

when children are in a heightened positive mood. In previous research, framed safety messages have consisted of behaviourally targeted messages that emphasize avoiding risk behaviors leading to specific injuries and outcomes. The current study examined whether more general warning messages in framed contexts had a differential effect on reducing risk taking in children when in a heightened positive mood.

Methods/Approach 39 children (7–9 years) were exposed to a safety message (gain- or loss-frame) regarding play behaviors on an obstacle course. Children's risk-taking running the obstacle course was measured before and after a positive mood induction.

Results Participants who were exposed to loss-framed safety messages in both the general and behaviorally targeted groups demonstrated a significantly lower level of risk taking compared to baseline, whereas participants who were exposed to gain-framed safety messages in both groups performed at baseline levels. Regardless of whether children were exposed to general or behaviorally specific messages, gain and loss messaging counteracted the increase in risk taking when in a positive mood, but loss messages produced greater reductions in risk taking than gain messages.

Conclusion The results indicate that general messages can be as effective as behaviorally specific messages. Moreover, the loss-framed safety message had a greater effect on reducing risk-taking in children when in a heightened positive mood than the gain-framed safety message.

Significance and Contributions The results suggest that placing an emphasis on specific risk-taking behaviors and outcomes is not necessary in order to reduce risk-taking behaviours in school-aged children during play situations. This makes this intervention approach feasible to apply in situations in which there are a variety of potential risk behaviors which makes targeting a specific one likely to limit effectiveness of the intervention.

123 NO HIT ZONES: AN INNOVATIVE APPROACH TO VIOLENCE PREVENTION

¹Julia Fleckman, ¹Rachael Ruiz, ²Stacie Leblanc, ¹Hannah Gilbert, ¹Catherine Taylor. ¹Tulane University School of Public Health and Tropical Medicine; ²The Up Institute

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Statement of Purpose No Hit Zones (NHZs) are an emergent and highly promising public health strategy designed to change community-level social norms regarding the acceptability of physical punishment of children, an important approach for child physical abuse (CPA) prevention. NHZs are a multi-tiered strategic approach designed to: (1) promote an environment of safety such that no one will be hit, or witness hitting, within an organizational or community setting, and (2) reduce acceptance and use of PP within that setting, thereby ultimately reducing the incidence of CPA. This presentation will discuss the benefits and challenges of NHZ implementation, training resources available to implement an NHZ, and preliminary results from a NHZ evaluation at Children's Hospital of New Orleans.

Methods/Approach Training resources developed and results from a short-term evaluation of the NHZ intervention will be presented. Pre- and post-assessments were administered to all medical center staff invited to participate in the study (n=507) before and after a mandatory NHZ training.

Measures were included to assess staff attitudes toward physical punishment, attitudes toward medical staff intervention when parents hit children, medical center policy and access to information on discipline, frequency of witnessing a parent hitting a child on the medical center property and whether or not they had intervened.

Results A pre-post analysis was completed via paired t-test, with significant results ($p < 0.001$) for a reduction in positive attitudes toward physical punishment, an increase in positive attitudes toward medical staff intervention when parents hit children, and willingness to intervene.

Conclusions The current results demonstrate promise for NHZs in reducing community-level risk for CPA.

Significance and Contributions to Violence and Injury Prevention Science NHZs are an innovative approach to family violence prevention at the community level. This presentation will discuss development of and preliminary results from the intervention evaluation.

125 EMERGENCY MEDICAL RESPONSE TO US SPORTS INJURIES: PATIENTS, PLACES, AND PROCEDURES

Viktor Bovbjerg, Oregon State University

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Statement of Purpose Emergency medical services (EMS) often respond to injuries sustained during sports. Characterizing such incidents can help schools/organizations and EMS agencies anticipate sports-related pre-hospital care needs, and coordinate their responses.

Methods/Approach We identified EMS runs associated with team sports (ICD-10 activity code Y93.6x), to a school, athletic field, or another athletic facility, using National Emergency Medical Services Information System 2017 data. We characterized incidents by patient characteristics, incident location, and pre-hospital medical procedures; we used ICD-10 diagnosis codes and SNOMED procedure codes.

Results Of 1107 EMS runs identified, the median patient age was 17 years (interquartile range 14–29), 29.5% of patients were female, and 46.7% were white. The most common locations were athletic fields (517 incidents, 46.7%) and schools (330, 29.8%). Initial diagnoses were non-specific: the most common primary symptom was 'pain, unspecified' (34.7%), and the most common primary impression was 'injury, unspecified' (53.7%). Of 1656 procedures recorded, 287 (17.3%) were conducted prior to EMS arrival. The most common pre-EMS procedure was splinting (32.4% of pre-EMS procedures), and the most common EMS procedures were gaining intravenous access (33.7%) and electrocardiographic monitoring (22.6%).

Conclusions The vast majority of sports-related EMS responses were for teens and young adults, at known athletic venues, for musculoskeletal injuries and pain. Pre-EMS care often focused on stabilizing the injury, while EMS care often involved advanced assessment and pain relief/fluid administration. National EMS data, while informative, often lacked diagnostic detail, and the specific type of athletic facility; combining EMS data with hospital diagnoses, when available, would enable greater precision.

