



The Pediatric Injury  
Prevention, Education  
& Research (PIPER) Program

# Annual Report 2014

**A collaborative initiative of:**

**Colorado School of Public Health  
University of Colorado School of Medicine  
Children's Hospital Colorado**

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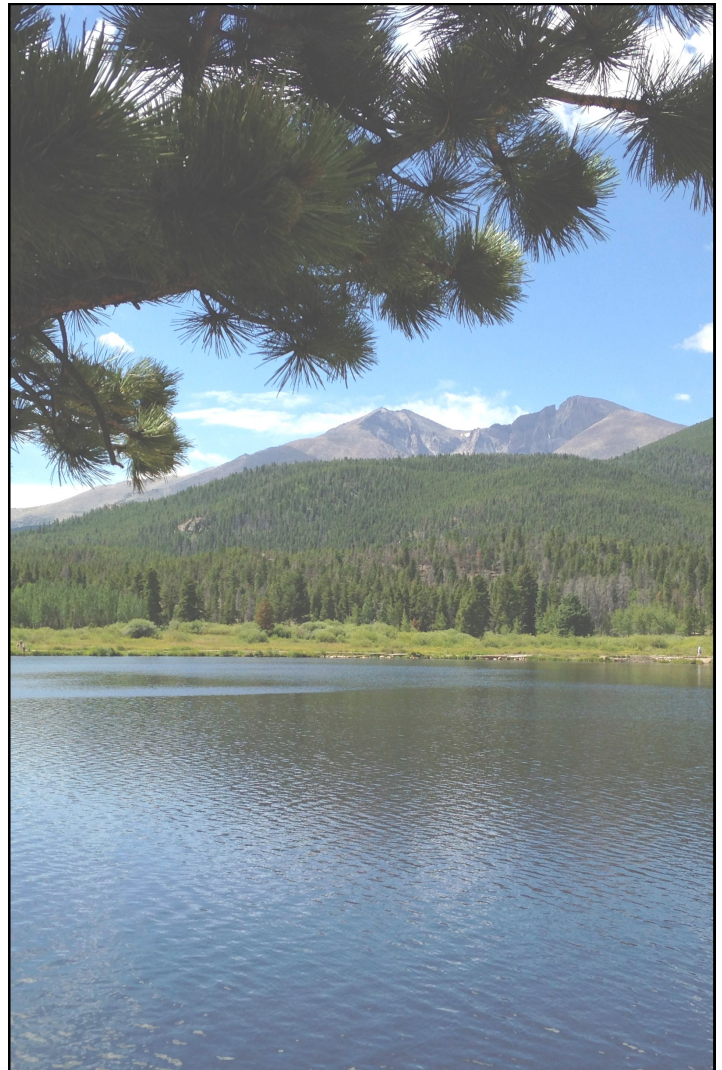
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# Contents

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Welcome	
Letter from the Director	4
Program Overview	5
Injury in the Mountain West Region	6
PIPER Team	
Faculty	8
Staff	11
Students	12
Injury and Violence Research and Evaluation (IVRE) Group	
Description & Topics	14
Group Members	15
Partnerships: Academic & Community	17
Projects Active in 2014	18
Selected Scholarly Publications	30
Training	
Teaching & Mentoring	32
Selected Presentations	34
Injury and Violence Seminar Series	35
Activities in Professional Service	36
Future: Looking Forward	39
Get Involved	40
Citations	41

# Letter from the Director

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## ***Dear Friends and Colleagues,***

This past year (2014) has been one of continued development for the PIPER Program. In our third year, we have advanced our mission of preventing injuries and violence through cutting-edge research, training and a wide variety of partnerships. Though we have built upon our initial focus on injuries among children and adolescents, our interests and activities are directed at injury problems that affect people throughout the lifespan. For example, the work of Drs. Betz and DiGuseppi on older adult driving is critically important while our work on understanding the role of marijuana in safety and of suicide prevention addresses both pediatric and adult populations. A number of our projects are at the interface of mental health and injury prevention.

Our core faculty come from diverse backgrounds and disciplines, including emergency medicine, internal medicine, pediatrics, community and behavioral health, epidemiology, and health policy. We are working diligently to investigate pivotal questions on topics ranging from suicide prevention to concussions to the public health consequences of marijuana. This research, funded by a combination of federal grants and funds from private foundations, will provide answers necessary for designing the most effective strategies to improve safety at the community level.

As detailed in this report and depicted in the map on page 6, the injury burden in the West is great – with mortality exceeding most other parts of the country. Though federal resources for injury research centers are not currently supporting centers of excellence in this region, we are continuing to envision a role that serves the needs of the region while also providing leadership at the national level.

We continue to build infrastructure to promote synergy among researchers, advance quality training of students, and enhance partnerships with our colleagues in public health practice. Regular communications through a listserv, newsletter, and meetings have built a community of scholars and collaborators. Our work has received national attention. For example, Dr. Comstock was a featured speaker at the White House as part of a special forum on concussions. Dr. Binswanger also was an invited participant in another White House conference on prescription drug overdose, while multiple core faculty presented their work to national audiences. I was honored to receive the Distinguished Career Award from the Injury Section of the American Public Health Association.

During this past year, Dr. Tung launched an important project with startup funds from the Pew Charitable Trust, with joint support from several units on campus. His effort, in conjunction with colleagues in the School of Medicine (Shale Wong, Des Runyan), the School of Public Health (Tim Byers, Carol Runyan) as well as Children’s Hospital Colorado and the City of Aurora will build the infrastructure for conducting Health Impact Assessments as a tool for hospitals as part of their community engagement planning. Going forward, we see this initiative as having potential to be a major innovation to assist health care organizations in achieving public health impact, with special emphasis on injury and violence prevention.

Many thanks to those who helped us advance our mission in 2014 and beyond. Please let us hear from you if you have questions or can think of ways we can improve or expand going forward. We’ve also made it easier than ever to support our efforts, by setting up a special fund through the CU Foundation. Visit our website at [www.ucdenver.edu/PIPER](http://www.ucdenver.edu/PIPER) and click “give now” to make a tax-deductible donation.

Sincerely,

*Carol W. Runyan, MPH, PhD, Director*

# The PIPER Program

Since 2011, the Pediatric Injury Prevention, Education and Research (PIPER) program has linked research, training, and practice to prevent injury in Colorado, nationally, and around the world, with a special focus on pediatric populations.

PIPER is a joint initiative of the Colorado School of Public Health, the University of Colorado School of Medicine, and Children's Hospital Colorado.

## ***Vision***

To contribute to the significant reduction in child and adolescent injury and its outcomes in Colorado, the U.S., and the world as a function of high-quality research and effective practice.

## ***Mission***

To drive evidence-based practice through discovery, translation, and workforce development.



*Dawn Comstock, PhD, was invited by the White House to speak at the Healthy Kids and Safe Sports Concussion Summit in May 2014*

## Goals of PIPER

<b>Research</b>	Conduct cutting-edge research on injury and violence issues
<b>Community Programs</b>	Conduct high-quality injury and violence prevention activities in the community setting
<b>Policy</b>	Work to improve national, state, tribal, local, and organizational policy addressing injury and violence issues
<b>Workforce Development</b>	Train and assist professionals in public health practice applied to injury and violence prevention

# Injury in the Mountain West Region

PIPER is located in Colorado, the second most populous state in the Mountain West – the large, geographically diverse US Census region that includes Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming. Though better known for its beautiful scenery, the Mountain West has particularly high rates of injury mortality, including significant injury problems and ethnic disparities as well as specific risks associated with our geographic uniqueness, distinctive urban-rural mix, and range of policy environments. The Mountain West Region has higher injury death rates than the nation as a whole for most types of injuries.

## The Mountain West Injury

### Characteristics

#### **Poisoning**

In 2010, the poisoning death rate for the Mountain West was nearly 40% higher than the US rate.<sup>1</sup> Opioid analgesics are an increasing problem that is not yet well understood. In 2008, 5.8% of people age 12+ were using opioid analgesics non-medically in the Mountain West—20% higher than the US as a whole.<sup>2</sup>

#### **Suicide**

Suicide rates per 100,000 in the Mountain West (18.2) are substantially higher than for the US overall (12.1). Firearm suicides are especially problematic for the region, occurring at a rate of 9.9 per 100,000 compared to a US rate of 6.8.<sup>1</sup> By federal definition of mental health professional shortages, rural areas in much of the region disproportionately suffer from a shortage of mental health providers.<sup>3</sup>

#### **Motor Vehicle**

Motor vehicle crash deaths take a disproportionate toll in the Mountain West, with a rate of 12.4 vs. 11.3 per 100,000 in the US as a whole. Native American communities have some of the highest motor vehicle death rates in the nation.<sup>1</sup> Contributing factors may include:

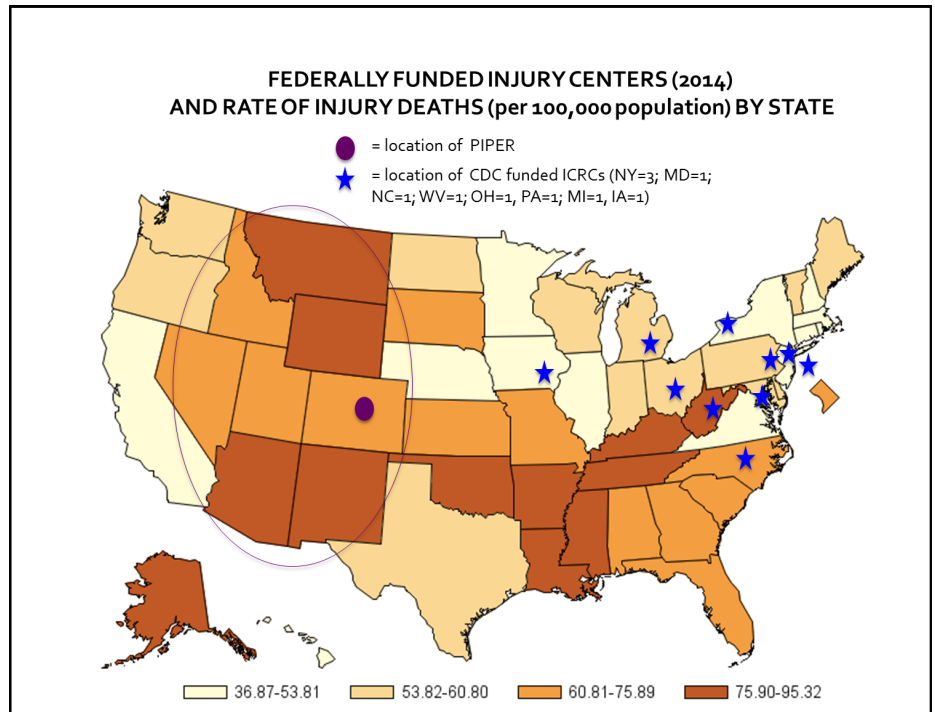
- Long driving distances and challenging conditions on rural and mountainous roads.
- Speed limits are among the highest in the nation, and only one Mountain West state has a primary seat belt law (NM), motorcycle helmet law (NV), or required bicycle helmets for children (NM).<sup>4,5,6</sup>

