Session Abstracts

CONCURRENT SESSION BREAKOUT #1
Wednesday, May 2, 2012
4:15 - 5:30 PM

Concurrent Session #1: Successful Policy Partnerships for Injury and Violence Prevention

Implementing Policy to Address Sports-related Head Injury: The Massachusetts Experience

Carlene Pavlos, Massachusetts Department of Public Health

Background: In July 2010 Massachusetts passed An Act Relative to Safety Regulations for School Athletic Programs. Massachusetts was the 7th state to pass a law aimed at reducing the incidence and consequences of sports-related head injuries. MDPH and its partners in the Massachusetts Prevent Injuries Now Network (MassPINN) had been working in this area for a number of years and provided important data and advocacy towards this effort. However, passage of this important policy was not the end of work in this area. Since that time, the Department of Public Health's Medical Director and staff from the Division of Violence and Injury Prevention have worked with internal and external stakeholders to develop comprehensive regulations that, in essence, put the "meat on the bones" of this important law. The regulations address a comprehensive range of issues including requirements for:

- Annual concussion training for school staff, parents, and students and instruction on how such training must be documented;
- Documenting prior head injuries for student athletes as well as head injuries occurring during a sports season;
- Roles and responsibilities of key school staff;
- Removing athletes from play or practice if they have a suspected head injury/concussion;
- Graduated re-entry to both academics and athletics;
- Medical clearance for returning to play;
- Coaches to teach techniques that reduce the likelihood of head injury and prohibit dangerous play; and
- Penalties for not complying with the regulations.

This presentation will review the process of developing the regulations, including the challenges of balancing the needs of a wide range of stakeholders and the need to carefully consider extensive professional and public comment.

Additionally, Massachusetts has learned that work in this area does not end with law or regulation. Schools and staff with responsibilities under the regulations need assistance in developing their local policies and determining if they are in compliance with the regulations. As a result, this presentation will review current work including:

- Developing model guidance for schools as they develop their policies;
- Assuring that all schools have developed policies consistent with the regulations;
- Providing trainings for school nurses, administrators, athletic directors, coaches and others involved in the development of school policies;
- Developing criteria and an application process for those interested in providing the required annual training for school personnel, students and parents;
- Working with the state department of elementary and secondary education to develop guidance for schools on returning to academics after concussion; and
- Working with professional groups to develop education and training for those clinicians approved to provide medical clearance for return to play (physicians, nurse practitioners, certified athletic trainers and neuropsychologists).

Policy Partnerships: Joining Forces to Pass and Defeat Injury Prevention Legislation

Theresa Rapstine, Children's Hospital , Lindsey Myers, Colorado Department of Public Health and Environment

Strong partnerships between government, non-profit, and private agencies are essential to successfully impact

injury prevention policy. Whether the goal is to enact or defeat legislation, each of these partners has a unique and valuable role to play in the policy process. Opportunities to improve or protect public policies often arise unexpectedly. In order to be able to act quickly, it is important to understand how different types of agencies can contribute to the policy process. During this presentation, participants will learn the difference between lobbying and advocacy, as well as the many opportunities public and private agencies have to promote evidence-based state injury prevention policies.

The presenters of this session will share how they leveraged government and non-profit partnerships during the 2011 Colorado Legislative Session to: 1) clean-up Colorado's booster seat law that was strengthened in 2010, and 2) defeat legislation to establish an agricultural youth license, which would have worked against what Colorado has achieved through graduated drivers licensing over the last six years. Using Colorado's 2011 Legislative Session as a case study, participants will learn how the Shaping Policy for Health Framework can be used to establish a role for state public health departments at the "policy table," as well as ten effective advocacy tips from a non-profit perspective.

Participants attending this session will learn:

1. The difference between lobbying and advocacy and how government, non-profit, and private agencies contribute to the policy process;

2. The benefits of non-profit and government partnerships;

3. The importance of paying attention to seemingly innocuous proposed legislation

4. How the Shaping Policy for Health Framework can be used to get state health departments involved in policy; and

5. Ten effective tips for advocacy.

Concurrent Session #2: Prescription Drug Poisonings

Enhancing Statewide Drug Overdose Surveillance by Utilizing the North Carolina Controlled Substances

Annie DeMuth, North Carolina Division of Public Health, Scott Proescholdbell, North Carolina Division of Public Health , William Bronson, North Carolina Division of Mental Health, Developmental Disabilities, and Substance Abuse Services

Objectives: 1) Describe demographic characteristics of persons who died from a drug/medication overdose in North Carolina in 2010. 2) Describe the prescription drug history of these persons in the year before death. 3) Determine what proportion of persons who died from a drug/medication overdose had a prescription for the medication(s) that contributed to their death.

Statement of Purpose: Unintentional overdose from prescription narcotics is a growing problem in the United States and has gained increased attention from health and law enforcement agencies nationwide. In North Carolina, the rate of unintentional and undetermined overdose deaths from prescription narcotics increased elevenfold from 0.54 per 100,000 in 1999 (43 deaths) to 6.60 per 100,000 in 2008 (610 deaths) and has since declined to 5.40 per 100,000 in 2010 (515 deaths). The purpose of this study is to examine the demographic characteristics and prescription drug history of N.C. residents who died from an unintentional or undetermined drug/medication overdose in 2010.

Methods: The study sample included all 894 N.C. residents who died in 2010 from a drug/medication overdose (ICD-10 codes X40-X44, Y10-Y14). Death certificate data for the cases in the study sample were merged with prescription drug records from the year before death from the N.C. Controlled Substances Reporting System (CSRS) and data from the N.C. Office of the Chief Medical Examiner (OCME). Frequency analysis was conducted using SAS, version 9.2.

Results: Preliminary analysis showed that prescription narcotics were listed as a cause of death for 58% of cases, while illicit drugs (cocaine or heroin) were listed for only 17% of cases. Cases had an average of 19 prescriptions for controlled substances dispensed in the year before death. The majority of cases (56%) had at least one prescription for a controlled substance dispensed within 30 days of death. Analysis of study data is ongoing, and results of additional analyses will be presented at the conference.

Conclusions: Although the rate of unintentional and undetermined drug/medication overdoses in North Carolina declined slightly in 2010, this issue remains a significant public health problem for the state. Linking death certificate data to prescription drug history and medical examiner data provides valuable insight into this problem, which can be used to developed targeted intervention and prevention strategies.

Magnitude and Trends in Cocaine, Other Psychostimulant, and Benzodiazepine-related Poisoning Deaths in Massachusetts 2000-2009

Holly Hackman, Jeanne Hathaway, Massachusetts Department of Public Health

Objectives: 1. Provide an overview of the epidemiology of poisoning deaths in U.S. and Massachusetts. 2. Describe trends in Massachusetts poisoning deaths associated with cocaine, other psychostimulants and benzodiazepines and populations with highest rates. 3. Compare and examine co-occurrence with opioid-related deaths.

Background: Poisoning deaths in the U.S. and Massachusetts have risen dramatically. This has been associated with changes in the availability and use of prescription opioids. The ongoing surveillance of poisonings due to other drugs with high potential for abuse is important for effective prevention. This work examines trends in deaths associated with lesser discussed agents -cocaine, other psychostimulants (including amphetamine and methamphetamine), and benzodiazepines, and compares these with opioid-related deaths.

Statement of Purpose: To describe the magnitude, trends and demographic risk groups for poisoning deaths associated with cocaine, other psychostimulants and benzodiazepines in Massachusetts. Comparisons and co-occurrence with opioids will be discussed.

Methods: Data from 2000 through 2009 from the Massachusetts death file was analyzed to identify poisoning deaths associated with cocaine, other psychostimulants and benzodiazepines. Rates by age group, sex, race/ethnicity, and intent are described. Co-occurrence with opioids is examined. Comparisons are made with U.S. data.

Results: From 2000 through 2009, the Massachusetts (MA) age-adjusted poison death rate rose from 9.0 to 13.8 per 100,000 residents, an increase largely occurring between 2000-2006. Of the 8,126 poisoning deaths during the 10-year period, 66% were associated with an opioid (range 62% to 69%). Twenty-eight percent of these deaths were associated with cocaine (N= 2,271), an annual proportion ranging from a high of 35% (N= 296) in 2003 to a 17% low (N=163) in 2009. Rates of benzodiazepine-related poisoning deaths increased from 0.3 to 1.6 per 100,000 persons from 2000 to 2009 (from 2% of all poisoning deaths to 11%). Deaths associated with other psychostimulants made up < 1% of poisoning deaths and have increased only slightly. Co-occurrence of cocaine with opioid-related poisoning deaths have declined slightly during this period (17% in 2009), while co-occurrence of benzodiazepines with opioid-related poisoning deaths rose from <1% in 2000 to 14% in 2009.

Demographic patterns and intent of opioid and cocaine-related deaths differed from those associated with benzodiazepines. Age-specific death rates associated with opioid and cocaine poisoning were highest among those 25-44 years; benzodiazepine-related poisoning death rates were highest among residents 44-65 years. Death rates of opioid-, cocaine-, and benzodiazepine-related poisoning were all higher for males than females, although rate ratios by agents differed (2.6, 2.9, and 1.6, respectively). Ninety-six percent of opioid-, 98% of cocaine-, and 81% of benzodiazepine-related deaths were unintentional or of undetermined intent.

Conclusions: Surveillance of poisoning deaths associated with cocaine, benzodiazepines, and other psychostimulants may provide useful information on emerging patterns of abuse which can assist prevention efforts.

Preventing Prescription Drug Abuse: An Important Role for State Injury Prevention Programs

Cynthia Rodgers, Children's Safety Network , Jennifer Sabel, Washington State Dept. of Health , Holly Hackman, Massachusetts Department of Public Health , Kathryn Santoro, National Institute for Health Care Management Foundation

Background: Prescription drug abuse and its consequences are an increasing and significant public health problem in America. Deaths from unintentional drug overdoses in the US have increased roughly five-fold since the 1990's according to the National Vital Statistics System. This increase has been propelled by a rising number of overdoses of opioids which caused 14,800 (73.8%) of the 20,044 prescription drug overdose deaths in 2008. In 2011, CDC's Injury Center identified prevention of prescription drug overdose as one of its 4 focus areas.

State injury and violence prevention programs have an important role to play in the prevention of prescription drug abuse. Recognizing the impact of this epidemic on youth and their families the Children's Safety Network (CSN) and the National Institute for Health

Care Management (NIHCM) Foundation conducted an environmental scan of all state injury prevention, maternal and child health, and substance abuse services programs, along with health insurance plans, in September 2011. Of the 45 states that responded to the scan, 20 indicated that prevention of prescription drug abuse is included in their state injury prevention plan; 91% expressed an interest in learning more about prescription drug abuse and 79% were interested in receiving technical assistance in preventing prescription drug abuse. In response, CSN organized a six-month Learning Circle for Prevention of Prescription Drug Abuse and CSN and NIHCM are planning a webinar for Spring 2012.

This session will include a brief review of the latest data on prescription drug abuse, highlight key findings from the CSN and NIHCM environmental scans and the Learning Circle, and feature two state programs. Washington State will describe how their surveillance efforts led to programmatic and policy initiatives including an interagency workgroup, emergency department guidelines, sharing of data between emergency departments, development of chronic non-cancer pain management rules for health care providers, enactment of a Good Samaritan Law, and implementation of the Prescription Drug Monitoring Program. Massachusetts will share recent experiences in incorporating drug overdose prevention strategies into their state injury prevention strategic plan, focusing in particular on state assets identified and challenges faced in addressing this problem within the context of their Core Violence and Injury Prevention Program.

By the end of this session participants will: 1. Understand the latest data on prescription drug abuse; 2. Develop a greater understanding of the role of state injury and violence prevention programs in the prevention of prescription drug abuse; 3. Have increased knowledge of successful strategies for working with health plans; 4. Have increased knowledge of successful strategies for collaborating with substance abuse services programs; and, 5. Identify key resources available to develop or enhance efforts to prevent prescription drug abuse among youth and young adults.

Surveillance of Drug Poisonings in Kentucky Using Multiple Data Sources

Terry Bunn, Svetla Slavova Kentucky Injury Prevention and Research Center

Introduction: Drug poisonings, including prescription drug overdoses, have increased significantly in recent years. The present study was undertaken to identify and characterize drug poisonings, including prescription drug overdoses, in Kentucky using multiple data sources: inpatient hospitalization data, emergency department data, and death certificate data.

Method: Nonfatal drug overdoses were identified from the Kentucky inpatient hospitalization data for years 2002-2010, and emergency department (ED) data for 2008-2010 using the following criteria: ICD-9 codes E850-858, E950.0-E950.5, E980.0-E980.5, and E962.0. Drug overdose fatalities (2002-2010) were identified from death certificates using the following criteria: ICD-10 codes X40-X44, X60-X64, X85, and Y10-Y14.

Results: There was a statistically significant increase in the age-adjusted rates of drug overdose deaths from 2002 (10.6 age-adjusted deaths/100,000 population) to 2010 (~18.7 deaths/100,000 population), with an average increase of 0.9 points per year. One-third of all drug overdose deaths for the time period (1,769 deaths/5,006 total deaths) involved prescription opioid pain relievers. There was a significant increase in the number and rate of drug overdose inpatient hospitalizations from 2002-2010, from 2,718 inpatient hospitalizations and an age-adjusted rate of 66.1 hospitalizations/100,000 population in 2002 to 3,937 inpatient hospitalizations and an age-adjusted rate of 91.3/100,000 in 2010. Drug overdose inpatient hospitalization rates increased approximately 3 hospitalizations/100,000 population per year over the time period. There was a concomitant significant increase in the numbers (4,205 ED visits in 2008 to 5,050 ED visits in 2010) and rates (99.9 age-adjusted ED visits/100,000 population in 2008 to 119.7/100,000 in 2010) of drug overdose emergency department visits from 2008-2010. Using multiple data sources, a total of 9,797 drug overdose cases were identified for the year 2010 alone in Kentucky.

