with MVC (aOR=0.5, 95%CI: 0.3-0.7).

### **Conclusions:**

Although efforts have been made to prevent MVC related pediatric injuries, the trend of MVCs was stable in the most recent five years. The incidence of MPCs is decreasing; however, there continues to be a higher likelihood of leading to deaths compared to MVCs. Thus, continuing efforts and innovative intervention programs are still needed to prevent traffic-related pediatric injuries in Texas.

### **Objectives:**

Attendees will learn:

 To identify the overall trend of traffic-related injuries among children in Texas, 2005-2014.
 To describe whether there are any differences in different types of traffic related traumatic injuries among children.

3. To prioritize the type of traffic related pediatric injuries for the future injury intervention.

## A multi-year assessment of a hospital-school program to promote teen motor vehicle safety

Purnima Unni, MPH, CHES, Cristina M. Estrada, MD, Emily B. RIley, BA

### Background:

Motor vehicle crashes are the leading cause of deaths among teen drivers. BITZ is a primary prevention initiative which improves driver safety among high school teens through a unique peer-generated anti-texting campaign. The program consisted of two phases. In Phase 1, student leaders from atrisk counties in Middle Tennessee participated in a half-day, hospital-based experiential program that emphasized safe teen driving. This phase involved active participation from trauma surgeons and other staff. In Phase 2, these students conceptualized and implemented an anti-texting while driving campaign during the school year. Formative evaluation of a BITZ pilot from 2011-2012 was conducted previously. This study is an evaluation of the expansion of this program from 2013-2015.

### Methods:

The program enrolled 32 schools from 14 counties (6 in 2013, 11 in 2014, and 15 in 2015). In Phase 1, 137 student participants were nominated by their schools. A mixed methodology was used to assess this multi-level program. Process evaluation was done through observations and short surveys with open ended questions to staff members, participants, and teachers in the program (e.g., "what do you like most (least) about this program?"). Impact evaluation was done with a pre and posttest with follow-up design to assess

changes in awareness, beliefs, and behaviors relating to safe driving with emphasis on texting while driving. An online follow-up survey was used after five months to assess changes in knowledge, beliefs and behaviors. Response rates in the follow-up ranged from 66% to 91%. Finally, two rounds of unannounced observations of drivers were made near the participating schools at the beginning and towards the end of Phase 2. The results were analyzed using ANOVA and z-tests.

### **Results:**

The average rating for Phase 1 was 3.9 (4 = excellent). Speakers with personal experiences on texting and driving were liked the most each year. About 52% indicated involving more schools and using personal relatable experiences would make this program more valuable to other teens.

There was a strong belief (average score: 6.38 on 7-point scale) that texting while driving could result in a crash. About 58% had texted while driving in the previous seven days in the pre-survey. This proportion came down to 44% in the follow-up (p<.05). Knowledge of GDL (37% vs 87%, p<.001), and feeling of empowerment to take action with a teen driver who was texting went up (46% vs 64%, p<.05).

In Phase 2, 12,309 drivers (adults and teens) were observed in the first round and 14,153 were observed in the second round of observations. Significant reduction in proportion of drivers texting while driving (ranging between 31% and 40%, p<.05) was observed in each year.

### Conclusions:

The BITZ program is unique in that it uses a sequential combination of hospital and school-based components over an extended period (academic year). A comprehensive evaluation with multiple methods indicates effectiveness in several aspects of the program.

### **Objectives:**

Attendees will learn:

1. To describe the core components of BITZ, a multifaceted teen motor vehicle safety program.

To explain the evaluation process for this program.
 To recognize the effectiveness of this program at different levels.

## Making public-private partnerships work for road safety

Jane Edwards, BSc, MSc, Alyssa Penney, RN. BScN. BA. MA

### Background:

Road Safety remains a growing concern in our region and in Ontario. Using local data over a period of 4 years (2009-2013), it was established that the number of collisions resulting in fatal and serious injury have remained consistent within the City of London and Middlesex County. There were approximately 1,300 severe collisions causing an injury or fatality per year, from 2011-2013.

### Methods:

The City of London partnered with stakeholders from the London Middlesex Road Safety Committee (LMRSC) to collect local data analyzing six major target areas where serious collisions occur on our roads. This data was used to create an integrated London Road Safety Strategy (LRSS). The strategy guides the LMRSC members to work together to create road safety programs that focus on the three principles of enforcement, engineering and education. The committee is composed of stakeholders from the municipality, county, police, public health, acute care hospital, college, emergency services, Ministry of Transportation, Block Parent Program, and private partners from Young Drivers of Canada, 3M Canada and Canadian Automobile Association.

### **Results:**

The LMRSC created the Buckle Up, Phone down London campaign that used a population based approach targeting drivers 16-45 years of age, through the promotion of a video, "Josh's Story." The video describes the tragic loss of a local teen to distracted driving and how that loss affected his family, friends and the community. The committee promoted Josh's Story and Buckle Up, Phone Down through social media, on YouTube and in Cineplex movie theatres. Josh's Story was viewed on You Tube over 65,000 times. In addition, the campaign included bus shelter ads, print materials, and cell phone screen cleaners to enhance the message and reach the target population outside of social media. Youth engagement was pursued through a high school video contest, while local and provincial police increased enforcement efforts through multiple blitzes and handed out campaign materials.

### Conclusions:

Working in partnership is key to greater success in injury prevention. As we expanded the campaigns it was important to leverage our stakeholders and use their abilities and skills. We had some missed

opportunities - not making the connections with additional private partners working in the field of distracted driving who could have added support to the campaign. We also realized that in our community there was an over saturation of similar messaging - with multiple organizations targeting distracted driving; was our message lost to oversaturation? It is key to work with policy - public policy and organizational policy can be a barrier to developing public-private partnerships; how can we address these policy issues to promote collaboration? The use of emerging technology- to enhance the reach of messaging; multiple social media strategies work best. Certain strategies work better than others for specific target audiences. All of this information will be used to further foster public-private collaborations and to guide and improve how we deliver future road safety programs.

### **Objectives:**

Attendees will learn:

 To create an educational road safety program using theory from the "Seven E's of injury prevention."
 To evaluate campaign messages and recognize information depicting the consequences of distracted driving.

3. To foster community engagement between public and private sectors and build community capacity.

# Teen distracted reality an interactive virtual education (d.r.i.v.e.): experience and impact on teenage drivers

Jonathan Green, MD, Gregory Keefe BS, Rachelle Damle, MD, MS, Pradeep Nazarey, MD, Jeremy Aidlen, MD, Mariann Manno, MD, EdM, Michael Hirsh, MD

### Background:

In 2013, 2,163 teens in the United States ages 16-19 were killed and 243,243 were treated in emergency departments for injuries from motor vehicle crashes. Distracted driving (i.e. texting, loud music, or phone conversations) and impaired driving (driving under the influence) play a role in these motor vehicle crashes. Prevention efforts aimed at reducing high-risk teenager driving behavior may encourage safe driving habits.

### Methods:

The Teen D.R.I.V.E. Program is a mobile driving simulator that provides teenagers with distracted and impaired driving scenarios. We administered anonymous surveys from April 2015-April 2016 to obtain demographic data and evaluate the program's impact on their driving behavior. We retrospectively analyzed survey responses using univariate and multivariate statistical analysis.

### **Results:**

A total of 1374 participants were surveyed, however, 50 did not respond to the driving experience portion of the survey. Most participants (70%) were between 16-17 years of age years old and 51% were males. A majority (76%) of respondents had driving experience (26% permit, and 46% license) or had attended a driver's education course (67%). After experiencing the simulation, respondents felt that the consequences of driving distracted (53%) and driving impaired (61%) were worse than previously expected. In addition, participants said that they would never drive distracted (70%) or drive impaired (90%). A majority of participants (72%) feel that simulation is the most effective way to teach driving related topics.

### **Conclusions:**

Teen D.R.I.V.E. offers a valuable experience to teenagers, teaching them about the dangers of driving distracted and impaired. Course participants report that they are unlikely to ever drive impaired or distracted. Most teenagers feel simulation teaches these driving lessons most effectively.

### **Objectives:**

Attendees will learn:

1. To identify the problem of driving distracted or impaired on teenager drivers.

2. To explain and understand the Teen D.R.I.V.E Program and its efforts.

3. To discuss the results and Impact the Teen D.R.I.V.E Program has on participants through survey analysis.

### A safer place to ride: regulations and dnr enforcement in off-highway vehicle parks increases safety behaviors

Charles Jennissen, MD, Jessica Waters, BA, MPH, Emily Robinson, BS, Nathaniel Johnson, Undergraduate, Brandon Johnson, Undergraduate, Gabe Greene, BS, Benjamin Wilkinson, BA, Pam Hoogerwerf, BS, Gerene Denning, PhD, Karisa Harland, PhD

### Background:

Iowa off-highway vehicle (OHV) parks have regulations regarding youth users and helmet use that do not apply outside of parks, and have Department of Natural Resources (DNR) personnel who patrol the parks and provide enforcement. In previous studies, we found Iowa all-terrain vehicle (ATV) crash victims at OHV parks had better safety behaviors as compared to off-road crashes outside the parks. Our objective in this study was to determine the demographics and prevalence of safety behaviors among OHV park users, and how regulations and enforcement affect rider safety behaviors.

### Methods:

From May to September of 2014, motion-activated cameras captured photos of users at the entrances of lowa's eight OHV parks. Riders were coded by vehicle type, estimated age, sex, and safety behaviors. Descriptive and multivariable logistic regression analyses were performed.

### **Results:**

A total of 6,718 vehicles and 9,083 riders were analyzed. Riders on ATVs comprised 44% of OHV park users, 51% were on dirt bikes and 5% were on side-bysides (SxSs). Helmet use was 94.4% overall. Just 6% of single-rider ATVs and 0.8% of dirt bikes had passengers. While only 11% of park users on ATVs were <16 years old, 59% of the child operators were driving adult sized ATVs. Of those riding SxSs, 64% were not using their restraints. Multivariate modeling controlling for important covariates showed that in comparison with young adults (16-39 years) on ATVs, children were nearly 6 times as likely to wear a helmet, whereas middle aged adults (40-60 years old) were half as likely to wear one. When DNR officers were patrolling the parks, there was a 3.6 times higher likelihood of helmet use and a 40% lower likelihood of passengers on dirt bikes and ATVs.

### **Conclusions:**

Regulated safety behaviors such as helmet use and riding without passengers were highly practiced by OHV park users. However, unregulated behaviors such as children only driving youth sized vehicles and restraint device use in SxSs had lower compliance. Moreover, regulated safety behaviors were significantly increased when the parks were patrolled by DNR officers. This study shows that a combination of regulation and enforcement is effective in ensuring compliance with rider safety behaviors in OHV parks. The establishment of similar safety regulation and enforcement outside of parks would likely have a more far-reaching effect on decreasing OHV-related deaths and injuries.

### Objectives:

Attendees will learn:

1. To describe the utilization of motion capture cameras in performing injury prevention-related research.

 To recognize some of the behaviors that increase the risk of injury in off-highway vehicle-related crashes.
 To identify how regulations and enforcement can be effective in increasing off-highway vehicle rider safety behaviors.

### Recreational off-highway vehicle (ROV) crashes: an emerging pediatric health and safety concern

Gerene Denning, PhD, Charles Jennissen, MD

### Background:

All-terrain vehicle (ATV) crashes have long been recognized as a public health concern with about 800 deaths and more than 400,000 injuries each year in the U.S. alone. However, very little has been published on the injuries and deaths related to recreational off-highway vehicles (ROVs), a vehicle type which has become increasingly popular in recent years. ROVs, by definition, travel greater than 30 miles per hour and most can travel highway speeds. Unlike ATVs, ROVs have a rollover protective structure and seat belts or harness restraints. Most ROVs have manufacturer warnings stating the vehicle is to be driven only by those 16 years and older and that children should not be passengers. The objective of this study was to determine the epidemiology, mechanisms and outcomes of side-by-sides crashes, especially those involving children.

### Methods:

Descriptive and comparative analyses were performed using national data from the U.S. Consumer Product Safety Commission ROV database (2003-2011).

### **Results:**

The database contained 428 crashes with 899 injured occupants (428 operators and 461 passengers). The majority of operators were male. Youth under 16 years of age represented 25% of all injured operators (N=76) and 35% of injured passengers (N=139). Rollovers comprised 80% of all crashes. Of these, 78% were to the side and the majority occurred while turning. Two-thirds of all crashes occurred at speeds <20 mph. A higher proportion of youth operator crashes were on the road (64%) as compared to adult operator crashes (53%). Helmet use was only 5%.

The proportion of youth operators wearing a safety belt (12%) was less than half that for adult operators (29%). A similar proportion of youth (31%) and adult (26%) passengers were wearing safety belts. More than 8 out of 10 unbelted youth (operators and passengers) were fully or partially ejected. The proportion of belted youth operators partially or fully ejected from the vehicle (78%) was more than twice that of adult operators (31%). Of belted youth passengers, 21% were reported as being ejected. Overall, ejection increased the likelihood of death by over 10-fold.

### Conclusions:

Children <16 years of age suffer a significant percentage of the injuries related to ROVs. Rollovers

appear to be the major crash mechanism and occur even at lower speeds. Lack of seat belt use is a significant contributor to the risk of death and serious injury. However, a significant percentage of injured children who were reportedly restrained were ejected. This questions the effectiveness of the restraint devices in ROVs to adequately maintain children in the vehicle. Youth should be prohibited from operating ROVs and younger children should not be passengers.

### **Objectives:**

### Attendees will learn:

 To describe why recreational off-highway vehicle crashes are a safety and public health concern.
 To identify the major characteristics of recreational off-highway vehicle crashes, especially involving children, and their associated injuries.

3. To describe injury prevention and advocacy evidence-based public policy designed to decrease recreational off-highway vehicle deaths and injuries.

## Pediatric moped-related injuries in the United States

Brandon Johnson, Undergraduate, Nathaniel Johnson, Undergraduate, Gerene Denning, PhD, Charles Jennissen, MD, Benjamin Wilkinson, BA

### Background:

Mopeds have become an increasingly popular means of transportation over the past decade especially in urban areas. A Swedish study found moped riders have a 20-fold higher injury risk per kilometer traveled as compared to automobile occupants. Few studies have investigated pediatric moped-related injuries in the United States. The goal of this study was to better understand the demographics, mechanisms and injury patterns of pediatric moped-related injuries.

### Methods:

The National Electronic Injury Surveillance System (NEISS), a system that prospectively collects injury data from a stratified sampling of emergency departments from across the nation, was utilized to identify moped-related injuries between 2002 and 2014. Injuries not involving riding the moped at the time of the incident were excluded. Descriptive and comparative analyses were performed.

### **Results:**

Pediatric moped-related injuries in the NEISS database from 2012-2014 decreased by 70% from that treated 2003-2005, while injuries in adults increased 2.7 times. Overall, ~70% of injured children were male; however, the percentage who were female was higher

among victims <14 years of age (33%) than among victims 14-17 years old (26%), p=0.038. A higher proportion of injured 14-17 year olds were white (75%) as compared to those who were <14 years (64%), p=0.006. Mechanisms varied by age group. Injured riders <14 years had higher proportions that had struck an object or were injured while riding a moped but not in a crash, while those 14-17 years of age had a higher percentage that had been in a collision with another motor vehicle. Youth 14-17 years of age also had a higher proportion of injuries occurring on public roadways (78%) as compared to younger children (58%), p<0.001.

Contusions, lacerations and fractures were the most common diagnoses. Some differences were seen by age with children <14 years old having more burns, and those 14-17 years of age suffering more concussions. Only 6% of children injured were documented in the database narratives as having been wearing a helmet, which was a lower percentage than that of adults. As compared to adults (?18 years), youth had higher proportions who were injured during the summer months (p<0.001) and on weekends (p=0.005), who were female (p=0.037), and were races other than white (p=0.01). Youth also had higher proportions who were diagnosed with skin injuries (lacerations, contusions, burns) as compared to adults, who had higher percentages of musculo-skeletal injuries (sprains, fractures), p<0.001. As compared to adults, higher percentages of youth had their lower extremities being the injured body part. Adults had higher percentages having injuries involving the trunk. A higher percentage of adults (18%) required transfer or admission as compared to youth (11%), p<0.001.

### Conclusions:

Pediatric moped-related injuries decreased substantially during the study period. Still, too many children are being injured while operating these vehicles and the differences in crash mechanism and injury patterns suggest the need for age-specific interventions that separately target children less than 14 years of age and those 14 years and older.

### **Objectives:**

Attendees of this session will learn: 1. To recognize the differences in the mechanisms and patterns of moped-related injuries between adolescents and younger children.

 To describe how mechanisms and patterns of mopedrelated injuries in youth are different from adults.
 To identify injury prevention strategies related to children and mopeds.

# Safe summers: adapting evidence-based injury prevention to zip codes of high trauma incidence

Melody Schaeffer, MPH, Nicole Kozma, MPH, Greta Todd, MA

### Background:

According to Healthy People 2020, injuries are the leading cause of death for Americans age 1 to 44, and a leading cause of disability for all ages. Unintentional injuries are a common reason for emergency room utilization and are often preventable. A pediatric level 1 trauma center provides an evidence based interactive cityscape safety program for children in school communities when school is in session.

A zip code level analysis of a pediatric hospital trauma registry was conducted to identify zip codes with the highest injury incidence among children. With a goal to reach more children during summer months when they may not be at school, the trauma center adapted the school based program to fit into summer camp programming to increase outreach efforts in zip codes with the greatest incidence of traumarelated emergency department visits. The intervention topics were chosen according to the highest number of emergency room admissions by age and gender as reported by the hospital's trauma registry over a ten year period. Summer camp programs located in zip codes with low per capita income and high incidence of trauma were recruited for this summer safety program.

