

Injury Prevention Research Center

We envision a world in which injury and violence prevention professionals work collaboratively with local and global communities to implement effective solutions that reduce the occurrence and impact of injury and violence.



In the first half of life, more Americans die from injuries—such as being a victim of violence, falls, motor vehicle crashes or poisoning—*than from any other cause*, including cancer, HIV, or heart disease. Nearly 190,000 Americans died from injuries in 2011, and injuries cost more than \$465 billion dollars annually in medical care and lost productivity¹. The same year in North Carolina, 2,996 people died from injuries². 1,140 died from unintentional poisoning, 80% of these from prescription drug overdose. Injury is also a major cause of disability and health care costs, with about 2.8 million people hospitalized and 29 million treated in emergency rooms as a result of injury each year³.

Injuries can be prevented, as proven by the lives saved and injuries prevented by, among other strategies, seat belt use and related legislation, bicycle, motor cycle and football helmet use, smoke detectors, child-safe drug packaging, and evidence-based falls prevention and violence prevention programs.

The UNC Injury Prevention Research Center (IPRC) has been working to prevent injury since it was established in 1987. It is one of 11 “Centers of Excellence” funded by the National Center for Injury Prevention and control, Centers for Disease Control and Prevention (CDC). IPRC, like the field of injury control in general, spans disciplines, including public health, medicine, psychology, social work, and others. IPRC faculty and staff work closely with state and regional partners to assure the translation of research into practice.

Our mission is to build the field of injury and violence prevention and control through a combination of interdisciplinary scholarly approaches to research, intervention, and evaluation as well as through the training of the next generation of researchers and practitioners.

UNC IPRC’s history of innovative research in occupational, residential, sports and recreational injury and violence prevention continues today. Our work closely aligns with national priority areas identified by the CDC, including the prevention of violence against children and youth, prescription drug overdose and traumatic brain injury.

1: <http://www.cdc.ov/injury/overview/index.html>

2: North Carolina Center for State Health Statistics, Detailed Mortality Statistics: <http://www.schs.state.nc.us/schs/data/dms/dms.cfm>

3: North Carolina Division of Public Health, Injury and Violence Prevention Branch: <http://injuryfreenc.ncdhhs.gov/About/Poisoning.htm>

Select Research Projects

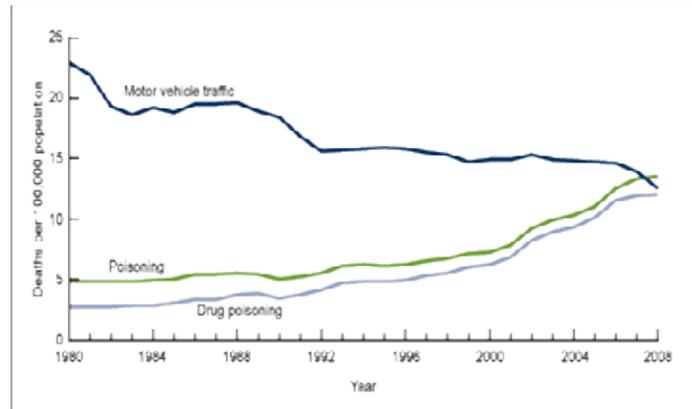
Prescription Drug Poisoning Prevention

Assessing the Effectiveness of Prescription Drug Monitoring Programs. The goal of this project is to provide evidence-based information and recommendations on the effectiveness and policy implications of Prescription Drug Monitoring Programs (PDMPs). The study will examine how laws relevant to a state's PDMP enactment and operation are interpreted, document how state PDMPs are utilized by stakeholders, and quantify how PDMPs affect prescribing and overdose mortality. The research team includes legal researchers, epidemiologists, a pharmacist and the administrator of a state PDMP. The results will include policy recommendations, and will be disseminated to government officials and clinicians. It is led by IPRC Senior Research Scientist Christopher Ringwalt and Nabarun Dasgupta, epidemiology doctoral student.

