NTRAP INJURY PREVENTION PANEL
LITERATURE SEARCH

01. Trauma Education and Prevention. Sidwell R, et al. Surg Clin North Am. 2017 Oct;97(5):1185-1197. doi: 10.1016/j.suc.2017.06.010.
PDF: Free pdf not available
URL: https://www.ncbi.nlm.nih.gov/pubmed/28958365
Trauma education and injury prevention are essential components of a robust trauma program. Educational programs address specific knowledge gaps and provide focused and structured learning. Advanced Trauma Life Support is the most well-known. Each offering seems to be valid, although it has been difficult to prove improved patient care outcomes owing specifically to any of them.
Injury prevention offers the best opportunity to limit death and disability owing to trauma. Injury prevention initiatives have paid tremendous dividends in reducing the mortality rates for motor vehicle crashes. Modern injury prevention efforts focus on reducing distracted driver rates and increasing helmet use.

02. Preventing injuries must be a priority to prevent disease in the twenty-first century. Dorney K, et al. and the Injury Free Coalition for Kids®. Pediatr Res. 2020 Jan;87(2):282-292. doi: 10.1038/s41390-019-0549-7.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/31466080
Injuries continue to be the leading cause of morbidity and mortality for children, adolescents, and young adults aged 1-24 years in industrialized countries in the twenty-first century. In this age group, injuries cause more fatalities than all other causes combined in the United States (U.S.). Importantly, many of these injuries are preventable. Annually in the U.S. there are >9 million emergency department visits for injuries and >16,000 deaths in children and adolescents aged 0-19 years. Among injury mechanisms, motor vehicle crashes, firearm suicide, and firearm homicide remain the leading mechanisms of injury-related death. More recently, poisoning has become a rapidly rising cause of both intentional and unintentional death in teenagers and young adults aged 15-24 years. For young children aged 1-5 years, water submersion injuries are the leading cause of death. Sports and home-related injuries are important mechanisms of nonfatal injuries. Preventing injuries, which potentially cause lifelong morbidity, as well as preventing injury deaths, must be a priority. A multi-pronged approach using legislation, advancing safety technology, improving the built environment, anticipatory guidance by clinical providers, and education of caregivers will be necessary to decrease and prevent injuries in the twenty-first century.

03. What strategies can be used to effectively reduce the risk of concussion in sport? A systematic review. Emery CA, et al. Br J Sports Med. 2017 Jun;51(12):978-984. doi: 10.1136/bjsports-2016-097452.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/28254746
The study examined the effectiveness of concussion prevention strategies in reducing concussion risk in sport. Highlights include a protective effect of helmets in skiing/snowboarding and the effectiveness of policy eliminating body checking in youth ice hockey. Future research should examine mouthguards in contact sport, football helmet padding, helmet fit in collision sport, policy limiting contact practice in youth football, rule enforcement to reduce head contact in ice hockey and soccer, ice surface size and board/glass flexibility in ice hockey and training strategies targeting intrinsic risk factors (eg, visual training).

04. Current state of concussion prevention strategies: a systematic review and meta-analysis of prospective, controlled studies. Schneider DK, et al. Br J Sports Med. 2017 Oct;51(20):1473-1482. doi: 10.1136/bjsports-2015-095645.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/27251896
The aim of the review was to systematically identify, evaluate and synthesise trials that examine concussion prevention via equipment, educational programmes and training programmes. 14 studies evaluated interventions of novel protective equipment. One prospective investigation evaluated an educational programme. The relative risk of concussion for participants enrolled in the interventional arms of trials was not significantly different from that in standard practice arms (RR=0.78, 95% CI 0.55 to 1.11, χ^2=1.8, p=0.17; I^2=85.3%, 95% CI 71.5% to 90.8%). The relative risk of concussion for participants wearing protective equipment (ie, headgear, full face shields) relative to their counterparts wearing standard or no equipment, calculated from seven available reports, showed no effect of intervention (RR=0.82, 95% CI 0.56 to 1.20, χ^2=1.06, p=0.30; I^2=86.7%, 95% CI 73.3% to 91.8%). The relative risk of superficial head injury for participants wearing protective equipment relative to their counterparts, calculated from three reports, showed a significant risk reduction (RR=0.41, 95% CI 0.31 to 0.56, χ^2=34.13, p<0.0001; I^2=53.1%, 95% CI 0% to 85.2%).
CONCLUSIONS:
Prospective controlled studies indicate that certain protective equipment may prevent superficial head injury, but these items are suboptimal for concussion prevention in sport.

05. Helmet efficacy against concussion and traumatic brain injury: a review. Sone JY, et al.
J Neurosurg. 2017 Mar;126(3):768-781. doi: 10.3171/2016.2. JNS151972.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/27231972
Helmets are one of the earliest and most enduring methods of personal protection in human civilization. Although primarily developed for combat purposes in ancient times, modern helmets have become highly diversified to sports, recreation, and transportation. History and the scientific literature exhibit that helmets continue to be the primary and most effective prevention method against traumatic brain injury (TBI), which presents high mortality and morbidity rates in the US. The neurosurgical and neurotrauma literature on helmets and TBI indicate that helmets provide effectual protection against moderate to severe head trauma resulting in severe disability or death. However, there is a dearth of scientific data on helmet efficacy against concussion in both civilian and military aspects. The objective of this literature review was to explore the historical evolution of helmets, consider the effectiveness of helmets in protecting against severe intracranial injuries, and examine recent evidence on helmet efficacy against concussion. It was also the goal of this report to emphasize the need for more research on helmet efficacy with improved experimental design and quantitative standardization of assessments for concussion and TBI, and to promote expanded involvement of neurosurgery in studying the quantitative diagnostics of concussion and TBI. Recent evidence summarized by this literature review suggests that helmeted patients do not have better relative clinical outcome and protection against concussion than unhelmeted patients.

06. Bicycle injuries and helmet use: a systematic review and meta-analysis. Olivier J, Creighton P. Int J Epidemiol. 2017 Feb 1;46(1):278-292. doi: 10.1093/ije/dyw153.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/27450862

The research literature was systematically reviewed and results were summarized from studies assessing bicycle helmet effectiveness to mitigate head, serious head, face, neck and fatal head injury in a crash or fall. CONCLUSIONS: Bicycle helmet use was associated with reduced odds of head injury, serious head injury, facial injury and fatal head injury. The reduction was greater for serious or fatal head injury. Neck injury was rare and not associated with helmet use. These results support the use of strategies to increase the uptake of bicycle helmets as part of a comprehensive cycling safety plan.

