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Safety Balls and Faceguards Reduce Injuries in Little League

Each summer we hear cries of “take me out to the ballgame” and youngsters are among our most enthusiastic ball players. There are approximately five million participants, ages 5-18, in organized youth baseball leagues in the U.S. and around half participate as Little League affiliates. Although safety balls and faceguards are widely used in youth baseball, their effectiveness in reducing injuries had not been examined until recently. In a new study published in the *Journal of the American Medical Association*, a team led by IPRC researchers Dr. Stephen Marshall (UNC Department of Epidemiology) and Dr. Fred Mueller (UNC Department of Exercise and Sports Science) document for the first time that faceguards and safety balls are significantly associated with reductions in injuries among Little League baseball players.

This 3-year study followed Little League affiliates in all 50 states from 1997-1999 to determine the effectiveness of safety balls and faceguards in reducing injuries. Only leagues that purchased optional Little League insurance coverage (97% of all leagues) and had a safety officer (87% of all leagues with insurance) were included in the census. Staff at Little League baseball headquarters in Williamsport, PA conducted a Census of Safety Equipment Usage to provide data on exposure to safety balls and faceguards. There was a 94% response rate in

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Focus on Methodology

The New National Violent Death Reporting System

In March UNC IPRC was pleased to host the director of the Medical College of Wisconsin's (MCW) Injury Research Center, Steve Hargarten, MD, MPH as a visiting scholar. While here Dr. Hargarten, also the director of the MCW Firearm Injury Center, presented a seminar that focused on the need for more attention to the problem of reducing violent deaths. He highlighted the potential of the new National Violent Death Reporting System (NVDRS) to provide a clear picture of how, when, and where most violence occurs. In 1999, 148,000 Americans lost their lives as a result of injuries and 46,000 of these deaths resulted from homicide (11.4%) or suicide (20%). According to Hargarten, “One of the major obstacles [in reducing the number of deaths] is that the information is fragmented.” Citing an

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The Right to Safety: Not a Seasonal Issue



Carol Runyan, MPH,
PhD, Director

The articles in this issue are about injury problems that are notable in the summer. But, reading them, I was struck by the issues they raise about risk and vulnerability that are surely not seasonal. Reading these pieces it's hard not to think about disparities in injury and injury risk, whether it be among young Latino construction workers, those persons dying as a result of exposure to extreme heat, disabled women exposed to potentially greater risks of assault, or even the risks to children who are, unknowingly, exposed to dangerous baseballs in seemingly innocuous Little League games.

Perhaps al Qaeda has taught Americans that we are all more vulnerable than we thought and that we should work hard to preserve our freedom from harm, as a collective. But, we must learn that this applies not only to homeland security but also to the more everyday risks at home, at work, or in transit. While we seem willing, as a nation, to grant everyone equal protection from foreign terrorists, we seem decidedly less willing to grant equal protection from the wide array of other potential hazards. Will we continue to accept that some members of our society must bear a greater burden of risk than others? To address these sorts of issues, Dr. Dinesh Mohan proposed the Delhi Declaration On People's Right To Safety at the Sixth World Injury Conference in Montreal in 2002. Though it was well received by attendees, this declaration will be brought before the participants of the Seventh World Conference in Vienna in 2004 for formal endorsement. Turning these principles into action will require a shared view that injuries are preventable and that prevention is worth the effort – for everyone. Endorsement by the attendees at the Seventh World Conference is important, but wouldn't it be nice if we all (and the U.S. Congress and President Bush) would endorse it in the meantime? And, while we're at it, let's endorse the Convention on the Rights of the Child (but that's another story...!)

The Delhi Declaration On People's Right to Safety

(Reprinted from <http://www.iitd.ernet.in/tripp/righttosafety/deldeclaration.pdf>)

Rationale: The Human Rights approach has been used effectively in many arenas, including the rights of the child, the rights of women and the rights of people in development. The Human Rights approach attempts to address issues of accountability at levels that range from the individual to those of the larger political and economic systems. The issues which such a document might address include non-discrimination, relationship to other human rights, accountability, the right to organise, the right to appropriate health care, the right to complain, sovereignty over living environments, the right to information and education, the right to participation, the right to environmental monitoring, the right to emergency preparedness, the right to relief and compensation, the right to enforcement of safety laws, the right to effective legal representation, the right to fair procedures, and the right to hold organisations and states accountable.