### Methods:

Child participants were given an electronic pre and post-test to assess their knowledge on basic street safety topics. The knowledge assessment included questions about bicycle, car, and pedestrian safety, stranger and stray animal awareness. Data was collected via Classroom Participatory System (CPS) clickers using a representative sample of all participants (Confidence Level 95%, CI 2.64, N=2,474). A sample of participants was given a pretest (n=416 participants, 16.8%) and a post test (n=400 participants, 16.2%) to assess their knowledge of safety topics. Data was entered into SPSS 20.0 for analysis.

### Results:

Participants answered correctly and significantly on a majority of the safety knowledge questions. T-test results show a change in mean test scores of 16.6% (Mean=0.706 vs. 0.872, p-value ?0.001, t=18.58). There was a statistically significant Chi-square result (p-value <.05) for six out of eight questions.
## Friday, December 2, 2016 Saturday,

#### **Conclusions:**

Using a large-group interactive intervention is an effective method of teaching children about safety and how to identify hazards (Emory et al, 2010). These results show that this program is effective in improving safety knowledge using a multiple choice pre and posttest among school-aged children during a one-hour intervention.

#### **Objectives:**

#### Attendees will learn:

 To recognize how injury prevention education programs can be adapted to evidence-based practices.
 To describe how to use of trauma registry data to expand outreach to children in areas of high trauma incidence.

3. To identify evaluation methods for determining effectiveness of safety education programming.

#### Child pedestrian collisions, walking to school and the built environment: a case control study

Linda Rothman, BScOT, PhD, Alison Macpherson, PhD, Ron Buliung, PhD, Sarah Richmond, PhD Colin Macarthur, MBChB, PhD, Andrew Howard, MD, MSC, FRCSC

#### Background:

Walking to school is a way to increase daily physical activity; however the risk of injury must also be considered so that walking does not lead to an increase in pedestrian injuries. Risk factors associated with the environment around schools with high child pedestrian motor vehicle collision (PMVC) rates were examined.

#### Methods:

Police-reported child PMVCs from 2000-2013, ages 4-12 years, were mapped within elementary school attendance boundaries in Toronto, Canada. Case and control schools were defined as those with the highest and lowest quartile of PMVC rates, calculated using census data. Potential risk factors included built and non-built environment variables obtained from municipal data sources as well as via direct observational counts done in the spring, 2015, to measure the proportion of children walking to school. Logistic regression was used to compare case versus control schools stratified by geographic location (older downtown city core vs newer inner suburbs).

#### **Results:**

The mean PMVC rate in case schools (n=50) was 13.4/10,000/year and in controls (n=50) was 1.75/10,000/year. Walking was not associated with high PMVC rates after adjustment for the built

environment and school social disadvantage. Overall, lower residential (OR 0.56, 95% CI 0.37, 0.86) and higher one-way street densities (OR 4.00, 95% CI 1.76, 9.08), school crossing guards (OR 3.65, 95% CI 1.10, 12.20) and higher social disadvantage (OR 1.37, 95% CI 1.11, 1.70) were associated with high PMVC schools, Similar associations of high PMVC schools with built environment features were found in the newer inner suburbs; however, there was a stronger association with school social disadvantage in the older downtown core.

#### Conclusions:

Walking to school was unrelated to high PMVC rates after controlling for the built environment. The built environment and school disadvantage were associated with higher PMVC rates with possible differences by geographic location.

#### **Objectives:**

Attendees will learn:

 To describe the association between walking to school and child pedestrian motor vehicle collisions.
 To identify built and social environment features that are associated with higher child pedestrian motor vehicle collisions near school.

3. To recognize the correlation of child pedestrian motor vehicle collisions and geographic locations (i.e. older downtown core versus newer inner suburbs).

# Primary school drop-off zone safety analysis of hazardous road conditions utilizing video review

Ibrahim Abd el-shafy, MD, Jillian Savino, CHES, Nathan Christopherson, RN, MSN, MBA, TCRN, CPEN, CEN, EMT-P, Jose Prince, MD

#### Background:

Seventy-six thousand pedestrians were injured by a motor vehicle in the United States in 2012. Children struck by a motor vehicle represent 20% of all pediatric mortalities for those between the ages of 5-15 in 2012. Pedestrian fatalities continue to climb with a 10% increase from 2014-2015 alone. A key part of daily life for children between the ages of 5-15 is being dropped off at school in the morning creating a discrete period of time with many pediatric pedestrians in a concentrated area with a high volume of motor vehicles. We hypothesize that a video surveillance program will permit the establishment of a school dropoff zone hazard score which will guide future injury prevention programs.

#### Methods:

Using trauma registry data from the only ACS-verified level one pediatric trauma center serving 4 counties

## Friday, December 2, 2016

with a population of 7.8 million people, we identified pedestrian injury due to motor vehicle accidents as the third leading cause of pediatric injury from 2014-2015. Of 355 public schools within one county, we identified a primary school with 588 students in a suburban environment with concerns for a high risk for pedestrian injury based on school location and traffic. We conducted multiple field surveys to observe traffic patterns and selected the optimal review period for surveillance to be 30 minutes prior to the start of school at 8:15am. We also established 2 separate locations on the roof for video capture with clear lines of sight of the school drop-off zone that were obscured from view to study participants. The study was approved by the Parent Teacher Association (PTA), school administration and Institutional Review Board (IRB). Three observation periods were conducted during 3 separate weeks from January to March 2016. Videos were evaluated by 2 independent reviewers to identify hazards which could be guantified. We developed a hazard scoring system with each dangerous event being equivalent.

#### **Results:**

Using video review we were able to identify 9 key hazards. Double parking (29+ 5.5), drop offs in the bus stop (23+ 7.6), jaywalking (10+ 3.1) occurred with the greatest incidence. Combining all hazards seen in each observation resulted in an overall hazard score of 79, 84 and 86 for each period with a mean of 83.

#### **Conclusions:**

We report the establishment of a video surveillance program to review school drop-off safety. Our novel school drop-off hazard score provides a baseline against which the impact of future injury prevention interventions can be measured. Evaluation of different schools during different seasons in the future will further refine our understanding of the different hazards identified. Future studies will attempt to impact behavioral factors, road conditions, and traffic flow to improve safety.

#### **Objectives:**

Attendees will learn:

- 1. To identify drop-off zone hazards.
- 2. To describe the leading causes of pediatric injuries.
- 3. To recognize drop-off zone safety hazard scores.

#### Dangerous student passenger drop-off, pedestrian behaviors and the built environment near schools

Linda Rothman, BScOT, PhD Andrew Howard, MD, MSC, FRCSC, Ron Buliung, PhD, Sarah A Richmond, PhD, Colin Macarthur, MBChB, PhD, Alison Macpherson, PhD

#### Background:

Dangerous drop-off of student passengers and pedestrian behaviors near schools have not been well described despite the potential for pedestrian motor vehicle collisions (PMVCs). Safe environments are required for children around schools. Passenger dropoff and child pedestrian behaviors are described by occurrence of child PMVCs and built environment (BE) features in Toronto, Canada.

#### Methods:

Dangerous passenger drop-off and pedestrian behaviors observations were done in 2015. Child PMVCs from 2000-2013, age 4-12 years, were mapped near 100 schools. Case schools had > 1 collision and control schools had 0. Dangerous driving/parking, unsafe pedestrian crossings, distracted walking and disobeying crossing controls/guards were compared using chisquare statistics by case/control status or BE features: downtown/inner suburbs, school crossing guards and designated car drop-off areas.

#### **Results:**

Dangerous drop-off and/or pedestrian behaviors occurred at over 92% of schools. A greater proportion of case schools had children crossing at uncontrolled midblocks (97% vs 78% controls). A greater proportion of inner suburb schools versus downtown had cars double-parked (52% vs 28%) and parked blocking crossing controls (25% vs 4%). A smaller proportion of schools with crossing guards versus without had cars parked blocking crossing controls (10% vs 25% without) and drivers texting (5% vs 22%). A smaller proportion of schools with designated drop-off areas versus without, had cars reversing dangerously (76% vs 55%), parked blocking crossing controls (31% vs 10%), children crossing at uncontrolled midblocks (78% vs 95%) and between parked cars (48% vs 76% ).

#### **Conclusions:**

Dangerous student drop-off and pedestrian behaviors were pervasive at schools. Occurrence of behaviors was related to the BE; particularly designated cardrop off areas. Adaptations to the BE near schools may defer dangerous behaviors and provide a safer child pedestrian environment.

## Friday, December 2, 2016

#### **Objectives:**

Attendees will learn:

 To identify how often dangerous driver and pedestrian behaviors are observed at elementary schools during school morning drop-off time.
 To describe the correlation between child pedestrian-motor vehicle collisions related to dangerous drop-off and pedestrian behavior.
 To recognize how built environment factor correlate to dangerous passenger drop-off and pedestrian behavior.

## Violent injuries in the united states: emergency care and associated costs, 2000-2010

Michael Monuteaux, ScD, Eric Fleegler, MD, MPH, and Lois Lee, MD, MPH

#### Background:

Violent injuries are a leading cause of death and disability in the United States. Many violent injury victims seek treatment in the emergency department (ED), but the financial and societal costs as measured by medical and work-loss costs is not well understood. Our objectives were to: (1) estimate and predict rates of violent injuries evaluated in United States EDs; and (2) to determine the associated healthcare and workloss costs.

#### Methods:

We examined adults 18 years of age and older from the nationally representative survey the National Hospital Ambulatory Medical Care Survey (NHAMCS) for ED visits from 2000 to 2010. A violent injury case was classified if an injury diagnosis was documented in the primary diagnosis field and the mechanism of the injury was classified as intentional by the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) supplementary classification of external causes of injury (E-codes; E960 through E969). These codes included the codes for assault, brawl, fight, and rape. Cost data were examined using the WISQARS Cost of Injury Reports application We calculated rates of ED visits for violent injuries. Then we used multivariate logistic regression modelling to analyze demographic risk factors for those evaluated for violent injuries in the ED. Medical and work-loss costs accrued by these injuries were calculated for 2005, inflation-adjusted to 2011 dollars.

#### **Results:**

An annual average of 1.4 million people were treated for violent injuries in EDs from 2000-2010, comprising 1.6% (95% CI: 1.5%, 1.6%) of all U.S. adult ED visits, and there was no change in this proportion over time (test for linear trend: odds ratio (OR): 1.00, 95% CI 0.99, 1.02). Young adults (18-25 years), males, non-whites, uninsured or publically insured patients, and those residing in high poverty urban areas were at increased risk for emergency department visits for violent injury. Furthermore, patients from areas with ?20% of the population living below the federal poverty level were at increased risk for an violent injury-related ED visit compared to patients living in areas with <5% of the population living below the federal poverty level. The aggregate one-year, inflation-adjusted medical and work-loss costs for violent injuries across all injury types (discharged home from the ED, hospitalized, fatal) were \$7.1 and \$42.4 billion, respectively.

#### Conclusions:

Violent injuries account for over one million ED visits annually among adults, with no change in rates over the past decade. ED visits for violent injuries resulted in substantial financial and societal costs as measured by medical and work-loss costs.

#### **Objectives:**

Attendees will learn:

1. To describe the epidemiology of ED visits for violent injuries in the United States.

2. To recognize risk factors for those presenting to the ED for violent injuries.

3. To identify the substantial healthcare and work-loss costs associated with violent injuries.

# Factors driving worse quality of life in youth victims of violence compared to non-injured matched controls

Michael Levas, MD, MSCT, Marlene Melzer-Lange, MD, Alexis Visotcky, PhD, Sergey Tarima, PhD Mark Nimmer, BA, Julie Panepinto, MD, MPH

#### Background:

Interpersonal violence ranks among the top five leading causes of youth requiring medical attention and is associated with decreased five year survival. Youth directly exposed to such violence are at higher risk for experiencing emotional and behavior problems, diminished school connectedness/participation, increased weapon carrying, and repeat victimization or becoming a perpetrator in the future. Health Related Quality of Life (HRQOL) measures offer allow for the inclusion of the patient's perspective, and enable researchers and clinicians to quantify and compare the effect of interventional programs. Previous work by this team has shown that youth victims of violence suffer significant impairment in HRQOL compared to healthy populations and youth with specific disease burdens. Furthermore, a community-based summer program hosting violently injured youth resulted in overall improved HRQOL. The aim for this study was to compare HRQOL of youth victims of violence aged 8-18 years at presentation to a pediatric Emergency Department to non-violently injured controls. Controls were matched on age, gender, ethnicity, and home location to evaluate whether low HRQOL is driven by being violently injured or other social factors.

#### Methods:

Youth who presented to a pediatric level one trauma center emergency department for violence related injuries and non-injured matched controls participated in HRQOL surveys. Consented youth used an electronic

tablet platform to answer validated HRQOL measures. General domains of HRQOL included overall, physical, psychosocial, emotional, social, and school functioning. Symptom specific domains of HRQOL included fatigue, anxiety, depressive symptoms, pain interference, peer relationships, and anger. Groups were compared using simple and multiple linear mixed regression models with a random matched pair effect.

#### **Results:**

A total of 132 violently injured youth and 130 nonviolently injured matched controls were recruited and consented to the study. Mean HRQOL scores for youth victims of violence were statistically worse (p<0.05) in overall well-being (72.55 vs. 68.30), psychosocial well-being (71.40 vs. 66.70), school well-being (72.79 vs. 66.21), social well-being (71.18 vs. 64.27), depressive symptoms (48.44 vs. 51.67), and anger (50.88 vs. 56.06) in comparison to nonviolently injured controls. In addition youth victims of violence were also more likely in the last year to have been suspended or expelled from school, have had police contact, reported being bullied, or have bullied others. In multiple regression analyses however the HRQOL differences between violently and nonviolently injured kids observed in unadjusted analyses disappeared when controlling for school suspension or detention, bullying, or previous victimization.

#### **Conclusions:**

Youth victims of violence report worse HRQOL compared to their age, gender, ethnicity, and neighborhood non-injured matched controls. This indicates that violence drives lower self-reported well-being rather than neighborhood factors alone. The worse HRQOL scores can be explained by history of school suspension, school detention, bullying and previous victimization. HRQOL may be a useful tool to target youth violence program interventions for specific youth and to evaluate program effectiveness.

#### **Objectives:**

#### Attendees will learn:

 To describe how health related quality of life represents the well-being of youth victims of violence.
 To identify the difference in well-being between youth victims of violence and non-violently injured matched controls.

3. To Recognize the key drivers that influence worse well-being in youth victims of violence.

## Fresh check day: a novel approach to improve suicide prevention among college students

Steven Rogers, MD, MS-CTR, Stephanie Johnson, MT, MPH, Marisa Giarnella-Porco, LCSW Kevin Borrup, JD, MPA, Garry Lapidus, PA-C, MPH

#### Background:

Suicide is the second leading cause of death among ages 15 - 24 years. Approximately 1100 college students die by suicide every year. Suicide is preventable if those at risk can be identified and provided appropriate services. The "Fresh Check Day" (FCD) program, started in 2012 by the Porco Foundation, aims to create an approachable atmosphere where students are encouraged to engage in dialogue about suicide and mental health (MH). Students are introduced to the MH resources and programs that exist on campus, in the community, and on a national level. FCD is a one day, open access event conducted on college campuses. FCD uses a peer-to-peer messaging model to develop and execute interactive booths that deliver MH and resource information in a fun and engaging way.

#### Methods:

The FCD program is evaluated using an exit survey to assess the goals of the program as follows: 1) Increase awareness of warning signs of suicide risk, 2) Improve preparedness to help those at risk, 3) Increase awareness of MH resources, 4) Improve willingness to seek help and comfort discussing suicide. Our injury prevention center partnered with the FCD program in 2016. Prior to our partnership, data was being collected as cumulative survey responses only, which limited our ability to evaluate the program. The data collection method was modified for 2016 to allow for comparisons across groups. Data was analyzed using appropriate statistical techniques (Chi square, Mann-Whitney U and McNemar-Bowker).

#### **Results:**

In spring of 2016, approximately 5200 students attended FCD events at 17 colleges and 2248 students (43%) completed surveys. Of the 2248 students, 1672 (74%) identified as female, 544 (24%) as male and 32 (2%) as other or declined to answer. After FCD, 1827 (81%) were able to correctly name 3 suicide warning signs and 1925 (85%) of students felt more prepared to help a friend who is exhibiting signs of suicide or mental illness. A gender comparison to assess students' "likeliness to ask for help" (81% male vs 85% female) was performed and yielded a statistically significant difference (p<0.05). After FCD, 1953 (87%) students reported being more aware of MH resources. Comparisons between students indicated that those students reporting "more awareness" were more

likely to "help other students" (90%) compared to those reporting less awareness (60%) with statistical significance (p<0.05).

#### **Conclusions:**

The FCD program has important implications for our understanding of how to empower students to prevent suicide and improve MH on college campuses. Assisting community partners with program evaluation and improvement is an important role for injury prevention centers. Future program evaluation should include further refinement of survey and methods to yield more applicable results. Evaluation of campus suicidality rates and student MH service utilization before and after the implementation of the FCD program would also help determine program impact.

#### **Objectives:**

Attendees will learn:

1. To recognize the importance of suicide prevention programs on college campuses.

2. To describe the impact of a suicide prevention program on college students.

3. To recognize the benefits of partnerships between community organizations and Injury Prevention Centers to improve program evaluation and effectiveness.