#### **Firearms**

Of firearm deaths in the region, 75% are suicides, 11% are homicides, and <1% are unintentional.<sup>1</sup> Recognizing the Mountain West's weak gun violence prevention laws, the Law Center to prevent Gun Violence gave every state in the region an "F" on the strength of gun laws except CO, which was graded a "D."<sup>7</sup>

#### **Falls**

The death rate per 100,000 from falls is 11.4 in the region versus 8.1 in the US overall. Colorado's rate of 14.7 is one of the highest of any state.<sup>1</sup>



**Lifetime costs of fatal injuries that occurred in 2010 in the Mountain West region exceeded \$16 trillion.<sup>1</sup>**

**Age-adjusted injury mortality rates per 100,000 population by injury type in the Mountain West states and U.S., 2010 (Source: CDC WISQARS<sup>1</sup>)**

	Poisoning	Suicide	Motor vehicle	Firearms	Falls	Homicide	All Injury
United States	13.7	12.1	11.3	10.1	8.1	5.3	57.0
Mountain West	18.9	18.2	12.4	13.2	11.4	4.8	71.8
Arizona	19.7	17.0	12.3	14.5	12.0	6.7	73.2
Colorado	15.1	16.7	9.6	10.7	14.7	3.4	65.4
Idaho	13.2	18.8	13.9	12.7	9.5	1.5	64.7
Montana	15.3	21.9	19.5	15.6	11.1	3.1	81.8
Nevada	22.6	19.8	10.7	14.5	7.3	6.1	68.8
New Mexico	27.3	20.1	16.5	14.8	13.0	7.6	91.0
Utah	19.1	18.2	10.6	11.4	9.0	1.9	66.7
Wyoming	18.2	22.4	23.0	15.5	9.0	--	84.7

**Homicide**

Rates vary significantly by state. For example, ID and UT record very low rates while NV, AZ and NM have homicide rates exceeding the overall US rates. Homicide is an especially serious problem among Latinos.<sup>1</sup>

**Other Characteristics of the Mountain West:**

**Growing**

>22 million, or 7.2% of the continental US population (2010).<sup>8</sup>

Fastest growing population amongst census regions, with state population growth rates as high as 35%.<sup>9</sup>

**Highly urban and highly rural**

~75% of the population lives in major cities.<sup>8</sup>

226 frontier counties with a population density of <7 people per square mile.<sup>10</sup>

**Diverse and young**

<25% of the population in NV and AZ and nearly 50% in NM is Latino.<sup>9</sup>

~920,000 Native Americans in the Mountain West; among the highest injury death rates - 96/100,000.<sup>11</sup>

Largest percentage of people <18 and 18-44 of any region in the country.<sup>9</sup>

**Unique risk factors**

Overall alcohol intake and binge drinking rates higher than many other regions.<sup>12,13</sup>

Effects of expanding marijuana legalization from medical to recreational use in CO are undetermined, though initial data signal likely increases in child ingestions.<sup>14,15</sup>

**Poor health insurance coverage**

17% of Mountain West residents did not have health insurance at any point in 2012, compared to 15% in the US overall.<sup>16</sup>

**Limited trauma center coverage**

Only 78% of the region's population is within a 60 minute response time to a Level I or Level II trauma center compared to 83% of the US population overall.<sup>17</sup>

# PIPER Core Faculty

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## **Carol Runyan, MPH, PhD, PIPER Program Director**

**Carol Runyan**, MPH, PhD brings over 30 years as a leader in the field of injury and violence prevention to the program. She founded PIPER when she joined the faculty of the Colorado School of Public Health (CSPH) in 2011 as Professor of Epidemiology with secondary appointments in Community and Behavioral Health and Pediatrics.

In 1987, Dr. Runyan co-founded one of the longest operating and most successful injury control research centers in the nation, the University of North Carolina Injury Prevention Research Center — a “Center of Excellence” on injury prevention — and served as director for over 20 years. Her research has shaped state and national policy, identified priorities, and broken new scientific ground, publishing more than 130 refereed papers and 30 book chapters in the process.

Dr. Runyan has mentored dozens of graduate students, fellows, and junior faculty and has been an innovator in training the injury workforce. She was the chief architect of the National Training Initiative, a joint effort of the Society for the Advancement of Violence and Injury Research (SAVIR) and Safe States Alliance. This initiative resulted in the creation of a set of core competencies for injury and violence professionals and in 2003, Dr. Runyan developed the PREVENT (Preventing Violence through Education, Networking and Technical Assistance) program, which has trained over 900 professionals from 44 states. Her research has addressed topics including adolescent worker safety, safety in the home environment, and violence prevention.

She was honored with the first Excellence in Science award from the American Public Health Association and was the first recipient of the Home Safety Council’s Research Award. In 2012, Runyan was recognized by the National Center for Injury Prevention and Control as one of the most influential leaders of the injury field over the past twenty years. In 2014, she received the Distinguished Career Award given by the Injury Control and Emergency Health Services Section (ICEHS) of the American Public Health Association.



## **Marian (Emmy) Betz, MD, MPH**

**Marian Betz**, MD, MPH is trained in emergency medicine and epidemiology, with a research focus on traffic safety and suicide. She is an attending physician at the University of Colorado Hospital, as well as Assistant Professor of both Emergency Medicine (SOM) and Epidemiology (CSPH); she completed medical and public health training at Johns Hopkins University.

In 2013, Dr. Betz was awarded a Paul Beeson K23 award from the National Institute on Aging for her work to develop a tiered assessment system for older drivers. She has served as an invited member of national workgroups to develop guidelines for suicide prevention by emergency providers, and she was appointed to the Colorado Suicide Prevention Commission to represent hospitals with emergency departments. She is also the 2014-15 President of the Academy of Geriatric Emergency Medicine (part of the Society for Academic Emergency Medicine).



## **Ingrid A. Binswanger, MD, MPH, MS**

**Ingrid A. Binswanger**, MD, MPH, MS is an internist and health services researcher with special expertise in substance abuse. She is a Senior Investigator at the Institute for Health Research of Kaiser Permanente Colorado. She also serves as Associate Professor of General Internal Medicine and an Affiliated Member of the Division of Substance Dependence (SOM). Dr. Binswanger completed her MD and Internal Medicine residency at the University of California, San Francisco. She obtained research training in the Robert Wood Johnson Clinical Scholars Program and received her MPH at the University of Washington.

Dr. Binswanger leads the Primary Care Research Fellowship and the Patient-Centered Outcomes Research (PCOR) Scholars Program. Her research focuses on overdose epidemiology and prevention and on improving the health of high-disparity populations.





**Ashley Brooks-Russell, MPH, PhD**

**Ashley Brooks-Russell, MPH, PhD** has expertise in social and behavioral sciences, including intervention development and evaluation. She joined the PIPER faculty in January 2014 as Assistant Professor of Community and Behavioral Health (CSPH) and has an MPH from Case Western Reserve University and a PhD from the University of North Carolina at Chapel Hill in health behavior.

As a postdoctoral researcher in the Prevention Research Branch at the National Institute of Child Health and Human Development, Dr. Brooks-Russell studied trends and risk factors for youth violence, modifiable risk factors for underage drinking and driving, and the increased risk of crashes associated with peer passengers and distracted driving. Her interests include developing interventions tailored to community-based and clinical settings, with a focus on adolescents.



**R. Dawn Comstock, MS, PhD**

**Dawn Comstock, MS, PhD** has expertise in sports injuries. An Associate Professor of Epidemiology (CSPH) and Pediatrics (SOM), she has an MS in Epidemiology from the University of Iowa and a PhD in Public Health and Epidemiology from the joint program at the University of California – San Diego and San Diego State University.

Dr. Comstock is a nationally recognized expert in sports and recreation injury surveillance, epidemiology, and prevention. She is the originator of the National High School Sports-Related Injury Surveillance System (High School RIO™), which serves as the official surveillance system of the National Federation of State High School Associations. Her data have been used to drive federal, state, and non-governmental sporting organizations' policy decisions. Dr. Comstock is also an experienced teacher and has mentored more than 25 young researchers including high school, undergraduate, graduate, and medical students, and residents/fellows.



**Carolyn DiGuseppi, MD, MPH, PhD**

**Carolyn DiGuseppi, MD, MPH, PhD** contributes special expertise in systematic review and testing of community-based strategies to prevent injuries and violence. Professor of Epidemiology and of Community and Behavioral Health (CSPH) and Pediatrics (SOM), she trained in Pediatrics and General Preventive Medicine at the University of Washington, where she received her MPH degree in epidemiology. While a senior research fellow at the Institute of Child Health, University College London, in the U.K., she completed her PhD in injury epidemiology.

Dr. DiGuseppi spent more than five years as Science Advisor, then Senior Health Policy Analyst, in the federal government, earning several US Public Health Service special recognition awards. Her research has focused on trials of community-based injury prevention interventions, with current interests including prevention of falls and motor vehicle injuries in older adults and suicide, publishing more than 100 peer-reviewed journal articles, book chapters, and scholarly reviews. She serves on the editorial boards of Injury Prevention, Injury Epidemiology and the Cochrane Collaboration Injuries Review Group, directs the CSPH preventive medicine residency program, holds residency training grants, and served as Deputy Director of the Injury Control Research Center at Colorado State University.

# PIPER Core Faculty, cont.

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**Eric Jon Sigel, MD**

**Eric Sigel, MD**, a pediatrician, specializes in Adolescent Medicine with a research focus on violence prevention. He is Associate Professor of Pediatrics (SOM), directing the fellowship in Adolescent Medicine. Dr. Sigel received his MD and completed his pediatric residency at Case Western Reserve University, and Adolescent Medicine fellowship at Harvard.

Dr. Sigel has created a violence risk screening tool that has increased primary care providers' abilities to detect violence risk in adolescent patients and completed a K01 award from the CDC's NCIPC to further study violence screening. He is a co-investigator on an Academic Center for Excellence in Youth Violence Prevention, in collaboration with the University of Colorado-Boulder Center for the Study and Prevention of Violence, and is PI of a randomized controlled trial from the National Institute of Justice to address adolescent firearm access. He serves on the Society for Adolescent Health and Medicine's Violence Prevention Advisory Group, and works with numerous community-based organizations, including the Gang Reduction Initiative of Denver.