Significance and Contributions to Injury and Violence Prevention Science Characterizing sports-related EMS responses allows organizations with responsibility for athlete health and safety

to train and equip on-scene responders, and to coordinate responses to take advantage of the complementary skill sets of on-scene and EMS responders.

126 EMS RESPONSE TIME TO SPORTS INJURIES: A ROLE FOR ON-SCENE RESPONDERS

Viktor Bobbjerg, Sam Johnson, Marc Norcross. *Oregon State University*

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Statement of Purpose Emergency medical services (EMS) often respond to injuries sustained during team athletics and sports. The interval between injury and EMS arrival allows on-scene responders to provide immediate care.

Methods/Approach We identified EMS runs associated with team or group sports (ICD-10 activity code Y93.6x), to a school or an athletic field or facility, using National Emergency Medical Services Information System (NEMSIS) 2017 data. We calculated EMS response times to scene as the difference between dispatch time and on-scene time. Initial patient acuity was defined as 'green' (lower acuity), 'yellow' (emergent), 'red' (critical), or 'black' (deceased). We compared mean response time by patient acuity group.

Results Of 1107 EMS runs identified, initial acuity for the majority was green (764, 70.2%), with a substantial yellow group (302, 27.8%), and relatively few red cases (22, 2.0%); there were no on-scene fatalities. Response times did not differ significantly by acuity. Approximately one quarter (292, 27.0%) of EMS responses were within five minutes, with greater proportions in the 5–10 minute (472, 43.6%) and 10 + minute (319, 29.5%) range; all but 76 responses (7%) were greater than two minutes.

Conclusions In over 90% of EMS responses identified in the 2017 NEMSIS data involving response to a team sporting or athletic event, response time was greater than 2 minutes; approximately 75% were greater than 5 minutes. For every injury, but particularly for emergent and critical injuries, this represents an important interval during which patient assessment, stabilization, treatment, and packaging by on-scene responders could improve outcomes. Emergency action plans can formalize pre-EMS on-scene emergency response in athletic settings.

Significance and Contributions to Injury and Violence Prevention Science The presence of trained and equipped on-scene responders (e.g. athletic trainers, coaches) would enable effective initial care during the interval until EMS arrival, and improve patient outcomes.

132 CAN EXPOSURE TO FRAMED MESSAGES ABOUT SAFETY REDUCE RISK BEHAVIOURS BY SCHOOL-AGED CHILDREN?

Mackenzie Seasons, Emily Weinberger, Barbara Morrongiello. *University of Guelph, Ontario Canada*

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Statement of Purpose The current study aimed to determine whether delivering framed safety messages (gain-framed, loss-framed, and no frame) in poster format reduced physical risk-taking behaviours when children were in a positive mood.

Previous research has shown that when in an elevated positive mood state, children engage in more risk behaviours than when in a neutral mood state, which leads to greater risk of injury (Morrongiello *et al.*, 2014). Research in this area is particularly important for school-aged children, who are becoming increasingly independent and more vulnerable to injury outside of the home (Morrongiello *et al.*, 2013).

Method/Approach 28 children (7–9 years old) were exposed to a message (gain-frame, loss-frame, or no frame (control) message) regarding play behaviours on a specific risk-taking measure (an obstacle course). Children's risk-taking was measured before and after a positive mood has been induced, and the impact of framed safety messaging on risk-taking behaviours was examined.

Results Results indicated the positive mood induction was successful and led to increased risk taking when participants were in a positive mood. Both gain- and loss- framed messages differentially counteracted this mood effect and led to reduced risk taking, but the loss-framed message reduced risky behaviours to a level significantly lower than the participants' baseline risk-taking behaviours.

Conclusions Results demonstrate that even in a positive mood, children can be influenced to engage in safer play behaviours with the use of message framing (particularly loss-framed messaging).

Significance and Contributions to Injury and Violence Prevention Science Given that physical risk taking was mitigated by framed safety posters (particularly loss-framed posters) even when children were in a positive mood, framed posters may be a cost-effective and useful intervention in places like public parks, where children are often happy and inclined to engage in increased risk-taking.

137 A META-ANALYSIS ASSESSING THE OUTCOME OF OCCUPATIONAL INJURY BY MINORITY EMPLOYEE RACE

Chelsea Hicks, Niclette Kibibi, William Thomson. *University of Iowa College of Public Health*

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Statement of Purpose Literature suggests that racial disparities in the prevalence of occupational injury exist, but the magnitude of these disparities has not been summarized or well-described. The purpose of this meta-analysis was to examine differences of experienced workplace injury between White and Black employees.

Methods Our study population of interest was employees, teens to adults, who identified as non-Hispanic Black or non-Hispanic white, and who experienced an unintentional injury in the workplace. PubMed and Embase were searched, which resulted in a total of 488 published articles. Articles were identified and reviewed using search terms related to workplace injuries and racial ethnic disparities. Standard meta-analysis tools were used to rate the quality of the studies and data combined using generic inverse variance pooling. Random effects models were used to account for the heterogeneity between the studies.

Results A total of 5 articles met eligibility criteria and included workplace injury information from both national databases and smaller assessments. Publication dates ranged from 2003 to 2017 with cross sectional and cohort studies present. When assessing the outcome of injury for those who are a racial/ethnic minority, individuals who were African American were