Definition: Safety can be defined as a state in which hazards and conditions leading to physical, psychological, and material harm are controlled in order to preserve the health and well being of individuals and communities. Safety is a dynamic state resulting from the interaction of human beings with their physical, social, cultural, technological, political, economic and organisational environment. The objective is to establish a permanent state of vigilance and develop the mechanisms to control dangers on a continuous basis. Safety relates to various dimensions of physical, social, and psychological well being. It includes the prevention and control of injuries, both physical and psychological, to individuals and communities, as it should be contained in the notion of "human security" which is being discussed by the UN Security Council. Essential conditions for both physical safety and the perception of safety include:

- freedom from violence in a climate of peace, justice and equity protecting human rights;
- the respect of values of individuals and communities as well as the physical, material, and psychological integrity of individuals; and - strict enforcement of norms of transparency and accountability.
- Safety can be achieved by acting on structures, environments, and attitudes and behaviours. This can be affected by:
 - sharing information on risk and options for risk control between the public and political, professional, scientific, and community groups;
 - concerted actions to maximise levels of safety achievable under the given conditions;
 - adequate mechanisms for allocating resources for those in need and for resolution of conflicting interests; and
 - legal bases for ensuring accountability of individuals, organisations and governments at all levels.

Safety Balls, from page 1

1997, 98% in 1998, and 99% in 1999. Little League staff participation in data collection was vital to the high response rate.

Individual leagues decided whether or not safety equipment was used. Each youth league has nine divisions. For the purpose of this study, the divisions were divided into 4 categories: T-ball (ages 5-8), Little League minor (ages 7-12), Little League regular (ages 9-12), and upper leagues (junior, senior-minor, senior, big league minor, and big league; ages 13-18). The Challenger division, the division for children with special needs, was excluded due to the small number of injuries reported. Seventy-three percent of leagues had at least one division that used safety balls and 34% of leagues had at least one division that used faceguards.

Data on injury rates were collected using compensated injury claims filed with Little League and the participation database assembled by Little League. A total of 4,233 injury claims were compensated during the three-year period from 1997-1999, resulting in an injury rate of approximately 28 per 100,000 player-seasons (note: the injury rate per 100,000 player-seasons is more accurate than per 100,000 players because player-seasons take into account the time period that each youth participated in the league. For example, if a child played only half of a season during the three years of follow-up they would only contribute half of a player season as opposed to three player seasons). Of all injuries, 44.6% (1,890) of injuries were ball-related, while only 4.3% (183) of injuries were facial injuries. The absolute incidence of ball-related injuries was 28.02 per 100,000 player-seasons and of facial injuries was 2.71 per 100,000 player-seasons. Of all injuries, 38% were considered "higher severity." High severity injuries included

dismemberments, fractures, and dislocations. The majority of the injuries (47.9%) occurred in regular Little League (ages 9-12). However, use of safety equipment decreased as the competitiveness of the division increased.

The study found that the most effective safety ball in reducing injury is the reduced-impact ball, a ball that looks and plays like a regular baseball, but "gives" more on impact. There are several barriers to using reduced-impact balls, and Dr. Marshall recommends that more studies look at why the reduced-impact ball is not accepted. One such barrier is an underlying parental concern that their children should play "real baseball," fostered by a belief that one's child may be destined for a serious baseball career. This belief is so strongly held that even 15% of T-ball leagues, which serve children ages 5-8, use regular baseballs. Another concern is about the "play of the ball." There is a belief that a reduced-impact ball does not perform as well as a regular baseball, that "it doesn't come off the bat the same way... (or) bounce the same way." However, one laboratory study found that when the balls were not labeled, adults and youth ages 11-14 could not differentiate between the performance of a regular ball and a safety ball. This barrier seems to have to do more with the perception of the "play of the ball," and less with the actual performance of the ball.

Overall there was a 23% risk reduction of ball-related injuries associated with the use of safety balls and a 35% risk reduction of facial injuries associated with the use of faceguards. There were not enough facial injuries to support the use of one faceguard over another (i.e., plastic vs. metal). Some of the reasons that faceguards are not readily used are that they make the game less fun for the child and they partially block the child's vision.

Although safety balls and faceguards are not 100% effective in preventing injuries and the overall incidence of injuries in youth baseball is low, since such a large number of youth participate in baseball, even a small reduction in injury will have a large impact. The USA Baseball Medical and Safety Advisory

Committee did not believe that the intervention effect was strong enough to mandate safety equipment. Dr. Marshall recommends



that individual leagues look into using safety equipment. Leagues with limited budgets should invest in safety balls first, since ball-related injuries are more common than facial injuries.

