Editorial: Introducing the 2012 Volume of *Epidemiologic Reviews* on Injury and Violence

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Injury remains a critical area of public health science and practice. Adding together mortality from all types of injuries, as when computing the mortality burden for cancers and cardiovascular diseases, injury is the third leading cause of death in the United States, accounting for more than 182,000 fatalities in 2007 (1). Because of its high impact among young people, injuries are responsible for more years of potential life lost than cancer and heart disease combined (1, 2). Severe funding limitations create serious challenges for advancing the field through surveillance, research, and intervention development and evaluation (2). These challenges are evident in the themes of the 14 articles in the special volume of *Epidemiologic Reviews*.

One theme addresses gaps in surveillance coupled with some significant measurement issues. The paper by McKenzie et al. (3) describes external cause coding in the International Classification of Diseases schema and suggests needed improvements. As the authors point out, the data are only as good as what is recorded on death certificates or in medical records. The paper also stresses the value of learning from comparable data across both time and place. The ability to determine appropriate measures of factors associated with pedestrian injury (e.g., characteristics of the built environment) was noted by DiMaggio and Li (4), whereas the paper on the mental health of humanitarian relief workers points to the lack of standard definitions of relief work and inconsistency in how posttraumatic stress disorder is defined and measured (5). The paper on marijuana and its influence on motor vehicle crashes reflects measurement challenges in assessing dose, recency of use, and presence of marijuana in combination with other drugs (6).

A second theme focuses on the social epidemiology of injury and the need to enrich understanding of sociobehavioral and cultural factors that influence risk (e.g., drinking alcohol or using marijuana). The article by Keyes et al. (7) demonstrates the myriad complexities in unraveling racial and ethnic variations in the link between alcohol and injury. Similarly, the Pollack et al. paper (8) on motor vehicle injuries among American Indians and Alaska Natives points to the importance of examining cultural differences, while also noting how cultural barriers can impede research. The article by Chen et al. (9) on suicide in Asia examines how gender patterns and means of self-inflicted injury vary widely among cultures, undoubtedly reflecting differing values and availability of means (e.g., poisonous plants or charcoal). The paper by Rothman et al. (10) on the role of alcohol in adolescent dating violence makes a similar point, noting the absence of research that can differentiate patterns among college-age versus younger populations, stressing the importance of developmental context.

Three papers point to the importance of studying injury issues over the long term. For example, the article by Polinder et al. (11) stresses the importance of understanding injury patterns across time and context. The authors argue for studying the history of injury control efforts from a social perspective and emphasize the role of sociopolitical, economic, technological, and health care contexts as well as factors such as climate change or migratory patterns. They also note the importance of these factors in anticipating future contexts. A specific example of examining trends appears in the article by Schwatka et al. (12) on risks to aging construction workers. The authors note that older workers experience less frequent but more severe injuries and may require workplace adaptations. The article on mental health outcomes among humanitarian relief workers also demonstrates the value of social contexts in examining long-term recovery (6).

A fourth theme points to the need for better evaluations of interventions. The Cooper et al. paper (13) on fire safety documents the value in well-planned interventions that integrate types of approaches and notes gaps in the literature with regard to program implementation details. The paper by Sentenac et al. on interventions to address peer victimization among children with disabilities concludes that “[f]uture research should focus on evaluating the efficacy of such programs” (14, p. 120). The Vernick et al. (15) review on motor vehicle compatibility addresses the need for real-world evaluations to reduce reliance on laboratory tests with test dummies. Collectively, the authors argue for stronger evaluations that include process measures and do not rely strictly on laboratory studies or randomized controlled trials.

Several papers address a fifth theme, pointing to the value of policy and environmental approaches despite the complexities associated with policy change. For example, the paper...
addressing vehicle compatibility and the severity of motor vehicle crashes (15) notes complexities that can make implementation of known interventions difficult, for example, the balance of safety with pressures for smaller, more gas-efficient cars. The paper on suicide in Asia offers an example of an environmental intervention aimed at reducing availability of charcoal (10).

These varied papers cover a range of unintentional injury and violence topics. Collectively, they raise important issues and give readers new insights about challenges that, it is hoped, will also stimulate interest in addressing this major source of morbidity and mortality.

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REFERENCES


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