Significance The obtained data will be included in the implementation of comprehensive measures in road trauma prevention and to develop information- education campaigns on road safety.

Transportation safety

0073

GLOBAL ROAD SAFETY: ANALYSIS OF GLOBAL STATUS REPORTS ON ROAD SAFETY

¹I Bari, ¹H Rosen, ¹N Paichadze, ²M Peden, ³J Monclus Gonzalez, ¹A Hyder. ¹The George Washington University, Washington DC, USA; ²The George Institute for Global Health, Imperial College, London, UK; ³Fundación MAPFRE, Spain, Spain

10.1136/injuryprev-2021-SAVIR.50

Statement of purpose The purpose of this presentation is to evaluate progress towards achieving the Decade of Action for Road Safety by analyzing the results of three Global Status Reports on Road Safety.

Methods/Approach The analysis was based on the data from the three Global Status Reports on Road Safety with global level data from 2010, 2013, and 2016. Descriptive analyses and t-tests were conducted to evaluate the past and current trends in road traffic deaths and countries' progress in achieving key road safety indicators. Data from 160 countries that consistently reported their statistics for all three global status reports were included in the analysis.

Results A slight decline in road traffic deaths during the past decade was observed, however, current global deaths were found to be unacceptably high standing at a rate of 16.4/100,000. This decline considerably varied between countries and was highly dependent on the income level of the country, with deaths significantly high in low- and middle-income countries (LMICs) when compared to high- income countries (HICs). In terms of progress on countries' progress in achieving key road safety indicators, the same pattern was observed where HICs having emplaced most of the recommended rules, while low rates of achievement were observed in LMICs.

Conclusion Despite the global efforts, RTIs remain disproportionately high in LMICs and progress in achieving global road safety indicators is slow.

Significance This analysis highlights the need for continued efforts towards promoting road safety especially in LMICs and identifies areas for improvement that must be addressed for the new Decade of Action for Road Safety from 2021–2030.

Pediatric injuries

0074

EPIDEMIOLOGY OF FALLS IN YOUNG CHILDREN

¹E Omaki, ¹W Shields, ¹E McDonald, ¹P Delgado, ¹R Stefanos, ²B Solomon, ¹A Gielen. ¹Johns Hopkins Center for Injury Research and Policy, Baltimore, USA; ²Johns Hopkins Department of Pediatrics, Baltimore, USA

10.1136/injuryprev-2021-SAVIR.51

Statement of purpose Falls are the leading cause of emergency department visits among children less than five years old. Parents are encouraged to supervise their children and provide a safe environment to prevent injuries, but there are few evidence-based interventions to prevent child falls. This analysis

aimed to identify factors related to unintentional nonfatal fall injuries in children under five.

Methods/Approach Data about children under five years who experienced a fall in 2015 were extracted from the National Electronic Injury Surveillance System All Injury Program. The case narratives were reviewed and coded for what the child fell from, fell onto, the fall action (i.e. tripped, dropped, rolled), and the precipitating event leading up to the fall.

Results In 2015, an estimated 121,531 infants (<12 months), 443,867 toddlers (1–2 years) and 326,382 preschoolers (3–4 years) were treated in an emergency room for an unintentional non-fatal fall. Among infants the leading source of falls was from beds (36%) primarily due to rolling from a laying position onto the floor (90%). Toddlers most often fell from a standing position (23%), from the stairs (17%) or from the bed (17%). Falls from the stairs were primarily due to the child slipping or tripping (84%), but 5% were dropped, such as by an adult carrying them. Before falling from the bed, toddlers were jumping more than any other activity (52%). Among preschoolers, most falls occurred from a standing position (27%) or play equipment (16%). Falls from standing position usually occurred while the child was running (62%) or bathing (18%). Falls from the bed were usually preceded by jumping (62%).

Conclusion Infants primarily fall from beds; toddlers and preschoolers fall most often from standing by slipping or tripping.

Significance Understanding the circumstances of fall injuries can help identify new opportunities for prevention and intervention.

Suicide prevention

0075

RISING RATES: UNDERSTANDING TRENDS IN SUICIDE DEATHS IN NORTH CAROLINA BY RACE/ETHNICITY AND AGE GROUP, 2009–2018

S Geary, S Proescholdbell, T Norwood. North Carolina Division of Public Health, Raleigh, USA

10.1136/injuryprev-2021-SAVIR.52

Statement of purpose Suicide rates have increased between 2009–2018 in NC from 13.9 to 16.0 per 100,000 (n=1,085 and 1,463). Rates remain highest among males, non-Hispanic (NH) whites, and those 45 and older. This project sought to understand differences in trends among additional populations.

Methods/Approach NC Violent Death Reporting System data were used to identify suicide deaths among residents ages 10 and older between 2009–2018. Three-year rolling rates were calculated by race and age group. Data were combined across the study period to assess differences mechanisms.

Results There were 13,101 suicides between 2009–2018 (86.5% NH white, 8.3% NH black, 2.8% Hispanic, and 2.5% NH American Indian, Asian, or other/unknown race). The 2016–2018 suicide rate was highest among NH whites ages 45–54, 55–64, and 35–44, followed by NH American Indians ages 15–24 (26.7, 25.3, 24.3, 21.9, and 20.3 per 100,000 respectively). Rate increases were highest among youth and young adults across all racial/ethnic groups. Although rates were low among NH white and black youth ages 10–14 (3.1 and 2.7 per 100,000 for 2016–2018), they experienced the greatest percent increase (148.0% and

115.6% respectively), followed by NH Asians ages 15–24 (90.7% increase), Hispanics ages 24–34 (57.2% increase), and NH blacks ages 15–24 (54.5% increase). Mechanism differed by age and race, though firearms were most common (22.2%–80.8%).