In trying to reduce injury in youth baseball, Dr. Marshall believes that it is important to influence coaches and parents. More research should be done to determine how coaching attitudes translate into injury risk so that this knowledge can be applied to shift coaching attitudes and strategies to support a safer game environment. Parents are also very influential advocates in the baseball community. It could be argued that in youth baseball parents are the "consumers" and therefore, they can play a big role in promoting safety by making it a priority.

Reference

Marshall, SW; Mueller, FO; Kirby, DP. (2003). An evaluation of safety balls and face guards for prevention of injuries in youth baseball: A cohort study. *JAMA* 289(5):568-574.

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Teen Injury in the Construction Industry

Summer's here and school is out. Teens everywhere are looking for summer employment. Almost 7% of teens choose to work in construction (US Department of Labor, 2000). National injury statistics show that construction jobs are among the most dangerous. The nature of the tasks performed, the working environment, and the organization of work that includes transient assignments, frequent movements from place to place, and a shortage of safety equipment and on-site safety experts contribute to the problem.

Since 1992 Dr. Carol Runyan has led a team of colleagues at the Injury Prevention Research Center in pursuing a line of research on the hazards of youth labor, including studies of teen

young construction workers. Through information obtained from work permits, the team identified a sample of 187 sixteen and seventeen year olds from across North Carolina who worked in the construction industry during the summer of 2001. The teens were asked about job characteristics (what they did on the job, types of equipment used, potential hazards encountered, training provided, etc.), staffing patterns at work (number of hours worked, supervision provided, etc.), information about injuries sustained on the job, and about their knowledge of restrictions on youth work. Preliminary results show that the majority of teens in construction worked at house building or remodeling sites and that many used some type of power tool such as a hand held circular saw or



Typical construction site with barriers set up to prevent workers from falling off.

worker deaths and others focusing on specific settings such as agriculture, restaurants, groceries and other retail establishments. A current study, funded by the National Institute for Occupational Safety and Health (NIOSH), includes several components focused on youth working in construction.

The major component of the study examined the working conditions of

a power nail gun or staple gun. Most of the teens reported having received safety training that included the use of protective equipment, the safe use of all equipment, and identification of

hazards at the work site. Despite a majority of teens reporting that they received training on labor restrictions that apply to youth, a large number still reported not knowing whether or not a 16-year-old is allowed to perform certain tasks, such as applying roofing materials or working after 11pm when there is no school the next day. Many of the teens reported having performed tasks prohibited by law for workers their age.

Dr. Dana Loomis and Mr. Thomas O'Connor conducted a companion survey to examine the same issues in a sample of young Latino construction workers identified in the community rather than through work permits. Their findings indicate they were also asked about the language barriers, particularly in training. Preliminary results reveal that many young Latino workers reported often feeling rushed on the job and that supervisors gave speed a higher priority than work quality. Many workers report receiving little safety training and a lack of awareness of OSHA and its role in enforcing health and safety laws. Many also said that they get safety information and training more often from their coworkers than from a boss or supervisor, perhaps due to the language barriers they reported.

A component of this study, led by Dr. Michael Schulman (North Carolina State University) examined the views of a sample of employers in the construction industry to determine their practices regarding hiring, training, and supervising young workers, to identify the issues that they see as problematic in employing young workers in the construction industry, and to measure their awareness of child labor restrictions in construction work. Though firms reported doing some type of safety training for teens, they did acknowledge the need to supervise teen workers differently than adults. Giving verbal explanations, holding safety meetings, and having an experienced worker demonstrate safe work practices were among the means used for training. Employers also stated that some of the main problems with young workers include skipping work, showing up late,

fooling around, not asking for help, and not taking safety precautions seriously. A component of the research led by Dr. Hester Lipscomb of Duke University and published in *Injury Prevention* (2001) identified the work injury experiences of teens employed in the homebuilding industry in North Carolina and relied on workers' compensation data. Not surprisingly, the results showed that 52% of the injuries occurred during the summer months. Teens had proportionately more injuries to the eye and foot and fewer injuries to the back than did adults. Some injuries occurred while the teen was doing a task that was in violation of child labor laws.

Once the results of all of these youth construction projects have been fully analyzed and compiled, the study results will be submitted for publication in peer-reviewed journals as well as in sources targeted to employers, labor officials, parents and teenagers.

Other study team members include: Dr. Michael Bowling, Dr. Janet Dal Santo and graduate students Kelly Kline, Myduc Ta, and Shankar Viswanathan, all at UNC, as well as Linda Treiber (North Carolina State University) and Stephanie Pratt (National Institute of Occupational Safety and Health).