07. Interventions to Prevent Falls in Older Adults: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force. Guirguis-Blake JM, et al. JAMA. 2018 Apr 24;319(16):1705-1716. doi: 10.1001/jama.2017.21962.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/29710140
A systematic review of the literature on the effectiveness and harms of fall prevention interventions in community-dwelling older adults to inform the US Preventive Services Task Force.
MAIN OUTCOMES AND MEASURES: Number of falls (number of unexpected events in which a person comes to rest on the ground, floor, or lower level), people experiencing 1 or more falls, injurious falls, people experiencing injurious falls, fractures, people experiencing fractures, mortality, hospitalizations, institutionalizations, changes in disability, and treatment harms. CONCLUSIONS AND RELEVANCE: Multifactorial and exercise interventions were associated with fall-related benefit, but evidence was most consistent across multiple fall-related outcomes for exercise. Vitamin D supplementation interventions had mixed results, with a high dose being associated with higher rates of fall-related outcomes.

08. Multifactorial and multiple component interventions for preventing falls in older people living in the community. Hopewell S, et al. Cochrane Database Syst Rev. 2018 Jul 23;7:CD012221. doi: 10.1002/14651858.CD012221.pub2.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/30035305
Falls and fall-related injuries are common, particularly in those aged over 65, with around one-third of older people living in the community falling at least once a year. Falls prevention interventions may comprise single component interventions (e.g. exercise), or involve combinations of two or more different types of intervention (e.g. exercise and medication review). Their delivery can broadly be divided into two main groups: 1) multifactorial interventions where component interventions differ based on individual assessment of risk; or 2) multiple component interventions where the same component interventions are provided to all people. CONCLUSIONS: Multifactorial interventions may reduce the rate of falls compared with usual care or attention control. However, there may be little or no effect on other fall-related outcomes. Multiple component interventions, usually including exercise, may reduce the rate of falls and risk of falling compared with usual care or attention control.

09. Identification of Fall Prevention Strategies for the Military: A Review of the Literature.
Canham-Chervak M, et al. Mil Med. 2015 Dec;180(12):1225-32. doi: 10.7205/MILMED-D-14-00673.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/26633666
In the U.S. Army, falls have historically been among the top five causes of hospitalization and a leading cause of nonbattle injuries in military operations overseas.

OBJECTIVE:
For safety and public health professionals, commanders, and supervisors looking to address this problem, a literature review was conducted to identify and summarize existing fall prevention strategies applicable to a working-age population.
METHODS:
A total of nine literature databases were searched for articles published from 1970 to 2011. Article titles and abstracts were screened to select original research with an injury or noninjury outcome. Intervention studies were reviewed in detail and quality scored by 3 public health scientists.
RESULTS:
The search identified over 2,200 articles. Of these, 525 met inclusion criteria and were reviewed in more detail, resulting in identification of 9 interventions. Nearly all of the identified interventions had been implemented in occupational environments. Study quality was rated and scores ranged from 4.5 to 8.0 (maximum 10 points).
CONCLUSIONS:
Few intervention studies were identified. Multifaceted programs showed the greatest promise for translation to military environments. Additional evaluation research is greatly needed to further efforts to address this leading military public health problem.

10. SBIRT (Screening, Brief Intervention, and Referral to Treatment) Among Trauma Patients: A Review of the Inpatient Process and Patient Experience. Gormican EK, Hussein ZS. J Trauma Nurs. 2017 Jan/Feb;24(1):42-45. doi: 10.1097/JTN.0000000000000261.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/28033142
Screening, brief intervention, and referral to treatment (SBIRT) is an important and effective strategy among injury prevention measures aimed at reducing risky alcohol use (). The trauma patient population is at significant risk for alcohol-related trauma recidivism () and is therefore a priority group in which to implement SBIRT. Vancouver General Hospital (VGH) implemented SBIRT on its 2 inpatient trauma units in the fall of 2014. The alcohol use disorders screening test (AUDIT-C) was chosen as the screening tool for nurses to complete with new patients. A brief intervention was conducted by the trauma social workers in the cases where a patient scored positive on the AUDIT-C. To evaluate the implementation and effectiveness of SBIRT on the 2 inpatient trauma units at VGH and to provide recommendations for improvement, a telephone survey of past trauma patients and a review of the screening process were undertaken in May 2016. Patient follow-up was conducted via a telephone survey. Of the 79 patients who met the follow-up criteria, a total of 19 were successfully contacted. Results from the survey showed that the majority of patients did not recall being screened with the AUDIT-C and were either unsure or did not recall receiving a brief intervention by the social worker. Despite these findings, a rescreening with the AUDIT-C tool revealed that 68% of patients who participated in the survey had a lower score than when they were inpatients. Recommendations for improvement include optimizing the timing of SBIRT with trauma inpatients and implementing a follow-up system. The literature suggests that following up with patients to provide an SBIRT "booster" increases the effectiveness of brief interventions (C.).

11. Effectiveness of interventions to prevent motorcycle injuries: systematic review of the literature. Araujo M, et al. Int J Inj Contr Saf Promot. 2017 Sep;24(3):406-422. doi: 10.1080/17457300.2016.1224901.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/27690735

Globally, 49% of deaths from traffic crashes occur among vulnerable road users, including pedestrians, bicyclists, and motorcyclists. Approximately, a quarter of those killed are motorcyclists. The authors carried out a systematic review of the literature to evaluate the effectiveness of interventions to prevent motorcycle crashes and the associated morbidity and mortality. The studies included in this review provide evidence for the effectiveness of helmet use, protective clothing, training, and penalties for alcohol consumption and speeding in preventing injury and death to motorcyclists. The use of helmets is effective, especially if it is universally required by law for drivers and passengers. Training to obtain a license also has positive effects but not when it is totally voluntary. There is limited but consistent evidence that strengthening laws for penalties related to alcohol consumption or speeding has an impact on risk. Traffic calming interventions could help reduce crashes in urban areas. In jurisdictions where there is limited regulation or adherence to effective measures, such as the use of helmets, efforts should be directed primarily at expanding such practices. In other areas, efforts can focus on approaches based on alternative effective measures or on more innovative interventions adapted to local conditions.