**Gregory Tung, MPH, PhD**

**Gregory Tung, MPH, PhD** brings a focus on policy translation and implementation, including the use of health impact assessments as a tool for community level change. Dr. Tung is Assistant Professor of Health Systems, Management and Policy (CSPH), having earned an MPH and PhD in health policy from the Johns Hopkins Bloomberg School of Public Health.

Dr. Tung is especially interested in the incorporation of scientific evidence and community input into decision making related to injury prevention policies and programs. He is experienced in conducting health impact assessments (HIAs) to inform policy decisions and is currently engaged in collaborations with multiple community-based organizations. Dr. Tung also has a growing research focus on nonprofit hospital community benefit activities and in 2014 was awarded a grant from the Health Impact Project of The Pew Charitable Trust and the Robert Wood Johnson Foundation to connect health impact assessments to hospital community benefit requirements. He is teaching students in both the CSPH and CU Denver about health policy, drawing on his experiences as a hospital administrator.

# PIPER Staff

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**Sara Brandspigel, MPH**

**Sara Brandspigel, MPH** oversees daily operations of the PIPER program, including program development, communications, and grants management. Prior to joining PIPER, she led education and outreach activities for the family planning program at the Montana Department of Public Health and Human Services and served as development director for Heads Up, an educational enrichment program for underserved youth in Washington, DC, and project manager at the Association of Maternal and Child Health Programs. She received her MPH with a focus on maternal and child health from the University of North Carolina and has helped develop the PIPER program since 2012.



**Dustin Currie, MPH**

**Dustin Currie, MPH** joined PIPER in 2013 as a professional research assistant working with Dr. Comstock in sports injury epidemiology. Prior to joining PIPER, Dustin worked as a research assistant with Dr. DiGuseppi through the Colorado Injury Control Research Center and also with the Nurse-Family Partnership National Service Office. He received his MPH from the Colorado School of Public Health.



**Lauren Pierpoint, MS**

**Lauren Pierpoint, MS** joined PIPER in 2014 as a professional research assistant working with Dr. Comstock in sports injury epidemiology. Prior to joining PIPER, Lauren was the manager of the Sleep and Development Laboratory at CU Boulder. She received her MS in Integrative Physiology from CU Boulder in 2011.



**Ken Scott, MPH**

**Ken Scott, MPH** joined PIPER in 2014 as a graduate research assistant. Ken works for Drs. DiGuseppi and Betz coordinating the LongROAD cohort study of older drivers. Prior to joining PIPER, he worked for five years as the Outreach Director at the NIOSH-funded Mountain and Plains Education and Research Center at the Colorado School of Public Health. He received his MPH degree in environmental and occupational health from the University of Washington. He's working toward a doctoral degree in injury epidemiology, studying the patterns and consequences of occupational injuries among older workers.

# Student Employees

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One of PIPER's goals is to train and assist professionals in public health practice applied to injury and violence prevention. As such, Colorado School of Public Health students are an integral part of the PIPER team. A number of students were employed in projects led by PIPER core faculty in 2014. Many others received mentoring from PIPER faculty on their own projects (p. 33).



**Roman Ayele, MPH, Research Assistant, PhD Student—Health Services Research**

Roman Ayele works with Dr. Gregory Tung to understand the collaboration between the Nurse Family Partnership and Child Protective Services and factors mediating their relationship and goals.

*Research interests:* maternal and child health, access to care, healthcare utilization locally/globally



**Talia Brown, MS, Research Assistant, PhD Student—Epidemiology**

Talia Brown coordinated PIPER's Harmonizing Child Injury Research project and works on program evaluations for the Community Epidemiology and Program Evaluation Group.

*Research interests:* firearm suicide prevention



**Vicka Chaplin, MA, Program Assistant, MPH Student—Community and Behavioral Health**

Vicka Chaplin performed administrative and research support tasks for PIPER, including public communications, grants editing, and research assistance. She also worked on the Man Therapy evaluation project with Dr. Brooks-Russell.

*Research interests:* interpersonal violence and suicide prevention, military populations



**Katherine Collins, Research Assistant, MPH Student—Community and Behavioral Health**

Katherine Collins started at PIPER as Program Assistant and subsequently worked with Dr. Gregory Tung on the prevention of unintentional marijuana ingestion by children in Colorado.

*Research interests:* injury prevention, both intentional and unintentional, with an emphasis on youth



**Jodi Kay Duke, Research Assistant, PhD Student—Health Services Research**

Jodi Kay Duke worked with Dr. Gregory Tung to conduct a Health Impact Assessment on the prevention of unintentional marijuana ingestion by children in Colorado.

*Research interests:* strengthening and adopting health impact assessments in diverse settings



**Amy Klapheke, Research Assistant, MPH Student—Epidemiology**

Amy Klapheke worked with Dr. Carol Runyan on the Harmonizing Child Injury Research Project to create a database of collection instruments from childhood and adolescent injury studies.

*Research interests:* public mental health, particularly as related to suicide and substance abuse



**Suzuho Shimasaki, MPH, Research Assistant, DrPH Student—Community and Behavioral Health**

Suzuho Shimasaki works with Children’s Hospital Colorado on a safe sleep study as well as a study of the Nurse Family Partnership’s role in the prevention of child abuse and neglect.

*Research interests:* racial equity, social justice, health equity



**Norbert Soke, MD, MSPH, Research Assistant, PhD Student—Epidemiology**

Dr. Norbert Soke works with Dr. Carolyn DiGuseppi, leading a study comparing self-injurious behavior (SIB) in children with autism spectrum disorders to SIB in children with other neurodevelopmental disorders or typical development.

*Research Interests:* self-injurious behavior, autism spectrum disorder



**Elise Waln, Research Assistant, MPH Student – Community & Behavioral Health**

Elise works with Dr. Ashley Brooks-Russell in partnership with the Tri-County Health Department to understand the relationship between physical and mental health for students in the Adams, Arapahoe, and Douglas county school districts.

*Research interests:* adolescent health, school-based health coordination, positive-youth development, sexual & reproductive health



**Erin Wright, MA, Research Assistant, DrPH Student – Community and Behavioral Health**

Erin worked with Dr. Ashley Brooks-Russell on the evaluation of the Man Therapy website, with Dr. Carol Runyan as a qualitative interviewer for a study on suicide prevention, and with Dr. Tung on the evaluation of youth violence and gang prevention in Aurora.

*Research interests:* health equity, violence and suicide prevention, adolescent health, public mental health

# Injury and Violence Research and Evaluation (IVRE) Group

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Since 2012, PIPER has convened regular meetings of the Injury and Violence Research and Evaluation (IVRE) group, a gathering of researchers and practitioners who share an interest in injury and violence prevention. In 2014, IVRE had over 100 members. We conducted a survey of our members to improve the format and accessibility of meetings. Based on feedback, we launched a new approach to our group meetings with a featured speaker from a key organization sharing activities and potential collaborations.

IVRE members share research and network with their colleagues in the field of injury and violence. Topics include discussions of works in progress, brainstorming new directions, and exploring opportunities for future efforts and collaborations. A listserv is used to communicate funding opportunities, resources, events and other information.

## Selected 2014 IVRE Topics

Cultural influences on method choice in suicide attempts	Talia Brown, MS (doctoral student in epidemiology)
Occupational injuries among older workers	Kenneth Scott, MPH (doctoral student in epidemiology)
Transportation-related injuries to young workers	Ashley Brooks Russell, MPH, PhD (Community and Behavioral Health)
Potential collaborations for research on health determinants and consequences of violence	Terri Lewis, PhD (The Kempe Center)
Injury and violence prevention at the Colorado Department of Public Health and Environment (CDPHE)	Shannon Breitzman (Colorado Department of Public Health and Environment)

# IVRE Group Members

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## Colorado School of Public Health

**Sara Brandspigel**, MPH, Pediatric Injury Prevention, Education & Research Program

**Ashley Brooks-Russell**, MPH, PhD, Pediatric Injury Prevention, Education & Research Program, Community & Behavioral Health

**Talia Brown**, MS, Pediatric Injury Prevention, Education & Research Program, Epidemiology

**Dawn Comstock**, MS, PhD, Pediatric Injury Prevention, Education & Research Program, Epidemiology

**Carolyn DiGuseppi**, MD, MPH, PhD, Pediatric Injury Prevention, Education & Research Program, Epidemiology

**Robin Kimbrough-Melton**, JD, The Kempe Center, Pediatrics, Community & Behavioral Health

**Richard Lindrooth**, PhD, Health Systems, Management & Policy

**Jill Litt**, PhD, Environmental & Occupational Health

**Lee Newman**, MD, MA, Environmental & Occupational Health

**Carol Runyan**, MPH, PhD, Pediatric Injury Prevention, Education & Research Program, Epidemiology

**Angela Sauaia**, MD, PhD, Health Systems, Management & Policy

**Natalie Schwatka**, PhD, Environmental & Occupational Health

**Ken Scott**, MPH, Epidemiology

**Gregory Tung**, MPH, PhD, Pediatric Injury Prevention, Education & Research Program, Health Systems, Management & Policy

**Lorann Stallones**, PhD, MPH, Epidemiology (Psychology, Colorado State University)

## University of Colorado School of Medicine

**Kathleen Adelgais**, MD, Pediatric Emergency Medicine

**Sarah Allexan**, MD candidate 2016

**Lalit Bajaj**, MD, MPH, Pediatric Emergency Medicine

**Amy Becker**, MD, Pediatric Psychiatry

**Tell Bennett**, MD, MS, Pediatric Critical Care

**William Betts**, PhD, The Kempe Center, Pediatrics

**Marian (Emmy) Betz**, MD, MPH, Pediatric Injury Prevention, Education & Research Program, Emergency Medicine

**Ingrid Binswanger**, MD, MPH, Pediatric Injury Prevention, Education & Research Program, Internal Medicine

**Michelle Brock**, MD, Pediatric Pulmonology

**Donald Bross**, JD, PhD, The Kempe Center, Pediatrics

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**Jerry Clayton**, PhD, Physical Medicine & Rehabilitation

**Meghan Dahlin**, MA, The Kempe Center, Pediatrics

**Jeanne Dise-Lewis**, PhD, Psychiatry, Physical Medicine & Rehabilitation

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**Bernadette Johnson**, MD, Pediatrics

**Allison Kempe**, MD, MPH, Pediatrics, Children's Outcomes Research Program

**Morteza Khodaei**, MD, MPH, Family Medicine

**Sangwon Kim**, MS, The Kempe Center (Visiting Scholar 2013-14)

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**Roxanna Lefort**, MD, MPH, Emergency Medicine