Conclusions: Drug overdoses are a leading cause of morbidity and mortality in Kentucky; the development of policy strategies (e.g., mandatory enrollment of physicians and pharmacists in prescription drug monitoring programs, and increased regulation of pain clinics), and interventions

(including prevention programs, treatment programs, and rehabilitation programs) are critical elements necessary for a multipronged approach to reduce the burden of drug overdoses.

Learning Objectives:

1. To identify the numbers of drug poisonings using multiple data sources

2. To calculate rates of drug poisonings using multiple data sources

3. To characterize drug poisonings by drug class

Concurrent Session #3: SMART with Data-Informed Priorities

SMART With Data-informed Priorities

Jessica A. Hill, Shenée Reid, Jamila Porter, Amber Williams, Safe States Alliance

Background: Injury and violence prevention programs strive to use the best available data to determine priorities and strategically plan efforts and programmatic initiatives to maximize impact. Data-informed decisions help organizations and programs focus their efforts, improve their implementation, monitor progress towards goals, and communicate their effectiveness and successes to key stakeholders. Given current constraints in funding, staff time and other resources, the need to make data-informed decisions is even greater. In this session, participants will review strategies for using data to identify injury and violence prevention priorities, to determine populations of interest, to develop SMART objectives, and to track progress toward those objectives. Participants also will receive information on datasets they can access for different injury and violence prevention priority areas. Finally, participants will have the opportunity to discuss data strategies with their peers and to learn from the experiences of other states. The session presenters will be evaluators working with Safe States/SAVIR on the evaluation of CDC's Core VIPP Program. It will provide an overview of the SMART objectives Core VIPP funding states have identified as part of the Base Integration Component (BIC), and will provide tools and supports on the use of data to determine Health Impact SMART Objectives. This content will be of particular interest to states funded by Core VIPP, though all states are welcome to attend.

Learning Objectives:

1. To describe strategies for using data to determine injury and violence prevention priorities.

2. To identify available datasets for specific injury and violence prevention areas.

3. To describe the components of a SMART objective, and to discuss how data can inform objective development and tracking progress toward that objective.

4. To facilitate peer-to-peer exchange about states' experiences using data to determine priorities and track objectives.

Concurrent Session #4: Local Level Injury and Violence Prevention Efforts

Pennsylvania's Approach to Support Local Injury Prevention Efforts

Carol Thornton, Keri-Ann Faley, Stewart Williams, Brian Wyant, Pennsylvania Department of Health

Statement of Purpose: Since the 1990s, the PA Department of Health (DOH) has provided funding to local health departments for injury prevention using the Preventive Health and Health Services Block Grant. All local health departments authorized through Act 315 of the PA State Legislature had been apportioned funds based on population. Grant agreements were executed and were focused on locally determined priorities. With federal funding reductions and to shift from individual change efforts to policy, environmental, and systems change efforts, the Violence and Injury Prevention Program (VIPP) restructured the grant making process to be more competitive and support local and state priorities with proven interventions.

Methods: In September 2010, the PA VIPP issued a grant opportunity to the 10 Act 315 County and Municipal Health Departments and the City of Chester. The VIPP provided each department with data regarding their leading causes of injury deaths and hospitalizations. In these applications for three years of funding, applicants were asked to demonstrate a focus on preventing injuries based on data and through policy, environmental, and systems change (supplemented with evidence-based individual behavior change, when appropriate). Priority was to be given to program models and interventions that reflect the priorities of the DOH and the CDC:

- Motor Vehicle Safety

- Falls Prevention

- Prevention of Unintentional Poisonings by Prescription Drugs

- Traumatic Brain Injury Prevention (Youth Athletic Safety)

- Prevention of Intentional Injuries

To have a systematic approach to fall prevention, each applicant was required to implement "A Matter of Balance" to address the physical activity component of a full comprehensive approach to fall prevention.

Results/Evaluation: Six of 11 applications were approved and funded. Five of the six approved applicants are implementing "A Matter of Balance". Other funded interventions address teen driving safety, child passenger safety, unintentional poisonings by prescription drugs, and youth suicide prevention. The grantees will be assessed for the number of policy, systems, and environmental changes implemented in these areas.

Once award notifications were made, the VIPP stipulated that each grantee join the Safe States Alliance, to submit at least one abstract each for the Safe States Annual Meeting, and to attend one out-of-state professional development opportunity annually.

Conclusions: The restructuring of the grant agreements has helped to develop a more targeted approach in addressing injury prevention at the local level, given federal funding reductions. The six grantees are now completely aligned with the DOH's and/or the CDC's priorities. The VIPP anticipates conducting annual site visits to each grantee and will use the "Local Health Department IVP Standards" as a framework for technical assistance.

Learning Objectives:

1. Understand the public health system in Pennsylvania (PA) in relation to injury prevention.

2. Describe how the Violence and Injury Prevention Program administers funding to local health departments.

3. Identify opportunities for facilitating professional development at local health departments.

Setting Standards to Advance Injury and Violence Prevention in Local Health Departments

Laura Runnels, Jessica Carda-Auten, National Association of County and City Health Officials

Background: Injuries are a significant public health problem because of the impact on the health of Americans, including premature death and disability, and the burden placed on the healthcare system. More than 180,000 deaths are attributed to injury and violence each year. Millions more Americans are injured and survive, only to cope with lifelong disabilities. In a single year, injury and violence ultimately cost the United States $406 billion—$80 billion in medical costs and $326 billion in lost productivity.

LHDs protect and improve community well-being by preventing disease, illness, and injury, and effecting social, economic, and environmental factors fundamental to excellent health. Given the public health burden of injuries and violence, LHDs play a critical role in protecting and improving community safety, in coordination and collaboration with local, state, and national efforts. Despite the enormous toll of injury and violence, only 39 percent of respondents to NACCHO's 2010 National Profile of Local Health Departments reported injury prevention activities, and only 24 percent reported violence prevention activities. NACCHO and Safe States Alliance are committed to increasing the quantity and quality of LHDs' IVP efforts.

In 2010, a joint workgroup of the National Association of County and City Health Officials (NACCHO) and Safe States Alliance developed the Standards for Local Health Department Injury and Violence Prevention Programs (Standards). Standards for LHDs related to IVP have been set with the following goals: (1) Increasing the visibility of injury and violence as public health issues; (2) Multiplying the number of LHDs that focus on IVP; (3) Enhancing the effectiveness of LHDs' IVP efforts; and (4) Spurring the development and dissemination of new tools and resources for LHDs to effectively address the causes of injury and violence.

In 2011, NACCHO administered a survey to collect data about the infrastructure of LHD IVP programs and their capacity for strategic planning, implementation, data collection, evaluation, training, technical assistance, policy making, and advocacy. Key informant interviews were conducted with LHDs to gather additional information about capacity and needs.

This session will consist of presentations and facilitated conversations utilizing Technology of Participation® methods. The session will address the following learning objectives: (1) Explore the capacity of LHDs to address the causes of injury and violence; (2) Understand the development of the Standards and their implications for IVP; (3) Discuss the experiences of LHDs that piloted the Standards; and (4) Identify ways to promote the Standards and provide support for LHDs that aim to use the Standards.

Starting Today... Plan for Tomorrow's Success in Injury Prevention

Kevin Condra, Salt Lake Valley Health Department

Background: Motor vehicle crashes, poisonings, suicide, and crippling falls occur on such a regular basis that people believe they are fate. That is not true. A top challenge in injury prevention is to change the way individuals and families view injuries.

The Society for Public Health Education believes injuries do not happen by chance. The science of injury prevention has shown that events leading up to injuries are not random. Like disease, they follow a distinct pattern. Learning more about these patterns has made it easy to predict and prevent injuries. Violence, although not as easy to predict, often has a history as well than can help in understanding the risk that someone will hurt another person.

In Salt Lake County, injuries were the third leading cause of death for residents from 2005-2009. Costs of injuries are stunning and sometimes, we forget that injury is a major factor in health care costs. In 2009, over $193 million was spent on health care costs to treat people for injuries in Salt Lake County emergency rooms and local hospitals. This cost does not include other private practice doctors or ongoing treatment for injuries.

As injury prevention practitioners we are often so caught up in responding to these issues in the moment that at times we can easily forget to plan for the future. Salt Lake County has never had an Injury Prevention Strategic Plan. In June of 2011, staff of the Salt Lake Valley Health Department, Injury Prevention Program outlined a timeline to involve over 118 people from 78 groups to develop a three-year strategic plan. The 2012-2015 Salt Lake County Injury Prevention Strategic Plan is not just a

health department plan. The final plan was adopted by the Board of Health on October 6, 2011 and actions steps have already been implemented by lead organizations.

By the end of the session participants should be able to:

- Understand how to conduct a community needs assessment around injuries
- Understand how to engage partners in an injury prevention strategic plan
- Describe the components of an injury prevention strategic plan
- Learn strategies on how to market an injury prevention strategic plan
- Describe how a strategic plan can be used to guide programs and measure success

Concurrent Session #5: Health Communications

Evidence-based Approaches to Affect Policy: Lessons Learned from State Health Departments and National Non-profit Organizations in Injury and Violence Prevention and Response

Wendy Holmes, Paige Cucchi, Rebecca Greco Kone, Centers for Disease Control and Prevention

Background: The Centers for Disease Control and Prevention's (CDC's) National Center for Injury Prevention and Control (NCIPC) developed communication planning tools to build the capacity of Core Violence and Injury Prevention Program (Core VIPP) funded states and non-funded state injury programs to develop, disseminate, implement and evaluate communication strategies and activities for affecting policy at the local, state and national level. To best inform development of these planning tools targeted towards policy, NCIPC conducted a needs assessment with NCIPC's national partner organizations and state injury programs with experience in designing communication initiatives to affect policy. These key stakeholders were interviewed in order to identify the current capacity of state health departments, capacity gaps and needs, and ways to improve the capacity of state health departments to use communication strategies for affecting policy. Interviews explored how best to conduct an initial launch of these tools and support for ongoing utilization and examined best practices and challenges in affecting policy to prevent injury and violence.

To understand key stakeholders' experiences with communication to affect policy, the following research questions were asked:

RQ1: How do NCIPC stakeholders-partner organizations and state injury and violence prevention programs-perceive the importance of, plan for and implement communication initiatives to affect policy?

RQ2: What do NCIPC stakeholders perceive as key challenges to planning and implementing communication initiatives to affect policy?

RQ3: What types of information and resources do NCIPC stakeholders believe would be most helpful to them in planning and implementing communication initiatives to affect policy?

Method: A total of 18 in-depth interviews were conducted: 9 interviews with national partner non-profit organization members and 9 interviews with state health department officials working in injury and violence prevention and response.

Findings: Findings revealed state health departments' and national injury and violence prevention and response organizations' previous experiences with affecting policy, including evidence-based and best practice approaches to affect policy to prevent injury and violence. Findings also reveal barriers that states and organizations face in their use of communication to affect policy.

Conclusion: Communication to affect public health policy has been studied only limitedly. Exploring the lessons learned regarding state health departments' and national organizations' experiences affecting policy can contribute greatly to our understanding of how to affect policy for greater public health.

Implications for Research and/or Practice: Findings from this research inform recommendations for how to develop communication tools to assist states and national non-profits with their policy initiatives. Furthering understanding of evidence-based practices can help state and local health departments as well as national non-profit organizations to have greater involvement and success in affecting public health policy.

Using Social Media for the Nebraska Concussion Awareness and Education Campaign: "Heads Up Nebraska."

Peg Ogea-Ginsburg, Jennifer Marcum, Nebraska Department of Health & Human Service

Objectives: 1) Identify the provisions of Nebraska's concussion awareness/return to play law. 2) Explain the variety of methods used by partners in Nebraska to create public awareness and provide education about concussions and the new law. 3) Describe how Twitter was used, along with other media, to create awareness and direct individuals to accurate sources of information about concussions and Nebraska's concussion law.

Background: Between 2000 and 2009, sports-related TBI hospital discharge incidence and TBI as a proportion of all sports-related injury discharges followed an overall increasing trend among high school aged Nebraskans. An athlete who returns to play too quickly after a concussion is at increased risk of second impact syndrome, which may lead to long-term, potentially serious consequences.

In 2011, the Nebraska legislature passed a concussion awareness/return to play law with an effective date of July, 2012. The law has two main provisions: concussion training must be made available to coaches, families, and athletes; and athletes with a suspected concussion must be removed from play until they have been cleared by a health care professional.

Statement of Purpose: As the law goes into effect, it is important that accurate information be made widely available. A variety of partners are working to inform those affected by the law about what the law means and where trainings and information are available. Social media, specifically Twitter, is being used by several Nebraska athletes to create awareness about the law and direct individuals to accurate sources of information, including a dedicated concussion website.

Results: A variety of partners, including the Department of Health and Human Services, Bryan LGH Health Systems, Husker Sports (a marketing company), the Nebraska Medical Association, the Brain Injury Association of Nebraska, the Nebraska Athletic Trainers Association, and Hurrdat (a social media company) have worked together to compile accurate sources of information about the concussion law, concussions facts, available trainings, and resources. Twitter activity and website hits will be analyzed to determine the reach of the campaign.

