

Executive summary

More than 1.2 million people die each year on the world's roads, making road traffic injuries a leading cause of death globally. Most of these deaths are in low- and middle-income countries where rapid economic growth has been accompanied by increased motorization and road traffic injuries. As well as being a public health problem, road traffic injuries are a development issue: low- and middle-income countries lose approximately 3% of GDP as a result of road traffic crashes.

Although road traffic injuries have been a leading cause of mortality for many years, most traffic crashes are both predictable and preventable. There is considerable evidence on interventions that are effective at making roads safer: countries that have successfully implemented these interventions have seen corresponding reductions in road traffic deaths. Rolling out these interventions globally offers huge potential to mitigate future damage and save lives at a global level.

In recognition of the scale of this health and development problem – and the possibility to impact positively upon it – the United Nations General Assembly adopted a resolution in 2010 that led to the establishment of the Decade of Action for Road Safety (2011–2020). The resolution called on Member States to take the necessary steps to make their roads safer, and for WHO to monitor the situation through its *Global status report on road safety* series. This report, the third in the series, serves as a tool to assess the impact of changes three years into the Decade of Action and to highlight where more action is needed.

This report shows that the number of road traffic deaths – 1.25 million in 2013 – has remained fairly constant since 2007, despite the increase in global motorization and population, and the predicted rise in deaths. This suggests that interventions to improve global road safety are preventing increases that otherwise would have occurred. The report highlights that the situation is worst in low-income countries, where rates are more than double those in high-income countries and there are a disproportionate number of deaths relative to the (lower) level of motorization. The African Region continues to have the highest road traffic death rates, while the lowest rates are in the European Region, notably among its high-income countries, many of which have been very successful at achieving and sustaining reductions in death rates despite increasing motorization.

Changing road user behaviour is a critical component of the holistic “Safe Systems” approach advocated in this report. Adopting and enforcing good laws is effective in changing of changing road user behaviour on key risk factors for road traffic injuries – speed, drink-driving, and the failure to use helmets, seat-belts and child restraints properly or at all. The report highlights that 17 countries have changed laws to bring their legislation on one or more of these five risk factors into line with best practice in the past three years. This represents 409 million people or 5.7% of the world's population. The situation is most advanced on seat-belt laws, where 105 countries, representing 67% of the world's population, now have laws that meet best practice. While the report highlights encouraging examples

of countries that have brought their laws into line with best practice on particular risk factors, the potential for appropriate road safety laws to reduce road traffic deaths is largely unmet at a global level. Enforcement of these laws – essential to their success at reducing injuries – is also inadequate across all five behavioural risk factors.

The report further highlights the important role of safe infrastructure and safe vehicles in reducing road traffic injuries. Road infrastructure is mainly constructed with the needs of motorists in mind, although the report indicates that 49% of all road traffic deaths occur among pedestrians, cyclists and motorcyclists. Real, sustained successes at reducing global road traffic deaths will only happen when road design takes into consideration the needs of all road users. Making walking and cycling safer is also important to support other moves to reduce carbon emissions and increase physical activity. While vehicles in high-income countries are increasingly safe, the report provides worrying data showing that less than half of countries implement minimum standards on vehicle safety, and that these standards are notably absent in many of the large middle-income countries that are major car manufacturers.

With the launch of the Sustainable Development Goals, road safety is receiving increased international attention, and is included in two of the 17 Goals of this new global agenda. This is welcomed. The evidence on what works to save lives on the roads exists: the international community, national governments and civil society now need to act on it.

Background

Road traffic injuries are a leading cause of preventable death

Road traffic injuries are the number one cause of death among those aged 15–29.

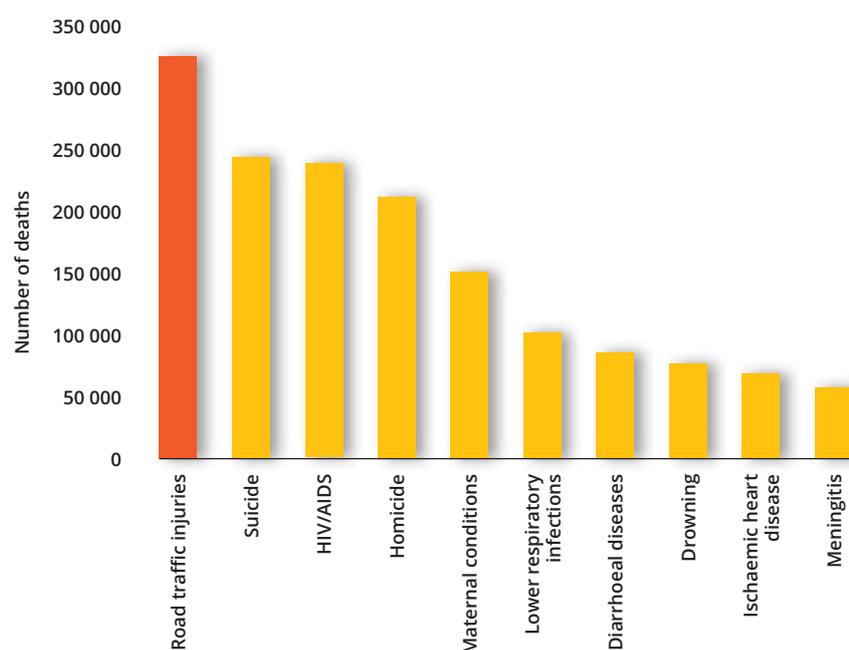
Over 1.2 million people die each year on the world's roads, with millions more sustaining serious injuries and living with long-term adverse health consequences. Globally, road traffic crashes are a leading cause of death among young people, and the main cause of death among those aged 15–29 years (see Figure 1).