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# IVRE Group Members, continued

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**Sam Wang**, MD, Pediatric Emergency Medicine

**Richard Zane**, MD, Emergency Medicine

Colorado School of Nursing

**Scott Harpin**, PhD, MPH, RN

University of Colorado Hospital

**Katie Fuenning**, MS, Burn Center

**Joy Schmitter**, EMT, Emergency Medicine, Injury Prevention

Children's Hospital Colorado

**Stephanie Harrison**, Trauma Burn Program

**Adrienn Hollonds**, Children's Health Advocacy Institute

**Theresa Rapstine**, BSN, RN, School Health Program

**Dwayne Smith**, MEd, MCHES, Injury Prevention

**Abby Waldbaum**, MA, Injury Prevention

University of Colorado Denver

**Elizabeth Greenwell**, ScD, Regulatory Compliance, COMIRB

**Carolyn McAndrews**, PhD, College of Architecture & Planning

Colorado Department of Public Health and Environment

**Leah Emerick Anderson**, BS, Child Fatality Prevention System

**Barbara Gabella**, MSPH, Health Statistics & Evaluation Branch

**Jan Hart**, MSPH, Injury, Suicide & Violence Prevention Branch

**Colleen Kapsimalis**, MPH, CPH, Child Fatality Prevention System

**Aerin LaCerte**, Injury, Suicide & Violence Prevention Branch

**Ali Maffey**, MSW, Injury, Suicide & Violence Prevention Branch

**Lindsey Myers**, MPH, Injury, Suicide & Violence Prevention Branch

Denver Health

**Katie Bakes**, MD, FACEP, Pediatric Emergency Medicine

**Anthony Barkey**, MPH, Injury Prevention

**Gregory Jurkovich**, MD, Surgery

**Erin Martinez**, MS, Rocky Mountain Poison and Drug Center

**Theresa Mickiewicz**, MPH

**Sara Muramoto**, BS, Emergency Medicine

**Deborah Rinehart**, PhD, MA, Health Services Research

Other

**Sabrina Arredondo Mattson**, PhD, Center for the Study & Prevention of Violence, University of Colorado Boulder

**Omar Gudino**, PhD, Psychology, Denver University

**Jennifer Kelloff**, MD, Kaiser Permanente Colorado



# Academic & Community Partnerships

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PIPER draws on strengths throughout the Anschutz Medical Campus, as well as partnerships with other groups in academia and practice settings.

Members of our team worked with colleagues at other institutions on research projects (e.g., Colorado State University, Ohio State University, Harvard University, Johns Hopkins University, University of North Carolina, University of Colorado-Boulder, University of Washington). In addition, we engaged with multiple practice partners in community settings. Some examples include working with:

- The Aurora Police Department and Aurora Public Schools on community-based efforts to reduce gang violence;
- Colorado Department of Public Health and the Environment on statewide efforts to promote nurturing safe, stable, nurturing relationships and environments for children;
- Colorado Department of Public Health and the Environment on evaluating marijuana education efforts;
- Tri-County Health Department in Colorado on mental health promotion;
- Tribal injury programs throughout the West;
- Athletic trainers in high schools throughout the nation on monitoring injuries to young athletes.



# Projects of PIPER core faculty active in 2014

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## Unintentional Injury: Drugs and Alcohol

### 2011-2016 **The Impact of Medical Marijuana in Metropolitan Denver**

Colorado has an estimated 100,000 medical marijuana patients, and this widespread use raises concerns about marijuana abuse, diversion, and other consequences of use. Unfortunately, there are few data describing the impact of medical marijuana legalization. This research helps to fill this gap by investigating the marijuana industry in Colorado using qualitative and quantitative methods. Phase I of this project will study how the evolving medical marijuana industry operates and the views of drug treatment and health care providers concerning how medical marijuana impacts their responsibilities. Phase II will involve an ongoing assessment of the epidemiology of medical marijuana, while Phase III will assess the prevalence of marijuana abuse and dependence, diversion, other drug use, general health and health care utilization among medical and non-medical marijuana users. Phase III will also include assessment of HIV-related sex risk behaviors among medical and non-medical marijuana users.

**PIPER Contact:** Ingrid Binswanger, MD, MPH, MS (Co-I); R. Booth, University of Colorado Denver (PI)

**Funder:** National Institute on Drug Abuse

### 2013-2014 **Let's talk about life: Empowering our Community to Prevent Deaths from Overdose**

Fatal unintentional poisoning from opioids is a major problem in Colorado and nationwide. The number of drug related overdose deaths has increased 59 percent since 1999 in Colorado. One proposed solution to high overdose rates has been widening access to naloxone, a short-acting opioid antagonist. Supported by an NIH/NCATS Colorado CTSI grant, we developed a community-academic partnership between the Harm Reduction Action Center (HRAC) and the University of Colorado School of Medicine to investigate overdose education and naloxone take-home use. The aims of the study include assessing the effectiveness of overdose education and naloxone training, describing contextual factors that influence safe and effective naloxone administration in the community, and describing how trained drug users make the decision to administer naloxone during overdose reversals in community settings.

**PIPER Contact:** Ingrid Binswanger, MD, MPH, MS (Academic PI)

**Funder:** Colorado Clinical and Translational Sciences Institute

### 2013-2016 **Overdose Risk Assessment, Counseling and Naloxone Prescription in Health Care**

Fatal unintentional poisonings from pharmaceutical opioids have increased more than three-fold in the last decade. Naloxone is an effective, Food and Drug Administration approved opioid antidote usually administered by first responders in emergency settings to reverse respiratory depression due to opioid poisoning. Widespread prescribing of naloxone for take-home use to patients on prescription opioids may prevent overdose deaths through earlier treatment. Primary care settings in large health care systems offer the opportunity to reach many individuals at risk for opioid overdose, particularly individuals on high dose opioids. In the primary care setting, patients at risk can be identified and counseled on overdose risk, as well as prescribed naloxone. This study will examine barriers and facilitators to prescribing naloxone for take-home use and develop and pilot test an overdose risk assessment, counseling, and naloxone prescription intervention for delivery in primary care settings. This study will develop a feasible overdose prevention intervention for use in large health care systems, and preliminary data will be collected to support a future multi-site randomized controlled trial of this intervention.

**PIPER Contact:** Ingrid Binswanger, MD, MPH, MS (PI)

**Funder:** National Institute on Drug Abuse

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2014-2017

**Evaluation of Marijuana Prevention and Education Program**

This evaluation project supports the Marijuana Prevention and Education Program, which includes an 18-month mass media campaign aimed at educating the general public on the health effects of marijuana, an ongoing program to educate the public about legal use, regional trainings, and alignment of messaging across state agencies. The Colorado Department of Public Health and Environment (CDPHE) was designated the lead for implementing public education efforts and aligning messaging across state agencies through Senate Bill 14-215. CDPHE is contracting with the Colorado Schools of Public Health to evaluate the effectiveness of the campaigns, trainings, technical assistance and other prevention work to increase accurate knowledge of the retail marijuana laws and health effects of marijuana use while reducing the negative public health consequences of marijuana use.

**PIPER Contact:** Ashley Brooks-Russell, PhD, MPH (Co-I); S. Bull, Colorado School of Public Health (PI)

**Funder:** Colorado Department of Public Health and Environment

2014-2015

**Patient Navigation to Enhance Pain Management and Opioid Safety in Cancer Patients**

The goals of this project are to collect qualitative data on pain management and opioid safety in advanced cancer patients and to develop a medication safety oriented patient navigation intervention for cancer care.

**PIPER Contact:** Ingrid Binswanger, MD, MPH, MS (Co-PI); S. Fischer, University of Colorado (CO-PI)

**Funder:** University of Colorado Cancer Center

## Unintentional Injury: Motor Vehicle

2014-2019

**Longitudinal Research on Aging Drivers (LongROAD)**

The first of its kind in the United States, this prospective cohort study of older drivers will enroll a total of 3,000 drivers aged 65 to 79 years (at baseline) in five states and follow them for a minimum of four years. The project is designed to identify the main protective and risk factors of safe driving in older drivers, the medications most strongly associated with driving performance and behavior, how drivers self-regulate their driving behaviors to cope with physical and cognitive declines, the role of new vehicle technology and post-market vehicle adaptations in driving safety, and the determinants of driving cessation and the impacts of driving cessation on the health and quality of life.

**PIPER Contacts:** Carolyn DiGiuseppi, MD, MPH, PhD (Site Co-PI) and Marian Betz, MD, MPH (Site Co-PI)

**Funder:** AAA Foundation for Traffic Safety

# Projects of PIPER core faculty active in 2014, cont.

2013-2018

## **Physician Screening of Older Drivers: Decision Rules for Geriatric Injury Prevention**

With the aging of the U.S. population, there is an urgent need for efficient, effective and acceptable methods of identifying, retraining or restricting unsafe older drivers without unfairly restricting the mobility of those who are safe. This project applies the model of a clinical decision rule to a public health program through the development of tiered older driver assessment, with widespread brief screening followed by referral for additional evaluation of those with a positive screen. The research plan aims to examine the viewpoints of older drivers, their families, and providers

concerning driver assessment, to validate and refine a brief question-based screening tool, and to examine the feasibility of pilot program implementation in order to prepare for future implementation of a model tiered older driver assessment program (planned R01). This project is part of a Paul B. Beeson Patient-Oriented Research Career Development Award in Aging (K23) awarded to Dr. Betz.

**PIPER Contact:** Marian Betz, MD, MPH (PI)

**Funder:** National Institute on Aging



*Image courtesy of Witthaya Phonsawat, FreeDigitalPhotos.net*

2014-2016

## **Evaluating State Ignition Interlock Laws**

In 2010, there were 32,885 motor vehicle crash deaths on U.S. roads. More than 30% (10,228) involved at least one driver with a blood alcohol content (BAC)  $\geq 0.08$  g/dL.<sup>1</sup> Among the most direct approaches to address alcohol-impaired driving is the use of alcohol-sensing ignition interlocks. Ignition interlocks connect a sensor that detects alcohol in the driver's breath to a vehicle's ignition. If the sensor detects an alcohol level in excess of a pre-set limit, the vehicle will not start. In addition, most ignition interlocks are programmed to require a "rolling" retest. This forces the driver to be periodically retested while operating the vehicle. The goals of this project are to: 1) evaluate the association between state laws mandating alcohol ignition interlocks for drunk drivers and fatal alcohol-involved crashes; 2) understand the factors associated with effective implementation of these laws; and 3) disseminate the findings to states with and without ignition interlock laws.