12. Universal Motorcycle Helmet Laws to Reduce Injuries: A Community Guide Systematic Review.
Peng Y, et al., Community Preventive Services Task Force. Am J Prev Med. 2017 Jun;52(6):820-832. doi: 10.1016/j.amepre.2016.11.030.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/28526357
Motorcycle crashes account for a disproportionate number of motor vehicle deaths and injuries in the U.S. Motorcycle helmet use can lead to an estimated 42% reduction in risk for fatal injuries and a 69% reduction in risk for head injuries. However, helmet use in the U.S. has been declining and was at 60% in 2013. The current review examines the effectiveness of motorcycle helmet laws in increasing helmet use and reducing motorcycle-related deaths and injuries.
EVIDENCE ACQUISITION:
Databases relevant to health or transportation were searched from database inception to August 2012. Reference lists of reviews, reports, and gray literature were also searched. Analysis of the data was completed in 2014.
EVIDENCE SYNTHESIS:
A total of 60 U.S. studies qualified for inclusion in the review. Implementing universal helmet laws increased helmet use (median, 47 percentage points); reduced total deaths (median, -32%) and deaths per registered motorcycle (median, -29%); and reduced total injuries (median, -32%) and injuries per registered motorcycle (median, -24%). Repealing universal helmet laws decreased helmet use (median, -39 percentage points); increased total deaths (median, 42%) and deaths per registered motorcycle (median, 24%); and increased total injuries (median, 41%) and injuries per registered motorcycle (median, 8%).
CONCLUSIONS:
Universal helmet laws are effective in increasing motorcycle helmet use and reducing deaths and injuries. These laws are effective for motorcyclists of all ages, including younger operators and passengers who would have already been covered by partial helmet laws. Repealing universal helmet laws decreased helmet use and increased deaths and injuries.

13. Road accident rates: strategies and programmes for improving road traffic safety.
Goniewicz K, et al. Eur J Trauma Emerg Surg. 2016 Aug;42(4):433-438. doi: 10.1007/s00068-015-0544-6.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/26162937

Nowadays, the problem of road accident rates is one of the most important health and social policy issues concerning the countries in all continents. Each year, nearly 1.3 million people worldwide lose their life on roads, and 20-50 million sustain severe injuries, the majority of which require long-term treatment.
DISCUSSION:
The objective of the study was to identify the most frequent, constantly occurring causes of road accidents, as well as outline actions constituting a basis for the strategies and programmes aiming at improving traffic safety on local and global levels. Comparative analysis of literature concerning road safety was performed, confirming that although road accidents had a varied and frequently complex background, their causes have changed only to a small degree over the years. The causes include: lack of control and enforcement concerning implementation of traffic regulation (primarily driving at excessive speed, driving under the influence of alcohol, and not respecting the rights of other road users (mainly pedestrians and cyclists), lack of appropriate infrastructure and unroadworthy vehicles.
CONCLUSIONS:
The number of fatal accidents and severe injuries, resulting from road accidents, may be reduced through applying an integrated approach to safety on roads. The strategies and programmes for improving road traffic should include the following measures: reducing the risk of exposure to an accident, prevention of accidents, reduction in bodily injuries sustained in accidents, and reduction of the effects of injuries by improvement of post-accident medical care.

14. What Do We Know About the Association Between Firearm Legislation and Firearm-Related Injuries? Santaella-Tenorio J, et al. Epidemiol Rev. 2016;38(1):140-57. doi: 10.1093/epirev/mxv012.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/26905895
Firearms account for a substantial proportion of external causes of death, injury, and disability across the world. Legislation to regulate firearms has often been passed with the intent of reducing problems related to their use. However, lack of clarity around which interventions are effective remains a major challenge for policy development. Aiming to meet this challenge, we systematically reviewed studies exploring the associations between firearm-related laws and firearm homicides, suicides, and unintentional injuries/deaths. We restricted our search to studies published from 1950 to 2014. Evidence from 130 studies in 10 countries suggests that in certain nations the simultaneous implementation of laws targetingmultiple firearms restrictions is associated with reductions in firearm deaths. Laws restricting the purchase of (e.g., background checks) and access to (e.g., safer storage) firearms are also associated with lower rates of intimate partner homicides and firearm unintentional deaths in children, respectively. Limitations of studies include challenges inherent to their ecological design, their execution, and the lack of robustness of findings to model specifications. High quality research on the association between the implementation or repeal of firearm legislation (rather than the evaluation of existing laws) and firearm injuries would lead to a better understanding of what interventions are likely to work given local contexts. This information is key to move this field forward and for the development of effective policies that may counteract the burden that firearm injuries pose on populations.

15. Prevention of firearm-related injuries with restrictive licensing and concealed carry laws: An Eastern Association for the Surgery of Trauma systematic review. Crandall M, et al. J Trauma Acute Care Surg. 2016 Nov;81(5):952-960.
PDF: Read PDF Here

URL: https://www.ncbi.nlm.nih.gov/pubmed/27602894
In the past decade, more than 300,000 people in the United States have died from firearm injuries. Our goal was to assess the effectiveness of two particular prevention strategies, restrictive licensing of firearms and concealed carry laws, on firearm-related injuries in the US Restrictive Licensing was defined to include denials of ownership for various offenses, such as performing background checks for domestic violence and felony convictions. Concealed carry laws allow licensed individuals to carry concealed weapons.
RESULTS: A total of 4673 studies were initially identified, then seven more added after two subsequent, additional literature reviews. Of these, 3,623 remained after removing duplicates; 225 case reports, case series, and reviews were excluded, and 3,379 studies were removed because they did not focus on prevention or did not address our comparators of interest. This left a total of 14 studies which merited inclusion for PICO 1 and 13 studies which merited inclusion for PICO 2.
CONCLUSION: PICO 1: We recommend the use of restrictive licensing to reduce firearm-related injuries. PICO 2: We recommend against the use of concealed carry laws to reduce firearm-related injuries. This committee found an association between more restrictive licensing and lower firearm injury rates. All 14 studies were population-based, longitudinal, used modeling to control for covariates, and 11 of the 14 were multi-state. Twelve of the studies reported reductions in firearm injuries, from 7% to 40%. We found no consistent effect of concealed carry laws. Of note, the varied quality of the available data demonstrates a significant information gap, and this committee recommends that we as a society foster a nurturing and encouraging environment that can strengthen future evidence based guidelines.

