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Road Safety Research Briefing

Date: 01 September 2025

The **Nepal Injury Research Centre** is a collaboration between researchers at Kathmandu Medical College and the University of the West of England, Bristol, UK. They have conducted research on road traffic crashes (RTCs) and road traffic injuries (RTIs) since 2017. This briefing summarises completed research (in **black**) and ongoing research (in **green**).

THE BURDEN OF ROAD TRAFFIC INJURIES IN NEPAL

- The **number of people with traumatic injuries and deaths in Nepal is underestimated** in all the available injury data systems ([see report here](#))
- In a study of every crash occurring on a section of the East -West Highway over a year, the Traffic Police recorded 100% of fatal crashes but **only 21% of serious injuries and 8% of minor injuries** ([see report here](#))
- **Young males on powered 2 and 3 wheelers** are more likely than any other population group to be involved in road traffic crashes ([see report here](#))
- Of 10,154 patients with injuries presenting to two Emergency Departments over 1 year, **24% had been injured in road traffic collisions**. RTCs were the leading cause of injuries in adults ([see report here](#)) and the third leading cause in children under 18 years ([see report here](#))
- We estimated the total cost of RTIs in Nepal in 2017 was **123 million US Dollars**, or **1.52% of Nepal's Gross Domestic Product**. This was **3 times higher than in 2007** and likely underestimates the true cost as it relies on assumptions ([see report here](#)). **An ongoing study is following up 520 road traffic crash patients for one year to update these figures – results expected in September 2026.**
- Nepal's long-distance buses are some of the most dangerous in the world. **An ongoing study using traffic police data is investigating 302 bus crashes over a four-year period, resulting in 733 deaths and 3,470 injuries.**
- There are an estimated 190,000 motorcycle taxis in Nepal. We estimated that **110 deaths and 1,300 injuries may have occurred to motorcycle taxi riders and passengers in 2023/2024**. Passengers not wearing helmets, speeding, and travelling under the influence of alcohol or drugs were reported to increase the risk of crashes. Female passengers report personal safety concerns ([Safer motorcycle taxis as part of Nepal's public transport system- See report here](#)). **Riders and passengers support action to improve motorcycle taxi safety** ([report in progress](#))

POST CRASH CARE AND THE PROVISION OF FIRST AID AND PREHOSPITAL CARE

- Prehospital care in Nepal is fragmented and inconsistent; **many ambulances lack trained personnel and equipment** ([see report here](#))
- In a study of prehospital care in Nepal, **19% of trauma calls to the Nepal Ambulance Service over one year were due to a road traffic collision**. Barriers to effective prehospital care included **public expectations to rush the patient to a hospital** without providing first aid and **public demands to go to a particular hospital**, which might be full or not have appropriate services ([see report here](#))
- We are following up 520 RTI patients, of whom **only 49% were taken to hospital in an ambulance and only 2% received any first aid or prehospital care** (*report in progress*)

WHAT CAN WE DO ABOUT IT?

- Legislation that is implemented and enforced is one of the most effective ways to reduce deaths and injuries on the road. **In a review of 21 laws and 14 policies from Nepal** that were related to road traffic crashes we found that **none of the 29 road safety recommendations from the World Health Organization were both included and fully implemented** ([see report here](#)). Known effective legislative interventions such as wearing seat belts or motorcycle helmets exist but are not fully enforced in Nepal.
- **Nepal lacks a Good Samaritan Law** which protects bystanders and first aiders from prosecution if they help a RTC victim who subsequently dies. This was stated as **the major reason for not providing first aid to crash victims** ([see report here](#)).
- We found **it is feasible to train Traffic Police to provide first aid to RTC patients** and that officers retain and use those skills over 6 months ([see report here](#))
- To support **improved road safety legislation**, we are analysing 63 road safety policy documents at National, Provincial and Local government levels, exploring the comprehensiveness, effectiveness and equity of the policies
- Based on ongoing studies, we are preparing a **Road Safety Reference Booklet for Palikas** to support them to deliver their mandated road safety responsibilities
- Based on ongoing studies, we are preparing a **Safer Public Transport Guide** which will include evidence-based recommendations for improving the safety of long-distance buses and motorcycle taxis
- Based on ongoing studies, we are exploring opportunities **to improve inter-professional care for RTI patients** between prehospital care providers and emergency department staff
- We have brought together motorcycle taxi regulators, operators, riders, and passengers to co-produce recommendations for government, regulators and operators to make the service safer. **We are currently advocating with provincial governments to incorporate these recommendations into service directives.**

FUNDING ACKNOWLEDGMENT

FUNDED BY

NIHR | National Institute for Health and Care Research

This research was funded by the NIHR (16/137/49 & 150089) using UK international development funding from the UK Government to support global health research. The views expressed in this publication are those of the author(s) and not necessarily those of the NIHR or the UK government.