**PIPER Contact:** Gregory Tung, PhD, MPH (PI of subcontract); Jon Vernick, JD, Johns Hopkins University (PI)

**Funder:** National Center for Injury Prevention and Control, Centers for Disease Control and Prevention

## Unintentional Injury: Sports

### 2005-2014 **High School Sports Injury Surveillance Study [Expansion]**

The National High School Sports-Related Injury Surveillance Study uses an internet-based data collection tool called the High School RIO™ to capture US high school athletes' exposure, injury, and injury event data weekly throughout the academic year across 20 sports. These data are used to describe the rates, patterns, and trends of high school sports-related injuries as the necessary first step toward the development, implementation, and evaluation of evidence-based, targeted prevention programs to reduce the number and/or severity of injuries among high school athletes. The goal is that High School RIO™ data will continue to be used to encourage students to safely play sports, which will in turn increase physical activity, improve physical fitness levels, and lead to life-long healthy behaviors. Annual funding continuations of the expansion of the study have allowed data collection to continue since its inception in 2005.

**PIPER Contact:** Dawn Comstock, MS, PhD (PI)

**Funder:** National Federation of State High School Associations

### 2012 – 2015 **Evaluating the Effectiveness/Outcomes of State Level Concussion Policies**

The goal of this study is to evaluate the effectiveness of state level concussion legislation and specific components of state level concussion legislation using High School RIO concussion outcomes data. As High School RIO has collected data since the 2005/06 academic year and the first state level legislation was passed in 2009, the data from this surveillance system uniquely position us to conduct pre-post comparison evaluation of concussion outcomes including concussion rates, severity, and compliance with return to play guidelines.

**PIPER Contact:** Dawn Comstock, MS, PhD (PI)

**Funder:** National Center for Injury Prevention and Control, Centers for Disease Control and Prevention), through a subcontract from the Nationwide Children's Hospital Center for Injury Research and Policy ICRC grant



### 2014-2016 **Studying the impact on the health of young athletes of laws on secondary prevention of concussions and on recurrent concussions**

This study entails an impact evaluation of youth sports TBI laws on the rates and patterns of concussions among high school athletes across a period from pre- to post-law enactment.

**PIPER Contact:** Dawn Comstock, MS, PhD (CO-I); J. Yang, Research Institute at Nationwide Children's Hospital (PI)

**Funder:** Robert Wood Johnson Foundation

# Projects of PIPER core faculty active in 2014, cont.

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## 2012-2017 **Functional Evaluation to Predict Lower Extremity Musculoskeletal Injury**

The National Federation of State High School Associations considers pre-participation physical evaluations (PPE) a prerequisite to athletics participation, yet there are no large-scale controlled trials confirming the effectiveness of the PPE as it relates to musculoskeletal injuries. Recently updated PPE guidelines promote a "functional" aspect of testing by incorporating performance-based tests, but limitations exist concerning the best recommended functional test components, their ability to predict injury, and effectiveness as compared to a traditional PPE. To address this knowledge gap, this study will determine if a functional pre-participation physical evaluation (F-PPE) will better predict lower extremity injury than traditional PPE. This project includes developing a cost-effective and time-efficient F-PPE for use in clinical settings, recording injury occurrence using the High School RIO™ to identify which F-PPE measurement(s) are best associated with injury risk, and developing operational procedures for the F-PPE. The findings will help to understand the parameters of functional performance testing and evaluate methods for improving risk prediction of musculoskeletal lower extremity injury.

**PIPER Contact:** Dawn Comstock, MS, PhD (Co-I); J. Onate, The Ohio State University (PI)

**Funder:** National Institute of Arthritis, Musculoskeletal and Skin Diseases

## 2013-2015 **Evaluation of Spot Light: A Concussion Injury Management App for Youth Sports**

Sports-related traumatic brain injuries, including concussions, are a serious public health concern. Diagnostic criteria and consensus return to play (RTP) guidelines exist, but these guidelines are almost completely unsupported by an evidence base. However, it is well known that by increasing awareness of concussion signs and symptoms as well as the importance of addressing this injury, improving coaching on proper techniques and good sportsmanship, providing appropriate protective equipment, and quickly responding to injuries, the incidence, severity, and long-term negative health effects of sports-related concussion among children and adolescents can be reduced. Thus, there is a critical need for tools for prevention. *Spot Light* is a free and easy-to-use application (app) that coordinates diagnosis, management, and RTP procedures from concussion injury to safe return to sport. This project will evaluate whether *Spot Light* increases reporting rates of sports-related concussion, increases referrals to physicians, and increases athlete compliance with RTP guidelines. This research has potential impacts in the areas of sports injury prevention and the related use of mobile app technology, and is the first step toward attaining the long-term goal of reducing the negative consequences of sports-related concussion, specifically in youth sports.

**PIPER Contact:** Dawn Comstock, MS, PhD (Co-PI); L. McKenzie, Nationwide Children's Hospital (Co-PI)

**Funder:** National Institute of Child Health and Human Development

## Suicide and Interpersonal Violence

### 2014-2016 **Means Restriction for Discharge of Suicidal Patients in Emergency Care**

This project examines, in the Mountain West, the potential adoption of emergency department discharge practices that include counseling on limiting access to guns during times of mental health crisis. This study also examines the practices and perspectives of law enforcement and gun retailers about offering temporary safe storage of firearms for families of suicidal patients.

**PIPER Contact:** Carol Runyan, PhD, MPH (PI)

**Funder:** National Institute of Mental Health

2013-2019

**Evaluation of Essentials for Childhood: Safe, Stable and Nurturing Relationships and Environments**

The Colorado Department of Public Health and Environment is building a diverse collective impact team across disciplines, communities and cultures working toward a common goal of preventing child abuse and neglect. PIPER serves as the external evaluation partner on this effort to create safe, stable and nurturing relationships and environments for children in the state.

**PIPER Contact:** Carol Runyan, PhD, MPH (PI of subcontract); S. Breitzman, Colorado Department of Public Health and Environment (PI)

**Funder:** Colorado Department of Public Health and Environment through a grant from the Centers for Disease Control and Prevention



*Image courtesy of FreeDigitalPhotos.net*

2009-2014

**Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE)**

The goals of this quasi-experimental clinical trial are to develop and test a standardized approach to screening ED patients for suicide risk, to refine and test an ED-initiated intervention to reduce suicidal behavior and associated morbidity and mortality, and to complete a comparative economic analysis of treatment as usual, screening, and the intervention. The ED-SAFE study tests the concept that not all patients with suicidal ideation need to be evaluated by a psychiatrist or to be hospitalized. We hypothesized that ED clinicians can provide a brief intervention during the visit and that in-person or telephone counseling sessions after the ED visit can be used to reinforce the treatment received during the ED visit and to facilitate linkage with specialized care, thereby improving patient outcomes. ED-SAFE consisted of three phases of data collection (now complete, with analysis ongoing) and also included three rounds of surveys to providers at the eight participating EDs.

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**PIPER Contact:** Marian Betz, MD, MPH (Site-PI) E. Boudreaux, University of Massachusetts (PI)

**Funder:** National Institute of Mental Health

2011-2014

**Lethal Means Restriction for Suicide Prevention: Beliefs and Behaviors of Emergency Department Providers**

As part of the Emergency Department Safety Assessment and Follow-up Evaluation (ED-SAFE) study, ED providers completed three rounds of surveys. These surveys included a module on “lethal means restriction,” or the restriction of access to medications and firearms. The purpose of this study is to learn the beliefs and behaviors of providers in EDs regarding lethal means restriction for suicide prevention.

**PIPER Contact:** Marian Betz, MD, MPH (PI)

**Funder:** American Foundation for Suicide Prevention

# Projects of PIPER core faculty active in 2014, cont.

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2011-2016

## **Academic Centers for Excellence in Youth Violence Prevention**

The overall aim of this grant is to develop an Academic Center of Excellence (ACE) in Denver to initiate a multifaceted, evidence-based approach to addressing youth violence. The study will enhance the body of research associated with studies on community-wide prevention efforts and will advance our understanding of "what works" at this level of implementation by targeting the reduction of youth violence in a high risk Denver community. Immediate and long-term goals are to reduce levels of youth violence, implement and evaluate a multifaceted, evidence-based primary prevention/intervention approach, provide training for junior researchers in a variety of related fields, provide training to medical practitioners to recognize and treat youth violence, and embed activities coordinated through the ACE into the existing community infrastructure of youth services to ensure sustainability after completion of the grant. The sites participating in this study are two of Denver's most high-risk residential neighborhoods: Montbello and Northeast Park Hill.

**PIPER Contact:** Eric Sigel, MD (Co-I); B. Kingston, University of Colorado (PI)

**Funder:** National Center for Injury Prevention and Control

2013-2014

## **Means Restriction Education for Adolescent Suicide Prevention: A Quality Improvement Pilot Project at Children's Hospital Colorado**

This project was designed to enhance the care of patients in the Psychiatric Emergency Service (PES) by implementing a structured protocol for addressing suicide prevention. Using an evidence-based approach, providers educated parents/guardians of children and adolescents seen in the PES about restricting access to medications and firearms and provided them with the means to better secure medications and firearms (e.g., lock boxes, trigger locks); this approach to suicide prevention is referred to as *means restriction*. All providers in the PES who handle discharge planning received standardized, on-line training developed in partnership with the Colorado Department of Public Health and Environment.

**PIPER Contact:** Carol Runyan, MPH, PhD (Co-I and lead evaluator); A. Becker, University of Colorado (PI)

**Funders:** The O'Shaughnessy Foundation; Colorado Department of Public Health and Environment; Children's Hospital Colorado

2013-2017

## **Reducing Youth Access to Firearms through the Health Care Setting.**

This randomized control trial examines the implementation and effectiveness of an intervention, delivered in a health care setting, to decrease home firearm access by youth aged 12-17. Health care providers are initially trained to provide means restriction education to parents, focused on the risk of having access to firearms for youth who live in a home with firearms. Youth and their families are screened for firearm access, complete a violence risk and depression screening survey, and are randomized to either a non-intervention control group, a group that receives means restriction counseling alone, or a group that receives means restriction education and free safe storage devices (lock boxes or trigger locks). We are examining whether parents change their behaviors and whether the distribution of a free lock box or gun lock is more effective than counseling alone. The implementation process will be assessed to guide future dissemination. We expect to demonstrate that the health care setting can be used effectively to reduce youth access to guns. By doing so, youth will have less opportunity to perpetrate crime using firearms and will be less likely to use a guns for self-harm or experience an unintentional shooting.