16. State of the science: a scoping review of primary prevention of firearm injuries among children and adolescents. Ngo QM, et al., FACTS Consortium. J Behav Med. 2019 Aug;42(4):811-829. doi: 10.1007/s10865-019-00043-2.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/31367940
Intentional and unintentional firearm injury is the second leading cause of death for youth, underscoring the need for effective primary prevention approaches that focus on increasing safe storage by caregivers and decreasing handling/carriage among youth. This article describes the state of the science for prevention of firearm injuries among children and adolescents. We applied PRISMA guidelines to present results from a scoping review using PubMed, Scopus, CINAHL, and CJ Abstracts for original research articles published between January 1, 1985 and March 1, 2018 in the U.S. focusing on primary screening or interventions for primary prevention of pediatric firearm injuries. In total, 46 articles met inclusion criteria: safe storage (23), screening (2), firearm handling/carriage/use (21). Across school, healthcare, and community settings, few evidenced-based programs exist, and data on firearm safety technologies are lacking. Programs have generally not employed rigorous designs, and/or assessed behavioral (e.g., carriage) or injury-related firearm outcomes. Evidenced-based prevention programs are needed to mitigate firearm morbidity and mortality among youth.

17. Drugs, guns and cars: how far we have come to improve safety in the United States; yet we still have far to go. Dodington J, et al. Pediatr Res. 2017 Jan;81(1-2):227-232. doi: 10.1038/pr.2016.193.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/27673424
Significant breakthroughs in the field of injury prevention and childhood safety have occurred during the past half-century. For example, the Poison Prevention Packaging Act of 1970 and the institution of child passenger safety laws are responsible for a significant reduction in injuries among children and adolescents. This review will focus on the following three topics because of their significant contribution to pediatric injury morbidity, especially among adolescents, and their promise for further effective

prevention research. Opioid overdoses by adolescents and young adults are increasing; however, the use of naloxone by bystanders represents a life-saving development in opioid overdose prevention that deserves further investigation. Youth firearm injury remains a major cause of death and disability in adolescents. Despite a lack of robust injury prevention research on the topic, the development of novel approaches to access and examine firearm injury data is leading to exploration of public health approaches to reduce these injuries. Finally, despite legislative and educational efforts surrounding child passenger safety and graduated driver license laws, motor vehicle crashes are still a leading cause of injury for both children and adolescents; however, research on these laws holds the opportunity for significant reduction in injuries. Focused efforts to reduce unintentional injuries from opiate overdoses, firearms and motor vehicle crashes may produce a breakthrough in the field of injury prevention similar to that of the Poison Prevention Packaging Act.

18. **Firearm Laws and Firearm Homicides: A Systematic Review.** Lee LK, et al. JAMA Intern Med. 2017 Jan 1;177(1):106-119. doi: 10.1001/jamainternmed.2016.7051.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/27842178
Firearm homicide is a leading cause of injury death in the United States, and there is considerable debate over the effectiveness of firearm policies. An analysis of the effectiveness of firearm laws on firearm homicide is important to understand optimal policies to decrease firearm homicide in the United States.
OBJECTIVE:
To evaluate the association between firearm laws and preventing firearm homicides in the United States.
EVIDENCE REVIEW:
We evaluated peer-reviewed articles from 1970 to 2016 focusing on the association between US firearm laws and firearm homicide. We searched PubMed, CINAHL, Lexis/Nexis, Sociological Abstracts, Academic Search Premier, the Index to Legal Periodicals and Books, and the references from the assembled articles. We divided laws into 5 categories: those that (1) curb gun trafficking, (2) strengthen background checks, (3) improve child safety, (4) ban military-style assault weapons, and (5) restrict firearms in public places and leniency in firearm carrying. The articles were assessed using the standardized Guide to Community Preventive Services data collection instrument and 5 additional quality metrics: (1) appropriate data source(s) and outcome measure(s) were used for the study, (2) the time frame studied was adequate, (3) appropriate statistical tests were used, (4) the analytic results were robust, and (5) the disaggregated results of control variables were consistent with the literature.
FINDINGS:
In the aggregate, stronger gun policies were associated with decreased rates of firearm homicide, even after adjusting for demographic and sociologic factors. Laws that strengthen background checks and permit-to-purchase seemed to decrease firearm homicide rates. Specific laws directed at firearm trafficking, improving child safety, or the banning of military-style assault weapons were not associated with changes in firearm homicide rates. The evidence for laws restricting guns in public places and leniency in gun carrying was mixed.
CONCLUSIONS AND RELEVANCE:
The strength of firearm legislation in general, and laws related to strengthening background checks and permit-to-purchase in particular, is associated with decreased firearm homicide rates. High-quality research is important to further evaluate the effectiveness of these laws. Legislation is just 1 part of a multipronged approach that will be necessary to decrease firearm homicides in the United States.

19. Critical Violent Injury in the United States: A Review and Call to Action. Riley CL, et al., Society of Critical Care Medicine. Crit Care Med. 2015 Nov;43(11):2460-7. doi: 10.1097/CCM.0000000000001255.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/26327199
This review provides an overview of what is known about violent injury requiring critical care, including child physical abuse, homicide, youth violence, intimate partner violence, self-directed injury, firearm-related injury, and elder physical abuse.
DATA SOURCES:
We searched PubMed, Scopus, Ovid Evidence-Based Medicine Reviews, and the National Guideline Clearinghouse. We also included surveillance data from the Centers for
Disease Control and Prevention and National Trauma Data Bank.
STUDY SELECTION:
Search criteria limited to articles in English and reports of humans, utilizing the following search terms: intentional violence, intentional harm, violence, crime victims, domestic violence, child abuse, elder abuse, geriatric abuse, nonaccidental injury, nonaccidental trauma, and intentional injury in combination with trauma centers, critical care, or emergency medicine. Additionally, we included relevant articles discovered during review of the articles identified through this search.
DATA EXTRACTION:
Two hundred one abstracts were reviewed for relevance, and 168 abstracts were selected and divided into eight categories (child physical abuse, homicide, youth violence, intimate partner violence, self-directed injury, firearm-related injury, and elder physical abuse) for complete review by pairs of authors. In our final review, we included 155 articles (139 articles selected from our search strategy, 16 additional highly relevant articles, many published after we conducted our formal search).
DATA SYNTHESIS:
A minority of articles (7%) provided information specific to violent injury requiring critical care. Given what is known about violent injury in general, the burden of critical violent injury is likely substantial, yet little is known about violent injury requiring critical care.
CONCLUSIONS:
Significant gaps in knowledge exist and must be addressed by meaningful, sustained tracking and study of the epidemiology, clinical care, outcomes, and costs of critical violent injury. Research must aim for not only information but also action, including effective interventions to prevent and mitigate the consequences of critical violent injury.