References

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Mueller Receives Citation Award



Mueller

Professor Frederick Mueller, PhD, chairman of the Department of Exercise and Sports science and IPRC sports injury researcher was presented with the Citation Award from the American College of Sports Medicine (ACSM) at their annual meeting on May 30. The ACSM, the largest sports medicine organization in the world, presents one Citation Award each year for a professional who has made significant contributions to the field. Dr. Mueller, an expert in the epidemiology of athletic injuries, is the director of the National Center for Catastrophic Sports Injury Research. The Center collects and disseminates data on death and permanent disability from sports injury that is related to brain or spinal cord injury. This type of data has been collected since 1931 nationally and at UNC since 1965. Dr. Mueller works with other IPRC-affiliated faculty on various projects. He collaborated with Dr. Stephen Marshall on a study related to the effectiveness of safety balls (see page 1 this issue) and with Dr. Kevin Guskiewicz and Dr. Marshall to collect data on 12 sports from 100 high schools in North Carolina in an NIH-funded UNC IPRC study.

The IPRC Spotlight On... **Dr. Sandra L. Martin**



Martin

Meet Dr. Sandy Martin, faculty member in the Department of Maternal and Child Health, and one of UNC IPRC's core faculty and researchers in the area of violence against women. Her studies on substance abuse and intimate partner violence (IPV) and on IPV during pregnancy have contributed significantly to the understanding of some of the dynamics that accompany violence against women. Martin says that the ultimate goal of her research on risk factors, needs, and program effectiveness is the enhancement of services for victims of violence in the community and the prevention of violence against women. To this end, she likes to "bring a diverse group of people to the table," including researchers, program workers, community members, and victims of violence to address the issue. "Researchers and people in the field have burning issues from both sides that can best be addressed when we work together."

This is one of the reasons that Martin has enjoyed working with IPRC. As chair of the IPRC Violence Working Group, she is able to convene researchers and practitioners who are working in different areas of violence to share current interests, needs, and

ideas. Invariably, seeds for new projects or ideas begin to sprout during these meetings. A recent example of this was the development of the Domestic Violence Providers Survey. This survey was administered in 2001 to domestic violence service providers in North Carolina to identify gaps in existing services. Practitioners and policy makers, who are working to improve services to NC women victims

of domestic violence are now using the survey results. In fact, the findings from this small study have been deemed so useful by the NC Public Health Alliance

on Violence Against Women, that this group developed and is administering a second parallel survey for providers of sexual assault services.

The Domestic Violence Providers Survey also served to raise awareness that women with disabilities who experience violence are under-recognized and underserved in North Carolina. In response to this finding, Martin is conducting a new research project to learn more about the magnitude and characteristics of this problem. This work is being conducted in partnership with the Injury and Violence Prevention Unit of the North Carolina Department of Health and Human Services (NC DHHS) and the North Carolina Office on Disability and Health (NCDOH). The project team

includes Jeanne Givens of the NC DHHS, Donna Scandlin and Pam Dickens of the NCODH, and Dr. Beth Moracco of Pacific Institute for Research and Evaluation. According to Martin, there have been very few studies on violence against women with disabilities and most have focused on institutionalized women. This study will incorporate a broader perspective, considering both sexual and physical

violence among women with all kinds of disabilities living in many different settings and is intended to serve as the foundation for developing better health care practices and programs.

"Sandy has supported our efforts to advocate for women with disabilities by adding this focus to both her teaching and research."

Pam Dickens, MPH
NC Office on
Disabilities and Health

Martin relishes her role as a university faculty member because it allows her to combine research with teaching. She has advised or supervised more than 120 graduate students or fellows and 39 of these students have won fellowships and/or awards while under her mentorship. Martin loves working with students and emphasizes that much of her research and writing has been conducted with student help. Another great source of satisfaction in her work is her experience in teaching and course development. With fellow injury researcher, Beth Moracco, she developed and annually teaches a graduate-level course on violence against women. She has taught and/or designed seven masters and doctoral level courses at the

School of Public Health, and taught various independent studies courses. She received the McGavran Award for Excellence in Teaching from the School of Public Health in 2001.

Dr. Martin received her Master's degree at McMaster University in Ontario, Canada. Later, she earned her PhD in the Department of Epidemiology at UNC under the direction of Dr. Victor Schoenbach and completed a post-doctoral fellowship at the Frank Porter Graham Child Development Center.

Since 1990 she has been on faculty at UNC and in 1998, she achieved the rank of associate professor. She has published more than 50 articles in peer-reviewed journals and given more than 80 peer-reviewed presentations at conferences. In addition, Martin has authored several book chapters, technical reports, and book reviews. Her other activities include research consultation, appointments to scientific advisory committees and groups, and service activities including the North Carolina Public Health Alliance on Violence Against Women.