**PIPER Contacts:** Eric Sigel, MD (PI) and Carol Runyan, MPH, PhD (Co-I)

**Funders:** National Institute of Justice



2013-2018

**Nurse Family Partnership – Keeping Kids Safe and Families Healthy 2.0.**

The Nurse Family Partnership<sup>®</sup> (NFP) is a home visitation program for low-income mothers having their first babies. The goals are to improve pregnancy outcomes via enhanced prenatal health, to improve children's health and development by helping parents provide competent care, and to improve economic self-sufficiency by helping parents make choices consistent with their values regarding their educations, work, and planning subsequent pregnancies. The NFP is grounded in the highest standards of scientific evidence and is of high clinical and social value, but always will be a work in progress. In the original trial of the NFP, there was found a reduction in the rates of substantiated reports of child abuse and neglect, and nurse-visited cases were identified at lower thresholds of severity. The current project incorporates these findings: its aims are to increase statewide NFP referrals of Medicaid eligible pregnant women bearing first children, increase voluntary NFP enrollment rates, consolidate NFP nurses' skills in the primary prevention of child abuse and neglect and in reducing maltreatment recidivism among those identified as having abused or neglected their children, and strengthen child welfare agencies' understanding of the value of collaborating with NFP nurses to address the needs of families in which maltreatment appears imminent or has occurred.

**PIPER Contact:** Gregory Tung, MPH, PhD (Co-I); D. Olds, University of Colorado (PI)

**Funder:** Colorado Department of Human Services

2014

**Health Impact Assessment on Youth and Gang Violence in Aurora**

In collaboration with the Aurora Gang Reduction Impact Program (A-GRIP), PIPER led the process of conducting a Health Impact Assessment (HIA) on youth and gang violence in the city of Aurora. The HIA helped to define target communities and prevention strategies through data analysis, stakeholder input, and a review of the scientific evidence.

**PIPER Contact:** Gregory Tung, MPH, PhD (PI)

**Funder:** Aurora Police Department/Aurora for Youth

2014-2019

**Mentoring for At-Risk Youth in Aurora**

PIPER serves as the evaluation partner on Aurora Police Department's violence-prevention initiative under Aurora's Gang Reduction Impact Program (A-GRIP). The goals of the "Violence Prevention" (ViP) project are: 1) Decrease the attractiveness of gang membership. 2) Reduce risk factors for gang membership/violence & increase protective factors. 3) Provide opportunities for youth/families to build positive relationships with APD. Prevention programming is provided by Friends for Youth, Hood Monsters & APD's Aurora for Youth. The project will serve 756 youth (4–17) + 65 parents.

**PIPER Contact:** Gregory Tung, MPH, PhD (PI of subcontract); D. Barrett, Aurora Police Department (PI)

**Funder:** Colorado Division of Criminal Justice

# Projects of PIPER core faculty active in 2014, cont.

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- 2014      **Evaluation of Man Therapy website**  
This project developed an evaluation framework for Man Therapy, an innovative mental health promotion website for working age men. PIPER's evaluation team, with guidance from the Man Therapy Team, undertook a series of activities designed to better understand how the website is currently being used and received and how potential users assess its content and style. The team proposed future evaluation approaches to not only understand how to strengthen the existing Man Therapy website but also to continue to study its impact and enhance the possibility of dissemination to other settings.  
**PIPER Contact:** Ashley Brooks-Russell, PhD, MPH (PI)  
**Funder:** Colorado Department of Public Health and Environment

## Other and Cross-cutting Projects

- 2014-2015      **Partnership to improve child and adolescent mental health by promoting the interrelatedness of mental health and physical health**  
This is a pilot grant funded to strengthen the partnership between PIPER and Tri-County Health Department related to child and adolescent mental health. The primary focus is to undertake a multi-pronged assessment to help guide the development of shared research interests.  
**PIPER Contact:** Ashley Brooks-Russell, PhD, MPH (Co-PI); S. Weinberg, Tri-County Health Department (Co-PI)  
**Funder:** Colorado Clinical & Translational Sciences Institute (CCTSI)
- 2014-ongoing      **Healthy Kids Colorado Survey**  
The Healthy Kids Colorado Survey (HKCS) collects health information biennially, every odd year, from Colorado public school students. Dr. Brooks-Russell serves as Project Director and Co-PI of a state-wide adolescent health survey, including the Youth Risk Behavior Survey.  
**PIPER Contact:** Ashley Brooks-Russell, PhD, MPH (Co-I); A. Levinson, Colorado School of Public Health (PI)  
**Funder:** Colorado Department of Public Health and Environment
- 2011-2015      **Longitudinal Approach to Examining Deaths in Correctional Facilities**  
This is a Visiting Fellowship in the Criminal Justice Statistics Program to examine mortality among prisoners in the United States and develop a framework for future data collections on health in correctional populations. The overall purpose of this fellowship is to support the scholarly use of Bureau of Justice Statistics data collections, expand the body of policy-relevant research that uses these data, and enhance or inform bureau programs. The focus of the first project in this Visiting Fellowship is to assess the impact of tobacco control policies on tobacco-related deaths in prisons. The second project develops a framework for data collections on health and health care delivery across the spectrum of criminal justice involvement.  
**PIPER Contact:** Ingrid Binswanger, MD, MPH, MS (PI)  
**Funder:** U.S. Bureau of Justice Statistics

2014-2017 **The Consequences of Sanctions for Mortality in Socially Marginalized Populations**

This study examines the effect of incarceration on health and health disparities by using a pair of quasi-experimental studies in a statewide longitudinal cohort to examine the effect of incarceration on mortality.

**PIPER Contact:** Ingrid Binswanger, MD, MPH, MS (PI)

**Funder:** National Institute of Child Health and Human Development

2011-2016 **Centers for Autism and Developmental Disabilities Research and Epidemiology (CADDRE): Study to Explore Early Development (SEED) II**

While diagnostic practices are improving, little is known about the causes or correlates of the neurodevelopmental disorders known collectively as Autism Spectrum Disorders (ASDs). The Centers for Autism and Developmental Disabilities Research and Epidemiology were established to address the magnitude, incidence, and causes of autism and related developmental disabilities and recently completed Phase I of the Study to Explore Early Development (SEED I) with more than 3500 children enrolled. The current project, **SEED Phase II**, involves recruiting another 1080 children in each study group across six national study sites to address hypotheses in five domains: phenotype, infection and immune function, reproductive and hormonal features, genetic features, and socio-demographic features. A sub-study examines injuries and injury hospitalizations in children with autism, including self-injurious behavior. The combined SEED phases will provide clinical, risk factor, and biological specimens and data on over 6000 families – the largest study of ASDs of this kind – and is poised to make significant contributions to our understanding of ASDs. This is a joint project with Pediatrics and Psychiatry (School of Medicine), Colorado School of Public Health, and Colorado Department of Public Health and Environment.

**PIPER Contact:** Carolyn DiGuseppi, MD, MPH, PhD (Co-PI)

**Funder:** Centers for Disease Control and Prevention

2012-2014 **Harmonizing Child Unintentional Injury Research Through Shared Instrumentation**

As the field of injury has grown, more investigators are examining patterns of child injury in different settings. In 2011, for example, there were more than 6000 papers listed in SafetyLit®.org with a focus on child and adolescent injury. Yet, no central compendium of data collection instruments accessible to the community of researchers exists, and there has never been a systematic method to compile, on an ongoing basis, measures used in injury research. To address this need, we created a searchable database of data collection instruments so that investigators can benefit from prior work and enhance the consistency across studies. This database has been made available to the community of scholars through Dr. David Lawrence of SafetyLit.org, Inc.

**PIPER Contact:** Carol Runyan, MPH, PhD (PI)

**Funder:** National Center for Injury Prevention and Control, through a contract with the Society for the Advancement of Violence and Injury Research



# Projects of PIPER core faculty active in 2014, cont.

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2014-2016      **Nonprofit Hospital Community Benefit Activities as an Institutional Home for Health Impact Assessments (HIAs)**

This project aims to create sustainable infrastructure to conduct HIAs as part of nonprofit profit hospital community benefit activities. Through collaboration between several entities on the Anschutz Medical Campus, HIAs will be conducted on two pressing issues: preventing gang violence in Aurora schools and developing policies on marijuana for Colorado's child welfare system.

**PIPER Contact:** Gregory Tung, PhD, MPH (PI)

**Funder:** The Health Impact Project—Pew Charitable Trusts and Robert Wood Johnson Foundation

2014-2016      **Evaluation of the Accountable Care Collaborative (ACC) Implementation in Colorado**

The delivery of health care through Accountable Care Organizations (ACO) has emerged nationally as a promising way to increase health care integration with the goal of improving the value and performance of health care delivery (1). The Affordable Care Act recognized the potential of ACOs by encouraging states to apply the model to Medicaid services through pilot programs (2). In May 2011, the state of Colorado began a Medicaid pilot called the Accountable Care Collaborative (ACC) the differs from typical ACOs by focusing on supporting Primary Care Medical Practices (PCMPs) through a network of Regional Collaborative Care Organizations (RCCOs). The primary objective of the pilot is to transform the delivery of Medicaid services through increased integration of services. The underlying premise of the approach is that increased integration of health care services will lead to increased efficiency through lower costs and/or increased quality while ensuring access to care.

The goals of this project are to: 1) Understand the association of the Accountable Care Collaborative with health care expenditures; 2) Evaluate the performance of the Accountable Care Collaborative on targeted utilization (Key Performance Indicators), access-sensitive utilization, and other quality measures; and 3) Perform a qualitative assessment of high and low performing provider groups to document the key characteristics that encourage or hinder performance.

**PIPER Contact:** Gregory Tung, PhD, MPH (Co-I); R. Lindrooth, Colorado School of Public Health (PI)

**Funder:** Colorado Health Foundation and Rose Community Foundation

## Other: Infrastructure Development/Training

2003-2016      **National Research Service Award**

The National Research Service Award training programs are designed to train individuals to conduct research and to prepare for research careers. Institutional NRSA programs allow the Program Director to select the trainees and develop a program of coursework, research experiences, and technical and/or professional skills development appropriate for the selected trainees, providing high-quality research training and offering opportunities in addition to conducting mentored research. This program trains physicians in outcomes and health services research methods.

**PIPER Contact:** Ingrid Binswanger, MD, MPH, MS (Program Director)

**Funder:** Health Resources and Services Administration

2011-2015

**Monitoring Services for Tribal Injury Prevention Cooperative Agreements – Training Workshop Component**

The Tribal Injury Prevention Cooperative Agreement Program (TIPCAP) provides funds to American Indian and Alaska Native Tribal organizations to develop their infrastructure and capacity in injury prevention. Econometrica assists the Indian Health Service (IHS) by serving as an outside monitor, providing oversight and technical assistance to the 33 current TIPCAP grantees in support of IHS's priority of increasing accountability. Econometrica is responsible for a variety of rolls related to training, resource development, and technical assistance, including annual site visits. Subcontracted by Econometrica, the PIPER program is responsible for planning and participating in an annual 2-day training workshop for grantees.