20. Recommendations from the American College of Surgeons Committee on Trauma's Firearm Strategy Team (FAST) Workgroup: Chicago Consensus I. Talley CL, et al. J Am Coll Surg. 2019 Feb;228(2):198-206. doi:10.1016/j.jamcollsurg.2018.11.002.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/30447396
No abstract

21. School-based education programmes for the prevention of unintentional injuries in children and young people. Orton E, et al. Cochrane Database Syst Rev. 2016 Dec 27;12:CD010246. doi: 10.1002/14651858.CD010246.pub2.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/28026877
This study assessed the effects of school-based educational programmes for the prevention of injuries in children and evaluate their impact on improving children's safety skills, behaviour and practices, and knowledge, and assess their cost-effectiveness.

MAIN RESULTS:
The review included 27 studies reported in 30 articles. The studies had 73,557 participants with 12 studies from the US; four from China; two from each of Australia, Canada, the Netherlands and the UK; and one from each of Israel, Greece and Brazil. Thirteen studies were RCTs, six were non-RCTs and eight were CBAs. Of the included studies, 18 provided some element of the intervention in children aged four to 11 years, 17 studies included children aged 11 to 14 years and nine studies included children aged 14 to 18 years. The overall quality of the results was poor, with the all studies assessed as being at high or unclear risks of bias across multiple domains, and varied interventions and data collection methods employed. Interventions comprised information-giving, peer education or were multi-component. Seven studies reported the primary outcome of injury occurrence and only three of these were similar enough to combine in a meta-analysis, with a pooled incidence rate ratio of 0.73 (95% confidence interval (CI) 0.49 to 1.08; 2073 children) and substantial statistical heterogeneity (I^2 = 63%). However, this body of evidence was low certainty, due to concerns over this heterogeneity (inconsistency) and imprecision. This heterogeneity may be explained by the non-RCT study design of one of the studies, as a sensitivity analysis with this study removed found stronger evidence of an effect and no heterogeneity (I^2 = 0%).Two studies report an improvement in safety skills in the intervention group. Likewise, the four studies measuring observed safety behaviour reported an improvement in the intervention group relative to the control. Thirteen out of 19 studies describing self-reported behaviour and safety practices showed improvements, and of the 21 studies assessing changes in safety knowledge, 19 reported an improvement in at least one question domain in the intervention compared to the control group. However, we were unable to pool data for our secondary outcomes, so our conclusions were limited, as they were drawn from highly diverse single studies and the body of evidence was low (safety skills) or very low (behaviour, safety knowledge) certainty. Only one study reported intervention costs but did not undertake a full economic evaluation (very low certainty evidence).
AUTHORS' CONCLUSIONS:
There is insufficient evidence to determine whether school-based educational programmes can prevent unintentional injuries. More high-quality studies are needed to evaluate the impact of educational programmes on injury occurrence. There is some weak evidence that such programmes improve safety skills, behaviour/practices and knowledge, although the evidence was of low or very low quality certainty. We found insufficient economic studies to assess cost-effectiveness.

22. Interventions to Prevent Unintentional Injuries Among Adolescents: A Systematic Review and Meta-Analysis. Salam RA, et al. J Adolesc Health. 2016 Oct;59(4S):S76-S87. doi: 10.1016/j.jadohealth.2016.07.024.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/27664598
Globally, every day, ~2,300 children and adolescents succumb to unintentional injuries sustained from motor vehicle collisions, drowning, poisoning, falls, burns, and violence. The rate of deaths due to motor vehicle injuries in adolescents is 10.2 per 100,000 adolescents. We systematically reviewed published evidence to identify interventions to prevent unintentional injuries among adolescents aged 11-19 years. We defined unintentional injuries as a subset of injuries for which there was no evidence of predetermined intent, and the definition included motor vehicle injuries, suffocation, drowning, poisoning, burns, falls, and sports and recreation. Thirty-five studies met study eligibility criteria. The included studies focused on interventions to prevent motor vehicle injuries and sports-related injuries. Results suggest that possession of a graduated driver license (GDL) significantly reduced road accidents by 19% (relative risk [RR]: .81; 95% confidence interval [CI]: .75-.88; n = 5). There was no impact of GDL programs on incidence of injuries (RR: .78; 95% CI: .57-1.06; n = 2), helmet use (RR: 1.0; 95% CI: .98-1.02; n = 3), and seat belt use (RR: .99; 95% CI: .97-1.0; n = 3). Sports-related injury prevention interventions

led to reductions in the incidence of injuries (RR: .66; 95% CI: .53-.82; n = 15), incidence of injury per hour of exposure (RR: .63; 95% CI: .47-.86; n = 5), and injuries per number of exposures (RR: .79; 95% CI: .70-.88; n = 4). Subgroup analysis according to the type of interventions suggests that training ± education and the use of safety equipment had significant impacts on reducing the incidence of injuries. We did not find any study focusing on interventions to prevent suffocation, drowning, poisoning, burns, and falls in the adolescent age group. The existing evidence is mostly from high-income countries, limiting the generalizability of these findings for low- and middle-income countries. Studies evaluating these interventions need to be replicated in a low- and middle-income country-context to evaluate effectiveness with standardized outcome measures.

