

hospital admission. Adjusted risk ratios were calculated using Poisson regression.

Results 42 620 patients were attended to between April 2010 and September 2013. Overall, 6778 patients were included in the study. 52 patients died and 628 patients were admitted to hospital. The adjusted mortality risk ratio given a response time of ≥ 8 minutes was 0.635 (95% CI: 0.346–1.166; $p = 0.143$). The adjusted hospital admission risk ratio given a response time of ≥ 8 minutes was 1.165 (95% CI: 0.985–1.379; $p = 0.075$).

Conclusions A response time of ≥ 8 minutes was not associated with a difference in all cause mortality or hospital admission for paediatric patients suffering from a traumatic injury.

160 EPIDEMIOLOGY OF INJURIES LEADING TO VOLUNTARY WITHDRAWAL FROM US HIGH SCHOOL SPORTS, 2005/06–2014/15

¹Lauren A Pierpoint, ¹Dustin W Currie, ²Sarah K Fields, ¹R Dawn Comstock. ¹Program for Injury Prevention, Education and Research (PIPER), Department of Epidemiology, Colorado School of Public Health, Aurora, CO, USA; ²Department of Communication, University of Colorado Denver, USA

10.1136/injuryprev-2016-042156.160

Background Over 7 million US high school athletes played sports in 2013/14. Participation elevates injury risk, which sometimes results in athletes' voluntarily withdrawing from sports. Understanding what prompts athletes to withdraw, despite no medical disqualification, is important to inform injury prevention and management to reduce dropout rates.

Methods We utilised the High School Reporting Information Online database. Athlete exposure (AE) and injury incidence data were collected from a large national sample of US high schools for 22 sports from 2005/06–2014/15. Injuries motivating voluntary withdrawal from sports participation, despite no medical disqualification, were analysed.

Results Overall, 794 injuries resulting in voluntary withdrawal (representing 1.2% of all injuries reported) occurred during 35,454,673 AEs (rate = 2.24/100,000 AEs). Boys' wrestling had the highest rate (6.17) followed by football (5.15), girls' track and field (1.96) and girls' soccer (1.68). Concussions accounted for 24.6% of these injuries, ligament sprains for 22.5%, and muscle strains for 12.2%. In gender-comparable sports, there were no differences in the proportion (# of withdrawals/# all injuries) of boys' withdrawals compared to girls' (Injury Proportion Ratio = 1.19; 95% CI: = 0.92–1.53). Most injuries were new (77.8%) and few required surgery (6.5%). Trends over time in overall rates of athletes choosing to withdraw were stable, but the rate of withdrawal due to concussion increased significantly (0.12 in 2005/06; 1.01 in 2014/15; $p < 0.05$).

Conclusions Rates of athletes' voluntary withdrawal, despite no medical disqualification, differed by sport. Concussions were the primary diagnosis; rates of withdrawal due to concussion increased over time. This may reflect increased concussion awareness driving parent or athlete prompted reluctance to return to play. Sport and diagnosis specific targeted injury prevention efforts are needed to reduce voluntary athlete withdrawal from sports.

Injury Monitoring

Parallel Mon 2.6

161 AN EVALUATION OF CDC'S WEB-BASED INJURY STATISTICS QUERY AND REPORTING SYSTEM (WISQARS)

Mick Ballesteros, Sally Thigpen, Mark Faul, Marci-jo Kresnow, Jennifer Middlebrooks. National Centre for Injury Prevention and Control, CDC, USA

10.1136/injuryprev-2016-042156.161

Background WISQARS is an interactive, web-based data query system (WBDQS) that is accessible from the internet. It includes modules for fatal and non-fatal injuries, a separate module on violent deaths, and injury costs and maps. Data come from a variety of trusted sources, including national health surveys and health data repositories. CDC created WISQARS in 1999 to meet the data needs of injury practitioners in the United States. Since that time, the audience has expanded to include researchers, policy makers, media, and the general public.

Objective The purpose of this evaluation was to assess the focus, quality, usefulness, impact, and outcomes of WISQARS; and to identify gaps and areas for improvement. Data were collected through peer-reviewed and grey literature searches, google searches, an environmental scan of internal and external WBDQS, and a series of stakeholder interviews.

Results WISQARS is used as a data source by NGOs, academic institutions, other U.S. federal agencies, and social media websites. Stakeholders most frequently used the fatal and non-fatal modules. The most frequently accessed data were on suicides, poisonings, homicides, motor vehicle crashes, and falls. WISQARS is most often used to respond to data requests, educate decision makers, conduct basic analyses, and teach and plan. Areas for improvement included building more capacity for data visualisations and for users to export both data and graphics, allowing for full mobile responsiveness when accessing, expanding by incrementally including additional data, and developing better support information and guidance on use.

Conclusions While WISQARS has been largely a success in expanding access to U.S. injury and violence surveillance data, there are several opportunities to enhance the functionality of the system for the end user. CDC is planning to use innovations in data science to enhance WISQARS's capacity.

162 IMPLEMENTATION OF A MORTUARY-BASED FATAL INJURY SURVEILLANCE(FIS) SYSTEM IN RURAL AND URBAN HOSPITALS IN TANZANIA (2010–2015)

¹Ahmed Makata, ¹Ruge Manyere, ²Charles Massambu, ³Amos Mwakigonja, ⁴Kidist Bartolomeous. ¹Police Forensic Bureau, Tanzania; ²MoHSW, Tanzania; ³Muhimbili University of Health and Allied Science, Tanzania; ⁴World Health Organisation, Geneva

10.1136/injuryprev-2016-042156.162

Background Tanzanian law states that all injury deaths should undergo a postmortem medical examination. In absence of effective vital registration (VR) systems, mortuaries provide an alternative source of cause of death information to support injury prevention policies and programs. In 2010, a mortuary-based fatal injury surveillance system was established at selected mortuaries and a pilot study commenced with financial and technical support from WHO.