#### Child welfare professionals' determination of when certain unsafe activities and lack of child protection constitutes child neglect

Erin Evans, BS, Resmiye Oral, MD, Alycia Karsjens, MSW, LMSW, Charles Jennissen, MD

#### Background:

Although laws provide guidelines for the evaluation of possible child abuse and neglect cases, the language and substance of child safety laws and guidelines varies greatly among states. The objective of this study was to identify factors that influence the determination of child neglect by child welfare experts, and develop some consensus regarding what constitutes child neglect with respect to child safety issues.

#### Methods:

A survey was developed with questions related to demographic variables and six scenarios of potential child neglect which included children left at home alone, unrestrained in a motor vehicle, having access to or possession of a firearm, and operating an allterrain vehicle. Ten social workers completed the survey both on-line and through an investigator interview to validate the survey. Changes were made to the survey based on validation feedback. The survey was distributed to members of the American Academy of Pediatrics Section on Child Abuse and Neglect (SOCAN). Respondents were requested to decide whether a particular scenario was child neglect with varying age of the child involved, and then with alterations in the scenario regarding the presence of injury to the child and the legality of the situation.

#### **Results:**

Of 523 members, 200 participated in the study. In a child left at home alone scenario, respondents were significantly more likely to declare child neglect for those 8-14 years of age if the child had been injured. In addition, for 10-14 year olds, SOCAN members were significantly more likely to declare child neglect if leaving that aged child at home alone was against the law. In a scenario where a loaded firearm was allowed to be accessible to children, the legality of the situation significantly affected the determination of child neglect for every age category. For a child who had possession of a loaded firearm in their home's vard, 100% of the experts believed the situation constituted child neglect for those 4-8 years of age, and over 85% thought it was child neglect for children 10-14 years. No significant differences in child neglect determination were seen by sex, age, ethnicity, or child abuse and neglect certification possession.

#### **Conclusions:**

Age of the child, presence of injury, and the legality of a situation affect how experts view a case of potential child neglect. This suggests that such cases may be evaluated differently across the nation due to varying state child safety laws, even though the risk to the child is the same. Moreover, a vast majority of experts indicated certain scenarios warranted child neglect designation, even when no current state laws regulated those particular situations. These results call for child safety law reform to provide greater uniformity in the evaluation of potential child neglect cases and to better protect the safety of children.

#### Objectives:

Attendees will learn:

1. To recognize when child abuse and neglect experts consider certain child safety scenarios as being child neglect for children of varying ages.

2. To describe how the presence of injury and/or the legality of a situation affects child abuse and neglect expert determination of child neglect.

3. To identify how variances in state child safety laws are likely causing vast differences in how cases of potential child neglect are evaluated across the country.

#### The prevalence of intimate partner violence among clients receiving services in community hair salons

Maureen Dunn, MD, Susan DiVietro, PhD, Rebecca Beebe, PhD, D'Andrea Joseph, MD, and Garry Lapidus, PA-C, MPH

#### Background:

Intimate partner violence (IPV) is a serious, preventable public health problem resulting in both acute and chronic medical conditions and fatalities in the United States. IPV prevalence has been well established in a variety of healthcare settings. Community hair salons have been identified as a location where women who are victims of IPV could be identified and referred for services, but prevalence has not been reported previously. Therefore, the purpose of this study is to determine the prevalence of IPV among clients in community hair salons.

#### Methods:

A convenience sample of two medium sized hair salons in Connecticut was recruited for participation in the study in 2016. Hair stylists completed CUT IT OUT training, learning to recognize and refer IPV victims. Over a 2 week period, stylists offered all female clients over 18 years old a validated, tablet-based screening, the Patient Satisfaction and Safety Survey. A research assistant remained in the salon for the duration of study to ensure all eligible participants were offered the survey. The number of clients recorded was confirmed against the weekly salon schedule. Fisher exact test was used to reveal significant correlation for dichotomous demographic variables and odds ratios were calculated for these variables.

#### **Results:**

111of 123 eligible female clients (90%) participated in the the study. Overall, the reported lifetime prevalence of IPV was 21.6%. One woman reported current abuse, 4 women reported physical abuse in the past year and 1 women reported sexual abuse in the past year. Unmarried women were 4.1 times more likely to report abuse compared to women in a committed relationship (p= 0.003). Women with an annual household income <\$100,000 were 3.7 times more likely to report abuse (p=0.016). These relationships remained significant when controlling for age and income or relationship status respectively. Younger age, minority racial or ethnic group, and lower education were not associated with increased risk of IPV.

#### **Conclusions:**

Community hair salons are an important site for IPV screening, and women report IPV at rates consistent

with previous research. Documentation of IPV prevalence in the community hair salon can provide support for further training for salon professionals as a resource in the community to improve access to resources to women experiencing IPV.

#### **Objectives:**

Attendees will learn:

 To describe the prevalence of IPV among women nationally and in the community hair salons.
 To recognize the abuser behaviors that make hair salons an important location for intimate partner violence interventions.

3. To identify the methodology for successfully obtaining prevalence in a community hair salon setting.

# Increasing safe firearm storage awareness and action through a community-based giveaway program

Cassie King, BS, Chelsie Gallagher, BA and Elizabeth Bennett, MPH, MCHES

#### Background:

By far, unrestricted access to guns has the strongest link to gun-related injury in the pediatric population. Studies have shown that youth suicide risk is nine times higher when there is a gun in the youth's home. More than 60% of the firearms used in school shootings come from the perpetrator's home or that of friends or family. Practicing safe firearm storage is a proven method in keeping kids safe from firearm suicide and unintentional shootings, reducing risk by up to 85%. Additionally, evidence suggests that counseling augmented by device provision can effectively encourage the safe storage of firearms.

#### Methods:

Safe gun storage giveaway events have been held around Washington State since late 2014 as a means to increase awareness and action around the safe storage of firearms, as well as reduce youth access. The giveaways offer free lock boxes and trigger locks on a first-come, first-served basis, as well as training and practice on how to use these devices. Educational materials are distributed to all event attendees in Spanish and English, and bi-lingual volunteers are available to assist families as well.

Each event costs approximately \$18,000-20,000 to coordinate, and cost is shared through partnership with other hospitals, local health districts, community organizations and the hosting store site. It requires an estimated 150-200 hours of coordination and implementation per event, with the assistance of

35-40 volunteers at the event. Pre- and post-event surveys are administered on site to learn more about attendees' current safe gun storage device practices, basic demographics, and opinions about the event. A post-event evaluation on the effectiveness of the events is also being conducted, to measure knowledge, attitudes, and reported behaviors in using safe gun storage devices.

#### **Results:**

To date, six giveaways have been held, and a total of 1,770 lock boxes and 175 trigger locks have been distributed. 27 of the 39 counties in Washington State have been reached through attendance at these events. Out of 812 event attendees from three events, 622 consented to participate in the post-event survey phone call (76%). Of the 622 attempted calls to the individuals who agreed to participate in the survey, 408 phone surveys were completed (66%). An online survey research panel and event-related social media responses showed a high degree of support for the initiative.

#### **Conclusions:**

Safe gun storage protects children, reduces the risk of firearm injury and saves lives. Community events have increased access to safe gun storage devices and education. Evaluation results will provide direction toward the most effective firearm safety intervention strategies as these events continue.

#### **Objectives:**

Attendees will learn:

1. To describe how community-based safe gun storage events are developed and implemented in partnership with others.

2. To recognize at least three key messages that resonate among gun owners who attend community events.

3. To identify effective firearm safe storage interventions that can be replicated nationally.

# Barriers and enablers to enacting injury prevention legislation in Canada

Linda Rothman, BScOT, PhD, Ian Pike, PhD, Pam Fuselli, BSc, BHA, MSc Kathy Belton, PhD, Lise Olsen, PhD RN Alison Macpherson, PhD

#### Background:

Policy supporting injury prevention is crucial for the health and well-being of Canada's children. However, injury prevention legislation has not been adopted uniformly across the country. Very little is known regarding why decisions have been made with respect to enacting or not enacting laws. The purpose of this study was to determine the key barriers and enablers to enacting injury prevention legislation in Canada.

#### Methods:

On online survey was conducted in the winter/spring 2015. Purposive snowballing sampling was used to identify individuals involved in injury prevention research, practice and policy throughout Canada. Respondents were asked to identify the injury topics that are enacted at the provincial level they have been involved with, and whether there was legislation in their province related to the topic. They were asked to rate the importance of factors that have been shown to enable or were barriers to injury legislation using a 5 point Likert scale and provide open ended comments.

#### Results:

There were 57 respondents with representation from all 10 provinces with the majority from Saskatchewan (16, 28%), Alberta (11, 19%) and Ontario (10, 18%). The top six injury topics identified were: Bicycle helmets (44, 77%, 68% with policy/legislation in their province), Cell phone-distracted driving (36, 61%, 97% with policy/legislation), booster seats (28, 49%, 75% with policy/legislation), ski helmets (23, 40%, 35% with policy/legislation), and graduated driver's licensing (21, 37%, 100% with policy/legislation). The top barriers to legislation were competing policy priorities and insufficient managerial/political support which were particularly relevant to bicycle and ski helmet legislation. The top enablers of legislation were research/surveillance availability, managerial/ political support, professional groups to consult with and media attention. Media attention and existing legislation in other provinces were particularly relevant to cellphone legislation. Research availability was particularly relevant to GDL and booster seat. Other commonly reported research enablers were: research being of sufficient quality/quantity that was easy to understand, research being in a useful format and affiliation of researchers with reputable organizations. Less important was that researchers had similar priorities as policy makers and that they understood the policy process. The importance of different research enablers varied by injury topic.

#### Conclusions:

The results highlight the importance of considering injury prevention topics individually as there are topicspecific barriers and enablers. Strategies to implement evidence-based policies should include collaboration between researchers, policy makers, management and the community. Although respondents identified the importance that research be readily available, it was less important that researchers had similar priorities as policy makers or understood the policy process.

This presents a challenge for researchers to conduct timely research and emphasizes the need for ongoing relationships with policy makers to develop common injury prevention priorities to ensure research is used effectively in the legislative process. Findings can help inform the process of turning injury prevention evidence into policy action.

#### **Objectives:**

Attendees of this session will learn: 1. To recognize the top barriers and enablers to enactment of injury prevention legislation in Canada. 2. To describe differences between barriers and enablers by injury topic.

3. To describe the importance of research in the policy making process.

# Working with interns to extend the reach of your safety program: best practices

Amanda Davani, MS, CPST, Eileen McDonald, MS, Kisha Price, BS, CPST

#### Background:

Internships can be a valuable resource to today's workforce, with benefits extending to both the organization and the intern. However, if the intern does not have proper training, s/he can become disinterested and diminish the internship while the host site can find the intern a burden and lose opportunities for potential programmatic growth. Over the past 10 years, we have developed a strategic training program that benefits both the intern and our child safety program.

#### Methods:

Our child safety program has official relationships with several area universities' undergraduate and graduate health professions programs. Candidate interns are interviewed by the project team and offers are made to a maximum of three interns per semester. Interns experience a standardized training program that is tailored to their unique needs and interests. The orientation process includes: 1) registration with our volunteer office, 2) completion of our internal orientation manual while shadowing our staff, 3) participation in weekly meetings, and 4) identification of personal projects of interest to the intern. Interns participate in several assessments to define their mastery of the injury prevention (IP) content, including a safety board game, role playing interactions for both one-on-one and group education, mock e-mail replies, and an 'understanding diversity' round table. After a period of orientation, interns are expected to contribute to the day-to-day administrative tasks

and fulfill the role of safety educator. Analyses of the intern's aptitudes are determined by various performance metrics throughout the internship. Feedback is given immediately (when feasible) and a formal evaluation is completed with the student at both the midpoint and end of the internship.

#### **Results:**

We have trained 20 interns between September 2007 and May 2016. Thus far, most of our interns were undergraduate (85%) compared to graduate (15%) students and 80% study community health education. Despite the intern's level of training or discipline, the overwhelming majority (95%) have little IP proficiency at their start, but by the end all master the IP content. Interpersonal and professional skills are more variable across interns but all experience growth though the internship. Each intern has at least one in person meeting including themselves, internship supervisor, and university advisor, or a performance evaluation submitted by us. All the interns have described the placement as a "valuable learning experience" that "provided them with useful, professional skills." We will share valuable "lessons learned" in working with interns.

#### **Conclusions:**

A systematic IP intern training program can help extend the impact of your child safety program. Moreover, enhancing young professionals IP knowledge can help attract them to the IP field and increase integration of IP into other professional fields they may enter.

#### **Objectives:**

Attendees of this session will learn:1. To describe why interns can be useful to extend the reach and impact of an injury prevention program.2. To describe how to effectively and efficiently integrate interns into an IP program.3. To identify important orientation, training, and evaluation components that ensure interns have the requisite skills to work in an IP program.

## Opportunities to enhance injury prevention services with Head Start programs

Eileen McDonald, MS, Amanda Davani, MS

#### Background:

Unintentional injury is the leading cause of death for children over the age of one in the United States. Ethnic minorities and low income children are disproportionately affected by injuries. Head Start, a federally funded comprehensive child development

program that serves children from birth through age five, serves many of these at-risk children. Yet, injury prevention has not been a priority.

#### Methods:

We conducted a mixed methods approach with Head Start leadership at the city level to understand the needs, barriers and facilitators to providing injury prevention services and programs to all Head Start programs in our city. Key informant interviews were conducted with Head Start personnel in our city. Interviews were digitally recorded with Head Start directors, family services coordinators, and educational specialists from six sites. Transcripts were created and reviewed for emerging themes. A Head Start document review was completed to look for opportunities to integrate injury prevention or safety into Head Start procedures. Environmental assessments were conducted to look for egregious safety issues at area Head Start locations.

#### **Results:**

Interviews were conducted at six Head Start sites and with 5 directors, 1 assistant director, and 17 other staff including curriculum coordinators and family services coordinators. Results indicate that even though most of the sites use the common Creative Curriculum, considerable variability exists among Head Start programs' ability to integrate injury prevention offerings for either their students or their families. Pedestrian safety and fire drills are two examples of federally-mandated injury prevention topics offered by all sites. General fire safety education conducted by a fire department was the most commonly identified safety topic offered by Head Start programs. Child passenger, pedestrian and home safety were identified as topics of most interest and relevance to Head Start families. Facilitators and barriers of offering injury prevention to Head Start families will be explored along with results from the completed document review and environmental assessments.

#### **Conclusions:**

Collaborating with Head Start programs offers injury prevention professionals an opportunity to reach high-risk families with much needed injury prevention programs and services. Armed with this information, we are now poised to develop injury prevention programming for area Head Start programs.

#### **Objectives:**

Attendees will learn:

 To describe formative methods used to understand Head Start program injury prevention needs.
 To recognize barriers and facilitators to integrating injury prevention programming in area Head Starts.
 To identify injury prevention priority topics for area Head Start programs.

## Injury Free Coalition for Kids: markers for success and sustainability

Sofia Chaudhary, MD, Wendy J Pomerantz, MD, MS, Beverly Miller, MEd, Anqi Pan, BEng, MSPH, Maneesha Agarwal, MD

#### Background:

Childhood injury remains the leading cause of mortality in children ages 1-19. Local efforts in injury prevention education, outreach, and research vary considerably. This study sought to identify the characteristics of pediatric injury prevention programs affiliated with the Injury Free Coalition for Kids (IFCK).

#### Methods:

All 42 IFCK sites were sent a 30-question survey via e-mail; data was managed in a REDCap database. Survey questions developed by the study team focused on organizational structure, demographics, activities, finances, academic productivity, legislative activities, and self-efficacy. Counts and frequencies were calculated and compared using chi-square tests when applicable.

#### **Results:**

The survey was completed by 37 sites (88.1%). The majority of sites were associated with a freestanding children's hospital (59.5%) and a level 1 pediatric trauma center (86.5%). Coalition size varied between < 15 members (40.5%) to 55 or more members (16.2%). Most programs (81.1%) had at least 1 fulltime equivalents (FTE) dedicated to injury prevention programming. The majority of programs (>75%) offer outreach and education in: child passenger safety, safe sleep, home safety, poison prevention, bicycle safety, pedestrian safety, and teen driving. Research across all ages was most common on child passenger safety and teen driving. Nearly 30% of programs offer educational curricula to healthcare providers; these sites were more likely to have FTE support than sites not offering education (p = 0.036). Although 64.9% of programs were affiliated with a medical school, 51.4% a school of public health, and 16.2% either a current or past CDC research control center, only 13.5% of programs published 16 or more peer-reviewed publications over the prior 5 years, and 59.5% had 5 or fewer publications. Steady sources of funding were identified for 59.5% of programs, with 45.5% identifying their hospital as the primary source of funds. While 72.9% of respondents were confident in their program's capacity to sustain activities, these were more likely to be larger programs (p = 0.001) and have a steady source

of funding (p <0.001). Among survey respondents, 89.2% expressed confidence in their individual ability to select and implement effective interventions. In the prior 2 years, 56.8% of programs impacted legislative or policy changes. Funding, size of program, and FTE had no statistical correlation with research productivity or number of legislative/policy changes.

#### **Conclusions:**

This study characterizes the variation among pediatric injury prevention programs within Injury Free sites. The study also highlights that financial and FTE support from programs' institutions are associated with sustainable programming. These results can assist programs in identifying differences in relation to their peers.

#### **Objectives:**

1. Describe the characteristics and demographics of individual Injury Free sites.

 Identify common factors of success and sustainability amongst pediatric injury prevention programs.
 Provide a model of injury prevention programming that can be used to build additional programs across the nation.