23. A Methodological Review of Intimate Partner Violence in the Military: Where Do We Go From Here? Rodrigues AE, et al. Trauma Violence Abuse. 2015 Jul;16(3):231-40. doi: 10.1177/1524838014526066. PMID: 24648490
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/24648490
A significant number of military personnel report engaging in or experiencing intimate partner violence (IPV). To advance current research and understanding of this behavior, we conducted a methodological review of the literature on IPV in military personnel and veterans. Research from 1980 to the present, which consisted of 63 empirical studies, was objectively coded by two independent raters on a number of variables important to the methodological quality of research on IPV in the military. In addition, areas of importance to the future of IPV research are presented.

24. Review of Programs to Combat Elder Mistreatment: Focus on Hospitals and Level of Resources Needed. Rosen T, et al., National Collaboratory to Address Elder Mistreatment Project Team. J Am Geriatr Soc. 2019 Jun;67(6):1286-1294. doi: 10.1111/jgs.15773.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/30901078
Elder mistreatment is common and has serious social and medical consequences for victims. Though programs to combat this mistreatment have been developed and implemented for more than three decades, previous systematic literature reviews have found few successful ones.
OBJECTIVE:
To conduct a more comprehensive examination of programs to improve elder mistreatment identification, intervention, or prevention, including those that had not undergone evaluation.
MEASUREMENTS:
We abstracted key information about each program and categorized programs into 14 types and 9 subtypes. For programs that reported an impact evaluation, we systematically assessed the study quality. We also systematically examined the potential for programs to be successfully implemented in environments with limited resources available.
RESULTS:
We found 116 articles describing 115 elder mistreatment programs. Of these articles, 43% focused on improving prevention, 50% focused on identification, and 95% focused on intervention, with 66% having multiple foci. The most common types of program were: educational (53%), multidisciplinary team (MDT) (21%), psychoeducation/therapy/counseling (15%), and legal services/support (8%). Of the programs, 13% integrated an acute-care hospital, 43% had high potential to work in low-resource environments, and 57% reported an attempt to evaluate program impact, but only 2% used a high-quality study design.
CONCLUSION:

Many programs to combat elder mistreatment have been developed and implemented, with the majority focusing on education and MDT development. Though more than half reported evaluation of program impact, few used high-quality study design. Many have the potential to work in low-resource environments. Acute-care hospitals were infrequently integrated into programs.

25. Elder Abuse: Systematic Review and Implications for Practice. Dong XQ. J Am Geriatr Soc. 2015 Jun;63(6):1214-38. doi: 10.1111/jgs.13454. Epub 2015 Jun 11.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/26096395
This article is based on the lecture for the 2014 American Geriatrics Society Outstanding Scientific Achievement for Clinical Investigation Award. Elder abuse is a global public health and human rights problem. Evidence suggests that elder abuse is prevalent, predictable, costly, and sometimes fatal. This review will highlight the global epidemiology of elder abuse in terms of its prevalence, risk factors, and consequences in community populations. The global literature in PubMed, MEDLINE, PsycINFO, BIOSIS, Science Direct, and Cochrane Central was searched. Search terms included elder abuse, elder mistreatment, elder maltreatment, prevalence, incidence, risk factors, protective factors, outcomes, and consequences. Studies that existed only as abstracts, case series, or case reports or recruited individuals younger than 60; qualitative studies; and non-English publications were excluded. Tables and figures were created to highlight the findings: the most-detailed analyses to date of the prevalence of elder abuse according to continent, risk and protective factors, graphic presentation of odds ratios and confidence intervals for major risk factors, consequences, and practical suggestions for health professionals in addressing elder abuse. Elder abuse is common in community-dwelling older adults, especially minority older adults. This review identifies important knowledge gaps, such as a lack of consistency in definitions of elder abuse; insufficient research with regard to screening; and etiological, intervention, and prevention research. Concerted efforts from researchers, community organizations, healthcare and legal professionals, social service providers, and policy-makers should be promoted to address the global problem of elder abuse.

26. Creating a Trauma-Sensitive Practice: A Health Care Response to Interpersonal Violence. Davies JA, et al., Glob Health Res Policy. 2016 Jul 15;1:6. doi: 10.1186/s41256-016-0006-7. eCollection 2016.
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/30202371
Interpersonal violence has a profoundly negative impact on individuals and our society. Health care providers are in a unique position to identify interpersonal violence, support survivors, and to contribute to violence prevention. The purpose of this article is to describe the nature, scope, and impact of interpersonal violence, its subsequent trauma on individuals, families, and society, and to delineate how providers can apply trauma-sensitive practice. The authors provide definitions, examples and prevalence rates and review theories of violence and violence prevention. They describe how to create a trauma-sensitive practice by being aware of the trauma that accompanies violence, the barriers to violence prevention, and how to intervene with patients about violence. Providers are urged to adopt universal screening practices, educate themselves on the nature of interpersonal violence and engage in screening, education, collaboration, and social justice activities to reduce interpersonal violence. Resources are provided to assist health care organizations, providers, and patients in addressing interpersonal violence.

27. Violence Is Preventable: A Best Practices Guide for Launching and Sustaining a Hospital-Based Program to Break the Cycle of Violence. Youth ALIVE! 2011. Karraker N, Cunningham RA, Becker M, Fein JA, Knox LM.
PDF: Read PDF Here
In 1998, the U.S. Department of Justice's Office for Victims of Crime, referring to an American Academy of Pediatrics' report on youth violence, "recommended that hospital-based counseling and prevention programs be established in medical facilities that provide services to gang violence victims." This replication guide was developed to support development of these programs in medical facilities across the country.

28. Hospital-based violence intervention programs save lives and money. Purtle J, Dicker RA, Cooper C, et al. J Trauma Acute Care Surg. 2013;75(2):331-333.
PDF: No free PDF
URL: https://www.ncbi.nlm.nih.gov/pubmed/23887566
Injury prevention activities are a defining characteristic of the modern trauma center. Violent injury—with a 5-year reinjury rate as high as 45%--represents a priority area for preventive intervention. Advances in trauma care increase the likelihood that a patient will survive violent injury but do nothing to reduce the chances that they will be reinjured after leaving the hospital. The recurrent nature of violent injury strains trauma systems financially, and the absence of preventive intervention is inconsistent with trauma centers' commitment to providing optimal care. Hospital-based violence intervention programs (HVIPs) offer a strategy to address these issues.