Training Addresses Child Ag Injuries

Agriculture is one of the most hazardous industries and youth under 20 make up almost 40% of this workforce. More than 1.4 million children and adolescents worked on American farms in 1998, and an estimated 32,000 of them were injured. For the period of 1990-1996, about 100 children were killed on farms annually (*Agricultural Safety*. NIOSH, <http://www.cdc.gov/niosh/injury/traumaagric.html>).

On April 26th the National Injury and Violence Training Initiative (a project of the NAICRC-STIPDA Joint Committee on Infrastructure Development) conducted a workshop designed to create effective partnerships between practitioners from state injury programs and from agricultural extension services to address agricultural safety for children. The goals of the workshop were for partners to gain knowledge about the leading causes of child injury in agricultural settings, to share promising injury prevention strategies and programs, and to develop collaborative state-specific plans to address childhood agricultural injury. The 26 participants included members of the Southeastern Regional Injury Control Network, a professional organization of the state health department injury prevention programs in AL, FL, GA, KY, MS, NC, SC, and TN and agricultural safety specialists from each state's cooperative extension service. Each state team identified barriers, such as the need for better data on childhood agricultural injuries and developed an action plan for the months following the workshop.

Funding for this pilot workshop came from the National Children's Center for Rural and Agricultural Health.

Selected Publications by Sandra Martin on Violence Against Women Topics

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Heat Stroke: A Seasonal Hazard to Farm Workers in NC

On average in the U.S., temperature extremes kill more people each year than any other natural disaster or weather event – including lightning strikes, tornadoes, floods, and earthquakes. During a heat wave, elevated environmental temperatures combine with high humidity to create weather conditions that are not only uncomfortable, but also dangerous.

Under normal conditions, when in a hot environment or performing strenuous physical activity, the body attempts to cool itself down by increasing sweat production. The evaporation of sweat from the skin cools

the core body temperature.

When hot weather and high humidity overwhelm the natural capacity to regulate

temperature or when the body's

ability to dissipate heat is

compromised, core body temperature rises rapidly and a heat injury occurs.

Some heat injuries are mild (e.g., heat cramps, sun burn) and rarely require medical attention, whereas others, such as heat exhaustion or heat stroke, can be severe and even fatal.

In recent years hot weather has gained appreciation as a public health hazard, in part due to heightened awareness of the dangers of leaving children in vehicles during hot weather, increased attention to severity of heat injuries among elite athletes, and expanded media involvement in disseminating public health messages during heat waves. Historically, the most severe heat waves have occurred

in large urban areas; residents of Chicago, Dallas, and New York City experienced this phenomenon first hand during the 1990s. Efforts to prevent deaths due to heat-related injuries and illnesses have led to public health programs actively targeting assistance and messages about health and safety during hot weather to particularly susceptible populations.

Despite the well-developed public health programs and knowledge about risk factors and treatment for heat stroke, little is known about the

epidemiology of fatal heat injury in geographic regions where people are presumably acclimatized to hot weather and high humidity.

To improve our understanding of

heat-related fatalities in North Carolina, Maria Mirabelli, a doctoral student in the Department of Epidemiology, developed a project to compare characteristics of occupational and non occupational fatalities and to provide case descriptions of work-related deaths.

The IPRC Student Small Grants Program provided funding to conduct the research. Ms. Mirabelli reviewed state medical examiner's records for all decedents in NC between 1977 and 2001 for whom hot weather was a primary or contributory cause of death. During the 25-year observation period, 161 deaths were identified as heat-related; a quarter (40/161) of the deaths occurred among decedents who

were either working or returning home from work at the time the heat injury occurred. Among those who died from work-related exposure to heat, the most common job was as a farm laborer in the agricultural industry. A review of narrative portions of the decedents' medical examiner files revealed that farm laborers, mainly field laborers harvesting row crops, die unnoticed and without receiving sufficient medical attention.

Heat-related injury continues to be an important problem for workers performing physically demanding tasks, especially during summer months. In North Carolina, numerous organizations provide educational and health-related information to migrant farm workers. Educational material about the prevention of heat stress is widely available in both English and Spanish. Despite these efforts, the rate of heat-related death is still higher in the agricultural industry than in the construction industry, in all industries combined, and among the general population. Heat injuries can be prevented. Heat injuries exacerbated by physical exertion are not only treatable with appropriate medical attention, but are also entirely preventable if individuals can modify their tasks and physical activities in hot weather. The findings from this project justify involving workers, employers, and labor organizers in public health programs to prevent illness and injury while working in hot weather.

