



## Research Article

# Injury risks for different road users in Nepal: a secondary analysis of routinely collected crash data

Santosh Bhatta,<sup>1\*</sup> Pratiksha Pathak,<sup>2</sup> Anish Khadka,<sup>2</sup> John Parkin,<sup>3</sup>  
Paul Pilkington,<sup>1</sup> Sunil Kumar Joshi<sup>2</sup> and Julie Mytton<sup>1</sup>

<sup>1</sup>School of Health and Social Wellbeing, University of the West of England, Bristol, UK

<sup>2</sup>Nepal Injury Research Centre, Kathmandu Medical College, Kathmandu, Nepal

<sup>3</sup>Centre for Transport and Society, University of the West of England, Bristol, UK

\*Corresponding author [santosh.bhatta@uwe.ac.uk](mailto:santosh.bhatta@uwe.ac.uk)

Published September 2024

DOI: 10.3310/DWTR9883

## Plain language summary

Injury risks for different road users in Nepal: a secondary analysis of routinely collected crash data

Global Health Research 2024

DOI: 10.3310/DWTR9883

NIHR Journals Library [www.journalslibrary.nihr.ac.uk](http://www.journalslibrary.nihr.ac.uk)

## Plain language summary

Nepal, one of the least developed countries in the world, has rapidly rising numbers of road traffic-related deaths and injuries. There is a lack of sufficient and high-quality data to help in the prevention of road traffic injuries or to make international comparisons. The study aimed to better understand which types of road users were most likely to be involved in, and injured in, traffic crashes by examining routinely collected crash data from one district in Nepal.

This study used road traffic crash records from the District Traffic Police Office in Makwanpur, Nepal, over 2 years (2017–8 and 2019–20). Data were extracted from paper-based police records and used to create a computer database which was then analysed. Numbers, percentages and rates were used to describe the patterns of road traffic crashes by time, age and sex of victims; cause of the crash; and the type of vehicle involved in the crash.

Over the 2 years, there were 1215 casualties (both fatal and non-fatal) resulting from 726 crashes; 423 casualties were drivers, 670 were passengers and 122 were pedestrians. Motorcycles and scooters were the most commonly involved vehicles in crashes (35.5%). For most crashes (58%), no cause was recorded in the police record. The riders or passengers of motorised two or three-wheelers accounted for 31% of fatal injuries, while pedestrians accounted for 25%.

This study improves our understanding of which road users are most at risk of being killed or injured in a traffic crash. The findings indicate that the number and rate of crashes may be increasing over time. To understand the factors behind this, more complete data with accurate recording of details of the crash need to be collected and analyses of data should be conducted over a larger area and for longer periods of time.