**PIPER Contact:** Carol Runyan, MPH, PhD (PI of subcontract); M. Sheppard, Econometrica (PI)

**Funder:** U.S. Indian Health Service, through a subcontract with Econometrica

2013-2018

**Developing Infrastructure for Patient-Centered Outcomes Research at Denver Health**

The proposed Center for Health Systems Research at Denver Health, an integrated safety net health system, directly addresses two national priorities for patient-centered outcomes research: addressing disparities and improving healthcare systems. The Center will partner with an academic research unit and an applied healthcare research organization to develop a research infrastructure and to create collaborations that will sustain meaningful patient-centered outcomes research well into the future. Such infrastructure includes teaching and mentorship and development of a cross-institution data integration structure that will connect the Center with much larger research networks. Specific projects target the "healthcare required to achieve best outcomes" among socioeconomically disadvantaged groups, including racial and ethnic minorities; designs effective in a safety net can inform high-value design in other systems.

**PIPER Contact:** Ingrid Binswanger, MD, MPH, MS (Co-I, Director of PCOR Scholars Program); E. Havranek, University of Colorado (PI)

**Funder:** U.S. Department of Health & Human Services, Agency for Healthcare Research and Quality



# Selected scholarly publications of core faculty

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# Training, teaching & mentoring

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During the past year, we have continued efforts to engage more students in the topic of injury prevention, while also mentoring junior faculty, fellows, and residents as they develop their work.

## **Teaching & Student Training**

In 2014, PIPER core faculty were involved in a number of teaching activities, including classroom teaching of undergraduate, medical, and graduate students, as well as mentoring of graduate student projects (e.g., dissertations, practica and capstone projects).

Some classroom teaching is focused on injuries – for example, Dr. DiGuseppi’s course, “Injury and Violence Epidemiology and Prevention,” which is a required course for students in the M.S. Epidemiology program and open to all students in the Colorado School of Public Health. Other courses taught by PIPER faculty have a broader focus but incorporate injury content, exposing a range of students to the field. Examples include Dr. Runyan’s four-semester seminar for DrPH students and “Foundations of Public Health,” taught to MPH and certificate students, Drs. DiGuseppi and Comstock’s undergraduate “Introductory Epidemiology,” Dr. Brooks-Russell’s undergraduate “Introduction to Public Health,” Dr. Tung’s “Health Policy” course, and Dr. DiGuseppi’s graduate-level “Introduction to Systematic Reviews.” In addition, Dr. Comstock also taught the MPH Capstone course and Dr. Binswanger is Co-Director of the Correctional Care Elective for medical students, covering injury topics in the curriculum.



PIPER faculty are also often invited to give guest lectures on injury topics in courses focused on maternal and child health, health policy, aging, or in a wide variety of professional programs (e.g., Dr. Betz teaches about intimate partner violence to physical therapy and medical students and about global injury to students learning about global public health). Our goals are to expose as many students as possible to basic injury concepts and, in the process, identify students interesting in studying injury in more depth.

## **Faculty, Fellow, & Resident Mentoring**

In addition to teaching and training students, mentoring is also a critical element of our work, as more senior scholars assist junior faculty, fellows, and residents in developing their work.

For example, in 2014, Drs. Comstock and Runyan worked with several fellows in Pediatric Emergency Medicine on topics ranging from home safety to concussions in sports. Dr. Betz regularly teaches residents and fellows in emergency medicine on care of injured patients, and Dr. Sigel directs the Adolescent Medicine Fellowship in Pediatrics while overseeing their training seminar series, including multiple topics on injury and violence prevention. Dr. Binswanger is an attending physician in adult medicine, training residents; she also directs the Primary Care Research Fellowship Program and serves as Primary Care Residency Research Director for the Primary Care Internal Medicine Residency Program. Dr. Binswanger was also mentor to two PCOR Scholars and serves on the career development advisory committee for three career development award grantees. Dr. DiGuseppi directs the Preventive Medicine Residency Program in the Department of Family Medicine and oversees their seminar series and journal club, which regularly include presentations and reviews of scientific studies on injury and violence epidemiology and prevention.

Faculty mentoring within PIPER is also strong: Dr. DiGuseppi serves as a member of the Advisory Panel for Dr. Betz’s Paul B. Beeson Clinical Scientist Development Award in Aging focused on physician screening of older drivers, while Dr. Runyan mentors a number



of junior faculty on career development, including Drs. Sigel, Brooks-Russell, and Tung. She regularly meets with junior and mid-level faculty in Emergency Medicine, providing guidance on research development.

### **Trainee Projects**

Students are involved in many of the research projects led by faculty and an increasing number are developing their own projects as the volume of activity on campus grows. Examples of 2014 student projects include:

- *Talia Brown, MS* – PhD student in epidemiology developing her dissertation on methods used for suicide attempts as a function of cultural influences (Runyan).
- *Vicka Chaplin, MPH* – Master’s student in community and behavioral health completed practica and capstone on suicide prevention (Brooks-Russell).
- *Erin Wright, MPH* – DrPH student in community and behavioral health, doing dissertation research on youth and police interactions (Tung and Brooks-Russell).
- *Erin Martinez, MS* – PhD student in epidemiology, doing dissertation research on the epidemiology of prescription opioid abuse (DiGuseppi, Comstock).
- *Ken Scott, MPH* – PhD student in epidemiology initiating a dissertation project to examine fall risk, falls, and fall-related disability in aging workers; Ken also completed a field methods project to design a research protocol for a systematic review assessing the use of smartphones and tablets to measure human movement, including falls. (DiGuseppi).
- *Suzuho Shimisaki, MPH* – DrPH student in community and behavioral health working on a dissertation project to create measures for racial inequalities (Tung).
- *Norbert Soke, MD, MSPH* – PhD student in epidemiology doing dissertation research on trends and risk factors for self-Injurious behavior (SIB) in children with autism spectrum disorders (ASD) (DiGuseppi).
- *Ryan Tucker* – medical student, completed a mentored research project on the relationship between homelessness and suicide among veterans (DiGuseppi).



*PIPER director Carol Runyan receives the “Distinguished Career Award” given by the Injury Control and Emergency Health Services Section of the American Public Health Association on November 18, 2014 (presented by Keshia Pollack of Johns Hopkins)*

# Selected presentations

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PIPER strives to provide injury-related learning opportunities on a regular basis. PIPER's Injury and Violence Seminar Series is open to the public, while the Injury and Violence Research and Evaluation (IVRE) group provides a more focused professional development opportunity for injury researchers. PIPER faculty are also engaged in numerous workshops and training activities related to their areas of interest. In 2014, PIPER faculty gave presentations on campus, in the local community, regionally, and at national and international meetings. Topics and audiences were diverse. A few examples are listed below:

## Substance Use

- Brooks-Russell A. Evaluating the Public Health Risks of Marijuana: Scientific Evidence and Data Needs. Society of Risk Analysis Denver, CO. December 2014.
- Brooks-Russell A. Marijuana Use and Traffic Safety. Fire and Life Safety Educators of Colorado, Colorado Springs, CO. August 2014.
- Binswanger IA. Prescription Opioid Misuse and Overdose. OLLI Speaker Series. Leading Edge Medicine, Denver, CO. January 2014.
- Binswanger, I. Developing a Framework for National Data Collection on the Health of Criminal Justice Populations. Academic and Health Policy Conference on Correctional Health, Houston, TX. March 2014.
- Binswanger, I et al. Let's Talk About Life: Empowering Our Community to Prevent Deaths from Overdose. Public health in the Rockies Conference. Fort Collins, CO. September 2014.
- Tung, G. Preventing Unintentional Ingestion of Marijuana by Children: A health Impact Assessment of Packaging Regulations in Retail Marijuana Establishments in Colorado. Anschutz Medical Campus Seminar Series, 2014.

## Youth Violence

- Sigel E. Reducing Youth Access to Firearms through the Primary Health Care Setting. American Society of Criminology. November 2014.

## Falls

- DiGuseppi, C. Church-Based Social Marketing Motivates Older Adults to Take Balance Classes for Fall Prevention. Injury Division, George Institute for Global Health. Sydney, Australia. February 2014.

## Older Drivers

- Betz ME. Older Drivers and Primary Care Providers. Washington University School of Medicine; St Louis, MO. September 2014.

## Sports Injury

- Comstock RD. Neck Strength of Young Athletes for Screening and Prevention. Invited Speaker, Safe Sports Think Tank 2014, Concussions in Youth Sports: How Do We Advance the Science of Prevention? Washington, DC. November 2014.



*PIPER faculty member Ashley Brooks-Russell, PhD, presents at the Marijuana and Public Health Symposium in March 2014*

# Injury & violence seminar series

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PIPER continued its successful series of injury and violence seminars in 2014, sparking interest in a wide range of critical topics:

- January 28      **Prescription Drug Abuse in Colorado: Collective Action for Collective Impact**  
Robert Valuck, PhD, RPh, Director, Colorado Consortium for Prescription Drug Abuse Prevention
- February 27    **Driving High: To What Extent Are Young Drivers at Risk?**  
Ashley Brooks-Russell, MPH, PhD, Dept. of Community and Behavioral Health
- April 4         **Of Course They Are an Occupational Group! -- Preventing Injuries among Professional Baseball Players**  
Keshia Pollack, PhD, MPH, Associate Professor, Johns Hopkins Bloomberg School of Public Health
- April 29       **Buckle-Up Safely – Improving Use of Child Restraints in Children**  
Rebecca Ivers, MPH, PhD, Director, Injury Division, The George Institute for Global Health; Professor of Public Health, The University of Sydney, Australia
- June 13        **Undertriage of Major Trauma Patients in U.S. Emergency Departments and Increased Mortality Risk**  
Huiyun Xiang, MD, MPH, PhD Professor of Pediatrics, The Ohio State University College of Medicine
- August 21     **Application of the National Collegiate Athletic Association (NCAA) Injury Surveillance Program (ISP) in Injury Prevention, Policy, and Research**  
Zachary Kerr, MA, MPH, PhD Director, NCAA Injury Surveillance Program, Datalys Center for Sports Injury Research and Prevention
- September 23 **Development and Testing of iBsafe - A Novel mHealth Game App for Child Safety**  
Cinnamon Dixon, DO, MPH, Assistant Professor of Pediatrics, Cincinnati Children's Hospital Medical Center, Division of Emergency Medicine and Center for Global Health
- October 27    **Leadership and Safety in the Construction Industry**  
Natalie Schwatka, PhD, AEP, Research Associate, Center for Worker Health & Environment

These seminars are recorded and available on our website ([www.ucdenver.edu/PIPER](http://www.ucdenver.edu/PIPER)) for viewing.