Mirabelli's faculty advisor for this project was David Richardson, PhD, Assistant Professor of Epidemiology at the UNC School of Public Health.



Violent Death, from page 1

example with firearm deaths, Hargarten explained, “If you wanted to accurately depict the circumstances surrounding the deaths due to firearms, such as the type of gun used or the identity of the perpetrator, you would have to consult 13 separate federal databases. Even then, the data may be incomplete.” In response to this need, the CDC has created the NVDRS to address gaps in the data on violent death and to provide information that is timely and more detailed than is available at the local, state, and national levels. Hargarten noted that many groups will benefit from this system, including public health agencies and organizations, policy makers who wish to prioritize their actions, advocacy groups who want support for claims, and researchers who wish to perform studies.

Even though the new system has been in place for only one year, there is already evidence that this approach will be successful in making the needed data available. The Firearm Injury Center (FIC) and the Harvard Injury Control Research Center have created pilot systems that have demonstrated success. Wisconsin has been “at it the longest,” according to Hargarten. The FIC, through the Violent Injury Reporting System of Wisconsin (VIRS), has been working to link data from medical examiners (or coroners) with data from law enforcement and crime labs since 1994. Data collected by VIRS includes victim demographics and toxicology; the nature and location of the death (whether urban, rural, or suburban); circumstances of the homicide; the relationship between the victim and the suspect; other contributing factors; and details about the agent. One example of how these linked datasets have informed the development

of interventions is Wisconsin’s weapon buy-back program. Though assault rifles once were believed to be the most dangerous weapon associated with violent deaths, the data gleaned from the VIRS led to the identification of a handgun as the weapon most commonly used in homicides. Once this weapon was identified, program planners were able to focus resources on promoting the buy-back of handguns in particular. Building on success from the FIC, the National Violence and Injury Statistics System (NVISS) was developed under the leadership of the Harvard Injury Control Research Center in 1999. This system was based on the model established by the MCW Firearm Injury Center, but in an expanded form. NVISS was piloted at 13 sites in eight states on the east coast of the US and in two years developed uniform data elements, reporting protocols, and software for the reporting system. The NVDRS was, in turn, based upon this expanded system.

Though these pilot systems have proved successful, there will be challenges in the implementation of the NVDRS at the state level. Hargarten observed, “The chief obstacle in pulling the data together is that a higher level of collaboration will be required among state agencies than exists currently.” For any successful application for NVDRS funding, the organization has to prove their ability to access the data from a variety of sources: death certificates, medical examiner or coroner records, police records, and crime laboratory records, at a minimum. Considering that each data source is “owned” by a separate administrative unit, there is a need to establish trust between agencies. Hargarten stated that he had

learned through experience that “the people who need to share information have many charges and agendas and continued success relies on the ability to build and maintain good working relationships among them, and to keep everyone’s mind on the fact that these efforts [to share information] --though they may seem excessive -- will result in the reduction of deaths due to violent injury.”

The NVDRS received its initial funding of \$1.5 million (from Congress through the CDC) in 2001 after over 45 medicine, public health, child welfare, criminal justice, faith-based organizations wrote letters of support to key members of Congress. Six states were awarded funds in 2002 and funding is available for additional states this year. The ultimate goal is to have all states build an NVDRS system and to answer with more certainty the ultimate question: “What can we do to reduce or even eliminate violent death in America?”

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Preventing and controlling injuries: Addressing the nation’s leading cause of death for children and young adults 2002. Department of Health and Human Services
Centers for Disease Control and Prevention, Atlanta, GA.

National Violence and Injury Statistics System. <http://www.nviss.org>

National Violent Death Reporting System receives initial funding. The American Association for the Surgery of Trauma <http://www.aast.org/nvdrs.html>.

Carol Runyan Awarded Medal for Outstanding Public Service

In May, Dr. Carol Runyan and the other members who served on the Armed Forces Epidemiological Board (AFEB) from 2001 through 2002 were awarded the Secretary of Defense Medal for Outstanding Public Service. This is the second-highest award that can be given to private citizens and is only given for superior

accomplishments and contributions. For this board, the award was based on the “selfless

dedication of each of the members of the board, motivated

by patriotism, good citizenship, and a sense of public responsibility to the health and welfare of the men and women of our Armed Forces.” This board was asked to make recommendations on 31 policy issues over the two-year period. This is a 100% increase over the activity of the previous board and a significantly greater level of activity than any two-year period in the fifty-year history of the AFEB. In recognition of this accomplishment, each board member received a silver medal and a citation signed by the Secretary of

Defense and was “pinned” on the afternoon of May 21 by the Assistant Secretary of Defense for Health Affairs, Dr. William Winkenwerder, Jr. The formal ceremony took place on the Fort Detrick Army base in Frederick, MD.