Conclusions Although most suicides occur among NH whites, rates of suicide are increasing among youth across all groups, and more rapidly among youth of color. Prevention efforts are needed to address suicide among these populations that incorporate culturally appropriate messaging and variations in mechanisms.

Significance Analysis of multiple demographics at the state level is often overlooked due to small numbers. Use of rolling rates and other analytical methods are useful and necessary to understand disparities across demographic groups.

Child maltreatment

0076

TEXT-AND CHAT-BASED HOTLINES: A NOVEL APPROACH TO PROVIDE CHILD MALTREATMENT-RELATED SUPPORT

¹L Schwab-Reese, ¹C Short, ²L Jacobs, ²M Fingerman. ¹Purdue University, West Lafayette, USA; ²National Child Abuse Hotline, Scottsdale, USA

10.1136/injuryprev-2021-SAVIR.53

Statement of purpose The purpose of this study is to describe how people seek child maltreatment-related support from a text- and chat-based crisis hotline. Ultimately, this study will provide the foundation for the Childhelp National Child Abuse Hotline practice model and training.

Methods/Approach We conducted a qualitative content analysis of 300 conversations from a text- and chat-hotline, selected through stratified random sampling. After the first round of coding was complete, we compared the characteristics of the initial sample to all conversations. Then, we purposefully sampled additional conversations from underrepresented groups, including perpetrators, young people, and maltreated children.

Results We identified six groups who seek support, as defined by their relationship to the maltreated child: family members, peers/friends, maltreated children (self), distressed children (self), other known adults, and persons unknown to the child. Many people used the hotline as a source of information for referral to CPS. Children often sought resources for coping with maltreatment or supporting a friend who was being maltreated. Overall, the conversations progressed through five stages: introduction/clarification of hotline role, exploring the issue, problem-solving, working towards a resolution, and conclusion. Across these stages, crisis counselors used empathy/active listening to build rapport.

Conclusions Text- and chat-based hotlines may be one way to reach young people and others who need child maltreatment-related support. In a recent survey of text- and chat-based users, 90% of chat-based and 50% of text-based hotline users reported that they would not call a phone hotline, suggesting that this service fills a critical gap in available services.

Significance As text- and chat-based hotline services become increasingly popular, it is critical to understand how to provide adequate and appropriate support to individuals seeking child maltreatment-related help.

Occupational safety

0077

MENTAL HEALTH AMONG FIREFIGHTERS: UNDERSTANDING THE MENTAL HEALTH HAZARDS, TREATMENT BARRIERS, AND COPING STRATEGIES

D DeMoulin, S Jacobs, Y-S Nam, A Harding, A Moskowitz, Y Shi, H Kim. University of Minnesota, Minneapolis, USA

10.1136/injuryprev-2021-SAVIR.54

Statement of purpose The purpose of this qualitative study is to explore potential risk factors, treatment barriers, and coping mechanisms that may influence mental health outcomes in Minnesota firefighters.

Methods/Approach This study employed a two-phased, sequential qualitative design consisting of in-depth interviews followed by focus group discussions with both fulltime and volunteer firefighters in Minnesota. Fifty-two interviews were conducted with open-ended questions designed to identify themes and main areas of concern about Minnesota firefighters' mental health, then presented to focus groups (n=10, with 3–15 participants per group) to obtain feedback and initiate open discussion. Audio recordings were analyzed for codes and themes developed after each interview and focus group session.

Results The major contributor to mental health stress perceived by Minnesota firefighters involves the personal impact of the call. Coping mechanisms varied among institutions and individuals, and included Employee Assistance Programs, Critical Incident Stress Management, departmental debriefs, peer support groups, family, and exercise. However, barriers to treatment were equally as diverse, and included departmental and individual stigma, lack of personal and institutional support, and lack of knowledge about mental health.

Conclusions Our study identified potential pathways to mental health conditions in firefighters. The findings should be leveraged to improve current strategies to protect the health and well-being of firefighters.

Significance Major themes identified contribute to literature gaps regarding the perceived factors influencing psychological injuries in firefighters, in addition to the perceived barriers to treatment that would mitigate or prevent these injuries. However, the burden to each of the concepts, themes, and mental health issues are currently being assessed in a statewide survey completed by Minnesota firefighters. Study findings warrant future research to consider assessing the mental health in firefighters from other states, regionally, nationally, and globally.

Child maltreatment

0078

UNDERSTANDING IMPLEMENTATION OF CHILD DEATH REVIEWS IN THE UNITED STATES UNDERSTANDING IMPLEMENTATION OF CHILD DEATH REVIEWS IN THE UNITED STATES

¹E Omaki, ¹W Shields, ¹R Rousch, ²A Collier, ¹S Frattaroli. ¹Johns Hopkins Center for Injury Research and Policy, Baltimore, USA; ²National Center for Fatality Review and Prevention, Okemos, USA

10.1136/injuryprev-2021-SAVIR.55

Statement of purpose Child death review (CDR) teams provide insight into why child deaths occur by conducting systematic