#### West Virginia University, Injury Control Research Center

Robert M. Bossarte, PhD

#### Background:

The West Virginia University Injury Control Research Center (WVU ICRC) maintains a specific focus on populations residing in West Virginia, and throughout the surrounding Appalachian region. West Virginia is the only state that lies entirely within Appalachia. In addition to topics of regional concern, the WVU ICRC maintains an active portfolio of research and community outreach/education activities addressing seven priority areas including injuries resulting from motor vehicle crashes, unintentional overdose and poisonings, falls among the elderly, occupational injuries and violence, traumatic brain injury, suicide, and intimate partner violence.

In 2016, the ICRC became a partner, along with the City of Morgantown and surrounding County of Monongalia, in the one of the nation's first university/city/county Safe Communities coalitions. West Virginia continues to experience a high burden of morbidity and mortality associated with injury. For example, between 1999 -2014, the rate of suicide for West Virginia adolescents and young adults increased by more than 64%. Like other states in the Appalachian region, West Virginia is also experiencing an opioid crisis. Adolescents and young adults living in West Virginia had a rate of opioidrelated mortality that was more than 80% higher than rates of opioid mortality in the similarly-aged U.S. general population.

#### Methods:

This presentation will present results from ICRCsponsored projects designed to understand injuryrelated risk and inform efforts to prevent additional morbidity and mortality. Examples of WVU ICRCsponsored projects include efforts to educate law enforcement and other first responders on the use of intranasal naloxone to counter opioid overdose, distribution of naloxone intranasal administration devices and studies of suicide risk using data from state and federal data systems. Research methods and evaluation procedures are unique to each project and will be described as each project is discussed.

#### **Results:**

To date, WVU's ICRC has contributed to training of law enforcement officers throughout the state of West Virginia and has distributed more than 700 intranasal naloxone administration kits.

#### Conclusions:

Injury-related morbidity and mortality, particularly

those related to opioid use and self-directed violence, are significant threats to the health of children and adolescents living in West Virginia and the surrounding Appalachian region. This presentation will provide information leading causes of injury-related outcomes among children and adolescents in the West Virginia reading outcomes of major initiatives sponsored by WVU ICRC. Details of activities proposed and planned by the WVU Morgantown Safe Communities Coalition, such as a newly created Distracted Driving Task Force, will also be discussed.

#### **Objectives:**

Attendees will learn:

1. To describe naloxone distribution activities designed to reduce rates of opioid overdose.

2. To identify factors associated with risk for self-harm among children and adolescents.

3. To discuss processes and opportunities for development of university/community coalitions to reduce the burden of injury among children.

#### Response of school districts to the New York state concussion awareness and management act: a review of policies and procedures

Maria Kajankova, PhD, Jennifer Oswald, BA, Lauren Terranova, DO, Anne Ambrose, MD, Michael Kaplen, Esq Lisa Spielman, PhD, Wayne Gordon, PhD

#### Background:

As of 2014, all states implemented concussion laws. While schools are ultimately the ones tasked with translating the law into daily practice, limited knowledge exists regarding implementation of these laws within the school setting. Therefore, the purpose of this study was to examine the extent to which concussion management policies and procedure documents of New York State (NYS) school districts comply with the State's Concussion Awareness and Management Act (the Act). The study also aimed to identify potential barriers to compliance.

#### Methods:

Forty-seven school districts in NYS provided their concussion management policy and procedure documents. Compliance with total items and sections of the Act was examined for each school district. The relationship between compliance and school district demographics was examined.

#### **Results:**

Compliance was variable across school districts, with higher overall compliance among large city school districts compared to County districts. Although school

districts were highly compliant with the section of the law pertaining to staff education, several critical items of the Act evidenced low compliance. No significant relationship was found between compliance by school district and district demographics.

#### **Conclusions:**

The results highlight a need for school districts to increase compliance with concussion legislation to ensure adequate implementation, as full implementation of concussion legislation is necessary for the law to impact health and educational outcomes. The results provide important information to school personnel and others charged with the responsibility of implementation and ultimately reducing the negative outcomes associated with brain injuries in schools.

#### **Objectives:**

Attendees will learn:

1. To describe a brief overview of current research regarding concussion laws.

2. To describe the results of a study that examined the extent to which the concussion management policies of NYS school districts are in compliance with the State's concussion legislation.

3. To recognize how school district demographics relate to compliance.

# National survey results of opioid storage practice in households with and without children

Eileen McDonald, MS, Alene Kennedy-Hendricks, PhD, Emma McGinty, PhD, MS, PhD, Wendy Shields, MPH, Colleen Barry, PhD, MPP and Andrea Gielen, ScD

#### Background:

The US is in the midst of an opioid epidemic, with more than 259 million opioid pain reliever (OPR) prescriptions written in 2012 and more than 10 million people reporting non-medical use of OPRs in 2014. Children and adolescents are at risk for both unintentional and intentional exposure as a result of the pervasive presence of OPRs in US households.

#### Methods:

A cross-sectional survey was conducted among a national sample of U.S. adults reporting recent opioid pain reliever use. Adults with children in the household were oversampled. A screener question assessing recent opioid pain reliever use was applied to identify eligible participants. Descriptive statistics and bivariate analyses were calculated to assess attitudes and practices among this population and to compare respondents with and without children. The Health Belief Model guided assessment of beliefs and storage practices between respondents with younger (0-6) and older (7-17) children. Regression models examined the association between beliefs and safe storage practices.

#### **Results:**

Participants included 1,032 U.S. adults with recent opioid pain reliever use. Among those qualifying for the survey, the survey completion rate was 72 percent in the full sample and 65 percent among the subgroup oversampled with children living in the household. Among the full sample, only 9% of respondents reported keeping their opioid pain relievers in a locked location. One in five respondents reported ever having shared opioid pain relievers with others. Only 4% of respondents with leftover pills returned them to a pharmacy or take-back program.

Close to one-half of respondents reported receiving no information on safe storage and disposal of opioid pain relievers. Among households with children less than 18 years old, fewer than one-third of respondents overall, and 11.7% of those with older children (7-17) reported safely storing OPRs. Respondents considering a younger child had a significantly higher mean perceived threats scale score (6.2 [6.1-6.4] vs 5.7 [5.5-5.8]) and a significantly higher perceived benefits of safe storage scale score (6.0 [5.8-6.3] vs 5.5 [5.5-5.7]) compared to respondents considering an older child. Among respondents considering an older child, the odds of reporting safe storage were: reduced by half as perceived barriers scale scores increased (0.505, [0.369-0.692]); increased two-fold as worry increased (2.112, [1.390-3.210]); and increased 1.728 [1.374-2.174] as self-efficacy increased.

#### Conclusions:

Current opioid pain reliever storage and disposal practices are suboptimal in households with and without children and likely contribute to diversion and nonmedical use. Findings point to a clear need for more effective communication about appropriate storage and disposal of these medications and interventions to facilitate consumers' compliance with expert recommendations.

#### **Objectives:**

Attendees will lean:

1. To describe results of a national survey that explored safe storage of opioids in US households with and without children.

2. To identify health beliefs associated with safe storage practices and discuss implications for pediatric poisoning prevention efforts.

3.nTo describe this opioid work in the context of the larger portfolio of the Johns Hopkins Center for Injury Research and Policy.

#### A Look at an injury prevention research center post CDC funding: surviving and succeeding

Sofia Chaudhary, MD, Sharon Nieb, PhD, Terri McFadden, MD, Emory University School of Medicine, David Wright, MD,

#### Background:

The Emory Center for Injury Control (ECIC) was formed in 1993 with a goal of reducing violent and unintentional injuries throughout the state of Georgia and ultimately worldwide. ECIC is a multi-institutional research center supported by the School of Medicine, 9 additional state universities, public and private agencies including the Department of Public Health, and community organizations. For the past 23 years the center focused on reducing the burden of injury through research, education and training, and community outreach. In 2009 the ECIC was granted Centers for Disease Control (CDC) funding through 2014 and is currently on a no cost extension through September 2016.

This grant further strengthened the center's ability to support research and prevention. The center's multiple achievements include: procuring federal grants from the CDC, the National Institutes of Health, the National Highway Traffic Safety Administration, the National Institute of Justice, and the Bureau of Justice Assistance to conduct injury prevention research; being designated a World Health Organization Collaborating Center; teaching and mentoring over 100 Emory graduate and undergraduate students; pushing the improvement of Georgia's driving laws; and creating a model firearm injury surveillance system for the city of Atlanta.

#### Methods:

In 2014 the director for the ECIC was appointed as the director of the National Center for Injury Prevention and Control for the CDC. The ECIC underwent major transformations over the next two years and a new interim director and associate program director were appointed. In 2016 ECIC changed its name to the Injury Prevention Research Center at Emory (IPRCE) and restructured the organization, the mission, and vision of the center. This summer IPRCE's director with expertise in traumatic brain injury will be joined by a leader in the field of transportation injury research.

#### **Results:**

The vision of IPRCE is to be the leader in injury prevention and research and dramatically reduce injury in the communities they serve. IPRCE now has 5 task forces: Transportation, Drug Safety, Violence, Falls, and Traumatic Brain Injury. These task forces were formed in direct correlation with identified injury burden from the state of GA injury data and parallels CDC's focus areas. The goal of each task force is to provide a data-driven approach for research, education/training, community interventions, and policy changes. IPRCE also has a unique interest in evaluating injury in the state of GA across the lifespan.

#### **Conclusions:**

The support of CDC funding has provided a catalyst for an injury prevention center such as IPRCE to continue to succeed. Strong center leadership, a clear vision, data directed goals, and funding are essential for injury prevention research centers to survive.

#### **Objectives:**

Attendees will learn:
1. To identify the process of transition after CDC funding expires.
2. To describe characteristics needed for a successful injury prevention and research center.
3. To recognize the challenges faced when in between federal funding.

#### A comparative effectiveness study of two parent programs designed to support children after traumatic injury: a patient-engaged approach in four children's hospitals in the Midwestern United States

M. Ramirez, PhD, MPH, L. Roth, BA, C. Peek-Asa, MPH, PhD, V. Chande, MD, MS, H. Ortega, MD, B. Woods-Jaeger, PhD, K. Randell, MSc, C. Sexton, PhD, MSW

#### Background:

Injuries from car crashes, burns, and falls are the leading cause of hospitalization for children. Children can recover physically, but often have problems dealing with emotional and social effects of their injuries. Many of these reactions are normal and resolve with time. However, some children can develop serious conditions, such as post-traumatic stress disorder (PTSD) and depression. Parents who notice these negative reactions often do not know what to do about them. This project will compare two programs of psychological first aid that parents use in helping children recover emotionally and socially from injuries.

One is a program we have developed called Link for Injured Kids, which guides parents on how best to speak with their child after an injury, how to identify signs of distress, and how to obtain more care for their child if needed. The second approach is an educational booklet given to families as they leave a hospital after a child's injury. Methods:

At four Children's Hospitals in Iowa (Blank Children's Hospital, University of Iowa Children's Hospital), Minnesota (Children's Hospitals and Clinics of Minnesota) and Missouri (Children's Mercy Hospital), we will identify 300 children ages 10 to 17 who were admitted because of unintentional injury from 2014-2017. Parents and children will be randomly assigned to receive Link program or Trauma Education. Six weeks, three months, and six months after a child's hospitalization, we will collect information from the parents and children about school attendance and performance, children's emotional health and guality of life, and overall family relationships (especially regarding support and communication). Analysis will include descriptive statistics and longitudinal, repeated measures multilevel regression. Patient engagement has been integrated into designing and carrying out this study through a collaborative board of parent, child, provider and community consultants.

#### **Results:**

Thus far, a total of 163 dyads (injured children and their parents) have been enrolled into this study at a rate of 47%. Preliminary analyses of 122 children at baseline revealed that 25% of injured children had depressive symptoms at baseline, and another 25% had symptoms of post-traumatic stress disorder. Family communication was reportedly low to moderate in about 40% of children. And, coping behaviors (optimism, seeking understanding, support for feelings and support for actions) were not commonly used children (3-4%). The next steps of the study will be to compare improvements in stress symptoms and family communication patterns between intervention groups over time. Patient engagement activities include consultation with parents and patients, and routine meetings with children's hospital providers and community partners.

#### Conclusions:

In this multi-site study, we have successfully implemented a comparative effectiveness study. We anticipate completing recruitment and follow-up on participants by summer 2017. Doctors, nurses, social workers, parents, and the injured children themselves have all helped us design this project, and we will continue to work with them throughout the project period.

#### Objectives:

Attendees will learn:

1. To describe the development of a comparative effectiveness study in four children's hospitals from the Midwestern United States.

2. To recognize patient engagement and know examples of patient engagement in a comparative effectiveness study.

3. To describe some early impacts of two parent-based post-trauma programs of psychological first aid.

#### Child restraint and injury in NYC infants, children and teens: A comparison of taxis and private vehicles

Joyce C Pressley, PhD, MPH, Patricia Prince, Leah Hines, Michael Bauer, Jin Luo, Matthew Garnett and Chang Liu

#### Background:

Although the value of child, adolescent and teen restraint when riding in a motor vehicle is well established, there continues to be gaps in rear-seat restraint laws covering this population in many areas of the U.S. In New York City, more than 2 million resident children and teens and countless similarly-aged visitors, are covered by restraint laws that have several gaps: 1) children and teens are exempt from wearing a seat belt when riding in taxis and other vehicles for hire; 2) persons aged 16 and older are also exempt from restraint use in private vehicles except when riding with a junior (GDL) driver. The majority of taxicabs have a Plexiglas divider that can produce a syndrome dubbed "taxi-face" by the city's emergency department physicians. These injuries include facial lacerations, eve orbital and extremity fracture, traumatic brain injury, concussion or death. This study examines belt use and injury in taxis compared to private vehicles for persons aged 0-19 years.

#### Methods:

Working in partnership with the NY State Department of Health (NYSDOH), we collaborated on a study using the Crash Outcome Data Evaluation System (CODES) from years 2011-2013 to compare belt use and injury in NYC passengers aged 0-19 years commuting in taxis (n=1,631) vs. private vehicles (n=21,984). The large data sets containing hospitalization, emergency department and Department of Motor Vehicle crash data were merged by NYSDOH using a probabilistic linkage. Statistical analysis used SAS 9.4 for calculation of Chi square and risk ratios with independent predictors being assessed using logistic regression models with unadjusted and adjusted odds ratios with 95% confidence intervals (CI) for restraint use and injury.

#### **Results:**

In preliminary analyses, compared to taxis, passengers involved in crashes in private vehicles were 10 times more likely to be restrained and were 81.8% less likely to be injured. Passengers in taxis were 2.5 times more likely to experience facial injury and 2.0 times more likely to have traumatic brain injury than children in private vehicles. Independent predictors of being

restrained included riding in a private vehicle, driver belted, seating in an outboard (left or right) seat, older driver age, female driver, younger passenger age, fewer than 4 passengers, daytime, and outside of Manhattan. Among the independent predictors of increased passenger injury were travel in a taxi, being unbelted, older passenger age, being female, manner of collision and borough.

#### **Conclusions:**

In conclusion, gaps in rear seat restraint laws for children riding in taxis in NYC are associated with lower belt wearing and increased likelihood of injury compared to those commuting in private vehicles.

#### **Objectives:**

Attendees will learn:

 To describe gaps in seatbelt laws impacting young children and teens in an urban environment.
 To discuss the importance of being belted in the rear seat when traveling in both hired and private vehicles.
 To explain types of injury sustained in rear-seated HV compared to PV.

#### Pediatric Water-Related Incidents: A Closer Look At Home Pool Supervision And Barrier Use For Children Ages 1 To 4

Tiffaney Isaacson, BS, Kara Kronemeyer, BS, Liz Perez, AAS, Erin Kurowia, MHI

#### Background:

Drowning is the leading cause of unintentional, injuryrelated deaths for children ages 1 to 4 years, both nationally and in the state of Arizona. In 2011, fifty-nine percent of non-fatal drowning emergency department visits in Arizona were for children under the age of five years old. A large majority of pediatric water-related incident deaths are preventable. Arizona Department of Health Services (ADHS) monitors these incidents through local emergency medical services. Our aim is to describe the epidemiology and circumstantial events surrounding pediatric water-related incidents in the state of Arizona, focusing on children ages 1 to 4.

#### Methods:

Phoenix Children's Hospital collected data from the ADHS water-related incident database for years 2002 to 2014 on children 0 to 18. Circumstantial and demographic data were collected on total population (n=1,168), with focus on supervisor and child activity prior to incident occurrence. Basic descriptive analysis was applied, with incident rates compared between Arizona and the national level. In Arizona, a large majority of incidents occurred in swimming pools at single and multi-family dwellings (75.7%). Of all incidents, 883 (75.6%) were children ages 1 to 4. Parental or familial supervision occurred in 81% of incidents for children ages 1 to 4 at a home swimming pool. 189 (27%) had multiple supervisors present. Only 16 (2.3%) of water-related incidents involving children ages 1 to 4 at a home pool had no supervision. For this age group, 50.1% of supervisory activity prior to a water-incident was within the pool area and included swimming (14.7%), socializing/ partying (5.2%), actively supervising (14.2%), or distracted/away for a moment (16.0%). 42.4% of supervisors were outside pool area prior to an incident, 7.5% of supervisor activities were indeterminate. Discovery of child after water-related event shifted the supervisory role. Parental supervision decreased by 17%, relative supervision increased by 3%, and supervision by another child increased 13%. A pool fence was present in 378 (45.2%) incidents. Children were let into the pool in 51.1% of incidents, entered from an unsecured gate in 26.5% of incidents, and climbed the fence in 1.5% of incidents.