Conclusions: Athletes often have a large following on Twitter. This allows them to reach a wide audience and help increase awareness of this issue by directing their followers to accurate sources of information about concussions and the new law. We anticipate this will aid in successful implementation of this law and prevention of future concussions and cases of second impact syndrome.

Reframing Messages for Youth Suicide Prevention

Jennifer Woody, North Carolina Division of Public Health

Background: Injury and violence prevention presents unique communications challenges, but in recent years there have been advances in the science behind creating messages that will accurately and convincingly convey information about the burden and prevention of injuries and violence. Some common challenges with communication about unintentional injuries include grappling with the belief that injuries are unpredictable or unavoidable; with violence prevention the need is to encourage individual responsibility for the prevention of violence without blaming victims of violence. To address some of these communications challenges, the CDC produced the guide Adding Power to Our Voices: A Framing Guide for Communicating About Injury to help practitioners use science-based communication strategies to increase social and political will to prevent injury.

The North Carolina Division of Public Health's Injury and Violence Prevention Branch was one of three states that received 12 months of technical assistance from the CDC and the marketing firm ICF Macro to work on reframing messages using the guide. North Carolina selected the topic of youth suicide prevention for its reframing project. The messages developed using the reframing guide will compliment the Branch's Youth Suicide Prevention Program which is funded by the Substance Abuse and Mental Health Services Administration to provide gatekeeper training in schools throughout the state.

The concept is that youth who are contemplating suicide are unlikely to seek help; research shows help seeking behavior decreases with worsening depression. For this reason, the program works to educate the community of individuals around young people to recognize the signs and symptoms of suicide and what to do to help. This presentation will guide participants through the message reframing process as undertaken by a state health department's injury and violence prevention program, and discuss how the information will be used in communications developed by the youth suicide prevention program.

Participants will:

- Learn about the concept of message frames and how they can make messages more impactful
- Learn options for carrying out message reframing projects on a shoestring budget
- Hear the results of teen focus groups on the topic of messaging about youth suicide prevention
- Learn about audience research beyond focus groups and when focus groups are most useful
- Learn the steps required for message reframing of an injury and violence prevention topic, including specifically defining the audience and the behavior you want to promote from the audience

This will be a learning opportunity for injury prevention professionals who have the need to produce impactful communications but who have little formal training in the topic.

The California Statewide Suicide Prevention Social Marketing Project

Stacey Smith, AdEase , Jana Sczersputowski, Your Social Marketer , Anara Guard, EDC, Inc

Background: The California Mental Health Services Authority (CalMHSA) has engaged a partnership of AdEase, Your Social Marketer, and EDC, Inc. to conduct a statewide suicide prevention social marketing campaign. This workshop will describe the first year of activities which established baselines, provided a research base for the work, gathered input from stakeholders throughout the state, assessed gaps to be filled, and created initial campaign materials. The workshop will be interactive so that participants can directly experience some of the stakeholder input processes and provide feedback on the campaign.

In order to ensure that the campaign drew on evidence-based suicide prevention knowledge, the project partners began the year by conducting a literature search on what is known about suicide prevention marketing and awareness campaigns. They created a catalog of existing campaigns with information on any evaluations that may have been conducted. A random digit dial telephone

survey of 2,003 Californians assessed their knowledge, attitudes and beliefs about suicide, suicide prevention and available resources in their communities. To ensure that the resulting campaign would meet the needs of counties, extensive needs assessments were conducted with county behavioral health agencies. The interviews elicited information on their existing marketing efforts, media outreach, county assets and interests. To gather input that was reflective of the diverse demographics of California, an online forum was created that allows individuals to take polls, weigh in on campaign concepts and designs, and add activities occurring throughout the state. Focus groups were used to test campaign approaches and materials. Together, all of these research activities informed the logic model for the campaign and initial campaign concepts and messages for the general public.

The campaign is integrated with other CalMHSA funded projects to strengthen the network of crisis centers, expand suicide prevention training, and decrease stigma around mental illness. The workshop will also describe next steps over the coming two years.

Participants will be able to:

1. Describe the array of suicide prevention social marketing activities occurring in California;

2. Understand how they might apply findings from California activities to suicide prevention efforts in their own states;

3. Understand the impact of utilizing community input in the development of social marketing campaigns;

4. Recognize how the particular needs of rural counties were addressed;

5. Describe how an online tool can engage stakeholders and community members across the state in informing campaign materials and strategies.

Session Abstracts

CONCURRENT SESSION BREAKOUT #2
THURSDAY, MAY 3, 2012
12:30 - 1:45 PM

Concurrent Session #6: Storytelling as Best Practice - Workshop (Part 1)

Storytelling as Best Practice

Andy Goodman, The Goodman Center

Background: Building on the principles covered in the Storytelling as Best Practice (General Session), Andy Goodman will offer additional guidelines for effective storytelling, and participants will have the chance to write and share their own stories in the course of this workshop. This session is part one of a two part series and is sponsored by the National Association of County and City Health Officials.

Concurrent Session #7: Suicide Prevention

Actionable Knowledge and Suicide Prevention: Acting on What We Know and Putting It Into Practice

Natalie Wilkins, Sally Thigpen, Christina VanRegenmorter, Jennifer Lockman, Juliette Mackin, Mary Madden, Tamara Perkins, James Schut, Centers for Disease Control and Prevention

Research Objectives: The Life is Sacred Native Youth Suicide Prevention program evaluation, Tennessee Lives Count, and the Maine Youth Suicide Prevention Program each engaged in a systematic process to transform their program evaluation results into actionable knowledge products for the field. Their lessons learned & resulting actionable knowledge tools provide case study examples of this emerging process for applying evaluation findings and lessons learned to improve practice in suicide prevention.

Methods: Each site engaged in a systematic actionable knowledge process consisting of four key steps: 1) Determining what you want your audience to do, 2) Specifying your audience, 3) Determining the best method of packaging your message, and 4) Establishing how you will measure whether your actionable knowledge has had the desired impact. This framework is adapted from the knowledge transfer literature (Reardon et al., 2006)

and follows the exchange model of knowledge transfer, where research and practice are engaged in a bidirectional exchange of knowledge (Lomas, 2000).

Results: Tennessee Lives Count developed the Gatekeeper Training Implementation Support System, a practical guide that provides actionable tools & information for improving implementation of Gatekeeper Training programs with any population and in any setting. Life is Sacred found that culture & family were essential protective factors for Tribal youth and developed actionable resources for parents/caregivers, youth-serving professionals, and Tribal leaders. The Maine Youth Suicide Prevention Program, through evaluation of the Lifelines youth suicide prevention program, identified a communication gap between schools and community agencies and developed a data systems template to fill this need.

Learning Objectives: At the conclusion of this presentation, the participant should be able to discuss the importance of actionable knowledge for applying evaluation findings to strengthen suicide prevention practice. Actionable knowledge is the creative intersection between "what" we know and "how" to use what we know in everyday practice (Blood et al., 2006). It can be used to promote the uptake and implementation of best available research, or evaluation findings in practice settings and can take many forms, from simple briefs to comprehensive toolkits. By improving practice, actionable knowledge also helps to strengthen the "practice to research" process, increasing suicide prevention programs' readiness for more rigorous evaluation and research on effectiveness. This presentation focuses on the process of translating evaluation findings into actionable knowledge products for the field of suicide prevention through technical assistance and guidance provided by the Centers for Disease Control and Prevention to three Enhanced Evaluation grantees of the Substance Abuse and Mental Health Services Administration, Garrett Lee Smith program, with additional support from ICF Macro.

A Statewide Survey of Knowledge, Attitudes and Beliefs About Suicide

Anara Guard, EDC, Inc., Jana Sczersputowski, Your Social Marketer, Inc., Richelle Brown, AdEase

Background: The California Mental Health Services Authority has engaged a partnership of AdEase, Your Social Marketer, and EDC, Inc. to conduct a statewide suicide prevention social marketing campaign. The campaign aims to increase help-seeking among suicidal individuals, increase knowledge about appropriate steps to take when someone you know is suicidal, and ultimately to reduce suicides. In order to gauge whether the campaign will appropriately change suicide knowledge, attitudes and behaviors (KAB), a baseline survey needed to be conducted to determine current KAB. The only prior similar statewide survey was conducted in Kentucky for three years. The California survey was based on the Kentucky instrument, with additional questions added, as well as additional analysis to measure KAB among active military and veterans, in rural communities, among different regions in California and among various demographic groups. The baseline survey was conducted in fall of 2011. This workshop briefly describes the process of designing and implementing a random-digit dial survey among 2,003 California residents 18 years and older, and provides details on relevant results. Twelve percent of interviews were conducted in Spanish. In addition, responses were gathered from all 58 counties in the state. Respondents were asked about their personal experiences with suicide, how supportive their families and communities are in talking about or addressing suicide, their knowledge of suicide prevalence and prevention, awareness of crisis hotlines, knowledge of warning signs, their perceived efficacy and skills to approach a suicidal individual, actions they might take in response to such an individual, and exposure to news coverage about suicide and public service announcements. Results will be compared with those found in the Kentucky surveys.

Participants will be able to:

1. Discuss the value of conducting a statewide survey on suicide KAB;
2. Compare California results with Kentucky results;
3. Recognize factors that might influence a respondent's willingness to participate in a survey related to the topic of suicide;

4. Describe the broad content covered by this statewide RDD survey; and
5. Understand how the survey results will inform the statewide social marketing campaign.

A Tool to Analyze News Coverage of Suicide

Anara Guard, EDC, Inc., Theresa Ly, EDC, Inc., Sherry LeCocq, AdEase

Background: Suicide prevention is unique among other areas of injury prevention in that research has shown that inappropriate and excessive news coverage can create "copycat" suicidal behavior and that expert consensus recommendations were created in 2001 to provide guidance to news media. Following the April 2011 release of revised consensus recommendations, a California-based project created and applied a tool to analyze statewide media coverage. The analysis provided baseline understanding of how well California television and print news outlets are currently following the recommendations. The tool was created with input by experts from around the country and was designed to allow for pragmatic use. The tool analyzes whether news coverage encourages suicide prevention by including resources for help such as a crisis center telephone number, warning signs of suicide, and appropriate actions to take. It also measures whether coverage may encourage suicide contagion by romanticizing suicide, providing too many details on method and location, or simplifying the causes of suicidal behavior. The tool was piloted on a small sample and then applied retroactively to a subset of news coverage throughout 2011. Follow-up analyses will be conducted annually to measure changes that may result from: a) disseminating the recommendations broadly throughout the state; b) training county and local advocates to advocate and build relationships with media contacts c) county coalitions and task forces advocating with their local news outlets for improved reporting; and d) improved relationships between advocates and media professionals.

Participants will be able to:

1. Describe how media coverage of suicide can create contagion among vulnerable individuals;
2. Understand the consensus media recommendations and be able to differentiate them from earlier versions and from the Safe Messaging Guidelines;
3. Understand the challenges and limitations of analyzing news coverage of suicide;

4. Recognize how the analysis tool can be applied to news coverage (print and broadcast transcripts); and

5. Describe how the recommendations and analysis tool can be used to improve relations with local media in regards to suicide coverage.

Bullying and Suicide: Cutting through the hype to keep youth safe

Ellyson Stout, Gayle Jaffe, Suicide Prevention Resource

Background: In recent years, dramatic media stories have drawn on tragic deaths of young people to oversimplify the link between bullying and suicide. In sensationalizing these instances of 'Bullycide,' news stories have tapped into the grief of parents and communities to blame bullies and schools for student deaths that, in reality, are much more multifaceted.

Suicide is a complex behavior, in which multiple risk and protective factors come into play. Researchers have identified dozens of factors that may play into different individuals' suicidal behavior, with the major risk factors including: prior suicide attempt(s), substance abuse, mood disorders, and access to lethal means. However, no single factor can be claimed as the 'cause' of any particular suicide; instead, high risk for suicide is usually found in a combination or 'constellation' of multiple risk factors.

The relationship between suicide and bullying is also complex. Studies suggest that both victims and perpetrators are at higher risk for suicide than their peers, with victim-perpetrators being at highest risk. Bullying is associated with depression, which is a major risk factor for suicide, while at the same time many risk factors for bullying and being bullied are also risk factors for suicidal behavior. Bullying, and especially chronic bullying, has long-term effects on suicide risk and mental health that can persist into adulthood. However, no instance of bullying is the single 'cause' of a suicide, and prevention practitioners should be cautious about acknowledging the complexity of suicide and avoiding blame when speaking with the media about these behaviors.

Bullying and suicide prevention programs often employ similar strategies, such as work to change school environments, family outreach, and identifying and referring students in need of mental and behavioral health services. Because several risk and protective factors are shared across bullying and suicide, it is likely that primary prevention strategies to minimize occurrence of risk factors before they occur, and to maximize protective factors and supports in schools and families, could be effective in reducing both bullying and suicidal behaviors.

This session will equip injury prevention practitioners with the facts about the link between bullying and suicide, highlight effective prevention approaches for each within a school setting, and outline opportunities for collaboration between the suicide and bullying prevention communities.

