# Road Traffic and Other Unintentional Injuries Among Travelers to Developing Countries

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#### **KEYWORDS**

- Road traffic injuries
   Drowning
   Burn
   Fall
   Unintentional injury
- Injury prevention Travel medicine Advocacy

#### **KEY POINTS**

- Road traffic crashes are the most common cause of travelers' deaths.
- Travelers can protect themselves and set an example by always wearing a seatbelt, never driving after consuming alcohol, and wearing a helmet when riding a motorcycle, moped, or bicycle.
- Drowning is the most common cause of death among travelers to water recreation destinations.

Continued

Funding: This study was funded by grants (R25-TW009345; D43-TW007267) from the Fogarty International Center, US National Institutes of Health. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Disclosure Statement: No real or potential conflicts to disclose.

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Med Clin N Am 100 (2016) 331–343 http://dx.doi.org/10.1016/j.mcna.2015.07.011

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#### Continued

- Closely supervising children, wearing a personal flotation device, and practicing pool, open water, and boat safety can lower drowning risk.
- Advocacy is a way for travelers to make a difference that lasts long after their trip and for travel medicine providers to contribute to patient and population health more broadly.

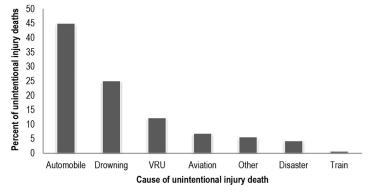
#### INTRODUCTION

Injuries result in nearly 6 million deaths and incur 52 million disability-adjusted life-years annually, making up 15% of the global disease burden. More than 90% of this burden occurs in low- and middle-income countries (LMICs) where injury control capacity and initiatives are lacking. When trauma services do exist, they are often insufficiently resourced and unavailable to most of the injured. Consequently, treatable injuries frequently result in avertable death or disability.

Injuries are the leading cause of death among travelers.<sup>5</sup> Travelers abroad are 10 times more likely to die from injury than infection, accounting for less than 2% of traveler deaths.<sup>6</sup> Of traveler unintentional injuries, road traffic crashes account for 57% of deaths, followed by drowning (25%), aviation crashes (7%), other causes (eg, falls, burns; 6%), and natural disasters (4%) (Fig. 1).<sup>7</sup>

Despite high injury risk, pretravel advice has concentrated on communicable and vaccine-preventable diseases, such as malaria, typhoid, and diarrhea.<sup>8</sup> However, among individuals age 15 to 49 in LMICs (ie, same age cohort as 65% high-income country travelers), road traffic injuries (RTIs) alone are responsible for more deaths than these 3 diseases combined (Fig. 2).<sup>7,9</sup> A survey of travel medicine clinics worldwide found that 99% offered advice on infections; only 70% discussed personal safety.<sup>10</sup> Fortunately, nearly two-thirds of injuries are preventable.<sup>11,12</sup> Therefore, pretravel advice regarding foreseeable dangers and how to avoid them may significantly mitigate injury risk.<sup>13</sup> Pretravel consultations are incomplete without specific injury prevention advice.<sup>11</sup>

This article discusses the epidemiology, risk, and pretravel advice regarding road traffic injuries and drowning. Other causes of traveler injury, such as aviation crashes,



**Fig. 1.** Percentage of unintentional injury deaths by mechanism for US travelers from 2003 to 2014 (N = 4479). Unintentional injuries exclude homicide, suicide, and terrorism. VRU, Vulnerable road user. (*Data from* United States Department of State - Bureau of Consular Affairs. U.S. Citizen Deaths Overseas. Available at: http://travel.state.gov/content/travel/english/statistics/deaths.html. Accessed July 28, 2015.)

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