#### Conclusions:

In a majority of water-related incidents involving children 1 to 4, parental supervision was present. After the water-related incident, parental supervision decreased and discovery by other parties increased. In incidents with fences, over half the time children were let into the pool area. Educational programming targeting parents of children ages one to four years, in residential pool settings, is necessary. Data points discussing behaviors in and around the pool, supervisory expectations, fence usage, and acceptable child developmental processes must be addressed.

#### Objectives:

Attendees will learn:

 To identify the circumstances of drownings involved.
 To recognize behaviors in and around the pool area that contribute to drowning risk.

3. To describe how understanding drownings can enhance programming to reduce the risks of drowning.

# Home safe home: evaluation of a childhood home safety program

Tanya Charyk Stewart MSc, Jane Edwards MSc, Jason Gilliland PhD, Andrew Clark PhD, Michael Miller PhD, Tania Haidar BSc, Brandon Batey MSc, Kelly N Vogt MD, MSc, FRCSC, Neil G Parry MD, FRCSC, FACS, Douglas D Fraser MD, PhD and Neil H Merritt MD, FRCSC, FAAP

#### Background:

The London Health Sciences Centre, Home Safety Program (HSP) provides safety devices, education, a safety video and home safety checklist to all first-time parents for the reduction of childhood home injuries. The objective of this study was to evaluate the HSP for the prevention of home injuries in children up to 2 years of age.

#### Methods:

A program evaluation was performed with follow-up survey, along with an interrupted time series analysis of Emergency Department (ED) visits for home injuries in infants and toddlers 5 years pre- (2007-13) and 2 years post- (2013-15) implementation. Spatial analysis of ED visits was undertaken to assess differences in home injury rates by dissemination areas controlling differences in socioeconomic status (SES) (i.e., income, education, lone-parent status) at the neighborhood level. Time series analysis on two control groups (non-home injury ED visits and non-injury ED visits for children < 2 years of age) over the same 2007-15 time period was also undertaken.

#### **Results:**

A total of 3,458 first-time parents participated in the HSP (a 74% compliance rate). Of these, 20% (n=696) of parents responded to our questionnaire with 94% reporting the program to be useful (median 6, IQR=2 on a 7-point Likert scale) and 81% learning new strategies for preventing home injuries. The median age of the respondent's babies were 12 months (IQR=1). The home safety check list was used by 87% of respondents to identify hazards in their home, with 95% taking action to minimize the risk. The time series analysis demonstrated a significant decline in ED visits for home injuries in toddlers < 2 years of age post-HSP implementation. The declines in ED visits for home injuries remained significant over and above each SES covariate. Additionally, results of the time series on two control groups (non-home injury ED visits and noninjury ED visits for children < 2 years of age) over the 2007-15 time period did not reveal any change in the ED visits after HSP implementation.

#### Conclusions:

Removing hazards, supervision, and installing safety devices are key facilitators in the reduction of home injuries. Parents found the HSP useful to identify hazards, learn new strategies, build confidence and provide safety products. Initial finding suggest the program is effective in reducing home injuries in children up to 2 years of age.

#### **Objectives:**

Attendees will learn to:

1. To describe the components of an effective home

safety program for the reduction of childhood home injuries.

 To recognize findings from a qualitative survey of participants' satisfaction with the home safety program, as well as safety knowledge, attitudes and behaviors.
 To describe the results of an interrupted time series analysis of Emergency Department (ED) visits for home injuries in infants and toddlers 5 years pre- (2007-13) and 2 years post- (2013-15) implementation, along with similar analysis of two control groups (non-home injuries and non-injuries).

# Evaluation of a home safety program for family homeless shelters

Rebekah Coelho, BS, Lois Lee, MD, MPH, Maria McMahon, MS, cPNP-AC, David P. Mooney, MD, MPH

#### Background:

The number of homeless families, including children, has been increasing over the last several decades in the United States. We have previously demonstrated a need for home safety materials and education in family homeless shelters. The objective of this program evaluation is to compare the effectiveness of installing home safety equipment versus the provision of education and the home safety equipment (without installation) to family homeless shelters.

#### Methods:

This is a prospective observational evaluation of an interventional home safety program for homeless shelters for families with children in an urban area. First a family shelter safety needs assessment was conducted by trained research assistants to record the use of safety equipment and the observation of safety practices in the environments of these homeless shelters. The research assistants returned to four shelters with the needed safety equipment. In one shelter all of the supplies were installed. In the other three shelters, the assistants provided an educational session for tenants and staff and supplied, but did not install, the equipment. After 30 days, the shelters were visited again and inspected for equipment use. Frequencies of safety behaviors and equipment use after the intervention were calculated.

#### **Results:**

At the shelter with the safety equipment installation, all of the home safety materials were in place, with the exception of 10 cabinet locks, at the 30 day inspection. In the other three shelters with only equipment distribution, installation of the equipment at 30 days was varied (Table 1). Table 1. Presence of Safety Materials 30 Days after Resource/Education Intervention

Safety Materials Installed Shelter 3 Supplied Shelters Total Smoke/CO detectors 8/8 (100%) 8/31 (26%) Stair gates 3/3 (100%) 7/17 (41%) TV straps N/A 0/34 (0%) Dresser straps 36/36 (100%) 2/108 (2%) Cabinet locks 74/84 (88%) 0/210 (0%) Medicine lock box 12/12/ (100%) 29/37 (78%)

Supplied Shelters Shelter 1 Shelter 2 Shelter 3 Smoke/ CO detector 0/8 (0%) 3/11 (27%) 5/12 (42%) Stair gates 0/6 (0%) 2/6 (33%) 5/5 (100%) TV straps 0/12 (0%) 0/22 (0%) N/A Dresser straps 0/42 (0%) 2/54 (4%) 0/12 (0%) Cabinet locks 0/65 (0%) 0/95 (0%) 0/50 (0%) Medicine lock box 0/8 (0%) 20/20 (100%) 9/9 (100%)

#### **Conclusions:**

Home safety materials were in use in family homeless shelters 30 days after installation, but not reliably in shelters that simply received the equipment uninstalled. To be effective, funding of future similar efforts should provide installation for shelters.

#### **Objectives:**

Attendees will learn:

1. To describe the home safety practices of family homeless shelters.

2. To recognize the effectiveness of different home safety intervention strategies for family homeless shelters.

3. To identify the challenges of implementing a home safety program for family homeless shelters.



# 21 Years of Forging New Frontiers:

# Looking into the Future of Childhood Injury Prevention

Celebrate, Collaborate, Continue the Journey...



# **POSTERS**

Poster authors must be present to address attendees at posted agenda times.

## Posters

#### Hitting the road: teen driving safety

#### Deena Liska, BA, CPST-I

#### Background:

In our state, according to the Department of Transportation (DOT), a teen is killed or injured in a traffic crash every 3 hours. A needs assessment highlighted areas for reducing teen deaths and injuries, including creating programs that address issues for new drivers. In our work with Driver Education instructors, we verified the need for additional resources surrounding new drivers. Parents often articulate a lack of information or confusion about how to keep their new driver safe.

The goal of Hitting the Road is to provide online and traditional resources to increase knowledge of new driver issues, and in turn and improving safe teen driving outcomes in the state. Intended outcomes were: • creation of an parent/teen resource addressing safety issues for new drivers • increased knowledge of risk factors for teen drivers • increased knowledge of the GDL • increased discussion and use of driving agreements by parents and teens.

#### Methods:

Modeled after Children's Hospital and Health System Parents Act Now, the program includes digital lessons guiding participants through key risk areas and safety tips, and a video to encourage discussion. Lessons can be used by independent learners or in a classroom setting.

Classroom materials include a lesson summary, teacher guide, student worksheet, and answer key. Parent materials include a safe driving agreement, communication tips, and handout on the importance of practice driving. We also developed coordinated pieces including a promotional postcard, flash cards, and a file folder with tips for teens on obtaining their learner's permit. Final pieces are housed on our teen driving website. State Farm provided a grant which covered program development. Minimal ongoing costs are funded through annual grants and in-kind match.

#### **Results:**

This project created a foundation of resources around teen traffic safety, to address the need identified in our initial assessments. However the true benefit was the program's unintended results. Our original proposal was to create a resource for parents to use as their teens begin the licensing process. When we reached out for feedback from subject matter experts in the driver education and DOT community, we discovered a shared need for these resources in their professional settings. The file folder, which driving schools across the state use for parent orientation meetings, is a direct result of the collaboration.

Additionally, foster care group homes in our urban, metro area use it to coach teens through the process of getting a driver's license. This has resulted in an ongoing conversation about licensing issues of youth in foster care, and additional resources such as a driving readiness checklist. The next steps are to migrate the content into a "storefront" so that interactions can be tracked more effectively. We have also started discussions about how this could be used in primary care to evaluate the depth of parent engagement with the tools.

#### Conclusions:

The effectiveness of this program was strengthened by the public/private, inter-agency collaborations that maximized a grant opportunity and resulted in a more comprehensive community resource.

#### Objectives:

Visitors of this poster will learn:1. To locate Hitting the Road resources.2. To identify potential uses of Hitting the Road resources in their community.3. To consider what collaborations in various communities might be used to strengthen injury prevention work.

#### Child safety seat education & distribution: moving beyond outputs to achieve proper child restraint use throughout childhood

Victoria Salow, MPH, CHES

#### Background:

Although car seats can reduce the risk of death for children by 54 - 71% and booster seats can reduce the risk of serious injury by 54%, motor vehicle crashes continue to be the second leading cause of death among children 1-10 years old. In Cook County, Illinois in 2014, less than half of motor vehicle accident involved children ages 0- 9 were properly restrained. While the incidence of motor vehicle related mortality increases with child age, proper child restraint use decreases with child age. This program aims to increase correct child restraint use and adherence to correct child restraint transitions among caregivers of children 0-9.

#### Methods:

Education and reduced-cost child restraints (infant carriers, car seats, and booster seats) are provided by certified Child Passenger Safety Technicians to low-

### Posters

income families through monthly community workshops and satellite distribution sites (e.g. labor and delivery units, home visiting programs, etc.). While grant reporting only requires counts of safety seats and education delivered, this program aims to incorporate participant follow-up and meaningful evaluation across multiple sites and with limited resources. A pre- and post-test have been successfully piloted with 33 caregivers that attended community workshops. All future participants will complete a post-test to assess knowledge and self efficacy and collect relevant demographic and contact information. Caregivers who agree will receive a text one-month later asking if the safety seat was installed and a survey six-months later to assess knowledge retention and behavior change. Annually, program participants will be invited to attend a car seat inspection station at which correct restraint use will be assessed. Program participants will receive a text and email regarding best-practices on their child/children's birthday each year and a link to a survey.

#### **Results:**

An initial paired samples t test was conducted to evaluate whether caregiver knowledge changed after attending a community workshop. The mean knowledge score after the workshop (88%) was significantly greater than the mean knowledge score before the workshop (49%), t(32)= -8.77, p<0.001. Further followup and surveys will assess behavior change, knowledge retention, maintenance of behavior, and child restraint transitions. Data will be used to assess whether child safety seat education and distribution lead to correct child restraint use and how long the effects of the program are maintained. Specific outcomes of interest are the percentage of caregivers who use a rear-facing car seat until 2+ years, use a car seat with a five-point harness until the seat's upper weight/height limit are reached, and use a booster seat until age 8 and/or height 4'9".

#### **Conclusions:**

Based on county-wide crash data and initial pre-test knowledge scores, there is a need for child restraint education among caregivers. In order to ensure caregivers maintain proper child restraint use and transition correctly between child restraint types, follow-up and evaluation must move beyond output measures.

#### Objectives:

Visitors of this poster will learn:

1. To describe the American Academy of Pediatrics Car Seat Recommendations.

2. To identify barriers to conducing follow-up and evaluation of a multi-site child restraint education and distribution program.

3. To describe planned follow-up and ongoing evaluation efforts to ensure proper car seat use throughout childhood.

#### #URKeys2Drv

Leslie Brown, CRNP, Marie Crew RNC-NIC, BS, Kathy Monroe, MD, William King DRPH, Nayanika Sanga, BDS, MPH

#### Background:

Motor vehicle crashes are the number one cause of death for teens. Alabama consistently ranks in the top four states for teen driving related deaths. An educational event was conducted in four areas of Alabama to target teen drivers.

#### Methods:

A one-day interactive educational event was conducted in four major cities across the state. Participants completed a survey at the conclusion of the event regarding teen driving behaviors. Specifically, the questions addressed the risky teen driving behaviors of driving over the speed limit, non-use of seat belts, texting while driving and drinking and driving for both drivers and passengers.

#### **Results:**

Overall there were 520 participants from four distinct areas in the state. 29 % stated they were less likely to drive over speed limit after the educational intervention (27% stated they never drove over speed limit even prior to event). 54 % said they would be less likely to text while driving (11 % reported never texting while driving prior to event). 87% were less likely to drink then drive (2% never drank and drove). Passenger behaviors: 73% reported being less likely to ride with someone who's been drinking and 30% reported less likely to ride with someone who's texting. 59% reported that they were more likely to wear seat belt ALL the time; 36% said they always wear seat belt prior to event. Favorable driving behaviors amongst those in the southern regions of the state were not statistically significantly different from those in the northern regions, i.e. driving over the speed limit (Chi-square 0.28, p-value 0.28), texting while driving (Chi-square 0.873, p-value 0.919), drinking and driving (Chi-square 0.22, p-value 0.26).

#### Conclusions:

The educational event reached 520 teens in four areas across a state with high rates of teen driving injuries. Participants reported being less likely to engage in risky teen driving behaviors in all categories (drinking while driving, texting while driving, driving over speed limit,

### Posters

seat belt non-use and passenger behaviors). Overall, only 36% of students reported that "they always wore their seat belts" prior to attending the educational event. However, following the event, 59% reported that they would "more than likely wear their seat belt ALL the time." There was no statistically significant difference in favorable driving behavior in the southern parts of the state when compared to the northern parts.

#### **Objectives:**

Visitors of this poster will learn:

1. To identify changes in self-reports of driving and passenger behavior by teens.

2. To describe why teens self-report that they were/ are less likely to drive over the speed limit, text or drink while driving, as well as being less likely to ride as a passenger when a driver was drinking or texting. 3. To recognize 59% of the teens self-report that they are/were more likely to always wear their seat belt as compared to 36% that reported wearing their seat belt prior to the program.



# 21 Years of Forging New Frontiers:

# Looking into the Future of Childhood Injury Prevention

Celebrate, Collaborate, Continue the Journey...



# FACULTY

### 2016 Faculty

Annual Injury Free Coalition for Kids® Conference Forging New Frontiers: Looking into the Future of Childhood Injury Prevention

### Instructors

#### Barbara Barlow MD, FACS, FAAP

Professor of Surgery in Epidemiology Director Injury Free Coalition for Kids Mailman School Public Health Columbia University Medical Center New York, NY

#### Michael J. Mello, MD, MPH, FACEP

Director Injury Prevention Center at Rhode Island Hospital/Hasbro Children's Hospital Director, Master of Science in Population Medicine Program Professor of Emergency Medicine Professor of Health Services, Policy and Practice Professor of Medical Science, Section of Medical Education Brown University Providence, Rhode Island

#### Wendy Pomerantz, MD, MS

Professor of Clinical Pediatrics Division of Emergency Medicine Cincinnati Children's Hospital University of Cincinnati School of Medicine Cincinnati, OH

## FACULTY

#### Dina Burstein, MD, MPH, CPSTI, FAAP

Research Associate, The Injury Prevention Center at Rhode Island Hospital Assistant Professor of Emergency Medicine, Warren Alpert Medical School of Brown University Coordinator, Safe Kids Rhode Island Providence, RI

#### Catherine Cavallaro, BA

Injury Prevention Specialist Boston Children's Hospital Boston, MA

#### Amanda Davani, MS, CPST

Project Director, CARES Safety Center Center for Injury Research and Policy Johns Hopkins Bloomberg School of Public Health Baltimore, MD

#### Jane Edwards, BSc, MSc

Injury Prevention Specialist Program Coordinator - Injury Free Coalition for Kids Trauma Program London Health Sciences Centre/Children's Hospital

#### Barbara A. Gaines, MD

Professor of Surgery University of Pittsburgh School of Medicine Clinical Director Pediatric General and Thoracic Surgery Director, Trauma and Injury Prevention Children's Hospital of Pittsburgh of UPMC

#### Dawne Gardner, MBA, CPST

Comprehensive Children's Injury Center (CCIC) Injury Prevention Specialist Cincinnati, OH

#### Mike Hirsh, MD

Pediatric Surgery/Trauma/ Injury Prevention UMass Memorial Medical Center Medical Director, Worcester Department of Health Worcester, MA

#### Tiffaney Isaacson, BS

Water Safety Coordinator Phoenix Children's Center for Family Health and Safety Phoenix, AZ

Charles Jennissen, MD University of Iowa Carver College of Medicine Department of Emergency Medicine, Clinical Professor Iowa City, Iowa

#### Yun Kim, MS, OTR/L, STAR/C, CPST, CIMI Pediatric Occupational Therapist II Johns Hopkins Hospital

Baltimore, MD

#### Cassie King, BS

Senior Program Coordinator External Affairs and Guest Services Seattle Children's Hospital Seattle, WA