After participating in this session, participants will be able to:

1. Explain the complex relationship between bullying and suicide

2. List talking points for interacting with news media about bullying and suicide

3. Identify how both bullying prevention and suicide prevention can be integrated into violence prevention initiatives

4. Cite key SPRC resources for connecting with state and local suicide prevention initiatives

Concurrent Session #8: Policy Evaluation in Action

Policy Evaluation in Action

Sara Patterson, Centers for Disease Control and Prevention

Background: The use of policy as an injury prevention tool is gaining in popularity across the United States; however, there is not always clear evidence to indicate whether these policies are effective in preventing injuries. Both process and outcome evaluations can yield results useful in the development of more effective programs and policies. They provide valuable information to public health practitioners, policymakers, and other key stakeholders involved in any stage of the policy process. This session will highlight how policy evaluation can be used as an effective tool for evidence informed policy development, implementation, and refinement. The CDC Injury Center's current efforts to develop a Policy Evaluation Guide will be described. Panelists will share the key content of the Guide, including outlining the capacities needed to engage in a successful policy evaluation process, recommended stages of evaluation that should be performed to achieve an effective evaluation, and options for applying findings from an evaluation. Examples of application of these skills will also be shared, including preliminary findings from

a case study on sports related concussion prevention legislation, specifically return to play policies for youth sports concussion, in Massachusetts and Washington State. The panelist will discuss the importance of evaluation in developing and implementing policy interventions and measuring longer term outcomes..

At the conclusion of this session, attendees will be able to:

1. Identify key elements necessary for policy evaluation, and

2. Describe how policy evaluation is an important tool for informing policy. Policy evaluation is a useful tool for ensuring both the fidelity of policy interventions and their effectiveness. States and other entities seeking to develop policy interventions are urged to plan for and utilize policy evaluation approaches in the development, implementation, and measurement of longer term health outcomes in injury prevention and control.

Concurrent Session #9: Injury and Violence Prevention and the Built Environment

Falls Prevention Through Safe Built Environments that Promote Active Living for Seniors

Jennifer Woody, Rebecca Hunter, North Carolina Division of Public Health

Background: Falls in older adults are a serious public health problem that must be addressed now in anticipation of the expected growth in the senior population in North Carolina (NC) and across the country. A primary risk factor for falls in older adults is lower body weakness. To prevent this condition seniors need physically activity so they can stay strong. Environments where seniors live predict whether they are able to include physical activity in their daily lives. Safe environments for walking for exercise or transportation purposes give community-dwelling older adults opportunities to incorporate physical activity into their daily lives.

In NC on Falls Prevention Awareness Day 2011, a group of older adults from Raleigh, the City of Raleigh Pedestrian Planner, and representatives from the Area Agency on Aging, the CDC's Healthy Aging Network, the NC Falls Prevention Coalition (NCFPC), and the NC Division of Public Health conducted a walkshop to assess the walking

conditions of a neighborhood. Photos and videos of conditions through the eyes of older adults and people with disabilities were captured and compiled into a report.

Older adult participants learned how to conduct community walkshops and how to contact city officials to fix identified problems. Additionally, the city of Raleigh pedestrian planner gained an enhanced understanding of issues specific to older adults. The report on the findings was presented to the Raleigh Bike and Pedestrian Commission, and at the Raleigh City Pedestrian Plan Open House. The findings from the report will be included in the city's pedestrian master plan.

The NCFPC and its partners plan to create a toolkit for other communities to conduct additional walkshops across the state. The emphasis of the toolkit will be to take the findings beyond the walkshop participants, ensuring the information is provided to decision makers in the community that can make needed structural changes to improve pedestrian environments for older adult safety.

Learning Objectives:

- How the built environment affects activity levels of people in communities Aspects of the built environment that pose falls hazards for older adults

- Strategies for making systems level changes to the built environment to create safer pedestrian environments for older adults

- Working with state and local partners to promote safer environments through community involvement on a shoestring or zero budget

Healthy Corridor for All: A Community Health Impact Assessment of Transit-Oriented Development Policy in Saint Paul, Minnesota

Jeanne Ayers, MN Department of Health, Doran Schrantz, ISAIAH, Kate Hess Pace, ISAIAH, Marilyn Metzler, CDC

Background: Health Impact Assessment (HIA) is increasingly recognized as an important tool for community members, public health practitioners, policymakers and others seeking to understand how a proposed project or policy can affect the well-being of the people in a community. In the context of an HIA, health impacts are defined broadly-from transportation options that support access to health care, safe neighborhoods or healthy foods, to the creation of living-wage jobs that

can provide stability and income for families. The primary focus of an HIA is to examine how a proposed policy or project might affect the health of some populations differently than others -including low- versus high-income families, communities of color versus white communities, or communities in different geographic locations. Recommendations are then based on these findings.

In 2011, ISAIAH, a faith-based community organization in St. Paul-Minneapolis, in partnership with other groups, led the design and implementation of an HIA on proposed rezoning and land use plans for differential impact on the communities living along the central corridor connecting the twin cities. The core values which guided their HIA included equity, community empowerment, collaboration, accountability and scientific integrity. The process was directed by a Community Steering Committee comprising community representatives from constituencies along the central corridor. A diverse and experienced Technical Advisory Panel, including public health practitioners, supported the HIA every step of the way. In this workshop, presenters will provide an overview of the design and implementation of the Healthy Corridor HIA and discuss how findings were used to develop relationships and support actions that will contribute to health and health equity. Workshop participants will have the opportunity to explore how these processes may be used in their communities. Background materials for the workshop can be found at "Healthy Corridor for All: A Community Health Impact Assessment of Transit-Oriented Development Policy in Saint Paul, Minnesota."

Concurrent Session #10: Promoting Safe Sleep

Building a Coordinated Effort to Reduce Sleep-related Infant Deaths.

Sally Fogerty, Erin Reiney, Mary Adkins, Mark Kinde, CSN

Background: Each year in the United States, more than 4,500 infants die suddenly of no immediately obvious cause. Half of these Sudden Unexpected Infant Deaths (SUID) are due to Sudden Infant Death Syndrome (SIDS). Additional causes include suffocation, asphyxia, and entrapment. There has been increased understanding of risk and protective factors to reduce the risk of a sudden unexpected infant death (SUID). There are currently efforts to coordinate work at the federal and state levels to address the prevention of infant death in sleep environments.

The AAP released revised recommendations in October 2011, expanding from a SIDS-only focus to a focus on safe sleep environments, therefore reducing the risk of all sleep-related infant deaths. The recommendations outlined by AAP policy include importance of supine positioning, need for a firm sleep surface, elimination of soft bedding, need to prevent overheating, use of a pacifier, importance of breastfeeding, room-sharing but not bed-sharing, and elimination of exposure to tobacco smoke, alcohol, and illicit drugs.

National stakeholders have developed a conceptual model for a coordinated safe sleep promotion effort. This model explores the pathways for translation of these AAP guidelines to action within various layers of an ecological model. The ultimate goal is to reduce sleep-related infant mortality, which will advance policy objectives set forth in Healthy People 2020.

Reducing sleep-related infant death is a public health issue. Currently in public health agencies multiple programs are involved at different levels in developing initiatives to address SUID. The purpose of this workshop is to further explore how injury and violence prevention programs can be active players in this effort, including implementation of the revised AAP Recommendations. The session will include a historical context for the issue, current challenges, a model for a coordinated safe sleep effort, and opportunities for synergy among various stakeholders. Information about national resources will be provided. Presenters will include: Children's Safety Network, Project IMPACT, HHS Maternal and Child Health Bureau, and the state of Minnesota.

Through this presentation, participants will (1) increase knowledge of current issues related to SUID, including efforts and resources, (2) enhance knowledge of revised AAP policy recommendations for safe sleep environments and (3) explore opportunities for how IVP programs can engage in statewide efforts to increase safe infant sleep environments.

Factors Associated with Infant Bed Sharing

Amy Bailey, Carrie Nie, Shelli Stephens Stidham, Gregory R Istre, Injury Prevention Center of Greater Dallas

Learning Objective: Describe factors significantly associated with infant bed sharing.

Background: Bed sharing in conjunction with prone sleeping or sleeping outside of a crib has been shown to

have an association with unexplained infant deaths. A previous study of bed sharing among infants under 1 year of age found that families without a crib spent more hours on average bed sharing and that the lack of a crib was significantly associated with bed sharing.

Objective: To build on a previous pilot and quantify the prevalence of infant bed sharing and associated factors, using a larger random stratified sample of pediatric clinics in Dallas County, Texas.

Methods: Caregivers were asked to answer a survey regarding their infant's (< 1 year of age) sleep patterns while waiting to see a pediatrician. Surveys were conducted at 17 private and three public clinics. Surveys were collected between December 2009-2011. Surveys asked basic demographic information and contained questions that attempted to quantify the number of bed sharing hours during naps and night time sleep in the previous 24 hours as well as the prevalence of other practices.

Results: A total of 279 completed surveys were collected. The majority (59.5%) of infants were Hispanic, similar to the overall prevalence of infants in Dallas County. Infant mean age was 3.7 months and maternal mean age was 29 years. Bed sharing occurred during the previous 24 hours among 45% of infants. The majority of bed sharing occurred during night time sleep and with a parent. Teen mothers bed shared with an infant 67% of the time versus moms 20 years and older (42.4%). The prevalence of other findings include: prone placement (8.2%), pacifier use (43%), and crib in the home (86%). Univariate analysis showed that bed sharing was more common among Hispanics, smokers, mother's with less than high school education, teen mothers and those who breastfed, and was less common among premature infants and those with a crib. In multivariate analysis the following remained significant: breastfeeding (OR =1.8; 95% CL 1.0, 3.3); crib ownership (OR=.12; 95% CL .04-.35); mother's education (OR = .37; 95% CL .21-.65); mother's age (OR=.33; 95% CL .13-.87); smoking (OR = 4.0; 95% CL 1.3-12.6).

Conclusions: Results confirm that families without a crib are more likely to bed share. This information offers the potential for a targeted community-based intervention (e.g., programs to increase crib ownership) to decrease bed sharing while maintaining proximity to the infant. Results also point to young mothers and those with less education as a group to promote safe infant sleep. The association of bed sharing with smoking also highlights the need to control for other risk factors when looking at the relationship of bed sharing to unexplained infant death.

Sleep-related Injury Deaths among Infants in New York City: An Illustration of Death Scene Investigation Changes and Active Surveillance

Princess Fortin, NYC Department of Health and Mental Hygiene, Injury Surveillance and Prevention Program, Martine Hackett, Formerly with NYC Department of Health and Mental Hygiene, Bureau of Maternal, Infant and Reproductive Health, Rebecca Yau, CDC/CSTE Applied Epidemiology Fellow, Laura DiGrande, NYC Department of Health and Mental Hygiene, Injury Surveillance and Prevention Program, Tracy Chu, NYC Department of Health and Mental Hygiene, Bureau of Maternal, Infant and Reproductive Health, Lorraine Boyd,NYC Department of Health and Mental Hygiene, Bureau of Maternal, Infant and Reproductive Health

Background. Sleep-related infant death surveillance has historically included sudden infant death syndrome (SIDS, a natural death often of unknown origin) and injury (unintentional suffocation and unspecified /undetermined causes). In the last decade, improvements in death scene investigation in New York City (NYC) have narrowed the criteria for classifying a death as SIDS, thus making the certification of an injury death more likely. Additionally, active surveillance of medical examiner files has allowed better categorization of those sleep-related deaths still classified as unspecified/undetermined cause. The purpose of this presentation is to share NYC's sleep-related death surveillance as a model for other jurisdictions to adopt to improve characterization of these deaths and focus prevention efforts.

Methods. Vital statistics data were obtained for all deaths occurring in NYC among infants under one year old and coded as "sleep-related" between 2000-2008 (ICD10 codes: R95-SIDS, W75-accidental suffocation/ strangulation in bed, W84-unspecified threat to breathing and Y33-Y34-undetermined intent injury). Trends were plotted to compare SIDS to the injury causes to elucidate the effect of better case investigation. Active surveillance of medical examiner files for all injury sleep-related deaths 2004-2008 was also conducted. Demographics and environmental factors such as location, position, sleep arrangement, and bedding materials were studied to identify potential risk factors.

Results. In 2000, there were 62 sleep-related deaths: 81% from SIDS and 19% from injury. This total frequency remained similar eight years later (n=68). However, from 2000-2008, the SIDS death rate among infants decreased 76% from 45.3 to 10.9 per 100,000 infants (n=50 to 12, respectively). Concurrently, injury sleep-related deaths increased 366% from 10.9 to 50.8 per 100,000 infants (n=12 to 56, respectively). The intersection representing a diagnostic shift occurred in 2004. Active surveillance of 252 injury sleep-related deaths after the shift (2004- 2008) indicated that 74% were among infants 28 days to four months old, 51% were male (rate=45.6), 57% were Black, non-Hispanic (rate=102.0), and 26% lived in The Bronx (rate=59.8). An assessment of environmental factors found that 57% of infants were put to sleep on the stomach or side, 63% shared a bed with another person, 64% had excess bedding, and 76% were sleeping on an unsafe sleep surface.

Conclusions. Better death scene investigations and active surveillance can help improve the accuracy of data on infant sleep-related deaths. Improved death scene investigation revealed that sleep-related injuries, as opposed to SIDS, are a leading cause of death among NYC infants. Active surveillance indicates that most sleep-related injury deaths involve at least one modifiable risk factor. Safe sleeping practices should be integrated into sleeping routines.

Learning Objectives

- Describe the difference between SIDS and injury sleep-related deaths

- Describe the diagnostic shift in NYC infant sleep-related deaths

- Identify risk factors for NYC infant sleep-related deaths

Session Abstracts

Concurrent Session #11: Storytelling as Best Practice - Workshop (Part 2)

Storytelling as Best Practice

Andy Goodman, The Goodman Group

Background: Continued from Concurrent Session Breakout #2, this session is the second part of a more in-depth session that will offer additional guidelines for effective storytelling, and participants will have the chance to write and share their own stories in the course of this workshop. Participation in Part 1 is required for attendance. This session is sponsored by the National Association of County and City Health Officials.

