

# Pediatric Injury Prevention

A SUMMARY OF WORK AT THE UNIVERSITY OF IOWA  
INJURY & VIOLENCE EXPERT RESEARCH TEAMS

September, 2019



*Preventable injuries are the number one cause of death for children in the U.S. Every year, around one million children die from preventable injuries around the world from car crashes, drownings, violence and more. Even more children experience non-fatal injuries and violence that can affect them for a lifetime.*

*The UI Injury Prevention Research Center (UI IPRC) organizes expert research teams with faculty from 25 departments around campus — including emergency medicine, education and public health — and partners with state agencies, the UI Stead Family Children’s Hospital, and community organizations to reduce the burden of pediatric injuries.*

## Together we accomplish work like this:

### RURAL ROAD SAFETY

- ⇒ We conduct the annual Iowa Child Passenger Safety Study in partnership with the Iowa Governor’s Safety Bureau. The survey has consistently shown child passengers are less likely to be restrained when traveling with unbelted drivers, teenage drivers, in rural areas, and in pick-up trucks.
- ⇒ We study vehicle interactions around farm equipment on the roadway to promote safer driving in rural areas. As many as 25% of crashes with farm vehicles involve young drivers.
- ⇒ We collaborated with the Iowa Center for Agricultural Safety to create PSAs to reduce crashes between motor vehicles driven by teens and farm equipment.



### TEEN DRIVERS

- ⇒ We developed and tested *Steering Teens Safe (STS)*, a parent communication and driving supervision guide that helps parents motivate their teens to drive safely. Evaluations of STS estimate a 21% reduction in teen risky driving. We have integrated this program into three business workplace wellness programs.



### FIREWORK INJURIES

- ⇒ We found fireworks injuries were more severe and more young people and bystanders were injured by fireworks after Iowa’s 2017 law went into effect allowing the sale of fireworks in the state during specific time periods.

*The UI Injury Prevention Research Center organizes expert research teams around road traffic safety, opioid overdoses, older adult falls, rural acute care, and interpersonal violence. These teams identify ways to collaborate around innovative research, outreach efforts, and educational opportunities for the next generation of injury & violence prevention leaders.*



[www.uiiprc.org](http://www.uiiprc.org)  
**Injury Prevention  
Research Center**

*Creating knowledge  
to keep you safe*

## PEDESTRIANS, BICYCLISTS & MOTORCYCLISTS

- ⇒ We study bicycle behaviors of children and educational programs for child bicyclists.
- ⇒ We look at parent—adolescent communications around bicycle safety.
- ⇒ We examine the causes of crashes and look at court outcomes, such as citations and convictions, following crashes involving vulnerable road users.
- ⇒ We found that younger motorcycle riders are more likely to be charged in the event of a crash.



## PEDIATRIC TRAUMA CARE

Research using the Iowa Trauma Registry has found:

- ⇒ Private vehicle transport of pediatric trauma patients was a risk factor for undertriage (when a patient is transported to a hospital that doesn't have the trauma capacity to treat them).
- ⇒ Nearly 43% of severe pediatric trauma patients arrived by private vehicle, and there was an almost 47% overall undertriage rate.
- ⇒ Undertriaged pediatric patients were more likely to be non-white, have a lower injury severity, reside in rural or micropolitan counties, and be injured farther from Level 1 & 2 trauma centers.

## YOUTH VIOLENCE

- ⇒ We study the effect of state teen dating violence laws on teen dating violence behaviors.
- ⇒ We developed the online toolkit HEAR: Helping Educators Use Art to Reduce Bullying [www.hear-project.org](http://www.hear-project.org)
- ⇒ We evaluated Iowa's anti-bullying law: We found that it has promise for improving traditional forms of bullying, but not cyberbullying.
- ⇒ We evaluated the effectiveness of anti-bullying laws in 25 states.
- ⇒ We examined parents' responses around teen cyberbullying and found parents were uncertain how to handle cyberbullying.
- ⇒ We examine workplace violence among youth workers and identify what puts youth at risk for being a victim of workplace violence.
- ⇒ We look at adverse family & neighborhood conditions on the development of youth violence.



## CHILDHOOD TRAUMA

- ⇒ We study the effects of childhood adversity on cardiovascular health.
- ⇒ We studied differences between Iowa home visiting programs in urban and rural areas which offer parent strategies for first-time parents and provide services to high risk parents.
- ⇒ We co-sponsor a new resilience & trauma-informed interdisciplinary certificate at the University of Iowa ideal for undergraduates interested in understanding child health and resilience.