#### Andrew W. Kiragu, MD, FAAP

Interim Chief, Department of Pediatrics Medical Director, Pediatric Intensive Care Unit Hennepin County Medical Center Assistant Professor of Pediatrics University of Minnesota Minneapolis, MN

#### Garry Lapidus, PA-C, MPH

Director, Connecticut Injury Prevention Center Connecticut Children's Medical Center & Hartford Hospital Associate Professor of Pediatrics & Public Health, UCONN School of Medicine Hartford, CT

#### Lois Lee, MD, MPH

Attending physician Division of Emergency Medicine Boston Children's Hospital Boston, MA

#### Alison Macpherson, PhD

Professor, School of Kinesiology and Health Science York University Toronto, ON Canada

#### Rod McClure, MBBS, PhD, FAFPHM

Director Division of Analysis, Research and Practice Integration (DARPI) National Center for Injury Prevention and Control Centers for Disease Control and Prevention Atlanta, GA

#### Eileen M. McDonald, MS

Associate Scientist & MSPH Program Director Director, Johns Hopkins Children's Safety Centers Johns Hopkins Bloomberg School of Public Health Baltimore, MD

#### Marlene Melzer-Lange, MD, FAAP

Professor of Pediatrics Medical College of Wisconsin Milwaukee, WI

#### Beverly Miller, MEd

Associate Director Injury Prevention Center Arkansas Children's Hospital and University of Arkansas for Medical Sciences Little Rock, AR

#### Kathy Monroe, MD

Professor of Pediatrics University of Alabama Children's of Alabama Birmingham, AL

#### Joseph O'Neil, MD, MPH, FAAP

Associate Professor of Clinical Pediatrics Developmental Pediatrics Riley Hospital for Children Indiana University School of Medicine Indianapolis, IN

#### Kyran Quinlan, MD, MPH

Associate Professor of Pediatrics Section Head, General Pediatrics Rush University Medical Center Chair, Council on Injury Violence and Poison Prevention American Academy of Pediatrics Chicago, IL

#### lan Pike, PhD

Associate Professor, Pediatrics, Faculty of Medicine, University of British Columbia Director, BC Injury Research and Prevention Unit Co-Theme Lead, Evidence to Innovation and Investigator, Research Institute at BC Children's Hospital Co-Executive Director, Community Against Preventable Injuries Vancouver, BC, Canada

#### Lindsay Pollok, MPH, CPSTI

Child Injury Prevention Coordinator Trauma Services Dell Children's Medical Center of Central Texas Austin, TX

#### Joyce C. Pressley, PhD, MPH

Associate Professor of Epidemiology and Health Policy & Management at CUMC Center for Injury Epidemiology and Prevention at Columbia Columbia University New York, NY

#### Lisa Roth, BS

Deputy Director Injury Prevention Research Center University of Iowa

#### Alison Riese, MD, MPH

Assistant Professor of Pediatrics. Division of General Pediatrics Assistant Professor of Medical Science, Section of Medical Education Alpert Medical School of Brown University Providence, RI

#### DiLenny Roca, MPH

Senior Cluster Administrator Department of Epidemiology Columbia University, Mailman School of Public Health New York, NY

#### Steven C. Rogers, MD, MS-CTR

Attending Physician - Division of Emergency Medicine Director - Emergency Mental Health Services Connecticut Children's Medical Center Research Scientist Connecticut Children's Injury Prevention Center Associate Professor University of Connecticut School of Medicine Hartford, CT

#### Linda Rothman BScOT, MHSc, PhD

Post-Doctoral Fellow Faculty of Health-School of Kinesiology and Health Science York University Toronto, Ontario

#### Victoria Salow, MPH, CHES

Buckle-Up Program Coordinator Ann & Robert H. Lurie Children's Hospital of Chicago Chicago, IL

#### Jillian Savino, CHES

Community Health Educator Cohen Children's Medical Center New Hyde Park, NY

#### Judy Schaechter, MD, MBA

Professor & Chair, Department of Pediatrics Chief of Service, Holtz Children's Hospital, Jackson Health Systems The George E. Batchelor Endowed Chair in Child Health University of Miami Miller School of Medicine Miami, FL

#### Karen Sheehan, MD, MPH

Mary Ann and J. Milburn Smith Child Health Research Program Stanley Manne Children's Research Institute Medical Director Lurie Children's Hospital of Chicago Professor of Pediatrics & Preventive Medicine Northwestern University's Feinberg School of Medicine

#### Tanya Charyk Stewart, MSc

Injury Epidemiologist LHSC & Children's Hospital Trauma Program London, ON

#### Kim Wiley-Schwartz

Assistant Commissioner, Education and Outreach New York City, Department of Transportation New York, NY

#### Purnima Unni, MPH, CHES

Pediatric Trauma Injury Prevention Program Manager Monroe Carell Jr. Children's Hospital at Vanderbilt Department of Pediatric Surgery/Trauma Nashville, TN

#### Pina Violano, PhD, MSPH, RN-BC, CCRN, CPS-T

Manager, Injury Prevention, Community Outreach & Research Yale-New Haven Hospital Injury Free Coalition for Kids of New Haven Co-Director & Co-Principle Investigator Yale-New Haven Children's Hospital Emergency Medical Services for Children Program Director and Co-Principal Investigator New Haven, CT

> Jessica Waters, BA, MPH University of Iowa Carver College of Medicine Iowa City, IA

#### Benjamin Wilkinson, BA, NRP

Iowa County EMS/North Benton EMS Virginia Gay Hospital, Respiratory Therapy Iowa City, IA

## **Program Committee**

#### Barbara Barlow MD

Committee Co-Chair Executive Director and Founder, Injury Free Coalition for Kids Professor of Surgery in Epidemiology, Mailman School of Public Health Columbia University Medical Center Injury Free Coalition for Kids, National Program Office Injury Free Coalition for Kids Executive Director and Founder

#### Michael J. Mello, MD, MPH

Committee Co-Chair Injury Prevention Center Director at Rhode Island Hospital Associate Professor of Emergency Medicine Associate Professor of Health Services, Policy and Practice Alpert Medical School of Brown University Providence, Rhode Island Injury Free Coalition for Kids of Providence, Principal Investigator Injury Free Coalition for Kids, Board of Directors

#### Arthur Cooper, MD, MS

Professor of Surgery Columbia University Director of Trauma & Pediatric Surgical Services, Harlem Hospital Injury Free Coalition for Kids of New York at Harlem Hospital, Principal Investigator

#### Steve Rogers, MD

Attending Physician, Division of Emergency Medicine Coordinator. Emergency Mental Health Services Connecticut Childrens Medical Center Research Scientist, Connecticut Childrens Injury Prevention Center Assistant Professor, University of Connecticut School of Medicine Injury Free Coalition for Kids of Hartford, Principal Investigator

### Science and Publication Committee

#### Lois Lee, MD, MPH

Committee Chair Attending Physician, Division of Emergency Medicine Boston Children's Hospital Assistant Professor Harvard Medical School Medical Director Pediatric Injury Prevention Program Injury Free Coalition for Kids of Boston, Principal Investigator Injury Free Coalition for Kids, Board of Directors

#### Nilda M. Garcia, MD

Trauma Medical Director Dell Children's Medical Center Injury Free Coalition for Kids of Austin, Principal Investigator

#### Marlene Melzer Lange, MD

Professor of Pediatrics, Medical College of Wisconsin Program Director, Project Ujima Attending Physician, Emergency Department Trauma Center Children's Hospital of Wisconsin Injury Free Coalition for Kids of Milwaukee, Principal Investigator

#### Kathy Monroe, MD

Professor of Pediatrics Medical Director Emergency Department Childrens Hospital of Alabama Injury Free Coalition for Kids of Birmingham Principal Investigator

#### Dina Burstein, MD, MPH, CPSTI, FAAP

Research Associate, The Injury Prevention Center at Rhode Island Hospital Assistant Professor of Emergency Medicine, Warren Alpert Medical School of Brown University Injury Free Coalition for Kids of Providence, Co-Principal Investigator

#### L R Tres Scherer, III, MD

Volunteer Professor of Surgery Indiana University School of Medicine Trauma Director

#### Pina Violano, PhD, MSPH, RN-BC, CCRN, CPS-T

Manager, Injury Prevention, Community Outreach & Research Yale-New Haven Children's Hospital Injury Free Coalition for Kids of New Haven, Co-Director & Co-Primary Investigator

## Staff

#### Estell Lenita Johnson, MA

Marketing/Communications & Program Director Injury Free Coalition for Kids National Program Office Center for Injury Epidemiology and Prevention at Columbia University

#### DiLenny Roca Dominguez, MPH

Columbia University Mailman School of Public Health Program Administrator Injury Free Coalition for Kids National Program Office Center for Injury Epidemiology and Prevention at Columbia University



# 21 Years of Forging New Frontiers:

# Looking into the Future of Childhood Injury Prevention

Celebrate, Collaborate, Continue the Journey...



## 2016 Bios

### Annual Injury Free Coalition for Kids® Conference Forging New Frontiers: Looking into the Future of Childhood Injury Prevention

#### Barbara Barlow, MD

#### Injury Free Coalition for Kids Founder & Executive Director

Dr. Barbara Barlow is Professor Emerita of Surgery in Epidemiology at Columbia University Mailman School of Public Health in New York. She is also the Founder and Executive Director of the Injury Free Coalition for Kids, a National Program developed with funding from of the Robert Wood Johnson Foundation of Princeton, New Jersey. Injury Free is a coalition of Injury Prevention Programs in Pediatric Trauma Centers located in major cities in the United States. The Injury Free Program reduces injury through education, construction of safe play areas, and the development and support of safe supervised activities with strong adult mentors. Major injury admissions of community children in Harlem have decreased by more than 60% since the program started in 1988.

The Program and Dr. Barlow have received awards from the American Hospital Association, the American Academy of Pediatrics, the U.S. Department of Transportation, the National Highway Traffic Safety Association, the National Safety Council, the American Trauma Society, the National Association of Public Hospitals, Society of Public Health Educators of the American Public Health Association, Johnson and Johnson Foundation, Allstate Foundation, the Hospital Association of New York, the American Association of Medical Colleges' David E. Rogers Award, the Renaissance Woman Award from the Foundation for Women in Medicine, the Distinguished Career Award from the American Public Health Association Section on Injury Control and Emergency Health Services, and the Sloan Public Service Award from the Fund for the City of New York. Dr. Barlow's research has focused on traumatic injury to children and on injury prevention for the past twenty-five years. She is a former member of the American College of Surgeons Committee on Trauma and the American Academy of Pediatrics Committee on Pediatric Emergency Medicine.

Dr. Barlow received a B.A. from Vassar College, an M.A. in Psychology from Columbia University and an M.D. from Albert Einstein College of Medicine where she was elected to Alpha Omega Alpha. Her general surgical training was completed at Bronx Municipal Hospital followed by a Fellowship in Pediatric Surgery at Babies Hospital, Columbia Presbyterian Medical Center.

#### Leslie Brown, CRNP, CPSTI

#### Children's of Alabama, Birmingham

Leslie Brown is co-Coordinator for Safe Kids Alabama at Children's of Alabama, Birmingham. She has held this position for 4 years. Previously, her experience includes nursing in a pediatric intensive care setting and working as a hematology nurse practitioner at Children's of Alabama.

Through Safe Kids, Mrs. Brown is focused on the community. She works closely with students, families, schools and other partners to provide education and resources for preventable injuries involving children birth to 18 years old. Teen passenger and driver safety are a passion for her, as Alabama is consistently ranked in the top 5 for automobile related deaths and severe injuries in this age group. She is married with 3 children. Two of her children are teen drivers.

Mrs. Brown received her Bachelor of Science in Nursing from the University of Alabama in 1993 and her Master's Degree in Nursing as a Pediatric Nurse Practitioner from the University of Alabama at Birmingham in 1997. She is a Basic Life Support (BLS) instructor, and Child Passenger Safety Technician Instructor (CPSTI), as well.

#### Dina Burstein, MD, MPH, CPSTI, FAAP

#### Providence, RI

Dina Burstein, MD, MPH is the program coordinator for community activities at the Injury Prevention Center at Rhode Island Hospital. She coordinates the Injury Free Coalition for Kids in Providence program, the Safe Kids RI program, Kohl's Cares for Kids on the Go program, and the IPC Home Safety programs. Dr. Burstein earned her MD degree at the University of Massachusetts Medical School and completed a residency in pediatrics at Yale-New Haven Hospital. Dr. Burstein has practiced as a primary care pediatrician and recently earned an MPH from the University of Massachusetts Medical School.

### Catherine Cavallaro, BA

#### Boston Children's Hospital Boston, MA

Catherine Cavallaro is an Injury Prevention Specialist at Boston Children's Hospital. She received her Bachelors of Arts degree in Developmental Psychology from Emmanuel College. While in school, she completed an academic internship with the Injury Prevention Team where she developed the passion to help educate families in preventing injuries. She loves working with the kids and teaching the children of Boston on the importance of car and helmet safety.

#### James Dodington, MD

#### New Haven, CT

James Dodington, MD, is an Assistant Professor of Pediatrics and Emergency Medicine at the Yale School of Medicine and an attending physician in the Pediatric Emergency Department of Yale-New Haven Children's Hospital. He is also Co-Medical Director, Injury Prevention, Community Outreach and Research program at Yale New Haven Children's Hospital. His research interests include violence prevention, and health disparities research with a focus on community-based participatory research (CBPR). He was the research director for an NIH-funded youth violence prevention project called YouthHaven, in collaboration with the Robert Wood Johnson Foundation Clinical Scholars Program at Yale. He currently is working with the New Haven Family Alliance, a community-based organization, to develop a Hospital-Based Violence Intervention Program at Yale-New Haven Hospital and with Streetsafe Bridgeport, a Hospital-Based Violence Intervention Program at Bridgeport Hospital.

#### Jane Edwards, MSc

## London Health Sciences Centre/Children's Hospital London, ON

Jane is an Injury Prevention Specialist for the Trauma Program at LHSC & Children's Hospital. She is a graduate of the University of Western Ontario with an BSc(Hons) degree in Microbiology & Immunology and the University of London/London School of Hygiene and Tropical Medicine with an MSc in Infectious Diseases. During her schooling, Jane worked at LHSC's pediatric and adult Emergency Department and learned firsthand the devastation of traumatic injury. She is a coordinator of the IMPACT (Impaired Minds Produce Actions Causing Trauma) program as well as the Chair of the Not By Accident Committee, and sits on many community and inter-hospital committees dedicated to reducing injury. Jane is a strong advocate for pediatric injury prevention and has worked to implement programming within the hospital, such as The Period of Purple Crying Program for shaken baby awareness, Bicycle Helmet Giveaway Program in the ED and the Home Safety Device Program for first time parents.

#### Erin Evans, BS

#### Iowa City, IA

Erin Evans is a third year medical student at the University of Iowa Carver College of Medicine. She grew up in Iowa City, Iowa and completed her undergraduate studies at The University of Kansas receiving a BS degree in Neurobiology. Erin is interested in acute care and plans to complete a residency in Emergency Medicine or Surgery. She hopes that her research will help fuel the conversation regarding the protection of children from injury and potentially lead to substantive changes in public policy.

#### Barbara Gaines, MD

#### Children's Hospital of Pittsburgh of UPMC Pittsburgh, PA

Dr. Gaines is a Professor of Surgery at the University of Pittsburgh School of Medicine and an attending surgeon at the Children's Hospital of Pittsburgh of UPMC, a level 1 pediatric trauma center. She serves as the Director of the Benedum Pediatric Trauma and Injury Prevention Programs, Clinical Director of Pediatric General and Thoracic Surgery, and the Program Director of the Pediatric Surgery Training Program. She is triple board certified in pediatric surgery, general surgery and surgical critical care. Dr. Gaines is currently serving as the Chair of the American Association for the Surgery of Trauma (AAST) Pediatric Committee, a member of the American College of Surgeons Committee on Trauma (ACS-COT), and the Secretary/Treasurer of the Association of Pediatric Surgery Training Directors (APSTD). She is a past president and founding member of the Pediatric Trauma Society (PTS) and a past board president of the Injury Free Coalition for Kids. Her current research interests include the role of post-traumatic coagulopathy in pediatric trauma, as well as outcomes and quality of life after pediatric injury and the prevention of childhood injury.

#### Dawne Gardner, MBA, CPST Comprehensive Children's Injury Center (CCIC) Cincinnati, OH

As an Injury Prevention Specialist, Ohio Certified Child Passenger Safety Technician and Program Coordinator for Injury Free Coalition of Kids at Cincinnati Children's Hospital, Dawne takes pride in her role to educate and train both the community and hospital employees on best practices for the prevention of unintentional pediatric injury. Receiving her MBA from Thomas More College, she has used her education and knowledge of community engagement to help develop and implement community outreach that has measurably decreased the frequency of pediatric home injuries treated in our local emergency rooms. In addition to her home safety programming she has organized and successfully built seven Injury Free playgrounds in various Cincinnati neighborhoods and lead multiple bike, pedestrian, playground, poison and child passenger safety initiatives both in the community and in the hospital.

For her focused work on helping to eliminate disparities in childhood injuries, Dawne received the Injury Free Coalition for Kids 2014 National Injury Prevention Coordinator of the Year and in November of 2015, she was invited to share her injury prevention expertise internationally as a speaker at the Global Safe Communities conference in Thailand. With a passion for keeping children "injury free", Dawne is always on the job and devoted to meeting the challenge of effectively educating and providing the necessary resources needed to keep children safe in the places they live and play.