Concurrent Session #12: Motor Vehicle Injury Prevention

Hyperthermia in Vehicles: An Unnecessary Death to Unattended Children in America

Torine Creppy, Kristie Caviliero, Martin Eichelberger, Safe Kids Worldwide

Background: On average, 38 children die every year when they are unattended in vehicles during sunny months. Deaths occur as early as February, peak in the summer and generally end in October, although some deaths have occurred as late as December. In all, since 1998 when statistics started to be gathered, over 500 children have died in this horrific manner.

Children are mostly unattended in one of three ways:

- Drivers arrive at their destination, exit the vehicle, lock up and head to their usual next location without remembering there is a child in a back seat;

- Children at play gain access to an unlocked vehicle and once inside are overcome by heat;

- Children are intentionally left as the adult performs an activity or errand. Children's bodies heat up 3-5 times faster than an adult body so children can be overcome by heat rapidly particularly if they are very young, may be slightly dehydrated or have other health issues.

As many as one fourth of deaths involve a child care facility. The year 2010 was particularly devastating as 49 children died. Safe Kids Worldwide has established an aggressive national education campaign using their 600 coalitions and chapters to make it acceptable for passersby to call 911 if any child is seen in a vehicle unattended. We saw a decline to 30 deaths in 2011, one of the hottest summers on record. It is Safe Kids' goal to completely eliminiate this type of death to children.

Attendees in this session will learn:

- How adults differ from children and how hyperthermia impacts the child's physical well being

- How first responders and the public can be involved in the education campaign to increase awareness in local communities

- How child care centers can incorporate safety protocols into daily routines to prevent this type of incident

Is It The Boomers and Their Harleys? Increasing Trends in Motorcycle Crash Injury

Jon Roesler, Leslie Seymour, Anna Gaichas, Mark Kinde, Minnesota Department of Health

Background: Motorcycles are the most dangerous type of motor vehicle to drive. Nationally, these vehicles are involved in fatal crashes at a rate of 35.0 per 100 million miles of travel, compared with a rate of 1.7 per 100 million miles of travel for passenger cars. The National Highway Traffic Safety Administration (NHTSA) has noted an increasing trend in the numbers of motorcycle deaths in recent years, especially among persons aged >40 years. Motorcycle crashes are also a leading cause of mortality, morbidity, and disability for children and teens.

From 1997-2006 the number of licensed motorcycle operators in Minnesota increased by 20%, roughly proportionate to the growth in population. However, during the same time period the number of licensed

motorcycles increased by 75% and the number of fatalities increased by 183%. A better understanding of the problem of motorcycle crashes is needed to address this rapidly growing problem.

Methods: A NHTSA-funded Crash Outcomes Data Evaluation System (CODES) project was implemented in Minnesota. Under CODES, motor vehicle traffic crash data for individuals (provided by law enforcement) are linked with hospital emergency department (ED) / inpatient treatment information. Other data are linked as well, including the vehicle characteristics, traumatic brain registry outcomes, and trauma center data. For this investigation, the 2004-2005 CODES data for traffic crashes involving motorcycles was examined, as well as hospital data going back to 1998, the traumatic brain and spinal cord injury registry going back to 1993, and death certificate data going back to 1990.

Results: The results provide insight and update into the continued increasing trend in motorcycle rider mortality, morbidity, and disability. The results will explore in detail the interaction between operator age, speed, and injury severity with the type and manufacturer of motorcycles. We will look at how these variables impact longer term outcomes. Additional variables examined and discussed include hospital charges, helmet use, speed, time to the hospital, type of crash, and road and weather conditions.

Conclusions: This analysis will provide both epidemiologic understanding and potential policy implications. Attendees will be able to identify those risk factors, both behavioral (such as helmet and alcohol usage) and immutable (such as age and gender), and their impact on hospital charges. Discussion will include possible policy, educational, enforcement and other interventional strategies incorporating these findings.

At the end of this presentation, participants will be able to:

- Describe the increasing trend in motorcycle rider fatalities and injuries in recent years.

- Identify associated modifiable and non-modifiable risk factors.

- Describe interventions suggested by the findings, including policy, educational, and enforcement strategies.

Thinking Clearly About Graduated Driver Licensing: Is Your State's Teenage Driver Licensing System Stellar or Porous?

Robert Foss, University of North Carolina at Chapel Hill

Background: Graduated driver licensing has been shown to dramatically reduce motor vehicle crashes and fatalities among young teenage drivers. More comprehensive, well-designed GDL systems consistently are found to produce greater benefits. However, there is great confusion about what constitutes a "good" GDL system. Unlike many safety-oriented policies and laws, which mandate or proscribe a single behavior (e.g., wear a seatbelt, stop at all stop signs, do not smoke in this building), GDL describes a multi-faceted system for licensing young drivers. Although the underlying principle of GDL is fairly straightforward, public discourse about the issue has tended to miss the point and instead focus on GDL as just another traffic safety law, dictating a variety behaviors and proscribing others for teenagers and their parents.

This lack of conceptual clarity about the underlying purpose of GDL has caused extensive and unnecessary delay in states' efforts to reduce teenage driver crash rates. Too often, efforts to enact or enhance GDL systems have begun with and focused exclusively on the "what" rather than the "why" and "how." For example, failure to understand the reason for a night driving restriction (viewing it, incorrectly, as a "curfew") resulted in most states establishing ineffectual night limits. In several cases, legislative battles have been lost in unyielding devotion to a particular element of minimal importance. In other instances, couching the issue as one of "law" has produced unnecessary political opposition. In recent years issues that are, at best, tangential to GDL have increasingly become important legislative priorities among safety advocates while critical and demonstrably beneficial elements of a sound GDL system are left unaddressed.

This talk will explain the conceptual rationale for GDL and illustrate how this can guide clear thinking (and speaking) about what is critical, what may be desirable and what is unnecessary for a maximally effective driver licensing system. Unlike many proposed teenage driver safety policies, the rationale for GDL rests on an increasingly solid base of evidence about the fundamental nature of human behavior, of learning and the etiology of teenage driver crashes.

Although focused on GDL, the points addressed here are relevant for promoting any complex policy to decision-makers.

Learning Objectives:

1. Understand the conceptual underpinnings of graduated driver licensing,

2. Recognize the kinds of teenage risks that GDL can and cannot address,

3. Be able to assess the quality of a driver licensing system in terms of its potential to reduce crashes, and

4. Appreciate how careful articulation of rationale, rather than requirements, for a policy can avoid opposition borne of misunderstanding.

Using Seatbelts in the Backseat Saves Lives, Reduces Injuries and Saves Money

Michael Bauer, Sarah Sperry, Stephanie Willing, New York State Department of Health

Objective: Motor vehicle crashes are the leading cause of death among children 16 to 19 years old in New York State (NYS). Despite this alarming fact, NYS law does not require people over the age of 15 to use a seatbelt while riding in the backseat of a motor vehicle. One priority of the NYS Department of Health's (DOH) Child Injury Policy Subgroup (CIPS), a statewide workgroup of child injury prevention stakeholders, is to provide data and other evidence to policymakers about the importance of seatbelt use for children 16 to 19 years old in the backseat. The benefits of seatbelt use in the backseat will be presented and a one page educational fact sheet developed from this analysis will be highlighted.

Methods: Police crash reports were linked to hospital and emergency department discharge data. Injuries occurring among those riding in the backseat were analyzed for seatbelt use

Results: In 2009, 1,567 New Yorkers ages 16 and older who did not wear a seatbelt while riding in the backseat were treated in a hospital for their injuries. Treatment of these injuries resulted in over $11 million in hospital charges. Among all backseat passengers ages 16 and older who were involved in a motor vehicle crash, the unrestrained were almost three times more likely to require hospitalization than those who buckled up. The resulting average hospital charge was $11,000 higher

for those who rode unrestrained. Furthermore, the unrestrained passengers were more than twice as likely to suffer a traumatic brain injury compared to those wearing a seatbelt. These findings were developed into a legislative fact sheet to educate policymakers about the increased risk of injury and costs associated with riding unrestrained in the backseat.

Conclusions: The NYSDOH partners with the NYS Highway Safety Office (HSO) (a member organization of the CIPS) to promote proper use of seatbelts. This partnership has broader goals and can have a greater impact than the childhood priorities of the CIPS. Therefore, the NYSDOH provided the HSO with the legislative fact sheet on increased risk of injuries and costs associated with not using a seatbelt in the backseat for ages 16 and older. The HSO provided it to their legislative liaison to support current legislation to require backseat seatbelt use for ages 16 and older in NYS.

Learning Objectives

1. Understand the NYS seatbelt laws.

2. Describe the differences in injury outcomes and costs comparing restrained and unrestrained passengers 16 years and older riding in the backseat during a motor vehicle crash.

3. See current education document developed for policy makers.

Concurrent Session #13: Child Injury Prevention

Allentown Health Bureau's Child Injury Prevention Home Safety Survey Program

Jim Carlisle, Jeff Stout, Bernie Krokus, Allentown Health Bureau

Background: For over 25 years the Allentown Health Bureau has offered a free home safety surveys to Allentown residents who have children ages 5 years and younger. A Community Health Specialist (CHS) from the Bureau's Injury Prevention Program arranges a visit to the family's home to identify child safety hazards, discusses ways to make the home safer and distributes safety items such as a bath tub mat, night light, cabinet and drawer locks, outlet covers, bath temperature card and safety literature.

Clients for the surveys are identified through marketing the service to the public by way of presentations to parenting

groups, to child oriented agencies and through referral from the Health Bureau's clinical services. Approximately 160 - 190 child home surveys are conducted each year and 55-65 of these surveys are followed-up to ascertain compliance to the recommended correction of the hazards.

The child home safety survey program was initiated in the mid 1980's as part of the environmental health program. The client program base grew to the point that a separate injury prevention program was created to conduct the surveys and a dedicated staff member was hired for this purpose.

The Allentown Health Bureau's Child Home Safety Survey Program has been recognized state-wide as an innovative approach to child safety education and has been featured at numerous injury prevention conferences.

The audience will learn that:

1. Approximately half of all injuries and injury deaths to children 5 years of age and younger occur in the home.

2. Due to the physical and cognitive development of children 5 years of age and younger, care givers need to be instructed about removing environmental hazards and installing safety devices to reduce the risk of child injury.

3. The survey is conducted by the CHS in the home on a one-to-one basis which includes a safety audit of each room to identify hazards and give corrective recommendations.

4. Clients with serious safety hazards identified by the CHS such as the absence of a functional smoke detector, potentially dangerous fall or poisoning hazard or other serious hazardous condition identified by the CHS will receive a follow-up to ascertain whether this hazard was corrected. Also as a quality check, at least 33% of all surveys performed by the CHS will receive a follow-up.

5. Statistics are kept on the following:

   • Number of surveys and follow-ups

   • Hazards identified and safety items distributed by each survey

   • Geographic location, type of dwelling and referral source. The statistical information is reviewed on a monthly basis and used for reporting, managing and adjusting program activities

Child Drowning in Utah: Case Review Summary 2005-2010

Catherine Groseclose, Utah Department of Health

Background: This presentation reviews Utah child drowning cases from 2005-2010, providing an overview of our data collection process and the role of the Child Fatality Review Committee. The development of Utah's child fatality database has led to the discovery of distinct patterns of child drowning in the state. In turn, data-driven prevention strategies have been created to address these specific drowning scenarios.

The Utah child fatality database was created in order to better understand the circumstances surrounding all child injury deaths. Based on the National Violent Death Reporting System, it was established to know more than the decedents' demographic characteristics. The Utah child fatality database contains variables from multiple sources as well as additional variables we created to understand issues of particular interest to the Utah violence and injury prevention community. The child fatality review process serves as the data source for many variables.

It was learned that national-level drowning prevention educational messages were generally inconsistent with the patterns of child drowning actually occurring in Utah; in this presentation we share Utah's distinct child drowning patterns. The presentation concludes with scene photos from several individual cases.

Learning Objectives:

1. Realize the importance of age-specific patterns as to setting and supervision.

2. Understand that a range of factors, including social context, should be considered when examining drowning data. (Behavioral patterns that lead to drowning may vary geographically.)

3. Realize the importance of circumstance data for the purpose of successful drowning prevention program implementation.

National Action Plan for Child Injury Prevention-Launching a Roadmap for Injury-Free Childhood

Grant Baldwin, Chet Pogostin, David Sleet, Michael Ballesteros, Angela Salazar, Leslie Dorigo, Michele Huitric, Gaya Myers, Kathy Seiber, CDC, National Center for Injury Prevention and Control, Division of Unintentional Injury Prevention

Background: Every day in the United States, 33 children under 19 years of age die from an injury that was not intended. Every year, more than 90,000 children are permanently disabled as a result of being injured. Such tragedy often leaves families broken apart and impacts the lives of those left behind.

After the 2008 release of the World Health Organization's World Report on Child Injury Prevention, the CDC Childhood Injury Report, and the CDC Protect the Ones You Love communications initiative, there were calls by researchers and practitioners for a comprehensive plan of action to guide work in the area. CDC, with key partners, developed a National Action Plan (NAP) to provide a coordinated multi-sector approach to child and adolescent injury prevention.

Statement of Purpose: Provide an overview of the development process for the NAP; describe the NAP launch and implementation plan (2012); and highlight ways in which States can use the NAP and supplementary materials (i.e.: audience-specific one-pagers, state-specific injury data), to guide their child injury prevention efforts.