29. Hospital-based violence prevention: Progress and opportunities. Purtle J, Rich JA, Fein JA, James T, Corbin TJ. Ann Intern Med. 2015;163(9):715-717
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/26301734
A substantial body of research shows that violently injured patients are at high risk for violent reinjury, violence perpetration, and symptoms of posttraumatic stress. The standard of care for assault injury, however, does not reflect this knowledge—physical wounds are treated and patients are discharged, often to return with repeated injuries. Although many physicians wish to act on this knowledge, as evidenced by a recent call to action endorsed by 8 medical societies, little concrete guidance on what they can do is available. In this commentary, we describe how hospital-based violence intervention programs (HVIPs) work to translate research into practice. We discuss challenges to HVIPs, steps that physicians can take to overcome them, and opportunities for these programs under the Patient Protection and Affordable Care Act (ACA).

30. Hospital-based violence intervention: Risk reduction resources that are essential for success. Smith R, Dobbins S, Evans A, Balhotra K, Dicker RA. J Trauma Acute Care Surg. 2013;74(4):976-982
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/23511134
INTRODUCTION:
Hospital-based violence intervention programs (VIPs) aim to reduce violent injury and recidivism. The aim of this study was to determine the most significant risk reduction variables associated with success in our VIP. We hypothesized that our recidivism rate declined since VIP's inception and that we could identify risk reduction variables that were independent determinants of program success.
METHODS:
We analyzed our prospectively collected data for 2005-2011 from our VIP database. Success was defined as more than 50% needs met without recidivism or attrition. Impact and outcome evaluation was

performed per a model promoted by the Centers for Disease Control. Rates of risk reduction and injury recidivism were calculated. Case management time spent per client (dose) was defined as low (0-1 hours per week), medium (1-3 hours per week), moderate (3-6 hours per week), and high (>6 hours per week). Correlation coefficients and logistic regression were used to examine associations between variables and success in the VIP.
RESULTS:
Two hundred fifty-four clients received services. Meeting needs in mental health (odds ratio, 5.97; 95% confidence interval, 2.72-13.07) and employment (odds ratio, 4.41:95% confidence interval, 1.56-12.46) proved significantly associated with success ($p < 0.005$). The 6-year program recidivism rate was 4% versus historical control of 16% ($p < 0.05$). Moderate and high exposure to intensive case management in the first 3 months was also significantly associated with success ($p < 0.05$). Success in our VIP was not associated with age, gender, education level, previous incarceration, probation status, or length of time in program.
DISCUSSION:
For 6 years, our recidivism rate has decreased fourfold compared with the rate before VIP inception. For startup and maintenance of a VIP, it is essential to know where to focus collaborative efforts in communities to target the most critical risk reduction resources. This study provides guidance-securing mental health care and employment for our clients appears to be predictive of success. The value of early "high-dose" intensive case management is also essential for reducing recidivism.

31. Prevention of youth violence: A public health approach. Sood AB, Berkowitz SJ. Child Adolesc Psychiatr Clin N Am. 2016;25(2):243-256
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/26980127
The causes of youth violence are multifactorial and include biological, individual, familial, social, and economic factors. The influence of parents, family members, and important adults can shape the beliefs of the child toward violence in a significant manner. However, the influence of school and the neighborhood also have an important role in attitudes and behaviors of children toward violence. The complexity of factors related to violence requires a comprehensive public health approach. This article focuses on evidence-based models of intervention to reduce violence while emphasizing collective impact as a guiding principle.

32. Violent reinjury risk assessment instrument (VRRAI) for hospital-based violence intervention programs. Kramer EJ, Dodington J, Hunt A, et al. J Surg Res. May 11, 2017
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/28602221
Violent injury is the second most common cause of death among 15- to 24-year olds in the US. Up to 58% of violently injured youth return to the hospital with a second violent injury. Hospital-based violence intervention programs (HVIPs) have been shown to reduce injury recidivism through intensive case management. However, no validated guidelines for risk assessment strategies in the HVIP setting have been reported. We aimed to use qualitative methods to investigate the key components of risk assessments employed by HVIP case managers and to propose a risk assessment model based on this qualitative analysis.
MATERIALS AND METHODS:
An established academic hospital-affiliated HVIP served as the nexus for this research. Thematic saturation was reached with 11 semi-structured interviews and two focus groups conducted with HVIP case managers and key informants identified through snowball sampling. Interactions were analyzed by a four-member team using Nvivo 10, employing the constant comparison method. Risk factors identified

were used to create a set of models presented in two follow-up HVIP case managers and leadership focus groups.
RESULTS:
Eighteen key themes within seven domains (environment, identity, mental health, behavior, conflict, indicators of lower risk, and case management) and 141 potential risk factors for use in the risk assessment framework were identified. The most salient factors were incorporated into eight models that were presented to the HVIP case managers. A 29-item algorithmic structured professional judgment model was chosen.
CONCLUSIONS:
We identified four tiers of risk factors for violent reinjury that were incorporated into a proposed risk assessment instrument, VRRAI.

33. Law Center to Prevent Gun Violence. Healing Communities in Crisis: Lifesaving solutions to the urban gun violence epidemic. March 1, 2016.
PDF: Read PDF Here

34. A prospective randomized study of the efficacy of "Turning Point," an inpatient violence intervention program. Loveland-Jones C, Ferrer L, Charles S, et al. J Trauma Acute Care Surg. 2016;81(5):834- 842
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/27537508
From 2002 to 2011, there were more than 17,000 shootings in Philadelphia. "Turning Point," Temple University Hospital's inpatient violence intervention program, takes advantage of the teachable moment that occurs after violent injury. In addition to receiving traditional social work
services, Turning Point patients watch their trauma bay resuscitation video and a movie about violence, meet with a gunshot wound survivor and an outpatient case manager, and also undergo psychiatric assessment. The purpose of this study was to determine the efficacy of Turning Point in changing attitudes toward guns and violence among victims of penetrating trauma.
METHODS:
This prospective randomized study was conducted from January 2012 to January 2014. Patients who sustained a gunshot or stab wound were randomized to standard of care, which involved traditional social work services only, or Turning Point. The Attitudes Toward Guns and Violence Questionnaire was administered to assess attitude change. Analysis was performed with repeated-measures analysis of variance. A $p < 0.05$ was significant.
RESULTS:
A total of 80 of a potential 829 patients completed the study (40 standard of care, 40 Turning Point). The most common reason for exclusion was anticipated length of stay being less than 48 hours. The two groups were similar with respect to most demographics. Unlike the standard-of-care group,
the Turning Point group demonstrated a 50% reduction in aggressive response to shame, a 29% reduction in comfort with aggression, and a 19% reduction in overall proclivity toward violence.
CONCLUSIONS:
Turning Point is effective in changing attitudes toward guns and violence among victims of penetrating trauma. Longer follow-up is necessary to determine if this program can truly be a turning point in patients' lives.

