



PUBLIC HEALTH & ROAD SAFETY

A GRSP Positioning Paper

This paper is one of a suite of Positioning Papers from the Global Road Safety Partnership (GRSP). These papers are designed to create an understanding of the scale of road traffic deaths and injuries and their linkages to other humanitarian and development issues. The Positioning Papers seek to highlight that road safety is a multidimensional issue that requires an urgent and sustained contribution across many sectors.

There are a number of evidence-based interventions aimed at reducing road traffic deaths and injuries, including designing safer roads, strengthening vehicle safety standards, improving road safety management, implementing effective post-crash care, and ensuring the passage, implementation and enforcement of comprehensive laws to protect road users. GRSP Positioning Papers primarily focus on the role of road users and the need for strong laws that help protect them.

OVERVIEW

Road crashes have emerged as a public health hazard, significantly contributing to mortality and morbidity worldwide. Road traffic injuries are currently estimated to be the ninth leading cause of death across all age groups globally, and are predicted to become the seventh leading cause of death by 2030.¹ Road traffic crashes are already the main cause of death among those aged 15–29 years.² There are a number of interventions that are effective in making roads safer, and have the potential to reduce the number of lives lost on the roads.

According to the World Health Organization, more than 1.2 million people die each year, and up to 50 million are injured, on the world's roads. Ninety percent of these deaths and injuries occur in low- and middle- income countries (LMIC), which are also adversely affected by other public health issues such as malaria and other infectious diseases.^{3,4} As such, addressing the preventable burden of road deaths and injuries presents an opportunity to achieve significant public health gains.

ROAD SAFETY IS A PUBLIC HEALTH ISSUE

- The number of lives lost on the roads each year represents a higher burden of death than from malaria and if trends continue, the number of traffic deaths could surpass those from HIV-AIDS by 2030.⁵
- Up to 50 million people incur non-fatal injuries each year as a result of road traffic crashes.⁶ This often leads to long-term health impacts, including permanent disability. Such injuries also have a substantial impact on families who provide emotional and financial support during rehabilitation and recovery.⁷
- Road traffic injuries pose a significant financial burden on national economies and can therefore impact many aspects of those economies including health systems, transport, education and workplace productivity. Globally, an estimated 3% of Gross Domestic Product (GDP) is lost to road traffic deaths and injuries, rising to approximately 5% of GDP in LMIC, which impacts their ability to invest in priority social services such as healthcare.^{8,9}



ESSENTIAL FACTS

- Road traffic crashes are the leading cause of death globally among those aged 15-29.¹⁰
- 49% of all road traffic deaths occur among vulnerable road users—pedestrians, cyclists, and motorcyclists.¹¹
- In 2013, 64.7 million years of life were lost due to road injury, while another 8.6 million years of life were lived with disability caused by road crashes.¹²

In response to the road traffic fatality crisis, the United Nations General Assembly proclaimed the UN Decade of Action for Road Safety (2011-2020), which serves as the primary vehicle by which road safety is being addressed at the global level. The Global Plan of the Decade of Action is organized around five pillars, which detail a series of recognized interventions: improving road safety management; designing safer roads; strengthening vehicle safety standards; ensuring the passage, implementation and enforcement of comprehensive laws to protect road users; and implementing effective post-crash care.¹³

CASE STUDY

Positioning Road Safety as a Public Health Issue in India

THE INSTITUTE OF PUBLIC HEALTH (IPH) IS A NOT-FOR-PROFIT ORGANISATION BASED IN BENGALURU THAT IS INVOLVED IN RESEARCH, TRAINING AND ADVOCACY ABOUT PUBLIC HEALTH ISSUES IN INDIA. Through their advocacy work, IPH strives for policy and system-wide changes that improve population health. This is achieved by engaging with policy makers at different levels, and using the media to build public awareness to support campaigns on issues such as tobacco control and strengthened care for people affected by non-communicable diseases.

IPH is now working with a network of civil society organisations to advocate for a comprehensive road safety law in India. In this work, IPH has been able to engage health professionals and key stakeholders in Karnataka state—including the Health Minister—to call for the new law, which seeks to enforce speed limits, prevent drink driving, protect the safety of children, and mandate the use of seat belts and helmets.

“In India, over 200,000 lives are lost annually in road crashes. Many more suffer disabilities and poor quality of life after a crash. The majority of these deaths and injuries are preventable if adequate safety measures are considered. Road safety constitutes one of the priority work areas for IPH, as we believe that safer roads are integral to building healthy societies.”²¹ Faculty Member, IPH.



SOLUTIONS

Reducing the burden of road traffic deaths and injuries around the world requires multiple players working together. While each element of the road system (vehicle, road, and person) contributes to any given road crash, road user related factors make a significant contribution and, therefore, require ongoing attention.¹⁴ The Global Road Safety Partnership's Advocacy and Grants Programme focuses primarily on advocating for stronger road safety policies and improving the effectiveness of road safety law enforcement. According to international best practices, adopting and enforcing strong road safety laws on five key risk factors can significantly reduce road traffic death and injury.¹⁵