Methods: CDC worked with 50+ national experts and partners in child health, emergency medical care, child advocacy, epidemiology, injury research, education, and policy (representing 35 national organizations, government agencies, and NGOs) to draft the NAP. Subcommittees were established to tackle goals and action strategies in each of 6 focal areas: data & surveillance; research; communications; education and training; health systems; and policy. During a meeting of maternal and child health (MCH) leaders at the Children's Safety Network in early 2011, the NAP was "road-tested" to determine its applicability for MCH purposes and whether the goals and strategies aligned with the efforts of the MCH alliance and network. This process was repeated during a meeting of national drowning prevention experts in March 2011. Participants at both meetings determined that the focal areas were applicable to their work and specifically described how the strategies in the NAP could be implemented.

Results: The assessment process with MCH and drowning prevention leaders helped improve the plan and reinforce its value and applicability. CDC worked in consultation with an expert committee to refine the NAP in preparation for the 2012 release.

Conclusions: The NAP provides a framework for guiding national, state and local efforts to reduce childhood injuries. It offers, for the first time, a specific set of goals and actions that can be used by federal and state agencies, advocates, NGOs and policy makers to reduce injuries—the leading cause of death and disability in children and adolescents.

Learning Objectives:

1. Describe the impact of childhood injuries in the United States.

2. Describe how the National Action Plan can be used to guide state and local efforts to reduce childhood injuries.

The Road is Long, With Many a Winding Turn: Creating a Safety Culture Around All-Terrain Vehicles (ATVs)

Charles Jennissen, Gerene Denning, Kari Harland, Kristel Wetjen, University of Iowa Hospitals and Clinics

Background. Crashes involving all-terrain vehicles (ATVs) remain an under-appreciated but highly significant contributor to deaths and injuries in rural communities, with over 800 deaths and 150,000 visits to emergency departments each year. Although we have known the major risk factors for ATV crashes and injuries for decades, efforts to create a safety culture around these vehicles have lagged far behind those for other vehicle types.

Learning Objective 1. Increase audience knowledge of the key risk factors, crash mechanisms, and injury outcomes for ATV-related deaths and injuries. YouTube videos of actual crashes will illustrate key crash mechanisms.

Learning Objective 2. Raise audience awareness of the specific dangers of on-road ATV use. Results from our statewide ATV injury surveillance database demonstrate that on-road crashes result in significantly more serious injuries than off-road crashes, including more serious brain injuries. These studies also show that helmets reduce the number and severity of brain injuries in our study population. In addition, crash reports for Iowa's ATV parks, where stricter regulations and enforcement exist, suggest

that park users practice safer behaviors than crash victims at other sites.

Learning Objective 3. Promote audience understanding of the significantly higher risk posed by these vehicles to adolescents. In a school-based study of almost 1,900 adolescents 11-15 years of age, we found a high exposure rate, with 86% having ridden on or operated an ATV. There was also a high rate of unsafe behavior reported among those who had been on an ATV - 94% riding with passengers, 81% riding on the road, and 61% wearing a helmet rarely or never. Of those students who had been on an ATV, 63% had been in a crash.

Learning Objective 4. Increase audience awareness of the gap in ATV safety anticipatory guidance by primary care providers. A survey of primary care providers was administered to determine their anticipatory guidance practices, as well as their attitudes, knowledge, and the barriers they face in educating families about the risk of ATV use. More than 60% believed that ATV anticipatory guidance was important to provide. However, 78% said they provide ATV safety counseling less than 10% of the time during regular pediatric exams. Provider ATV knowledge scores were low (median score 2 of 12). Many respondents affirmed insufficient knowledge and inadequate resources, but the most commonly identified barrier to providing ATV safety guidance was that it was not a routine part of their daily practice.

Learning Objective 5. Engage audience participation in a discussion of strategies to reduce ATV-related deaths and injuries through advocacy and public policy.

Concurrent Session #14: Partnerships for Prevention

28 Years of Progress in Preventing Injuries among American Indians and Alaska Natives: Highlights of the IHS-CDC Interagency Agreement

Alan Dellapenna, NC Division of Public Health, Holly Billie, CDC

Background: In 1984 the Indian Health Service (IHS) and the Center for Disease Prevention and Control (CDC) established an interagency agreement to share resources and expertise to address burden of injury among American Indians and Alaska Natives (AI/AN).

At the time both federal agencies were building their injury prevention efforts. Before the establishment of the Injury

Center, CDC had few authorized positions (FTE's) to devote to injury prevention; IHS, funded at 50% of the level of need, had authorized but unfunded FTE's and need to develop capacity and expertise in injury prevention.

Under the agreement, IHS transferred a staff member (a USPHS Commissioned Officer detailed to IHS) to Atlanta to work full-time with CDC staff on injury prevention projects for IHS and AI/AN communities. CDC provides the salary and office support for the position and incorporated the position in to their injury team. Four officers have served in the position over the 28 years of the agreement. The position is currently located in the Motor Vehicle Team in the Unintentional Injury Section.

Priorities and projects under the agreement have evolved over the years, including: developing community-based severe injury surveillance systems, providing AI/AN data and epidemiology support to IHS Areas, training, project evaluation, partnership with other agencies, program leadership, assistance in developing the IHS tribal infrastructure development projects, and developing the CDC Tribal Motor Vehicle projects in 2004.

Under the Tribal Motor Vehicle projects CDC's Injury Center funded four Tribes from 2004-2009 to tailor, implement, and evaluate evidence-based interventions to reduce motor vehicle-related injury and death in their communities. The four piloted programs were successful at increasing seat belt use, increasing child safety seat use, and decreasing alcohol-impaired driving.

CDC's Injury Center is continuing the Tribal Motor Vehicle initiative by funding 8 tribes from 2010-2014. Upon completion of the funding cycle, CDC will publish a best practice and lessons learned manual for tribal communities.

Other current initiatives include:

- Convening meetings with representatives of National Highway Traffic Safety Administration (NHTSA), IHS, Bureau of Indian Affairs (BIA), CDC and several tribes to identify essential components of successful tribal traffic safety programs.

- Conducting a motor vehicle policy improvement workshop in collaboration with IHS and BIA for tribes actively working to strengthen traffic safety laws. 66 tribal personnel from across the country participated in the workshop.

- Development of an injury surveillance course for tribal

Injury Prevention Practitioners.

• Development of a motor vehicle safety toolkit for tribal programs.

A Hidden Disparity: The Burden of Injuries in Rural Areas

Lorann Stallones, Colorado Injury Control Research Center, Ft. Collins, Colorado, Erica Streit-Kaplan, Children's Safety Network, Nichole Spivey, South Carolina Department of Health and Environmental Control

Background: Rural populations have disproportionately high injury mortality rates. In fact, the more rural a community, the higher its fatality rate from motor vehicle crashes, traumatic occupational injuries, drowning, residential fires, and suicide. According to recent CDC data (2003-2007, U.S.), the motor vehicle crash death rate for 15-19 year olds was 14.2 per 100,000 in the most urban areas, versus 50.2 in the most rural areas; similarly, suicide rates for the same age group were 5.9 urban versus 11.9 rural.

Through cross-agency collaboration, planning, and implementation of best practices, this disparity can be reduced. Our presentation provides a detailed overview of rural injuries across the U.S., shows how states can reduce these injuries using lessons learned from a multi-state Community of Practice (CoP), and offers a case study of one state's experience in implementing specific rural injury prevention measures.

Lorann Stallones, MPH, PhD, FACE, will begin the presentation by sharing rural injury data and the cultural, environmental, and occupational factors that contribute to high injury rates in rural communities. Dr. Stallones, the Director of the Colorado Injury Control Research Center, is internationally recognized as an occupational epidemiologist who has worked extensively in agricultural safety and health.

Next, Rural Injury Prevention Specialist Erica Streit-Kaplan, MPH, MSW, will describe how multi-disciplinary teams from 14 states came together in a CoP organized by the Children's Safety Network in 2010-2011 to address rural injury issues. Ms. Streit-Kaplan will share examples of how rural injury prevention activities were successfully implemented through innovative partnerships among state Injury and Violence Prevention programs, Maternal and Child Health programs, and Offices of Rural Health.

Finally, Nichole Kent Spivey, MBA, Core Violence and Injury

Prevention Program Coordinator at the South Carolina Department of Health and Environmental Control, will describe how her CoP state team examined data and collaborated with state and local partners to reduce ATV injuries. While the CoP was underway, South Carolina passed ATV safety legislation, and the CoP state team rapidly developed a communications plan and launched a public education website about the new law. Ms. Spivey will describe this process, as well as the broader lessons learned from being part of the CoP.

This session will build participant knowledge by presenting current data and describing the multifaceted nature of rural injuries. Participants will hear examples of effective prevention messages, evidence-based practices, and successful strategies for partnering in rural communities. As a result of this workshop, participants will: 1) Understand the disparity in rural/urban injury rates; 2) Learn about the complex cultural and geographical issues impacting rural injuries; 3) Learn how partnering across disciplines can reduce injuries to rural populations; 4) Hear success strategies from one state; and 5) Prepare to apply these lessons in their own states.

Creating the Fall Prevention Network: A Highly Collaborative Process for Systems Change

Kimberley Horn, Jana Smith, Stacy Weinberg, Tri-County Health Department

Purpose: Demographic shifts of the aging population pose challenges for both public health and community providers. Morbidity and mortality rates indicate that falls are a significant, under-addressed public health issue in the older adult population. Key white papers on reducing falls illustrate that fragmentation and lack of coordination are key barriers to addressing the issue. Multiple risk factors exist for older adult falls. Research shows several interventions to be effective but the greatest impact on reducing falls occurs when all three primary risk factor categories - physical, clinical, and environmental - are addressed. These strategies cut across disciplines and no one program can adequately address all. Coordination among groups that have not traditionally worked together is essential but challenging for the community to achieve.

Method: Tri-County Health Department (TCHD) created a new Partnership with key stakeholders from organizations serving older adults. The Partnership participated in a facilitated planning process to determine the best

community approach to address falls in metro-Denver. It became evident that a change in overall public health infrastructure was needed to effectively address lack of coordination in addressing the multi-disciplinary risk factors. TCHD took the lead in implementing the strategic action plan within a highly collaborative community process.

Results:

1. Created a new sustainable system to improve coordination of service delivery among providers;

2. Changed the way older adults access and receive fall prevention interventions; and 3) Established and maintained a collaborative process over time.

Conclusions: This is a unique application of the essential public health service of mobilizing partnerships across disciplines to address a multi-risk factor health issue in a truly collaborative approach. It is illustrative of public health in action in the community. Lessons learned about challenges of collaboration and factors influencing successful collaboration are instructive for public health professionals.

Population served: Adults age 65 and older and their caregivers; providers of older adult services

Brief session description: This session will present a successful process of mobilizing partnerships across disciplines to develop a coordinated, community system intended to change the way older adults access and receive fall prevention interventions. Lessons learned about challenges of collaboration as well as factors influencing successful collaboration will be discussed in the context of an approach to comprehensively addressing multi-risk factor health issues.

Target audience for session: Public health professionals and community service providers addressing the fragmentation of services, or utilizing collaborations and multi-sector partnerships to address complex health issues in the community.

Learning Objectives:

1. Define collaboration.

2. Identify 3 factors that helped this community collaborative succeed.

3. Describe 3 challenges of collaboration in this type of partnership.

Emory Center for Injury Control: Focusing on Vulnerable Populations and Research Translation through Partnerships and Collaborations in the Atlanta Metropolitan Region

Debra Houry, Emory Center for Injury Control, Monica Swahn, Georgia State University, Lisa Dawson, Georgia Department of Public Health, Randy Clayton, Governor's Office of Highway Safety

Background: The Emory Center for Injury Control (ECIC) is a CDC funded Injury Control Research Center (ICRC) charged with the mission of building the field of injury prevention and reducing injuries in Georgia. ECIC's initiative is a unique approach through translational research, training and outreach to local practitioners, and a particular research focus on vulnerable and underserved communities and populations.

Injuries and violence represent a significant burden in Georgia and the Atlanta Metropolitan region. In order to respond to and address this burden, the ECIC has developed and implemented an interdisciplinary consortium that includes leaders from nine public and private colleges and universities, including historically black colleges, several community-based organizations and two state agencies. These active collaborations and engagements work towards reducing injuries among racial and ethnic minorities and other highly vulnerable populations.

The ECIC also supports innovative research and prioritizes pilot grants that focus on vulnerable populations and those that support collaboration between at least two of the different participating universities or colleges.

The presentation will focus specifically on four thematic areas:

1. Injury and violence prevention in Georgia (Lisa Dawson) - Ms. Dawson will briefly discuss current trends of injury and violence in Georgia as well as give an overview of existing programs and partnerships. Her dual roles as ECIC staff and Injury Prevention Director at the state health department have helped illuminate the tangible need for connecting research to practice.

2. The Emory Center for Injury Control: Developing innovative programs and partnerships (Deb Houry) - Dr. Houry will present the different university partnerships and how these relationships work; she will also discuss

the role of the state health department as a funder and partner in the administrative structure of the academic center..

3. Injury prevention research in vulnerable and underserved communities and populations in Atlanta (Monica Swahn) - Dr. Swahn will discuss examples of the Center's research in vulnerable populations and underserved communities in the Atlanta region and highlight future areas of priorities for prevention research.

4. Interdisciplinary Collaborations: Perspectives from the Governor's Office of Highway Safety (Randy Clayton) - Mr. Clayton will provide examples of how his partnership with the Center helped facilitate his agency's work and present key strategies and priorities for the Office of Highway Safety.

These thematic areas highlight a collaborative approach between partners to leverage expertise and resources and to increase visibility for injury and violence prevention in Georgia.

