

veteran's safety behaviours and construct an understanding of how knowledge, attitudes, and beliefs about safety result in health or injury. Veteran's health and safety outcomes will be measured using existing US Veterans Affairs' mental and emotional health analysis tools.

Results Outputs will include modified quality of life and reintegration assessment instruments specific to V2F. This project will also explore if the unique experiences and training of veterans creates a worldview that puts them at particular risk and so establishes V2Fs as a new vulnerable worker population. Results pending and will be available by September, 2016.

Conclusions The study offers a new and emergent means to implementing research into practice by deriving hypotheses from a grounded theory approach and testing them through traditional epidemiological methods. While the V2F movement continues to expand, the unique risks posed to veterans through agriculture should be explored, recognised, and prevented for veterans as an at-risk population.

366 INJURIES IN RURAL QUEENSLAND, AUSTRALIA: A 17 YEAR EPIDEMIOLOGICAL ANALYSIS

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Background People living and working in agricultural regions experience higher than average rates of injury. The purpose of this epidemiological study was to examine the incidence and patterns of injury, as well as trends over time, in an agricultural region within SouthWest Queensland, Australia, in order to inform targeted injury prevention strategies. The primary land use is agricultural (sheep and cattle farming).

Methods Data on all patients resident in the study region within SouthWest Queensland who were hospitalised for treatment of an injury (defined as ICD9 codes 800–999, or S00-T98) between 1st January 1995 and 31st December 2011 (17 years), were extracted. ICD codes (including external cause code), age, gender, and length of stay were obtained. Estimated Resident Population data for each year of the study were obtained from the Australian Bureau of Statistics. Cause-specific, age-standardised rates were calculated, as well as age-, gender- and cause-specific rates. Descriptive analyses were completed using SPSS; trends over time were analysed using STATA.

Results There were 60466 hospital admissions during the 17 year data collection period; 7740 of these were injuries (12.8% of all hospital admissions; 557 per 10000 per annum). Injury hospitalisation rates increased over the study period (432.7578 to 539.5637 per 10000). Hospitalisation due to injury among males decreased over time (645 to 546 per 10 000 pa), but increased among females (238 to 445 per 10000 pa). Decreases in injury hospitalisation rates were seen in children (0–4 yr olds, and 5–9 yr olds), and adults (45–74 yrs), but rates increased in adolescents (10–14 yrs), young adults (20–44 yrs), and older adults (75 + yrs). Falls and poisoning were the leading causes of injury hospitalisation in young children (28% and 21% respectively). Falls and injuries due to transport incidents were the leading causes of injury for 5–9 yr olds (32% and 24%). Transport incidents were the leading cause of injury for all other age groups (10–14 yrs: 35%, 15–19 yrs: 42%, 20–24 yrs: 32%, 25–64 yrs:

28%,) except older adults, where falls were the leading cause of injury hospitalisation (65–74 yrs: 40%; 75 + yrs: 62%).

Conclusion Injury Hospitalisation rates in this agricultural region of QLD are almost double the Australian average. Trends over time in relation to specific injury mechanisms by age group and gender will be presented at the conference. While there is some evidence of injury reduction in this agricultural region during the 17 yr study period, injury prevention strategies specifically targeted toward recreational and work activities in agricultural regions are required to make further reductions. Adolescents, young adults and older adults warrant careful attention.

Child and Adolescent Safety

Parallel Wed 1.2

367 TRANSPORT SAFETY – CHILD MOTOR VEHICLE PASSENGER SAFETY, USING RESEARCH TO BUILD A CAMPAIGN

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Background New Zealand's rate of child motor vehicle occupant injury is high by international comparisons. A plethora of research and science has repeatedly stated the safety benefits of keeping children in booster seats until they reach 148cm in height. In New Zealand (prior to 2013) there was no legislation that mandated the use of child restraints beyond the fifth birthday; consequently children were prematurely graduated to adult safety belts and exposed to unnecessary injury risk.

Description of Problem In July 2009, Safekids launched a multi-pronged, two year campaign to promote regulation change, education and public awareness of the safety benefits of booster seats up to 148cm tall. Key activities included:

- The creation of a solid base of evidence

- The instigation of a national advocacy project to influence government strategy

- The delivery of a series of capacity building workshops

- The development of creatives to support a nation-wide public awareness campaign.

Results Key findings included:

- Utility and value of the Safekids Campaign: 95 percent of e-survey respondents utilised the Campaign to support local action, 83 percent found the key message effective to very effective and 96 percent of respondents found the resources effective to very effective.

- Reaching communities: of 100 e-survey respondents, 64 percent primarily worked with indigenous peoples. 360,000 child vehicle passenger safety resources were distributed to areas identified as 'communities at risk'.

- Shifting attitudes: 77 percent of e-survey respondents felt that the Campaign had supported the adoption of safer practices. One third of parents interviewed reported that they would prolong their child's use of a booster seat.

- Organisational engagement included health services, educators, government and local government, Police and social support services.