#### Tiffaney Isaacson, BS

## Phoenix Children's Center for Family Health and Safety Phoenix, AZ

Tiffaney Isaacson, BS is a Water Safety Coordinator with Phoenix Children's Center for Family Health and Safety. She examines data, conducts research, teaches families, and coordinates community-wide programs to address child drowning risk. Tiffaney works closely with local media and advocates for families and professionals who have been touched by drowning. Tiffaney is also a member of the Past Presidents Council with the National Drowning Prevention Alliance.

#### Charles Jennissen, MD

#### University of Iowa Carver College of Medicine

#### Iowa City, Iowa

Charles Jennissen, MD, is a Clinical Professor in the Department of Emergency Medicine at the University of Iowa Carver College of Medicine in Iowa City, Iowa. He serves as the Director of Pediatric Emergency Medicine at the University of Iowa Hospital and Clinics and the University of Iowa Children's Hospital. Dr. Jennissen grew up on a dairy farm in central Minnesota. This plays a large part in his interest in safety and injury prevention, particularly regarding children and teens, and those who work and live on farms. Most of his research projects have addressed injury-related issues with a heavy emphasis on off-highway vehicles (OHVs) such as all-terrain vehicles (ATVs). His 12-year-old first cousin and another neighborhood boy were killed while on an ATV as they drove out of a farmyard driveway and were hit by a pick-up in 1982 just a few miles from his family's farm. Dr. Jennissen is very active in the Iowa ATV Safety Taskforce and is a member of a national OHV On Roads coalition led by the Consumer Federation of America. This coalition has been working to decrease the number of OHV crashes and injuries on roadways and is making efforts to inform the public and governing officials of the dangers of OHVs on public roads. Dr. Jennissen is a Fellow in the American Academy of Pediatrics and the American College of Emergency Physicians. He is proud to have received the SAFE KIDS Iowa "People Who Make a Difference" Award in 2006.

#### Yun Kim, MS, OTR/L, STAR/C, CPST

#### Johns Hopkins Hospital Baltimore, MD

Yun Kim, MS, OTR/L, STAR/C, CPST, CIMI started in the adult acute care service at Johns Hopkins in 2008. In 2012, she transferred to the pediatric service. She has been involved in projects that focused quality improvement in the Pediatric Intensive Care Unit and the Neonatal Intensive Care Unit. She received her certification in Child Passenger Safety Seat in 2014 and Special Needs Safety Seat in 2015. She has been involved in car seat education policy in the NICU.
#### Cassie King, BS Seattle Children's Hospital Seattle, WA

Cassie King serves as a senior program coordinator for External Affairs and Guest Services at Seattle Children's Hospital where she helps coordinate the Seattle Children's Gun Violence Prevention Coalition and safe gun storage community efforts. She is a member of the research teams assessing and evaluating safe gun storage giveaway events and school-based violence and suicide prevention. Ms. King is currently pursuing her Master's in Public Health at The George Washington University and is a graduate of Central Washington University with a degree in public health.

#### Andrew Kiragu, MD

University of Minnesota Minneapolis, MN

Dr. Andrew Kiragu is currently the Interim Chief of the Department of Pediatrics and Medical Director of the Pediatric Intensive Care Unit at Hennepin County Medical Center in Minneapolis. He is an Assistant Professor of Pediatrics at the University of Minnesota. He completed his undergraduate studies at Dalhousie University in Nova Scotia, Canada and subsequently graduated from Howard University College of Medicine in Washington, DC. He served his residency in Internal Medicine and Pediatrics, followed by a fellowship in Pediatric Critical Care at the University of Minnesota.

As a pediatric intensivist at HCMC, one of Minnesota's premier Level 1 Pediatric Trauma Centers, he has considerable expertise in the management of critically injured children particularly those with severe traumatic brain injuries. He is also engaged in injury prevention efforts with Injury Free Coalition for Kids Minneapolis and serves on the boards of Safe Kids Minnesota and the Midwest Injury Prevention Alliance. Dr. Kiragu is an active advocate for children at the state level and is President-Elect of the board of directors of the Minnesota Chapter of the American Academy of Pediatrics.

#### Lois Lee, MD MPH

Boston Children's Hospital Boston, MA

Dr. Lois Lee is an attending pediatric emergency medicine physician at Children's Hospital Boston and an Assistant Professor of Pediatrics at Harvard Medical School. She received her MD from the University of Pennsylvania School of Medicine, and completed her internship and residency in pediatrics at the Children's Hospital of Philadelphia. She did her fellowship in pediatric emergency medicine at Children's Hospital Boston. She received her MPH from the Harvard School of Public Health. Her clinical and research interests are in pediatric trauma care and injury prevention. She also practices injury prevention at home with her son and her daughter.

#### Michael Levas, MD, MSCT

#### Medical College of Wisconsin Milwaukee, WI

Michael Levas, MD, MSCT has been with the Medical College of Wisconsin's Section of Pediatric Emergency Medicine since 2011. Since joining the faculty at the Medical College, Dr Levas has been intimately involved with youth violence and injury prevention policy and research. He is the assistant medical director of Project Ujima and currently serves on the Global Health Advisory Council and the Injury Reduction Initiative at Children's Hospital of Wisconsin.

#### Deena Liska, BA, CPST-1

#### Children's Hospital of Wisconsin Milwaukee, WI

Deena Liska is the Teen Driving Coordinator for Children's Hospital of Wisconsin Community Education and Outreach.

Deena has a BA in Professional Communication from Alverno College, and will graduate in May 2017 with a Master's degree in Education. She entered the field of injury prevention through emergency services where she was a Firefighter and Emergency Medical Technician for more than 15 years, and retired at the rank of Captain.

Deena has coordinated teen traffic safety programs for Children's Hospital for the past ten years, through partnerships with the Wisconsin DOT, the Wisconsin Department of Health, and State Farm. In addition, she has been a certified Child Passenger Safety Technician/Instructor for more than 15 years, and manages the Children's Hospital of Wisconsin car seat clinic.

#### Ping Ma, PhD

Dallas, TX

As the research scientist with Children Injury Prevention, Ping Ma is leads retrospective studies as a Principal Investigator (PI) using 11 years' pediatric traumatic injury registry dataset at Level 1 Trauma Center in North Texas and examining car seat misuse status 2013-2016 among low socioeconomic status (SES) children living in Dallas/Fort Worth areas. As a certificate car seat technician, I am also attending car seat installation education in communities and developing new intervention protocol for reducing motor-vehicle collisions (MVC) injuries among minority children living in North Texas. These responsibilities involve analyzing pediatric injury trend over time, examining risk factors related with pediatric injuries mechanisms and car seat misuse, and disseminating research findings at national and local conferences in 2016.

Prior to becoming research scientist at Children's Health, I was a postdoctoral fellow in health risk behaviors' intervention using innovative technologies. I have more than 7 years' advanced research experience on improving health behaviors among vulnerable population using epidemiological and biostatistician analysis skills. I have participated and evaluated multiple community-based intervention projects to promote people's risky behavior change. I am the author of 12 peer reviewed publications.

#### Michael Mello, MD, MPH

#### Rhode Island Hospital/Hasbro Children's Hospital Providence, RI

Michael Mello MD, MPH is a practicing board certified emergency physician with 26 years of clinical experience. He is a Professor in the Department of Emergency Medicine at Alpert Medical School of Brown University, and a Professor in Department of Health Services, Practice and Policy of Brown University School of Public Health. For the last fifteen years, he has also been the Director of the Injury Prevention Center at Rhode Island Hospital. He also Director of the Collis Injury Prevention Research Fellowship and Director of the Master of Science in Population Medicine program at Alpert Medical School of Brown University. His research has focused on behavioral change interventions to decrease injury recidivism. As alcohol and drug misuse is a significant risk factor for many injury patterns, much of his research has involved addiction science and he frequently has overlapped this with his interest in child and adolescent injury prevention. Dr. Mello's research has been funded by NIH, CDC and several research foundations.

#### Alison MacPherson, PhD

York University Toronto, ON Canada

Alison Macpherson, PhD is a Professor in the School of Kinesiology and Health Science at York University and an adjunct scientist at the Institute for Clinical Evaluative Sciences. She is the co-principal investigator on the CIHR Team in Child and Youth Injury Prevention, and holds a CIHR Chair in Child Health Services and Policy Research. Her research is related to the prevention of childhood injuries generally, and the evaluation of policies designed to reduce injuries specifically.

#### Eileen McDonald, MPH

#### Johns Hopkins Bloomberg School of Public Health Baltimore, MD

Eileen McDonald is an associate scientist in the Department of Health, Behavior and Society at the Johns Hopkins Bloomberg School of Public Health, where she directs the Masters program in Health Education and Health Communication. She is also core faculty of the Johns Hopkins Center for Injury Research and Policy. Her research focuses on the application of innovative health education methods, health communication technology, and other hospital- and community-based interventions aimed at reducing pediatric injuries. Among her currently active research projects is a randomized controlled trial of a safe sleep intervention in a pediatric well-child clinic, a survey of burn prevention and burn first aid response among parents whose children are being seen for a scald in a burn follow up clinic, and an m-health application to promote booster seats and fire prevention safety among parents of young children being seen in the emergency department.

Ms. McDonald was a co-creator of the Johns Hopkins Children's Safety Center, opened in 1997, a first-of-its-kind, hospital-based safety resource center, that provides free injury prevention education and promotes the use of safety products to reduce injuries among children and families. As director, Ms. McDonald also oversees a mobile safety center implemented in partnership with the Baltimore City Fire Department. Ms. McDonald has authored a nationally distributed guidebook for child safety and numerous research articles on injury prevention and health education topics. Ms. McDonald holds a bachelor's degree in health education and a master's degree in health administration. Ms. McDonald is the PI of Injury Free Coalition for Kids–Baltimore.

#### Beverly Miller, MEd

#### University of Arkansas for Medical Sciences Little Rock, AR

Beverly Miller, MEd, is the Associate Director of Research at the Injury Prevention Center at Arkansas Children's Hospital. Ms. Miller has over 30 years of experience working in health promotions for high risk populations in numerous public health areas, including substance abuse and violence prevention, cancer control, and injury control. In addition to working in the academic and pediatric settings, Ms. Miller has experiences working in a non-profit organization, mental health, and public schools.

Arkansas Children's Hospital became a member of the Injury Free Coalition for Kids in 2002. Since that time, Ms. Miller has worked closely with the faculty at the University of Arkansas for Medical Sciences and Arkansas Children's Hospital to develop translational research for populations most vulnerable for preventable injuries, most notably low-income, minority, and/or rural children. Current studies include a booster seat intervention in rural communities, innovative educational strategies for ATV riders in rural communities, and motor vehicle safety for teens. Successful awards for injury control include funding from the Allstate Foundation, the Centers for Disease Control and Prevention, and HRSA Targeted Issues in Maternal and Child Health.

Ms. Miller earned a Masters in Education with an emphasis on special education for the severely emotionally disturbed from the University of Arkansas.

#### Joseph O'Neil, MD

Riley Hospital for Children Indiana University School of Medicine Indianapolis, IN

Joseph O'Neil, MD is an Associate Clinical Professor of Pediatrics at Indiana University, Riley Hospital for Children, and is board-certified in Pediatrics and Neurodevelopmental Disabilities. He completed his Bachelors and Master's in engineering at the University of Notre Dame and received his Doctorate in Medicine and Masters of Public Health from Indiana University. He completed his residency in pediatrics at Riley Hospital for Children at Indiana University. Dr. O'Neil currently serves as chairperson of the Committee on Injury and Poison Prevention of the Indiana Chapter of the American Academy of Pediatrics and was an Executive Committee Member of the Council of Injury, Violence, and Poison Prevention for the AAP. His current research is in the area of trauma prevention, education of injury prevention, and safe transportation of children. Dr. O'Neil serves as co-principal investigator for Injury Free Coalition for Kids of Indianapolis.

#### Ian Pike, PhD

#### University of British Columbia Vancouver, BC, Canada

Ian Pike, PhD is Associate Professor of Pediatrics at UBC; Investigator and Co-Lead of the Evidence to Innovation Research Theme at the Research Institute at BC Children's Hospital; Director of the BC Injury Research and Prevention Unit, and Co-Executive Director, The Community Against Preventable Injuries. The BC Injury Research and Prevention Unit works directly with the BC Government, Health Authorities, and other organizations, with the goal to reduce the social and economic burden of injury in British Columbia. In addition to its BC focus, the Unit participates in injury prevention research and initiatives across Canada and internationally. Dr. Pike's research is funded by CIHR, AUTO21, and Public Health Agency of Canada, where he has co-led three CIHR teams to conduct national projects to develop and validate injury indicators for Canadian children and youth; injury prevention among First Nations and Inuit children and youth; child passenger safety; risky play; and, the efficacy of social marketing to reduce preventable injuries. He has given over 100 invited presentations, including 25 keynote talks. In addition, he has given over 30 continuing education sessions to physicians, nurses, public health and safety professionals, and has over 50 peer-reviewed journal articles, and numerous invited plenary and professional presentations. His current research is focused on the determinants of injury, and the linkages between unintentional and inflicted injury as a means to creating a safety oriented culture.

#### Lindsay Pollok, MPH

#### Dell Children's Medical Center of Central Texas Austin, TX

Lindsay Pollok, MPH is an Injury Prevention Coordinator at Dell Children's Medical Center in Austin, Texas where she coordinates inpatient education, interventions and programs as well as community initiatives addressing a variety of injury prevention topic areas. Prior to working at Dell Children's, Lindsay worked for the State of Texas gaining experience in grant writing, program planning, and evaluation. She earned her undergraduate degree from Texas A&M University majoring in Biomedical Sciences. In 2010, she graduated with honors from the Texas A&M Health Science Center with a Master of Public Health focusing on Social and Behavioral Health. She is a Child Passenger Safety Technician Instructor and has completed the Safe Travel for All Children training for adaptive child restraints. At Dell Children's, Lindsay uses her education and training to improve child passenger safety services for all patients, with special projects focusing on children who have complex medical issues and children seen in the Emergency Department after hours. She enjoys educating parents and caregivers, and partnering with healthcare providers to help keep children safe. Lindsay also serves on the National Child Passenger Safety Board (2016-2018) in the Injury Prevention position, where she works to strengthen partnerships, enhance resources, and maintain the education curriculum for Child Passenger Safety Technicians across the country.

#### Wendy Pomerantz, MD, MS

Injury Free Cincinnati - CoPI Cincinnati Children's Hospital Medical Center Cincinnati, OH

Wendy received her undergraduate degree from the University of Texas at Austin and her medical school degree from the University of Texas Southwestern Medical School in Dallas, Texas. She completed a Pediatrics Residency at Children's Medical Center of Dallas, a Pediatric Emergency Medicine Fellowship at Children's Hospital Medical Center in Cincinnati, and a Master's of Science in Epidemiology at the University of Cincinnati. Currently, she has a faculty appointment as a Professor of Clinical Pediatrics at the University of Cincinnati School of Medicine and Children's Hospital Medical Center in Cincinnati, emergency medicine physician since 1998. She has published many peer-reviewed articles in the fields of injury and poison prevention. Her interests include poison prevention, concussions, program evaluation, education, and geographic information systems.

#### Joyce Pressley, PhD, MPH

Injury Free Director of Injury Free Health Policy and Population Studies Columbia University Injury Control Research Center Columbia University New York, NY

Joyce Pressley, PhD, MPH, is an Associate Professor of Epidemiology and Health Policy and Management at Columbia University Medical Center and Co-director of the Outreach core for the Columbia University CDC Injury Control Research Center. She Chairs of the Council of Centers for the Society for the Advancement of Violence and Injury Research (SAVIR), Co-Chairs the 2016 Scientific Program Committee for APHA's Injury Control and Emergency Health Services section (ICEHS) and is a member of the Occupant Protection Committee of the Transportation Research Board of the National Academies. She serves as Director of Injury Free Health Policy and Population Studies and heads the Department of Epidemiology's master's level internship and exec thesis programs. She is a former chair of APHA's Injury Control and Emergency Health Services Section.

Dr. Pressley's experience in research and community-based injury prevention programs crosses the disciplinary boundaries of health policy, epidemiology, emergency medicine, critical care, economics, health planning and management. She has experience in strategic planning at the local city, county and regional levels gained through her role as a former Director of Emergency Medical Services for an 11 county EMS planning and implementation program whose goals included improving access, communication and public education at the community level and identifying deficiencies and planning for the certification of regional critical care units for trauma, burn and poisoning.

Her current research interests include evaluating the impact of legislative regulatory policies and laws on unintentional injury including motor vehicle (MV) safety across the age span, technological advances for occupant protection, scale up of effective injury prevention programs, injury-related health disparities and injury in vulnerable populations. She has published in the areas of MV safety, home safety including window falls, the impact of injury-related laws, disparities, injury in vulnerable populations and methodological issues in research. She previously served as the principal investigator of an NIH-funded injury-related health disparities research core.

#### Kyran Quinlan, MD, MPH

#### Rush University Medical Center Chicago, IL

Kyran Quinlan is an academic general pediatrician, injury researcher and child safety advocate. He is the Chair of the American Academy of Pediatrics' Council on Injury Violence and Poison Prevention and an Associate Professor of Pediatrics at Rush University Medical Center in Chicago. Dr. Quinlan completed the Epidemic Intelligence Service at the US Centers for Disease Control and Prevention during which he trained in child injury epidemiology and prevention at the National Center for Injury Prevention and Control.