Learning Objectives:

1. Describe recent patterns of injury and violence in Georgia.

2. Define strategies for facilitating collaborations across academic institutions and community groups.

3. Identify vulnerable groups for injury and violence.

4. Discuss recent injury prevention research.

5. Explain the benefits of academic and government partnerships in the injury prevention field.

Concurrent Session #15: Strategies to Prevent Sexual and Intimate Partner Violence

Building Capacity in Michigan: Sexual Violence Prevention across the Spectrum of Prevention

Meagan Hubbard, Michigan Public Health Institute, Jessica Hamel, Michigan Public Health Institute, Jessica Grzywacz, Michigan Department of Community Health, Julia Heany, Michigan Public Health Institute

Background: This abstract, Building Capacity in Michigan: Sexual Violence Prevention across the Spectrum of Prevention, relates to the conference theme, "Shaping the Path to Safety," by demonstrating how a model for primary prevention of sexual violence can contribute to safer, healthier communities. Sexual violence is a significant but preventable public health issue affecting individuals, families, and communities. In 2008, sexual violence in Michigan cost an estimated $29.3 billion or $2,925 per Michigan resident (Miller, 2009). The Michigan Department of Community Health's Rape Prevention and Education (RPE) program is funded by the Centers for Disease Control and Prevention and is designed to reduce first-time perpetration and victimization of sexual violence. The RPE program is comprised of the Sexual Violence Prevention Grants Program, which funds twelve local primary prevention programs to support increased awareness, education, and training across the Spectrum of Prevention. Employing a multifaceted primary prevention public health approach such as the Spectrum of Prevention increases the opportunity for community saturation, mobilization, and shifting cultural norms. Local level primary prevention programming includes efforts to educate individuals, service providers, and communities; foster community coalitions and networks; change organizational practices; and inform policy and legislation. To understand how the Spectrum of Prevention is applied within communities and the extent to which this approach impacts sexual violence in Michigan, the Michigan Public Health Institute has been contracted to evaluate the Michigan RPE program. Evaluation results from year one of this current three-year grant cycle suggest that optimal strategies for sexual violence prevention in Michigan utilize collaboration effectively, are responsive to the needs of and culturally relevant to target populations, and take a broader view of sexual violence prevention to emphasize that sexual violence prevention is an important health and safety issue for every individual, family, and community. The Michigan RPE program is "Shaping the Path to Safety" through the Spectrum of Prevention by extending its primary prevention programming beyond the individual.

The objectives of this presentation are to:

1. Demonstrate the value of the Spectrum of Prevention as a public health approach for the primary prevention of sexual violence in Michigan.

2. Illustrate innovative strategies utilized within the Michigan RPE program at each level of the Spectrum of Prevention.

3. Describe local level approaches utilized to gain buy-in and overcome barriers at each level of the Spectrum of Prevention.

4. Present key process and outcome evaluation findings at each level of the Spectrum of Prevention from year one of the three year grant cycle.

5. Discuss lessons learned as well as the implications of conducting primary prevention work in Michigan's challenging economic climate.

Developing Evaluation Strategies for a Prevention Capacity Building Conference: a Case Study

Binnie LeHew, Iowa Department of Public Health, Laurie Hart, Kansas Dept of Health & Environment

Background: During summer 2011, four Midwest states planned and conducted a regional conference on primary prevention of intimate partner and sexual violence. The purpose of the conference was to provide skill-building for community prevention specialists to conduct comprehensive primary prevention programming and to increase opportunities for regional networking. The planning committee was comprised of representatives from four state health departments, five state domestic violence/sexual assault coalitions, a community rape crisis center and the Safe States Alliance. The committee developed a creative evaluation plan to gather both qualitative and quantitative data. This presentation will describe this innovative evaluation approach and presenters will share results of their evaluation efforts including lessons learned and suggestions for improvement.

Learning objectives:

1. Describe the process of developing an evaluation plan for a specific training/conference.

2. Discuss and analyze appropriateness of the evaluation strategy for the intended outcomes.

3. Identify both successful and unsuccessful strategies that may apply to future evaluation planning efforts.

Moving Upstream: DELTA, DELTA PREP and Public Health in Partnership for Prevention of Intimate Partner Violence

Pamela Brown, Centers for Disease Control and Prevention, National Center for Injury Prevention and Control

Background: Intimate Partner Violence (IPV) is a significant public health problem that negatively impacts short and long-term physical and emotional health and has serious consequences for victims, families and communities. According to the CDC's 2010 National Intimate Partner and Sexual Violence Survey (NISVS), more than 1 in 3 women and more than 1 in 4 men in the United States have experienced rape, physical violence, and/or stalking by an intimate partner in their lifetime.

The Centers for Disease Control and Prevention (CDC) provides funding, networking opportunities, training and technical assistance for primary prevention of IPV. Two CDC projects contributing to local, state and national efforts for primary prevention of IPV are Domestic Violence Prevention Enhancement and Leadership Through Alliances (DELTA), funded by CDC since 2002, and DELTA PREP (Preparing and Raising Expectations for Prevention), started in 2007 in partnership with CDC Foundation and Robert Wood Johnson Foundation. These projects have funded state DV coalitions in 33 states. Through participation in DELTA and DELTA PREP, coalitions which have traditionally been focused on intervention services and advocacy for victims are integrating primary prevention principles, concepts and practices into their organizational, state and local efforts to address IPV. Utilizing a public health approach, DV coalitions are leading and contributing to IPV primary prevention strategies to prevent perpetration while continuing their historical work to address IPV survivor needs.

The determinants of violence are multiple, complex and often interrelated, requiring prevention strategies that include broad-based groups of individuals and a range of activities that link with, build upon and add value to one another. DV coalitions have reached out to public health partners to facilitate coordination of violence prevention efforts and are working in collaborative and innovative ways with state and local health departments to develop and support initiatives and programs to prevent IPV before it occurs.

DV coalitions, in their unique position as policy influencers, advocates, community members and service providers, can play an important role together with public health partners in comprehensive approaches to violence prevention. This presentation will explore and illustrate how DELTA and DELTA PREP coalitions have incorporated public health principles and purposefully integrated primary prevention into their work, influencing systems, policy and practice change for prevention of IPV.

Learning Objectives:

1. Participants will become familiar with the history and evolution of state DV coalitions' efforts to incorporate public health approaches to prevent IPV

2. Participants will learn about the challenges and approaches to building effective cross-sector prevention efforts among non-traditional partners to address intentional injury issues

3. Participants will hear and discuss examples of successful partnerships between DV coalitions and public health providers to facilitate primary prevention of IPV

CONCURRENT SESSION BREAKOUT #4
FRIDAY, MAY 4, 2012
10:15 - 11:30 AM

Concurrent Session #16: Making the Case for Injury and Violence Prevention: An Invitation Only Session for State Designated Representatives

Making the Case for Injury and Violence Prevention

Background: A joint roundtable discussion hosted by the Safe States Alliance and the Association of State and Territorial Health Officials (ASTHO), this session will allow State Health Officers (SHOs) and State Designated Representatives to share insights, strategies, and tips for elevating injury and violence prevention as a priority in state health departments. This session will build on the Safe States publication, "Making the Case for Injury and Violence Prevention: A Conversation Starter for State Injury and Violence Prevention Directors to Use with State Health Officials and Other Leaders" and the complementary ASTHO publication, "Spotting Injury and Violence Prevention on Your Radar Screen — Creating a Legacy in Public Health."

Concurrent Session #17: Law as a Path to Health and Safety

Law as a Path to Health and Safety

Matthew Penn, Montrece Ransom, Stacie Kershner, Susan Hardman, CDC

Background: There is considerable evidence that law and policy help lower the incidence and severity of injuries. For example, the risk of childhood drowning has been reduced by pool fencing laws; the risk of dog bites can be reduced by leash laws; and the risk for tap water scalds can be reduced by housing codes. Because injury prevention programming relies heavily on the modification of risky behaviors, environments, and products, law and policy are essential to effective injury prevention and control. For injury prevention practitioners, an understanding of public health law and how it can be used as a tool is critically important. It is also critically important that practitioners know how to identify issues for which legal advice should be sought and what action to take when such issues arise.

This learning lab/training session, offered by CDC's Public Health Law Program, is designed to help participants understand core concepts of public health law so that they can more effectively protect the public from intentional and unintentional injury - and avoid legal trouble. Part

I provides an introduction to fundamental principles of law and the legal system as they frame the practice of injury prevention in the United States. Part II features a discussion of ways to recognize potential legal and liability issues in injury prevention programming, and ways to effectively work with legal counsel.

Learning Objectives: After completing this learning lab/training, participants should be able to

1. Explain the basic legal framework for public health and understand its application to injury prevention programs;

2. Describe how law can be used as a tool to advance injury prevention goals on the state and local level;

3. Identify circumstances that require accessing the services of legal counsel;

4. Implement effective strategies for working with legal counsel to advance injury prevention goals; and

5. Characterize CDC's Public Health Law Program and describe the services offered.

Concurrent Session #18: The Evidence Project

The Evidence Project: A Comprehensive Framework for Evidence-Based Decision-Making

Sally Thigpen, Helen Singer, Natalie Wilkins, Richard Puddy, CDC

Background: Increasing emphasis has been placed on the importance of evidence in guiding the selection and implementation of prevention strategies at the local level. However, most resources commonly refer to evidence only in terms of traditional research evidence. A comprehensive approach to understanding evidence has been undertaken by the Division of Violence Prevention (DVP) at the Centers for Disease Control and Prevention (CDC) in developing guidance and tools for researchers, practitioners, and policy makers to use in making decisions based on a thorough understanding of all existing evidence. The Evidence Project incorporates three types of evidence for consideration in decision-making: (1) the Best Available Research Evidence - assists in determining whether or not a prevention program is actually achieving the outcomes it aims to and in the way it intends. The more rigorous a study's research design, (e.g. randomized control trials, quasi-experimental designs), the more compelling the research evidence, indicating whether or not a program is

effectively preventing violence; (2) Experiential Evidence - is based on the professional insight, understanding, skill, practice, and expertise that is accumulated over time by more than one person. This is different than simply being satisfied with a strategy, but rather on years of culled tacit knowledge and experience transformed into useable information; and (3) Contextual Evidence - is based on individual, relationship, community, and societal factors that address whether a strategy is useful, feasible to implement, and accepted by a particular community. This comprehensive understanding of evidence helps communities more adequately address whether a known effective strategy will be germane and suitable for their community under their unique conditions. This presentation will highlight how the three types of evidence form a comprehensive framework for evidence-based decision making. Tools to facilitate a common understanding of the three types of evidence will be presented.

Learning Objectives:

1. Define three types of evidence

2. Articulate an evidence-based decision-making process

3. Explain how three types of evidence are used in an evidence-based decision-making process.

Concurrent Session #19: Preventing Violence Against Children and Youth

A Community Safety Scorecard for the City of Los Angeles, to guide Youth Violence Prevention Strategies

Billie Weiss, Paul Hsu, Susan Lee, Maribel Meza, UCLA School of Public Health

Introduction: Despite declining crime rates in large urban areas, pockets of high crime, unsafe, traumatized neighborhoods exist across the urban landscapes of the United States. Violence Prevention Coalition, Advancement Project and SCIPRP collaborated to develop a method for measuring the risk & protective factors by zip code.

The Community Safety Scorecard highlights disparities across neighborhoods within the City, and measures whether resources expended are commensurate with levels of risk by specific neighborhood. Such a snapshot focuses where the need is greatest and where limited resources can be focused to create change from high risk to safe neighborhoods. The Community Safety Scorecard

presents data at the zip code level categorizing risk and protective factors and gives each zip code a letter grade from A to F, as in a "report card".

Methods: Four domains were selected based on literature review to indicate safety, school condition, risk and protective factors within a community. Each zip code in the City received a score in each domain. An overall score for the City of Los Angeles was also calculated for each domain so individual zip codes could be compared to the City overall.

Research generated more than 1,400 indicators that could be used to describe risk and protective community factors. Logistic regression was done in each selected domain to determine which were the most important indicators to use to develop the scorecard. When possible all indicators were presented as rates so that zip code population variance was not a factor in scores.

Results: The Scorecards shows that great disparity exists across neighborhoods in Los Angles. By highlighting results from previously collected needs assessments across the City, the scorecard helps to identify solutions to each of the most pressing needs in each of the highest risk zip codes. The Scorecard provides a useful tool for stakeholders to understand the diverse neighborhood strategies most likely to change the trajectory of the most at risk neighborhoods.

Recommendations are made and a community violence prevention and reduction model with several layers is presented to assist communities in implementing the elements of the model for each zipcode. Sample strategies are presented in each of the domains in order for each zip code to reach a "threshold of community safety".

Participants in this session will be able to:

- Know what indicators to use to describe the safety, schools, risk and protective factors in a neighborhood.

- Use a scorecard to guide city resources to the areas where they are most needed.

- Describe where the risks are highest and the resources lowest, and use the scores to correct the neighborhood inequities in resources for youth development and violence prevention.

Applying and Leveraging Simulation Modeling to Promote Essentials for Childhood

Richard Puddy, CDC, Sandra Alexander, CDC , Xiaolin Hu, Georgia State University

Background: Child maltreatment is a complex issue that results in significant physical and emotional consequences for children and increases the risk for long-term health problems in adulthood. Improving the collective understanding of individuals, organizations, communities and systems of the far reaching benefits of preventing child maltreatment is critical to ensuring that all children have "Essentials for Childhood": safe, stable, nurturing relationships (SSNRs) for children in their home and broader environment. This is CDC's strategic direction for child maltreatment and has far reaching impact for preventing other forms of violence later in life (youth violence, suicide, intimate partner violence, and sexual violence). Representatives from CDC's Knowledge to Action Child Maltreatment Prevention Consortium (K2A), a partnership of child maltreatment researchers, practitioners, parent leaders, policy makers, and thought leaders will illustrate the application of simulation modeling to identify and engage high leverage sectors at the community and societal level to increase positive community/societal norms around ensuring SSNRs for children.