# Activities in professional service

<b>INTERNATIONAL</b>		
Institute of Work, University of Toronto, Toronto, Ontario	Consultant, child labor project	Runyan
International Labor Organization (United Nations), Geneva, Switzerland	Reviewer, child labor documents Consultant, “Brick Kiln Studies” to improve child labor conditions in Bangladesh, Pakistan, Nepal, and Afghanistan	Runyan
University of Guelph, Guelph, Ontario	Consultant, pediatric fall prevention project (PI: Morrongello)	DiGuseppi
<b>NATIONAL</b>		
Academic Consortium on Criminal Justice Health	Member, Board of Directors	Binswanger
Academic and Health Policy Conference on Correctional Health	Member, National Advisory Group	Binswanger
American Public Health Association	Elected Section Councilor, Injury Control and Emergency Health Services Section	Betz
American Public Health Association	Member, Recreation and Sports Injury Subcommittee	Comstock
National Federation of State High School Associations	Ex-Officio Member, Sports Medicine Advisory Committee	Comstock
National Institute for Occupational Safety and Health (NIOSH)	Consultant, to Research Triangle Institute for the Safe Skilled-Ready Workforce Initiative	Runyan
National Collegiate Athletic Association - Injury Surveillance System	Member, Independent Review Committee	Comstock
Pew Charitable Trusts	Consultant, health impact project	Tung
Safe States and Society for the Advancement of Violence and Injury Research	Member, Expert Evaluation Panel, project on evaluating state injury control programs	Runyan
Society for Academic Emergency Medicine, Academy of Geriatric Emergency Medicine	President Previous Member-at-Large	Betz
Society for the Advancement of Violence and Injury Research	Member, Board of Directors Chair, Council of Centers Member, Training and Infrastructure Committee	Runyan
Society for the Advancement of Violence and Injury Research	Member, Scientific Advisory Committee	Tung, Sigel
Society for the Advancement of Violence and Injury Research	Invited Participant, Nominating Committee, convened to identify new board members	Comstock
Society for General Internal Medicine	Co-founder, Criminal Justice and Health Interest Group	Binswanger
Suicide Prevention Resource Center	Invited Participant, consensus process on the safe discharge of ED patients with suicide risk, RAND ExpertLens study	Betz

STATE/LOCAL		
2040 Partners for Health	Member, Board of Directors	Tung
CEDAS Trust USA	Member, Board of Directors	Binswanger
Children’s Hospital Colorado	Consultant, Community Health Advocacy Institute Consultant, Injury Program	Runyan
Cincinnati Home Injury Prevention and Literacy Promotion Trial	Chair (Runyan), Data Safety Monitoring Board Member (DiGuseppi), Data Safety Monitoring Board	Runyan DiGuseppi
Colorado Consortium for Prescription Drug Abuse Prevention	Co-Chair, Public Awareness Committee	Runyan
Colorado Consortium for Prescription Drug Abuse Prevention	Co-Chair, Data/Analysis Subgroup	Binswanger
Colorado Department of Public Health and Environment	Member, Retail Marijuana Advisory Committee	Brooks-Russell
Colorado Department of Public Health and Environment	Consultant Member, Advisory Committee, Injury Control Program Member, Leadership Action Committee, and Program Evaluator, “Implementation of Essentials for Childhood: Safe, Stable, Nurturing Relationships and Environments” Member, Surveillance Advisory Committee, Occupational Safety and Health	Runyan
Colorado Department of Public Health and Environment	Member, Core Violence and Injury Prevention Program Advisory Committee Member, Colorado Violent Death Reporting System Advisory Committee	DiGuseppi
Colorado Department of Public Health and Environment	Member, Injury, Suicide and Violence Prevention Policy Committee	Betz, DiGuseppi
Colorado Department of Public Health and Environment and Children’s Hospital Colorado	Evaluator, Means Restriction Counseling for Suicidal Patients	Runyan
Colorado Suicide Prevention Commission	Appointed member; chair of emergency services subcommittee	Betz
Gang Reduction Initiative of Denver	Member, Advisory Committee	Sigel

# Activities in professional service, cont.

<b>STATE/LOCAL, cont.</b>		
Injury Prevention Research Center, Mt. Sinai School of Medicine	Member, Advisory Board	Runyan
Injury Prevention Research Center, University of Iowa	Member, Advisory Board	Runyan
Several universities	External Reviewer, university promotion reviews	Runyan
University of Colorado School of Medicine	Chair, Suicide Screening Program Implementation Committee, Department of Emergency Medicine Emergency Medicine Liaison, Mentored Scholarly Activities Program	Betz
<b>EDITORIAL/REVIEW SERVICE*</b>		
American J. of Preventive Medicine	Member, Editorial Board	Runyan
Asian Journal of Exercise and Sport Science	Member, Editorial Board	Comstock
Cochrane Library	Co-Editor, Injuries Review Group	DiGuseppi
Encyclopedia on Criminology and Criminal Justice	Area Editor, Correctional Health	Binswanger
Health and Justice	Member, Editorial Board	Binswanger
Injury Epidemiology	Member, Editorial Board	Runyan, Comstock, DiGuseppi
Injury Prevention	Senior Blog Editor	Tung
Injury Prevention	Member, Editorial Board	DiGuseppi
Institute of Medicine	Reviewer, "Sports-Related Concussions in youth: Improving the Science, Changing the Culture"	Comstock
Journal of Athletic Training	Member, Editorial Board	Comstock
National Institutes of Justice	Grants Reviewer	Brooks-Russell
National Operating Committee on Standards for Athletic Equipment	Grants Reviewer	Comstock
National Research Council and Institute of Medicine of the National Academies	Reviewer, "Health and Incarceration: A Workshop Summary"	Binswanger
American College of Physicians	Editorial Consultant, "Opiate Abuse," in Physicians' Information and Education Resource	Binswanger
Society for Adolescent Health and Medicine	Member, Violence Prevention Advisory Group	Sigel
Society for General Internal Medicine	Reviewer, SGIM Best Research Paper Award	Binswanger
Substance Abuse	Associate Editor	Binswanger

\*In addition to the service listed, PIPER faculty are dedicated manuscript reviewers for numerous academic journals.

# Looking forward

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As we begin 2015, we see continuing opportunities to expand our reach in providing leadership in injury prevention in the region, as well as nationally and in global context. We will reach out to engage new scholars and practitioners to further increase our capacity, enlarge our core faculty group, and encourage more involvement from scholars and practitioners outside our institution.

Over the coming year we hope to expand our multiple collaborations and grow both the topical and geographic scope of our work. Watch for an announcement in coming months as we consider a name change to reflect our attention to issues that extend throughout the lifespan. Our focus will remain on the primary prevention of injury and violence problems, though we remain eager to partner with colleagues addressing improvements in systems of care.

Though our team has been very successful in competing for grants and contracts, our ability to expand will require increased attention to fundraising in its many forms. Federal funding for injury prevention remains extremely limited and far out of proportion to the magnitude of the injury and violence problems in America and abroad. Despite media attention to mass shootings and police violence – two important issues, there is still a lack of recognition of the critical importance of other violence and unintentional injury problems.

We need your help – as partners and interested parties – in doing the following:



1. Join us in conducting applied research on injury and violence.
2. Help us promote greater understanding of the importance of injury and violence as public health problems throughout the country, with special attention to the needs of our region and to populations experiencing disparities. Our website provides information to help you with this task. We are happy to tailor this information to specific needs.
3. Engage with key decision makers to help them understand the importance of supporting research and practice of injury control, especially leadership for injury research in the western region.
4. Spread the word about our work to others (e.g., donors, corporations, foundations) that may be interested in supporting our mission. Sign up for our email listserv, attend our events, and share with your networks.
5. Give us your feedback and ideas about how we can prevent the problems of injury and violence more effectively.

# Get Involved

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## Support our programs

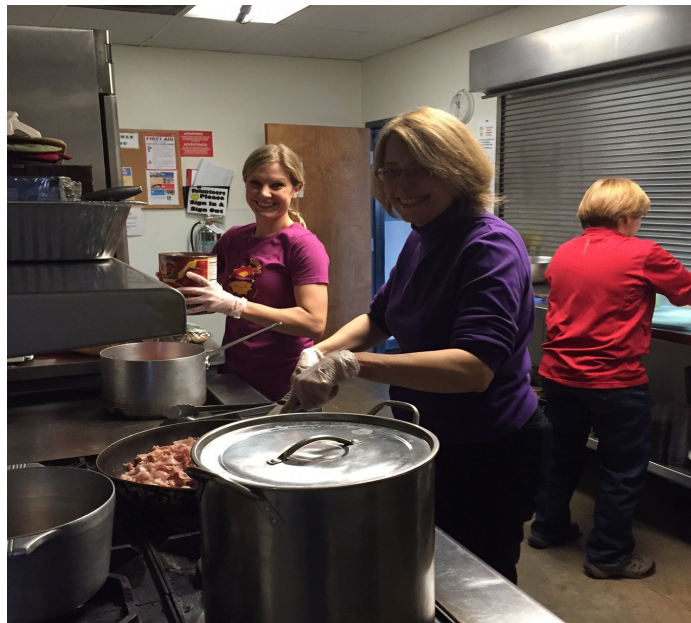
Join PIPER in preventing child and adolescent injury. Through financial support, you can help us provide scholarships to graduate students studying injury, offer cutting-edge training to the injury prevention workforce, and support new discoveries through our research agenda. Visit [www.ucdenver.edu/piper](http://www.ucdenver.edu/piper) to learn about giving opportunities.

## Join our mailing list

At [www.ucdenver.edu/piper](http://www.ucdenver.edu/piper), you can subscribe to the PIPER listserv to learn about upcoming events, activities, and news.

## Become a partner

Contact Sara Brandspigel at [sara.brandspigel@ucdenver.edu](mailto:sara.brandspigel@ucdenver.edu) if you would like to partner with PIPER on research, evaluation, training, or programmatic activities.



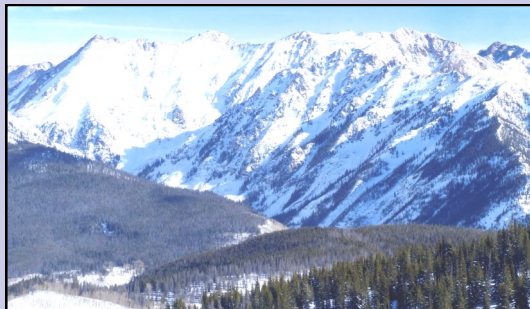
*PIPER faculty and students volunteer at Urban Peak, a shelter for homeless youth in Denver, in December 2014*



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