FUNDING Robert Wood Johnson Foundation

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Figure 1. Motor vehicle traffic, poisoning, and drug poisoning death rates: United States, 1980–2008



<http://www.cdc.gov/nchs/data/databriefs/db81.htm>

Randomized Controlled Trial of an Emergency Department Care Coordination Program in Eleven Emergency Departments of the Carolinas Health-Care System. The Centers for Disease Control and Prevention have contracted with the UNC IPRC to implement and evaluate a care coordination plan in collaboration with a hospital system in the Carolinas and the North Carolina Public Health Foundation. The care coordination plan will notify physicians in participating

emergency departments of flagged patients who have made numerous visits to secure opioids to relieve chronic subjective pain, and that it is in the patient's best interests to receive treatment from a community-based provider. This study will test whether the plan results in fewer patient visits to the emergency department, fewer prescriptions for opioids provided by emergency department physicians, fewer emergency department visits related to opioid poisoning, and lower patient costs. Partnering organizations include the Carolinas Poison Center, Carolinas HealthCare System, and the NC Injury and Violence Prevention Branch. The study is led by Senior Research Scientist Christopher Ringwalt.

FUNDING Centers for Disease Control and Prevention, National Center for Injury Control and Prevention

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Prevention of Traumatic Brain Injury

Center for the Study of Retired Athletes. The primary goals of the Center are to collect epidemiological data on retired professional athletes, and to provide medical care to select retirees in a research setting. This information is used to prepare active athletes for a healthier retirement. UNC IPRC assists the Center with biostatistical support and participation on the Center's Advisory Board. It is led by UNC IPRC Core Faculty Kevin Guskiewicz.

FUNDING University of North Carolina; The National Football League Players' Association-Professional Athletes Foundation; Medtronic, Inc.; Martek Biosciences Corporation; and the National Operating Committee on Standards for Athletic Equipment.

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Matthew Gfeller Sport-Related Traumatic Brain Injury Research Center. The mission of the Center is to improve the prevention, evaluation, management and rehabilitation of sport-related traumatic brain injuries through research, education and clinical practice. It is directed by UNC IPRC Core Faculty Kevin Guskiewicz.

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Child Maltreatment Prevention

The Period of PURPLE Crying®: Keeping Babies Safe in North Carolina. This project addressed abusive head trauma in infants, or Shaken Baby Syndrome, by evaluating the effectiveness of this parent education program and a related media campaign. Eighty-five North Carolina birthing hospitals delivered the parent education program, over 1,100 primary care doctors reinforced The Period of PURPLE Crying®, and each of North Carolina's 12 pediatric critical care units provided weekly enrollment data to permit prospective surveillance of serious abusive head injury. Originally developed by Dr Desmond Runyan, the project is now led by IPRC Core Faculty Adam Zolotor, and represents extensive partnerships with state and national partners.

FUNDING The Centers for Disease Control and Prevention, The Duke Endowment through the Center for Child & Family Health, and the Doris Duke Charitable Foundation

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From Science to Practice: LONGSCAN Findings that Can Transform Child Welfare. The goal of this project is to engage regional and national stakeholders in child maltreatment

prevention and intervention by using the extensive findings from the LONGSCAN study to generate actionable policy and practice recommendations. LONGSCAN, the Longitudinal Studies of Child Abuse and Neglect, followed 1,354 children and their primary caretakers from five study sites for 20 years and has resulted in over 130 peer-reviewed publications. Led by the LONGSCAN Investigators.

FUNDING Doris Duke Charitable Foundation

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Prevention of Youth Violence

The North Carolina Academic Center for Excellence in Youth Violence Prevention. NC-ACE is the nation's first rural Youth Violence Prevention Center. It serves Robeson County, NC, one of the most ethnically diverse rural counties in the US, and a county severely affected by on-going economic struggles precipitated in part by the loss of thousands of manufacturing jobs. In 2011, the Center began providing community support and solutions for preventing youth violence among middle school students. Evaluation activities include tracking community and school rates of violence in the county, and following the health and development of 3,000 Robeson County students and a comparison group of 2,000 students from a nearby county. The Center was established by the Centers for Disease Control and Prevention's National Center for Injury Control and Prevention. The project is a collaboration between the UNC School of Social Work, the UNC IPRC, and community partners in Robeson County. It is led by Core Faculty Paul Smokowski.