- Media responsiveness: 34 percent of all recorded media referred to Safekids' NZ child passenger safety information and messaging.

Conclusions The New Zealand Government has now increased the age that children must use a child restraint to age 7 years. Acceptance of the benefits of booster seats has grown; The Safe-kids Campaign was also awarded the Traffic Institute of New Zealand (TRAFINZ) leadership award in 2011, which recognises innovation and excellence in contributing to the safety of people on our roads.

368

TRENDS OF ROAD TRAFFIC CRASHES IN THE UAE: STRATEGIES FOR CONTROL AND PREVENTION

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Background High rates of serious road traffic crashes (RTCs) have been reported in several Arabian Gulf countries, including the United Arab Emirates (UAE), in recent years. In 2013, in a population of approximately 9.2 million, 7734 people were seriously injured and 651 (7.8%) died from road traffic injuries (RTI). Hence, the problem constitutes a major concern for public health in the UAE. The study aims to determine the trends of RTI in the UAE, to identify the causal factors of the problem and to review the most cost effective measures to mitigate their impact. Other objectives include estimating the future forecasts of RTI and assessing the economic burden of the problem on the population.

Methods Data from official UAE sources were used for the analysis. To identify RTI trends of morbidity and mortality during 2000–2013, time's series analysis was used. To forecast RTI fatalities in the UAE, regression analysis was used. Analysis of variance (ANOVA) was used to estimate overall and individual significance of regression parameters. To quantify the economic burden of RTI in the UAE, the Human Capital (HC) approach was used to estimate the direct and indirect economic losses from RTI during 2013. For pain, grief and suffering (PGS) willingness to pay value estimates (WTP) were derived worldwide and adjusted for the UAE.

Results The rates of RTC in the UAE were found declining on constant basis. Likewise, trends of morbidity and mortality and future forecasts from RTI were also declining. Paradoxically, however, the severity of RTI was constantly increasing. The total cost of RTIs in the UAE varied between AED 22–23 billion during 2013, representing 1–2% of its GDP for that year (US\$ 401 billion).

Conclusions Speeding, vehicles' mix, the competency of young drivers, the standard of medical care for victims at the roadside and the efficiency of traffic regulations and measures, are suspected for the paradoxical patterns, but the precise reasons remain to be determined. The study provides a useful base for establishing priorities for future roadway traffic safety interventions in the UAE.

369

CIVIL SOCIETY SUPPORTING GOVERNMENT IMPLEMENTATION OF CHILD RESTRAINT STANDARDS IN RUSSIA

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Background In 2014, the Eurasian Economic Community (EvRaZes) Customs Union, approved technical regulations requiring the sale, manufacture and importation of child restraints which conform with UNECE technical regulation 44.04. However, the domestication of these technical regulations has been slowed.

Description of the problem Children are dying on Russian roads. In 2014, 9302 car crashes involved children, and of those, 551 resulted in the death of children. Russia lacks child restraint policies which would mandate the sale, manufacture and use of child restraints which conform with international safety standards. In 2015, the Russian Red Cross conducted a poll showing that more than 96% of parents support using safe child restraints. A subsequent market survey showed that about 80% of child restraints sold in the Russian Federation, do not comply with the UNECE R44/04 requirements.

Results The adoption and implementation of UNECE R44/04 in Russia requires significant political will. Administrative and technical codes must be revised by a number of key ministries and government agencies. Following the poll and market survey findings, the Russian Red Cross worked with the relevant ministries and key government entities, including Presidential Commission on Human Rights, and media to call for the strengthening of child restraint policies in Russia and domestication of EvRaZes technical regulations. In August 2015, First Deputy Prime Minister of Russia, Igor Shuvalov, ordered all relevant government agencies and ministries to implement the standards.

Conclusions The Russian Red Cross effectively used their research findings to partner with the government and speed up the implementation of safe child restraints.

370

SCHOOL TRANSPORT IN URUGUAY

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Background (issue/problem) The Act for the creation of the National Road Safety Agency (UNASEV) and another act related to traffic provisions were passed in 2007. Although this represented some progress in Road Safety, children's needs were not taken into account. Fundación Gonzalo Rodríguez (FGR), organisation focused on Child Road Safety, was concerned about this fact. Aware that safety conditions were below acceptable levels, the FGR promoted research on private and School Transport equipment.

Results showed that seats in use were unstable, did not have headrests or seat belts, and retrofitting was impossible.

These findings generated alliances with different organisations in order to develop a feasible technical proposal to promote a change that considered the safety needs of children as vulnerable road users.

Description of the problem

Together with a renowned car manufacturer and a child seat manufacturer, a feasible proposal was presented including tax benefits. Said proposal was presented with the support of the School Transport Union, UNASEV, the Deputies Chamber of Transport, the Ministry of Economy and Finance and the President of the Republic, Dr. Tabaré Vázquez.

Results (effects/changes) The whole School Transport fleet in Montevideo (Uruguay) was replaced.