The AFEB is a group of physicians and scientists who protect the health of the service men and women in our nation by advising the Department of Defense about military health issues. Members of the board are nominated by the Department of Defense and appointed by the president. During their tenure, each board member spends about 240 hours of uncompensated activity on each issue for which they give advice.

This has been estimated to save taxpayers \$4 million (over a billion dollars for the service of this board).

Runyan was a member of the AFEB for two terms. Many of the issues dealt with by the board addressed force protection associated with prevention of infectious disease and threats of biological or chemical warfare and terrorism. Runyan has been involved most in issues associated with injury prevention and

health education, including strategies for conducting health assessments of new recruits and addressing surveillance and prevention of injuries, including a survey of Pentagon employees who survived the 9/11 attack and issues concerning off-duty, recreational injuries which present the largest source of morbidity and mortality to the troops.

Runyan says she has “learned a great deal from participating on the Board, not only about the specific health problems considered and from the other members, all of whom are leaders in their fields, but also from observing the process of policy making in a real world setting where difficult trade-offs must be made, sometimes with limited information.” In being appointed, she had to undergo security clearance procedures so as to be able to participate briefings about secure information.

References

History of the AFEB. <http://www.ha.osd.mil/afeb/history/default.html>

News Release: ARMED FORCES EPIDEMIOLOGICAL BOARD MEMBERS RECEIVE OUTSTANDING PUBLIC SERVICE MEDAL. http://www.defenselink.mil/news/May2003/b05222003_bt361-03.html



About the UNC Injury Prevention Research Center

Founded in 1987, the University of North Carolina Injury Prevention Research Center is one of 11 “Centers of Excellence” funded by the National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Our mission is to build the field of injury prevention and control through a combination of interdisciplinary scholarly approaches to research, intervention, and evaluation as well as through the training of the next generation of researchers and practitioners. IPRC operates as a “center without walls,” facilitating injury collaboration and research on our own campus as well as with researchers and practitioners throughout the US, and increasingly throughout the world.

Selected IPRC Publications - 2003

Bangdiwala, SI; S. de Paula, MS; Ramiro, LS; Munoz, SR. (2003). Coordination of international multicentre studies: Governance and administrative structure. *Salud Publica Mexico*. 45:58-66.

Bernhardt, J; Runyan, CW; Bou-Saada, I; Felter, E. (2003). Implementation and evaluation of a web-based education course in injury prevention and control. *Health Promotion Practice*. 4:120-128.

Chang, JC; Decker, M; Moracco, KE; Martin, SL; Petersen, R; Frasier, PY. (2003). What happens when health care providers ask about intimate partner violence? A description of consequences from the perspectives of female survivors. *Journal of the American Medical Women's Association*. 58:76-81

Coyne-Beasley, T; Moracco, E; Casteel, M (2003). Adolescent femicide: A population-based study. *Archives of Pediatric Adolescent Medicine*. 156:355-360.

Cox, CE; Kotch, JB; Everson, MD. (2003). A longitudinal study of modifying influences in the relationship

between domestic violence and child maltreatment. *Journal of Family Violence*. 18(1):5-17.

English, DJ; Marshall, DB; Stewart, AJ. (2003). Effects of family violence on child behavior and health during early childhood. *Journal of Family Violence*. 18(1):43-57.

Herman-Giddens, ME; Smith, JB; Mittal, M; Carlson, M; Butts, JD. (2003). Newborns killed or left to die by a parent: A population-based study. *JAMA*. 289:1425-1429.

Litrownik, AJ; Newton, R; Hunter, WM; English, DJ; Everson, MD. (2003). Exposure to family violence in young at-risk children: A longitudinal look at the effects of victimization and witnessed physical and psychological aggression. *Journal of Family Violence*. 18(1):59-73.

Litrownik, AJ; Newton, R; Mitchell, BE; Richardson, KK. (2003). Long-term follow-up of young children placed in foster care: Subsequent placements and exposure to family violence. *Journal of Family Violence*. 18(1):19-28.

Marshall, SW; Mueller, FO; Kirby, DP. (2003). An evaluation of safety balls and face guards for prevention of injuries in youth baseball: A cohort study. *JAMA*. 289(5):568-574.

Moracco, KE; Runyan, CW; Butts, JD. (2003). Female intimate-partner homicide: A population-based study. *Journal of the American Medical Women's Association*. 58:20-5.

Morrel, TM; Dubowitz, H; Kerr, MA; Black, MM. (2003). The effect of maternal victimization on children: a cross-informant study. *Journal of Family Violence*. 18(1):29-41.