FUNDING Centers for Disease Control and Prevention, National Center for Injury Control and Prevention

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Family-Based Dating Violence Prevention for Latino Teens. This multi-phase project combines translational research with developmental and intervention research by adapting the evidence-based *Families for Safe Dates* and related evaluation strategies to be culturally appropriate for Latino families. "NOVIO-lencia: Preparing our teens for healthy and safe dating" includes six booklets of interactive activities for Latino caregivers to complete with their teens. The randomized control trial of NOVIO-lencia began in 2011 and will assess the efficacy of the program on proposed theoretically-based mediating variables related to the primary prevention of dating abuse. The project is led by Dr Vangie Foshee.

FUNDING Centers for Disease Control and Prevention, National Center for Injury Control and Prevention

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Education & Training

UNC IPRC remains dedicated to training the next generation of injury professional and enhancing the capacity of our current workforce, particularly in NC. To this end, undergraduate and graduate courses on injury and its prevention are taught by IPRC-affiliated faculty. IPRC provides employment, research experience, and mentoring to graduate, doctoral and postdoctoral students, primarily from the UNC Gillings School of Global Public Health.

Capacity Building in NC: UNC IPRC hosts the Injury-Free NC Academy, which trains multi-organizational, multi-disciplinary teams working on community projects in core injury prevention skills; this year, our workforce development efforts will expand to include a conference on falls prevention and a statewide conference on injury prevention. The IPRC seminar series brings distinguished scholars, and innovative practitioners to a wide audience that includes students, faculty, staff and statewide practitioners. These are often followed by small group meetings or workshops.

Outreach

Outreach to practitioners, policy makers, the media and general public is UNC IPRC priority and assures that are findings are put to use to prevent injury. In North Carolina, we work very closely with the Department of Public Health's Injury and Violence Prevention Branch. Together, representatives from both organizations sit on subcommittees of the State Advisory Committee for Injury and Violence Prevention, serve on the Advisory Board for the North Carolina Violent Death Reporting System, and partner to provide professional development to NC's injury prevention workforce.



Injury-Free NC Academy team member Tiffany Wiggins, coach Karen Strazza and team facilitator Stephania Sidoti

“The UNC Injury Prevention Research Center is a vital partner for the Injury and Violence Prevention Branch of the North Carolina Division of Public Health and the injury and violence prevention community in North Carolina. North Carolina enjoys a strong and deep history of innovation and collaboration across diverse disciplines in injury and violence prevention practice. IPRC plays a central role in this unique practice environment in North Carolina.”

Alan Dellapenna, Jr, Branch Head, Injury and Violence Prevention Branch, NC Division of Public Health

Financials

The total operating budget in FY 2013 is \$3,375,168.00. The bulk of this is federal funding (\$2,984,255), followed by \$187,368.00 in state funding, with the remainder coming from other educational and research institutions, non-profits and foundations.



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| Federal: | \$2,984,255 |
| State: | \$187,368 |
| Other Funding: | \$203,545 |
| Total: | \$3,375,168 |

IPRC Leadership

Dr. Stephen Marshall, PhD, directs UNC Injury Prevention Research Center. He is a Professor of Epidemiology in the Gillings School of Global Public Health. He has degrees in mathematics from the University of Canterbury; in biometrics from Lincoln University; and in epidemiology from the University of North Carolina at Chapel Hill. He is a member of numerous editorial boards (including Injury Epidemiology), research review committees (including the National Operating Committee Standards in Athletic Equipment), and National Academy of Sciences committees. His personal research interests include concussion, sports injuries, injuries in older adults, physical activity and transportation injuries, and evaluation of injury interventions and injury-related policies and legislation.



Dr. Stephen Marshall, PhD

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Tonya Watkins, Assistant Director for Administration.

Core Faculty

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