

**Background** In Colombia, motorcyclists account for 40% of total road traffic deaths, higher than most of Latin American countries. Although the use of safety measures is mandatory, motorcyclist deaths and injuries continue increasing.

**Objective** To analyse motorcyclist deaths and injuries, and the use of safety measures in five cities in Colombia.

**Methods** Motorcyclist injuries and deaths recorded by the Forensic Office were analysed. The use of safety measures was collected by observational surveys in places and hours of high traffic activity.

**Results** Motorcyclist deaths and injuries were higher than deaths of other road users. Single men between 19 and 34-years-old were most affected. Although mainly motorcyclist drivers were involved, passenger women were high in two cities. TCE was the diagnosis in 30% of cases. Most of the fatal injuries occurred on weekends. The main causes were collision with other vehicle, and with fixed object. Fatal and non-fatal injuries mostly occurred at nighttime. The use of helmets varied from 68% to 99% for drivers, and 39% to 97% for passengers, and it was higher in urban areas than rural. Around 10% of motorcyclists were wearing reflective vests, and 30% were driving with lights on.

**Contribution to the Field** Although most of motorcyclists were wearing helmets, deaths and injuries were still increasing. The helmet use should be enforced, especially for passengers, and the quality of helmets should be controlled. The next step is to explore behavioural factors.