Runyan, CW; Moracco, KE; Dulli, L; Butts, JD. (2003). Suicide among North Carolina women, 1989-1993: Information from two data sources. *Injury Prevention*. 9:67-72.

Runyan, DK; Litrownik, AJ. (2003). Introduction to special issue: LONGSCAN and family violence. *Journal of Family Violence*. 18(1):1-4.

2003 Student Small Grant Recipients

As part of UNC IPRC's efforts to train the next generation of injury prevention researchers, the Center awards small grants to graduate or professional students or fellows who wish to conduct injury prevention research. This year, three grants were awarded. Following is a description of this year's awardees.

James Cavanaugh, MS, PT, is a doctoral candidate in the Interdisciplinary Program in Human Movement Science, Department of Allied Health Sciences, School of Medicine.



Cavanaugh

His project is "Determining the test-retest reliability of Approximate Entropy: A new

tool for the assessment of cerebral concussion in college athletes." Cavanaugh's faculty mentor is Kevin Guskiewicz, PhD, ATC-L, who is an Associate Professor in the Department of Exercise and Sports Science.

Thelma J. Mielenz, PT, PhD, OCS, is a National Research Service Award fellow at the Cecil G. Sheps Center for Health Services Research. Her project is "Pilot pragmatic RCT of two methods of specific lumbar stabilization exercises to prevent recurrence of acute LBP." Mielenz's faculty mentor is Timothy S. Carey, MD,



Mielenz

MPH, who is Director of the Cecil B. Sheps Center for Health Services Research and Professor in the Department of Internal Medicine in the School of Medicine.

Robin M. Queen, MS, is a doctoral candidate in Biomedical Engineering. Her project is "Effect of posterior heel flare on muscle activation, kinetics, and kinematics during running gait."



Queen

Queen's faculty advisor is Michael T. Gross, PT, PhD, who is a Professor in the Division of Physical Therapy in the Department of Allied Health Sciences in the School of Medicine.

Upcoming Conferences

July 27-31, 2003

**47th American Driver & Traffic
Safety Education Association
Conference**

Hilton Charlotte University Place
Charlotte, NC
(724) 357-4051 (phone); (724) 357-7595 (fax)
[www.adtsea.iup.edu/adtsea/conf/
2003_conf.htm](http://www.adtsea.iup.edu/adtsea/conf/2003_conf.htm)

September 10-14, 2003

**XXII Congress of the
International Association for
Suicide Prevention (IASP)**

Stockholm, Sweden
For further information:
Congress Secretariat
Stockholm Convention Bureau,
22nd IASP Congress,
Phone: +46 8-5465-15 99;
Fax: +46 8-5465-15 99
E-Mail: iasp2003@stocon.se
Web: www.ki.se/suicid/iasp2003

September 12-14, 2003

**International Conference on Trauma,
Attachment and Dissociation**

Grand Hyatt, Melbourne,
Victoria, Australia

Phone: +613-9482-7668

E-mail: info@delphicentre.com.au

Web: www.delphicentre.com.au

September 13-14, 2003

**24th Annual Neurorehabilitation
Conference on Traumatic Brain
Injury and Stroke**

Boston Marriott, Cambridge
Cambridge, MA
[http://www.braintreehospital.org/
neurorehabilitationconferencefaculty.html](http://www.braintreehospital.org/neurorehabilitationconferencefaculty.html)

September 22-24, 2003

**17th Annual California Conference
on Childhood Injury Control**

Los Angeles, CA
CA Department of Health Services
6505 Alvarado Road, Suite 208
San Diego, CA 92120
(619) 594-3691 (Phone)
www.cipp.org

September 23-26, 2003

**Mid-Atlantic Sexual Assault
Conference**

Valley Forge, PA
For further information visit:
<http://www.pcar.org/events/index.html>

November 15-19, 2003

**American Public Health Association
131st Annual Meeting and Exposition**

San Francisco, CA
[http://www.apha.org/meetings/
contact.htm](http://www.apha.org/meetings/contact.htm)

Register for the 7th World Injury Conference

June 6-9, 2004

Vienna, Austria

Deadline for Abstracts: September 30, 2003

Call for Papers is now available. View
all details in the PDF document by
visiting the link below:
[www.safety2004.info/news/pdf/
SAFETY_2004_CallforPapers.pdf](http://www.safety2004.info/news/pdf/SAFETY_2004_CallforPapers.pdf)

Please visit the Conference website for
more details: [http://
www.safety2004.info](http://www.safety2004.info)

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