Simulation modeling, including agent-based and systems dynamics modeling, offers tremendous promise for prevention as it has proven to be a powerful framework for exploring systems with similar characteristics, changing systems, time delays, unintended consequences, and building stronger support for prevention and identifying high leverage prevention actions at the community and societal level. This presentation will describe CDC's application of these simulation modeling approaches to child maltreatment prevention through live interaction with both an agent based model and a systems dynamics model. The systems dynamics model can help generate conversation and change mind sets about prevention and identify high leverage actions that can fundamentally change systems while the agent based model allows study of the impacts of family and community resources and social networks on the rate of child maltreatment. A learning tool based on this work and designed to make the business case for prevention and suggest business practice guidelines to support SSNRs will also be highlighted.

Hospital Based Violence Intervention: Making the Best of a Vulnerable Moment

Alicia Romero, The Effort, Wendie Skala, South Sacramento Kaiser Permanente, Melissa Bayne, The Effort, Maya Leggett, South Sacramento Kaiser Permanente

Background: The National Network of Hospital Based Violence Intervention Programs recently highlighted a universal need to provide quality screening, intervention, discharge planning and follow-up for young victims of violence seen daily in trauma centers across the country. The purpose of this presentation is to report on one program designed to meet those needs, the Sacramento Violence Intervention Program (SVIP). Founded in June of 2010, SVIP's purpose is to shape the path of safety and prevent re-injury and retaliation in young victims of violence in Sacramento, CA. Modeled after the evidence based "Caught in the Crossfire" program, SVIP utilizes a combination of timely recognition, referral to community resources, and long-term intensive case management services. This presentation will show the steps SVIP has implemented to provide a safe path of recovery for young victims of violence and discuss areas for development. Specifically, the presentation will address: program development, current outcomes, success and failures, needs assessment, and our vision for the future. Early data suggest significant reduction in recidivism and retaliation when young victims of violence participate in SVIP.

New Resources for State Health Departments in Child Maltreatment Prevention

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Background: It is well documented that child maltreatment is linked to a wide range of poor health outcomes. Children can experience injuries resulting directly from abuse and neglect and impaired brain development leading to developmental delays, cognitive impairments, risky behaviors, and poor health outcomes. Long-term health effects can include major depressive disorders, heart disease, cancer, obesity, substance abuse, as well as elevated risk for a former victim to abuse their own children and re-victimization as an adult. Safe, stable and nurturing relationships (SSNRs) between children and caregivers, as well as environments that foster SSNRs, can provide a buffer against child maltreatment.

Despite this growing understanding, society often views child maltreatment as a child welfare or criminal justice problem and overlooks the need for investment in primary prevention efforts. State health departments often have programs already in place that may help to prevent child maltreatment before it happens (e.g., home visiting, abusive head trauma/shaken baby syndrome prevention) or address child maltreatment risk and protective factors (e.g., community violence prevention; intimate partner violence prevention, child death review). These efforts are not always recognized as part of comprehensive child maltreatment prevention nor are health departments seen as potential partners in state child maltreatment prevention initiative. Increased collaboration and integration within health departments and across state agencies and organizations can be instrumental in an effective and comprehensive effort to address this problem.

With this in mind, the Public Health Leadership for Child Maltreatment Prevention (PHL) Initiative -- an initiative of the CDC's Division of Violence Prevention, CDC Foundation, and the Doris Duke Charitable Foundation -- has developed a tool-kit to enhance state's ability to address child maltreatment prevention as a public health issue. This session will share new resources and provide interactive exercises to help states identify strengths and gaps in current efforts. We will provide examples of state experiences in leveraging resources, developing effective collaborations, enhancing surveillance, aligning programs and policy, and increasing commitment for initiatives that promote safe, stable and nurturing relationships and environments for children. Information on child maltreatment risk and protective factors and what health departments can do, or are already doing, to address these factors; framing child maltreatment as a public health issue; and national and state-specific data on the cost of child maltreatment will also be presented.

Participants will:

1. Have an increased understanding of the long-term physical, behavior and societal outcome of child maltreatment.

2. Be able to identify 1-2 strategies to enhance support for health department efforts to create SSNRs for children

3. Be able to identify 2-3 strategies for enhancing collaboration across sectors for child maltreatment prevention.

4. Be able to identify 2-3 strategies to enhance alignment of health department programs to assure better outcomes for children and families.

Concurrent Session #20: Epidemiology in Action

An Assessment of the Completeness of External Cause of Injury Coding Among North Carolina Acute Care Emergency Department Visits

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Background: In 2010, injuries accounted for nearly 6,000 deaths in North Carolina, representing a fraction of the annual number of injuries in the state. To assess the true burden of injury on the population, it is important to monitor nonfatal events. NC collects information on 99.5% of acute care emergency department (ED) visits across the state through the state's emergency department surveillance system, the NC Disease Event Tracking and Epidemiologic Collection Tool (NC DETECT). The utility of this system for injury surveillance is contingent on the completeness and accuracy of ED records. The International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM) stipulates the use of an external cause of injury code (E-code) with any diagnosis code in the range of 800-999. NC DETECT requires hospitals to submit all electronically captured E-codes as part of ED data submission. The Injury and Violence Prevention Branch (IVPB) has partnered with NC DETECT to assess the completeness of E-coding for the improvement of E-coding among EDs in NC.

Statement of Purpose: To improve the accuracy of ED injury coding practices among acute care EDs through an assessment of surveillance data quality.

Methods: The research team examined all 2010 ED visits with an ICD-9-CM injury diagnosis (a code between 800 and 999) and/or an E-code. ED visits missing either an E-code or an injury diagnosis code were flagged for further review. Research staff generated summary statistics for these visits; visits were stratified by hospital, sex, age, location, and trauma center designation.

Results: There were 4,405,739 ED visits reported in 2010. Of these, 1,090,482 visits were injury-related (visits containing a diagnosis code of 800-999 and/or an E-code). Among all injury-related ED visits, 122,880 visits (11%) did not contain an E-code. Of the 967,682 visits with an E-code, 161,448 visits (17%) were missing a diagnosis code between 800 and 999. Much of the missing data could be attributed to a small number of facilities. Although most of the E-codes specified a general injury group (fall, motor vehicle, overexertion, etc.), many of the codes were for unspecified sub-classifications within these general groups.

Conclusions: Most NC acute care EDs consistently report E-codes for injury-related ED visits; however, several facilities do not. The research team will share results with under reporting hospitals to address data quality issues for the purpose of improving injury surveillance in the state. This project has the potential to serve as a model for other states planning to conduct a state-based injury surveillance evaluation.

Objectives:

1. Describe proposed methods to improve injury surveillance data in the state of North Carolina

2. Characterize coding discrepancies in ED data between diagnosis and external cause of injury codes

3. Highlight the importance of accurate and reliable ED surveillance data

Injury and Violence Prevention (IVP) and PRAMS (Pregnancy Risk Assessment Monitoring System): Working Together for Infant Safety

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Background: Unintentional injuries are the fifth leading cause of death for infants and the leading cause of death for children and adolescents. The CDC's Pregnancy Risk Assessment Monitoring System (PRAMS) is the only state population-based surveillance system that contains infant safety data. PRAMS has collected information related to injuries since 1996, but despite this, PRAMS remains, for many states, an untapped resource for injury and violence prevention. PRAMS data have not been routinely analyzed by states to understand the need for or the development

of strategies to address injuries. However, the range of PRAMS questions related to injury and violence prevention is broad and includes queries regarding infant car seat use, infant sleeping practices, smoke alarm use, presence of loaded guns in the household, domestic violence, and maternal depression.

This workshop will provide an overview of how state Injury and Violence Prevention (IVP) programs can use PRAMS to obtain population-based data on injuries and develop effective interventions to have an impact on both injury-related morbidity and mortality. Analysis of PRAMS data can help states to understand family behaviors related to infant sleep position, bed sharing, use of car seats, use of smoke alarms, and presence of loaded guns in the household and maternal violence and mental health.

PRAMS can be used by states to understand the prevalence of hazards in the home environment as well as maternal compliance with safety procedures. By studying these data, states can identify when and how these behaviors change as a result of specific interventions. PRAMS data also allow for greater understanding of the differences within populations, enabling states to design and implement more targeted interventions.

This session will review current PRAMS questions on injury and violence prevention. The session will explore how PRAMS can be used by states to evaluate current IVP activities, and future activities; how PRAMS data can inform the development of new policy and implementation of existing policy; and how cross-program collaboration can be enhanced as a result of data sharing.

Presenters from CSN, CDC PRAMS, CDC NCICP, and state of Massachusetts will explain how they selected PRAMS questions related to injury and violence prevention, and how they are using the data to shape programs and initiatives, and ultimately to improve outcomes for infants and families.

(1) knowledge of the PRAMS surveillance system and the utility of the survey data (2) understanding of current data available through PRAMS, and (3) understanding of how PRAMS can be utilized to shape IVP programs and policy.

Investigating a Unique Motorcycle Crash Cluster and Planning Evidence-based Interventions

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Background: Motorcycle rider deaths have increased dramatically in the U.S. during the past decade, although the rate of growth has slowed in recent years. This increase is due in large degree to the growth of motorcycling, especially among riders ages 40 and older.

One notable change associated with aging of the riding population is an increase in recreational travel by motorcycle. Western North Carolina, a scenic mountainous area, is a popular destination for motorcyclists. In recent years, the crash rate (per registered motorcycle) in one western NC county has grown to 17 times that of the state average and is nearly five times that of the second most risky county. The extraordinarily high crash rate in this county, even compared to similarly mountainous adjacent counties, suggested the need for a detailed investigation, to provide evidence to guide development and deployment of behavioral interventions, infrastructure modification or other programs.

We examined crash data in all rural, mountainous North Carolina counties to compare crash and rider characteristics in the subject county to others with similar riding conditions. In addition, information about the general motorcycling population in the high crash region was obtained through (1) systematic observation of riders (N = 1098); (2) interviews with randomly selected riders (N = 152) who had stopped at stores and rest areas to obtain information (age, sex, riding experience) not available through observation; (3) placement of traffic counters at two locations where crashes are common, to obtain precise exposure counts and to measure speeds.

Data analysis is still in progress but some things are already clear. Virtually all crashes (and riding) in the area occur during daylight hours; they tend to cluster along certain stretches of roadway and most involve only a single vehicle. The riding population is fairly old (mean age ~47) and quite attentive to safety (evidenced by 100% observed helmet use, moderate speeds, and interview responses). Most riders as well as crash victims are from states other than NC and the vast majority ride in this area only once a year. This presents a unique challenge in developing interventions since the population of interest is spread

throughout numerous Southern and Midwestern states, rather than concentrated where the crash problem exists. At the same time, the informal and semi-formal networks that exist among a cohesive motorcycling subculture present some unique opportunities for intervention as well. Exposure-adjusted crash rates will be presented and resulting intervention plans described.

Learning objectives:

1. Understand the unique nature of motorcycle crashes in a rural, mountainous region,

2. Appreciate the challenges of designing interventions to address a population that is only momentarily located where the problem exists, and

3. Recognize the subculture of recreational motorcyclists and its implications for intervention.

WISQARS Cost of Injury Reports with New Enhancements

Lee Annest, CDC

Statement of Purpose: To provide an overview of new enhancements to the WISQARS Cost of Injury Reports module that provides an option to obtain state and local cost of injury estimates. Background: WISQARS is a widely used resource for U.S. data on fatal and nonfatal injuries and on violent deaths. In February, 2011, Part I of a Cost of Injury Reports module was added to WISQARS that provides average and total lifetime medical and work loss cost. In February 2012, Part II enhancements of the WISQARS Cost of Injury Reports module was released to allow users to enter their own incident counts and obtain cost estimates applicable to state and local populations of interest.

Methods: Lifetime medical and work loss cost estimates for 2005 were computed by the Pacific Institute for Research and Evaluation, Calverton, MD. These unit cost estimates were computed for individual injury deaths, hospitalizations, and emergency department (ED) visits where the patient was treated and released. Injury death data were from the National Vital Statistics System and nonfatal injury hospitalization and ED data were from the National Electronic Injury Surveillance System - All Injury Program.

Results: Part I of the WISQARS Cost of Injury Reports module allows users to obtain average and total medical, work loss, and combined (medical + work loss) cost

estimates, using federal data sources, by intent and mechanism of injury and by body region and nature of injury. National, regional, and state-based cost estimates are provided for injury deaths; national cost estimates can be obtained for injury hospitalizations and ED-- treated and released visits. Tables of cost estimates can be generated by sex and age of the injured person. The Part II enhancements provide a new option for users to enter their own incident counts and, using average medical and work loss cost estimates from Part I, to obtain cost estimates directly pertinent to their population of interest.

Conclusions: Cost estimates from the WISQARS Cost of Injury Reports module can be used to demonstrate the substantial costs to society resulting from injury and violence.

Learning Objectives.

1. Understand the cost of injury estimates provide in WISQARS.

2. Understand how to access and use the new options of the WISQARS Cost of Injury Reports module.

3. Learn how to compute cost of injury estimates that can be used to support injury research and prevention programs at the state and local levels.

4. Learn how ready access to cost of injury estimates in WISQARS can help provide burden of injury data to support injury research and prevention program efforts across the United States aimed at shaping the path to safety.