- **Speed management:** Setting and enforcing appropriate speed limits is one of the most effective measures in reducing road traffic injuries, influencing both the risk of being in a road traffic crash, as well as the severity of the injuries that result from crashes. For example, for an adult pedestrian, the risk of dying if struck by a car travelling at less than 50km/h is below 20%. Those odds rise substantially as vehicle speed increases. The same adult pedestrian has a 60% risk of dying if hit at 80 km/h.¹⁶
- **Seatbelts:** The simple act of buckling a seatbelt is one of the most effective ways to save lives. Correctly wearing a seat-belt reduces the risk of a fatal injury by up to 50% for front seat occupants and by up to 75% for rear seat occupants.
- **Child restraints:** Children wearing an appropriate restraint for their size and weight are significantly less likely to be killed or injured than unrestrained children. Rear-facing restraints for children aged 0 to 23 months have been shown to reduce the risk of death or injury by over 90% and forward facing child restraints by almost 80% compared to being unrestrained.¹⁷
- **Motorcycle helmets:** Wearing a motorcycle helmet is a proven way to decrease death and serious injury. Helmet usage decreases the risk of injuries by 69%, and deaths by 42%.¹⁸
- **Drinking and driving:** Driving while impaired by alcohol increases both the risk of a crash and the likelihood that a death or a serious injury will occur. Strictly enforcing an effective drink-driving law can reduce the number of road deaths by 20%.¹⁹

ENDNOTES

- 1 Global Status Report on Road Safety, World Health Organization, 2015, (http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/ accessed 26 April 2016)
- 2 Global health estimates. Geneva: World Health Organization; 2014 (http://www.who.int/healthinfo/global_burden_disease/en/ accessed 07 June 2016)
- 3 Global Status Report on Road Safety, World Health Organization, 2015, (http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/ accessed 26 April 2016)
- 4 Global health estimates. Geneva: World Health Organization; 2014 (http://www.who.int/healthinfo/global_burden_disease/en/ accessed 07 June 2016)
- 5 Global health estimates. Geneva: World Health Organization; 2014 (http://www.who.int/healthinfo/global_burden_disease/en/ accessed 07 June 2016)
- 6 Global Status Report on Road Safety, World Health Organization, 2015, (http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/ accessed 26 April 2016)
- 7 World Report on Road Traffic Injury Prevention, Geneva, World Health Organization, 2004 (<http://apps.who.int/iris/bitstream/10665/42871/1/9241562609.pdf> accessed 26 April 2016)
- 8 Global Status Report on Road Safety, World Health Organization, 2015, (http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/ accessed 26 April 2016)
- 9 Watkins K., The missing link: Road traffic injuries and the Millennium Development Goals, (<http://www.fiafoundation.org/media/46107/the-missing-link-lr.pdf> accessed 8 June 2016)
- 10 Global health estimates. Geneva: World Health Organization; 2014 (http://www.who.int/healthinfo/global_burden_disease/en/ accessed 30 May 2016)
- 11 Global Status Report on Road Safety, World Health Organization, 2015, (http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/ accessed 26 April 2016)
- 12 Haagsma JA, et al., The global burden of injury: incidence, mortality, disability-adjusted life years and time trends from the Global Burden of Disease study 2013, *Inj Prev* 1 February 2016 vol. 22 no. 1 3-18
- 13 Global Plan for the Decade of Action for Road Safety 2011-2020, World Health Organization (http://www.who.int/roadsafety/decade_of_action/plan/en/ accessed 9 June 2016)
- 14 Goodwin, A., Thomas, L., Kirley, B., Hall, W., O'Brien, N., & Hill, K., Countermeasures that work: A highway safety countermeasure guide for State highway safety offices, Eighth edition. Washington, DC: National Highway Traffic Safety Administration, 2015
- 15 Global Status Report on Road Safety, World Health Organization, 2015 (http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/ accessed 25 April 2016)
- 16 Global Status Report on Road Safety, World Health Organization, 2015 (http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/ accessed 25 April 2016)
- 17 Elvik R et al. The handbook of road safety measures, 2nd ed. Bingley, UK: Emerald Group Publishing Limited; 2009.
- 18 Liu B et al. Helmets for preventing injury in motorcycle riders. The Cochrane Database of Systematic Reviews. 2009.
- 19 Drink- Driving: The Facts, World Health Organization, 2015 (http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/ accessed 30 May 2016)
- 20 Global Road Safety Partnership (<http://www.grsproadsafety.org/about-us/our-purpose> accessed 16 January 2017).
- 21 U. Bhojani, personal communication, 27 April 2016.

Global Road Safety Partnership secretariat

c/o International Federation of Red Cross
and Red Crescent Societies
Route de Pré-Bois 1 | 1214 Vernier | Geneva, Switzerland

Tel: +41 [0] 22 730 42 49 | Fax: +41 [0] 22 733 03 95

E-mail: grsp@ifrc.org | Website: www.grsproadsafety.org

Global Road Safety Partnership

The Global Road Safety Partnership (GRSP) is a hosted programme of the International Federation of Red Cross and Red Crescent Societies and is a voluntary association of governments, businesses and civil society organisations. GRSP works to reduce deaths and serious injuries as a result of road crashes in low- and middle-income countries in a number of ways. One important way to address this humanitarian crisis is to ensure that strong, evidence-based laws are in place and effectively implemented and enforced in order to protect road users.

GRSP is looking to partner with government and civil society organizations committed to reducing this unacceptable rate of road injuries and fatalities by advocating for stronger road safety policies. For more information on our work – and the Road Safety Grants Programme – please visit our website at www.grsproadsafety.org/advocacy.