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). This rise is driven by the escalating death toll on roads in low- and middle-income countries – particularly in emerging economies where urbanization and motorization accompany rapid economic growth. In many of these countries, necessary

infrastructural developments, policy changes and levels of enforcement have not kept pace with vehicle use. In contrast, many high-income countries have managed to break the link between rising motorization and road traffic deaths, with some managing to dramatically reduce such deaths. These achievements are the result of making infrastructure safer, improving the safety of vehicles, and implementing a number of other interventions known to be effective at reducing road traffic injuries (2). Having good quality data to monitor the impact of these efforts is also critical to demonstrating their success.

In addition to deaths on the roads, up to 50 million people incur non-fatal injuries each year as a result of road traffic crashes, while there are additional indirect health consequences that are associated with this growing epidemic (3). As vehicle ownership grows, many countries face

FIGURE 1
Top ten causes of death among people aged 15–29 years, 2012



Source: (1).

the twin problems of traffic congestion and rising vehicle tailpipe emissions, resulting in higher rates of respiratory illness (4). Rising car ownership has also resulted in reduced physical activities such as walking and cycling, with associated health consequences.

The economic burden of road traffic injury and death

Road traffic injuries place a heavy burden on national economies as well as on households. In low- and middle-income countries they particularly affect the economically active age group, or those set to contribute to family, society and the workforce in general. Many families are driven deeper into poverty by the loss of a breadwinner, or by the expenses of prolonged medical care, or the added burden of caring for a family member who is disabled from a road traffic injury (5,6). The economic costs also strike hard at a national level, imposing a significant burden on health, insurance and legal systems. This is particularly true in countries struggling with other development needs, where investment in road safety is not commensurate with the scale of the problem. Data suggest that road traffic deaths and injuries in low- and middle-income countries are estimated to cause economic losses of up to 5% of GDP. Globally an estimated 3% of GDP is lost to road traffic deaths and injuries (7).

The Decade of Action for Road Safety: a response to the road traffic injury epidemic

In response to this growing epidemic, in 2010 the UN General Assembly adopted Resolution 64/255 to

establish the Decade of Action for Road Safety (2011–2020),¹ the goal of which is to stabilize and reduce predicted levels of road traffic fatalities around the world. A Global Plan of Action² provides the roadmap towards this goal, promoting proven, cost-effective solutions for making roads safer, including those pertaining to: (i) road safety management; (ii) safer roads and mobility; (iii) safer vehicles; (iv) making road users safer; and (v) improved post-crash response and hospital care. It also provides a framework for coordinating action at an international level.

The UN General Assembly Resolution 64/255 also called for regular monitoring of the impact of the Decade of Action through publishing the *Global status report on road safety* series (8,9). This report provides an assessment of the situation three years into the Decade.

Global status report on road safety 2015: objectives

This report has the following specific objectives:

- describing the road safety situation in all Member States;
- identifying gaps in road safety in all Member States and thereby stimulate road safety action;
- monitoring countries' progress in implementing measures identified in the Global Plan of Action for the Decade of Action for Road Safety (2011–2020); and
- providing baseline information and data that allow monitoring of other international policy processes that set road safety targets.

¹ See <http://www.who.int/roadsafety/about/resolutions/download/en/index.html>

² Global Plan for the UN Decade of Action for Road Safety 2011–2020, http://www.who.int/roadsafety/decade_of_action/plan/en/index.html

Road traffic deaths and injuries in low- and middle-income countries are estimated to cause economic losses of up to 5% of GDP.

Methodology

Data were collected from each participating country and area -hereinafter referred to, for readability purposes only, as “countries” (see Statistical Annex and Table A1). Experts from different sectors within each country completed a self-administered questionnaire with information on key variables. The group of experts then met to reach consensus on the dataset that best represented their individual country’s road safety situation. The expert consensus data for each country is presented in this report. The data were validated with support from Regional Data Coordinators and analysed at WHO headquarters. Fatality data, collected through the questionnaires, were reviewed according to a set of criteria that determined how robust the data were, and an estimation process was carried out accordingly. More information on this process can be found in Explanatory Notes 1–3.

A major new element in this (third) *Global status report on road safety* was the comprehensive collection of legislative documents from all participating countries. The team at WHO performed an extensive search of online legislative databases and country-level government websites for legislative road safety documents. In addition, National Data Coordinators were asked to submit laws relating to the key risk factors¹. All legislative documents were reviewed by lawyers at WHO headquarters who extracted and analysed relevant information using the same criteria to assess all countries’ laws. In addition, the scope

of the legal analysis was extended: new indicators for child restraint and motorcycle helmet use were added for the first time in this report.

The application of the same criteria to all countries as well as the addition of new indicators resulted (in some cases) in discrepancies with the analysis published in the previous report, where data were provided exclusively by each country applying its own methods of interpretation.

To resolve any data conflicts, the WHO headquarter’s legal analysis was then shared with National Data Coordinators and a validation process clarified any data conflicts through discussion and, when appropriate, submission of new legal documents. More information on this process can be found in Explanatory Note 1.

A second new element to this report was the collection of data on vehicle standards. This information was compiled using data from the United Nations Economic Commission for Europe² (see Explanatory Note 1).

The report includes data from 180 countries/areas out of a total of 195 WHO Member States, covering 6.97 billion people or 97% of the world’s population (see Statistical Annex). Data on legislation and policies represent the country situation in 2014, while data on fatalities and numbers of vehicles are for 2013, the most recent year for which data were available.³

² See <http://www.unece.org/trans/main/wp29/introduction.htm>

³ Note that the second *Global status report on road safety* assessed fatality data relating to 2010, and legislative data relating to 2011.

¹ Speed, drink-driving, drug-driving, use of motorcycle helmets, seat-belts, child restraints and mobile phones.