His publications include a study in the Journal of the American Medical Association demonstrating that the majority of US child passengers killed by drinking drivers in the United States were riding in the same vehicle with them. His research has focused on finding insights that have significant implications for prevention, and has worked to carry this through to prevention through advocacy. He received an MD from Loyola University in Chicago, completed his pediatric residency training at the University of Chicago, and received a Masters in Public Health at the University of Illinois at Chicago. He was also a Physician Advocacy Fellow of the Center on Medicine as a Profession of Columbia University working on child pedestrian safety in low-income areas on the south side of Chicago.

#### Lisa Roth, BS

#### Deputy Director Injury Prevention Research Center University of Iowa

Lisa Roth is the current Deputy Director of the Injury Prevention Research Center at the University of Iowa. She has a background in Community Health Education and more than 15 years of experience in the field of public health and injury prevention.

Prior to joining the University of Iowa, Lisa worked at the Iowa Department of Public Health as the state's first child passenger safety program manager. She went on to be manager of Community Outreach at Blank Children's Hospital. While at Blank, she was involved in numerous public policy initiatives including work on upgrading Iowa's Child Passenger Safety and Graduated Driver's Licenses Iaws. She also coordinated the Injury Free Coalition for Kids.

In her role as Deputy Director at the Injury Prevention Research Center, she currently oversees outreach activities and community collaborations. She also serves as the project manager for the PCORI funded comparative effectiveness study of two parent programs designed to support children after traumatic injury: a patient engaged approach in four children's hospitals in the Midwestern United States.

#### Alison Riese, MD, MPH

#### Alpert Medical School of Brown University Providence, RI

Alison Riese, MD, MPH is an Assistant Professor of Pediatrics in the Division of General Pediatrics at the Alpert Medical School of Brown University. She directs Urgent Care at Hasbro Children's Hospital's Primary Care Clinic. Additionally, she co-teaches Population and Clinical Medicine I & II and serves the Assistant Clerkship Director of the Longitudinal Integrated Clerkship for 3rd year medical students enrolled in the Primary Care-Population Health program, a combined MD-ScM track at Alpert Medical School. Dr. Riese's research focuses on adolescent health risk behaviors, including youth violence and sexual risk behaviors, and the utilization of technology in teen-centered interventions.

Dr. Riese is a graduate of University of Massachusetts Medical School and completed her Pediatrics residency at the Hasbro Children's Hospital/ Brown University program. Following residency, she completed an Injury Prevention Research Fellowship with the Department of Emergency Medicine and obtained a Masters in Public Health from Brown University.

#### DiLenny Roca-Dominguez, MPH

#### Columbia University, Mailman School of Public Health New York, NY

DiLenny Roca-Dominguez serves as the Administrator of the Injury Free Coalition for Kids, National Program Office (NPO). She oversees the administrative and financial management of the NPO. As technical assistance to the forty Injury Free sites, she developed financial tracking systems to monitor reporting and financial practices. She also developed templates to facilitate the preparation of annual and multi-year grant budgets, reporting materials and budget revisions. DiLenny has served as the project director for the national Little Hands Playground Projects since 2001,

a partnership between the Allstate Foundation and Injury Free Coalition for Kids which made possible 34 community-built playgrounds in 24 Injury Free cities across the country. Locally, in New York City, over 75 safe playgrounds have been built in public schools across all five boroughs. She is certified as a SAFE playgrounds advocate from the National Program for Playground Safety and is able to provide technical assistance and direction relating to the coordination of safe community built playgrounds. DiLenny has been certified as a Car Passenger Safety technician since 2002; she provides education in the NY metropolitan area.

DiLenny earned a Bachelor of Science in Neuroscience & Behavior and a Master of Public Health in Health Policy and Management from Columbia University's Mailman School of Public Health.

#### Emily Edge Rogers, PT, DPT, STAR/C, CPS

Johns Hopkins Hospital Baltimore, MD

Emily Edge Rogers, PT, DPT, STAR/C, CPS graduated with her Doctorate in Physical Therapy from The George Washington University in 2008. She started working at The Johns Hopkins Hospital soon after graduation in 2008 starting in adult neurology and transitioning to pediatrics in 2010. She is certified as a STAR clinician focusing on the rehabilitation of the pediatric oncology population. In 2014 Emily became a child passenger safety technician, certified to install both conventional and specialty car seats and devices. She has collaborated with a multi-disciplinary team to provide a car seat program in her NICU.

#### Steve Rogers, MD Connecticut Children's Medical Center Connecticut Children's Medical Center Injury Prevention Research Center Hartford, CT

Dr. Rogers is an Attending Physician in the Emergency Department at Connecticut Children's Medical Center and serves as Co-Principal Investigator for the Injury Free Coalition for Kids of Hartford, a community-based childhood injury prevention program. Dr. Rogers received his medical degree from New Jersey Medical School and was a pediatric resident at Childrens Hospital Los Angeles. Prior to joining Connecticut Children's, Dr. Rogers was a Pediatric Emergency Medicine Fellow at Primary Children's Center in Utah.

#### Linda Rothman, BScOT, PhD

York University Toronto, Ontario

Linda Rothman, BScOT, PhD, trained and worked as a pediatric occupational therapist. After completing a Masters in Community Health at the University of Toronto, she worked as an injury prevention research manager at The Hospital for Sick Children in Toronto, Canada. She completed a PhD in 2014 at the Institute of Medical Science, U of T, and is currently doing a postdoctoral fellowship in the School of Kinesiology and Health Science at York University in conjunction with Child Evaluative Sciences at the Hospital for Sick Children. Dr. Rothman's research focuses on child pedestrian injury prevention related to school travel, and has been funded by Sick kids, the Ontario Neurotrauma Foundation and the Canadian Institutes of Health Research.

#### Victoria Salow, MPH, CHES

#### Ann & Robert H. Lurie Children's Hospital of Chicago Chicago, IL

Victoria Salow, MPH, CHES coordinates the motor vehicle safety program within the Injury Prevention & Research Center at the Ann & Robert H. Lurie Children's Hospital of Chicago. Before coming to Lurie Children's in January of 2016, Victoria was a research assistant at the Center for Urban Transportation Research at the University of South Florida where she worked on a project to promote voluntary helmet use among motorcyclists in Florida. Victoria is a Certified Child Passenger Safety Technician and has worked in the field of unintentional injury prevention for the past two years.

#### Jillian Savino, CHES

#### Cohen Children's Medical Center New Hyde Park, NY

Jillian Savino, CHES is the Injury Prevention Coordinator at Cohen Children's Medical Center. Jillian started working for Cohen's in 2013 as a Health Educator and joined the CCMC trauma team in 2014. She received her undergraduate degree in Public Health and is pursuing a graduate degree in Health Education. Jillian is a Certified Health Education Specialist and a member of the National Commission for Health Education Credentialing. In addition, she is a member of Safe Kids NY, a Child Passenger Safety Instructor, and Special Needs Certified.

#### Judy Schaechter, MD, MBA

#### University of Miami Miller School of Medicine Miami, FL

Judy Schaechter, MD, MBA, is professor and chair of the Department of Pediatrics at the University of Miami Miller School of Medicine and chief of service at Holtz Children's Hospital at Jackson Memorial Medical Center. Dr. Schaechter is a general pediatrician with special interests in adolescence, injury and violence prevention, education, and community health. She is past president of the national Injury Free Coalition for Kids, served on the Florida Children and Youth Cabinet for eight years, and is a Senior Advisor to the Florida Children's Movement. Dr. Schaechter was a founding board member of The Children's Trust, led the creation of HealthConnect in Our Schools, creating health teams in 170 schools, and HealthConnect in the Early Years, opening up home visitation to new families in Miami-Dade County. As child health policy expert on the Florida Healthy Kids Corporation board for eight years, she chairing several committees, including the Finance and Audit Committee. Dr. Schaechter is an elected member of the American Academy of Pediatrics Council on Injury, Violence, and Poison Prevention and a member of the American Pediatric Society, She has chaired the Miami-Dade County Immunization Coalition and as a board member of the Early Learning Coalition of Miami-Dade and Monroe Counties, chairs the Program and Policy Committee as well as the Early Head Start Health Advisory Task Force. Dr. Schaechter has a regional and national reputation advocating for child safety, access to care and health promotion. She has effected policy change in firearm injury prevention, vaccination supply and scheduling, and freedom of speech.

#### Karen Sheehan, MD, MPH

Lurie Children's Hospital Chicago, IL

Karen Sheehan, MD, MPH is a Professor of Pediatrics and Preventive Medicine at Northwestern University's Feinberg School of Medicine. She is the Medical Director of Ann & Robert H. Lurie Children's Hospital of Chicago's Injury Prevention and Research Center and the violence prevention collaborative, Strengthening Chicago's Youth (SCY). Dr. Sheehan serves as the Associate Chair of Advocacy for the Department of Pediatrics and is also the Interim Co-Director of the Mary Ann & J. Milburn Smith Child Health Research Program. She is a founding volunteer of the Chicago Youth Programs, a community-based organization that works to improve the health and life opportunities of at risk youth. She divides her clinical time between directing the Chicago Youth Programs' Clinic at Lurie Children's and attending in the Pediatric Emergency Department.

#### Tanya Charyk Stewart, MSc

TLHSC & Children's Hospital London ON

Tanya is the Injury Epidemiologist for the Trauma Program at LHSC & Children's Hospital. She has an appointment with the Department of Surgery at the Schulich School of Medicine & Dentistry at Western as an Adjunct Research Professor. Her research interests include quality improvement, injury prevention evaluations and injury research, specializing in traumatic brain injuries and their prevention in the pediatric population. Tanya won the Johnson & Johnson Injury Prevention Award for Best Injury Prevention Research, presented at the international Trauma 2009 conference in Auckland, NZ and in 2007 & 2012 she won national Research Awards at the Trauma Association of Canada's Annual Scientific Meetings. The SBS prevention work of the Trauma Program she co-led won the Southwest LHIN Quality Award for Population-based Integrated Health Services in 2012.

#### Purnima Unni, MPH, CHES

#### Monroe Carell Jr. Children's Hospital at Vanderbilt Nashville, TN

Purnima Unni is the Pediatric Trauma Injury Prevention Manager at the Monroe Carell Jr. Children's Hospital at Vanderbilt, Nashville, Tennessee. She also serves as the main media spokesperson on pediatric injury prevention topics for Monroe Carell Jr. Children's Hospital at Vanderbilt. Ms. Unni has a Master of Public Health degree from Portland State University, Oregon, and undergraduate degrees in Education and Psychology from the University of Mumbai, India. She is also a Certified Health Education Specialist (CHES).

Ms. Unni is a strong advocate for injury prevention in her community and has been active in the field for more than 20 years. She was instrumental in securing the Injury Free Coalition for Kids site designation for her hospital. She has developed and implemented innovative programs in Nashville and its surrounding counties. The "Be in the Zone" teen motor vehicle safety program was a finalist in the Children's Hospital Association's 2012 Call for Resources. She has been a strong advocate for ATV Safety and is currently the co- chair of the Tennessee ATV Safety Coalition.

Faced with the issue of limited resources, she has secured funding through gifts and grants from external agencies and leveraged resources available in Vanderbilt University through student projects and internships. Over the last 4 years she has raised more than \$783,000 for injury prevention programs and has mentored 13 student interns.

She actively works to form partnerships with local agencies to tackle injury prevention issues. She is a member of several national and state committees. She has been selected to be on the expert panel for the Governor's Highway Safety Administration's new report on "Other influencers" pertaining to teen driver safety. At the state level, she has been appointed by the Tennessee Governor, Bill Haslam to serve as the safety expert on the newly created Tennessee OHV Advisory Committee.

She is also on the advisory board for "The Safer Tennessee Project," a new gun violence prevention organization focused on reducing the number of gun-related injuries and deaths in Tennessee. She is a member of Committee on Pediatric Emergency Care (COPEC), Tennessee Committee on Trauma and the Tennessee Commissioner's Council on Injury Prevention and Control. She is also a member of the American Public Health Association and the Pediatric Trauma Society. Ms. Unni has a strong interest in research and has published in the Journal of Trauma and Acute Care Surgery, American Journal of Emergency Medicine, and the Journal of Pediatric Surgery. She has also presented her work at numerous state and national conferences. She has served as an ad hoc reviewer for "Pediatrics" and several APHA conferences.

#### Pina Violano, PhD, MSPH, RN-BC, CCRN, CPS-T

#### Yale-New Haven Children's Hospital New Haven, CT

Pina Violano, PhD, MSPH, RN-BC, CCRN, CPS-T is Manager of the Injury Prevention, Community Outreach & Research Department for Yale-New Haven Hospital & Yale-New Haven Children's Hospital. She is also Co-Director and Principal Investigator of the Injury Free Coalition for Kids of New Haven and Program Director and Co-Principal Investigator for CT's Emergency Medical Services for Children. She has developed injury prevention strategies on a local, state and national level, and has longstanding leadership and expertise in reducing the impact of preventable injuries, community outreach, and violence prevention in the City of New Haven, regionally and nationally.

She has led the effort for the Yale New Haven Children's Hospital to receive the designation of Injury Free Coalition for Kids of New Haven, and has led multiple injury prevention initiatives throughout her career including car seat programs, safe driving campaigns for teens and elderly drivers, pedestrian safety initiatives, fire safety programs, heroin and opioid abuse and gun buyback programs and other anti-violence efforts just to name a few.

Her research efforts have centered on the Determinants of Usage of Age-Appropriate Child Safety Seats, Evaluating if trauma is a factor in the cessation of driving, Assessing driver behavioral antecedents to car crashes. Medication effects on driving risk in clinical context among older drivers, distracted behaviors of adults while driving children in the car. As well as reduction of gun violence through gun buy-back programs, safe storage of guns, social cohesion and community resilience effects to mitigate gun violence, women's role in violent crimes, educating gun shop owners on suicide, and educating the community on how to reduce gun violence through education, and advocacy. Pina was recently appointed to the State's Child Fatality Review Panel by the Speaker of the House of Representatives. Pina has been a registered nurse for over 30 years and recently completed her PhD in Public Health. She is also a certified child passenger safety technician and has advanced training for safe transportation of children with special healthcare needs.

#### Jessica Waters, BA, MPH

#### University of Iowa Carver College of Medicine Iowa City, IA

Jessica Waters, BA, MPH is a second year medical student at the University of Iowa Carver College of Medicine. She grew up in Mason City, Iowa and completed her undergraduate studies at The University of Iowa with a BA degree in Economics and Spanish. She received a Master of Public Health (MPH) degree in Health Policy and Administration from the University of Iowa College of Public Health in 2012 and holds a Graduate Certificate in Emerging Infectious Disease Epidemiology. She has performed research in a number of different settings including the University of Iowa Center for Emerging Infectious Diseases, Mental Health Council of Australia, and the World Health Organization in Geneva, Switzerland. She is also an EMT and very interested in public health and working with immigrant populations in the U.S. She is presently considering completing a residency in General Surgery or Emergency Medicine.

#### Kim Wiley Schwartz

#### New York, NY

Kim Wiley-Schwartz has been working to make under-served communities stronger and safer in New York City for over 25 years. She began her teaching career bringing richer arts education to New York City public schools working for the Metropolitan Opera, the 92nd Street Y and the acclaimed TADA! Youth Theater and specializing in afterschool and middle school programs. Nine years ago, after a four-year-old boy was killed by an SUV just blocks away from her home, she took what she knew about arts and education and brought it directly to street safety. For the past six years, she has served as the Assistant Commissioner for Education and Outreach at the New York City Department of Transportation. There she oversees a team of 30 people working with over 700 schools, senior centers and community organizations each year to help bring the streets to their safest numbers in over 100 years. She has been thrilled to be on the front line of Vision Zero under Commissioner Polly Trottenberg. Kim is a graduate of Hampshire College and lives in Brooklyn with her two children and husband Andy Wiley-Schwartz who works for Bloomberg Associates in the Transportation group.

#### Benjamin Wilkinson, BA, NRP

#### Virginia Gay Hospital, Respiratory Therapy Iowa City, IA

Benjamin Wilkinson graduated from the University of Iowa with a BA degree in Interdepartmental Studies. He grew up in Cedar Rapids, Iowa and completed the University of Iowa paramedic program in 2013. Ben has worked as a paramedic with Iowa County EMS, North Benton EMS, and with respiratory therapy at Virginia Gay Hospital for the past several years. He is presently applying for medical school and would like to be an orthopedic surgeon someday. He is interested in injuries and injury prevention because of his work with trauma patients in the field as a paramedic.



## 21 Years of Forging New Frontiers:

# Looking into the Future of Childhood Injury Prevention

Celebrate, Collaborate, Continue the Journey...



# EVALUATION & CME CERTIFICATION

### ACCREDITATION

#### Accreditation

#### **Continuing Medical Education**

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Cincinnati Children's and the Injury Free Coalition for Kids at the Center for Injury Epidemiology and Prevention, Mailman School of Public Health, Columbia University. Cincinnati Children's is accredited by the ACCME to provide continuing medical education for physicians. Cincinnati Children's designates this live activity for a maximum of 14.5 AMA PRA Category 1 *Credit*(s)<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

#### Disclosure

Cincinnati Children's requires all clinical recommendations to be based on evidence that is accepted within the profession of medicine and all scientific research referred to, reported or used in support of or justification of patient care recommendations conform to the generally accepted standards of experimental design, data collection and analysis. All faculty will be required to complete a financial disclosure statement prior to the conference and to disclose to the audience any significant financial interest and/or other relationship with the manufacturer(s) of any commercial product(s) and/or provider(s) of commercial services discussed in his/her presentation and/or commercial contributor(s) of this activity. All planning committee members and/or faculty members were determined to have no conflicts of interest pertaining to this activity.