35. Scared safe? Abandoning the use of fear in urban violence prevention programmes. Purtle J, Cheney R, Wiebe DJ, Dicker RA. Inj Prev. 2015;21(2):140-141
PDF: Read PDF Here

URL: https://www.ncbi.nlm.nih.gov/pubmed/25805771

36. Cost-benefit analysis simulation of hospital-based violence intervention program. Purtle J, Rich LJ, Bloom SL, Rich JA, Corbin TJ. Am J Prev Med. 2015;48(2):162-169
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/25442223
Violent injury is a major cause of disability, premature mortality, and health disparities worldwide. Hospital-based violence intervention programs (HVIPs) show promise in preventing violent injury. Little is known, however, about how the impact of HVIPs may translate into monetary figures.
PURPOSE:
To conduct a cost-benefit analysis simulation to estimate the savings an HVIP might produce in healthcare, criminal justice, and lost productivity costs over 5 years in a hypothetical population of 180 violently injured patients, 90 of whom received HVIP intervention and 90 of whom did not.
METHODS:
Primary data from 2012, analyzed in 2013, on annual HVIP costs/number of clients served and secondary data sources were used to estimate the cost, number, and type of violent reinjury incidents (fatal/nonfatal, resulting in hospitalization/not resulting in hospitalization) and violent perpetration incidents (aggravated assault/homicide) that this population might experience over 5 years. Four different models were constructed and three different estimates of HVIP effect size (20%, 25%, and 30%) were used to calculate a range of estimates for HVIP net savings and cost-benefit ratios from different payer perspectives. All benefits were discounted at 5% to adjust for their net present value.
RESULTS:
Estimates of HVIP cost savings at the base effect estimate of 25% ranged from $82,765 (narrowest model) to $4,055,873 (broadest model).
CONCLUSIONS:
HVIPs are likely to produce cost savings. This study provides a systematic framework for the economic evaluation of HVIPs and estimates of HVIP cost savings and cost-benefit ratios that may be useful in informing public policy decisions.

37. Passing the torch: Evaluating exportability of a violence intervention program. Smith R, Evans A, Adams C, Cocanour C, Dicker RA. Am J Surg. 2013;206(2):223-228
PDF: Read PDF Here
URL: https://www.ncbi.nlm.nih.gov/pubmed/?term=Passing+the+torch%3A+Evaluating
A violence intervention program (VIP) developed at our trauma center resulted in a reduction of injury recidivism to 4% from a historical rate of 16%. Our aim was to investigate the feasibility of exporting our program to another trauma center by examining rates of and identifying potential barriers to recruitment, enrollment, and impact. We hypothesized that our VIP is feasible at another trauma center and successfully meets needs associated with risk reduction.
METHODS:
In January 2010, we introduced our VIP to another trauma center. To assess exportability of our program, we used a standard model of program evaluation for VIPs promoted by the Centers for Disease Control and Prevention. Specifically, the process and impact portions of the model evaluation were performed in this comparative analysis over a 1-year period. Recruitment, enrollment (process), and success at meeting risk reduction needs (impact) were our outcomes. This included patient and case manager characteristics in addition to rates at which eligible patients were approached and enrolled. These variables were compared using the Wilcoxon rank-sum and chi-square tests.
RESULTS:

During the study period, 155 patients were eligible for inclusion at the exported program compared with 119 at the original VIP. Rates at which eligible patients were approached at the exported program were significantly lower than the original program (44% vs 92%, P = .04). Rates at which approached patients were enrolled were also significantly lower (21% vs 55%, P = .002). The difference was associated with the time of injury and hospital length of stay because 40% of eligible patients were missed if injury occurred during a weekend and 70% were missed if the length of stay was less than or equal to 48 hours at the exported program. A cultural match between the client and case manager was assessed by race/ethnicity and language spoken; 2 of the 3 case managers at our site are Latino and bilingual and the other is black, whereas the 1 case manager at the exported program is black and monolingual. Cultural match was 91% versus 47%, respectively (P < .05).
CONCLUSIONS:
Program exportation is based on the replication of both the program model and the program infrastructure. The data in our study support success of the program model (case management process) at our export site, but the actual program infrastructure was not successfully exported to this hospital.

38. The Wraparound Project. Department of Surgery at Zuckerberg San Francisco General. 2017. Available at: http://violenceprevention.surgery.ucsf.edu/

Guidelines

A list of all the EAST Guidelines related to Injury Prevention can be found using the following link: https://www.east.org/education/practice-management-guidelines/category/injury-prevention
These are all hyperlinked:

- All-Terrain Vehicle Injuries, Prevention of 2018
- Child Passenger Safety: An Evidence-Based Review 2010
- Contact Sports-related Concussion in Amateur Athletes, Primary Prevention of 2018
- Distracted Driver: An Evidenced-Based Review 2015
- Fall-Related Injuries in the Elderly, Prevention of 2016
- Helmet Efficacy to Reduce Head Injury and Mortality in Motorcycle Crashes 2010
- Hospital-Based Violence Intervention Programs Targeting Adult Populations 2016
- Motor Vehicle Collision-Related Injuries in the Elderly, Prevention of 2015
- Palliative Care for Geriatric Trauma Patients, Trauma Center Care and Routine Processes for Care - Evidence-Based Review 2019
- Prevention Firearm Injuries with Gun Safety Devices and Safe Storage 2018
- Prevention of Firearm-Related Injuries with Restrictive Licensing and Concealed Carry Laws 2016
- Safety Helmets, Efficacy of in Reduction of Head Injuries in Recreational Skiers and Snowboarders 2011