Road Safety

A total of 85 000 people die annually from road traffic injuries in the WHO European Region (1). Addressing the risk of death in road traffic is fundamental to achieve the Sustainable Development Goals (SDGs), specifically those affecting health security, sustainable cities and reducing inequalities among countries. Action is necessary across all sectors to reduce mortality and morbidity from road crashes.

Overview

Road transport is an essential means of carrying people and goods but can have high costs in terms of adverse effects on health and welfare. Although the WHO European Region has the lowest road traffic death rates among the WHO regions, these remain a significant public health challenge. Road traffic injuries continue to be the leading cause of death among young people aged 5–29 years (1,2). Sustained political commitment and innovative strategies and technologies have been successfully applied in some of the high-income countries to reduce road traffic injuries and deaths. However, rates of injuries and deaths are increasing in some countries and one third of Member States in the Region do not have a multisectoral national strategy on road safety, suggesting a greater need for policy action.
Halve the number of deaths and injuries from road traffic accidents: in 2013, almost 85,000 people died in the WHO European Region from road traffic injuries. Despite an overall increase of 7% in motor vehicles, this represents a decrease of 8.1% in road traffic deaths in the Region between 2010 and 2013 (1,2). However, if progress continues at this rate, the WHO European Region will fall short of the global SDG target of a 50% reduction in road traffic-related fatalities by 2020 (1,3,4).

- While the mortality rate from road traffic injuries in the WHO European Region is 1.8 times lower than the global average (9.3 deaths per 100,000 population relative to 17.4 globally), great disparity exists within the Region (1).
- Road traffic fatalities are the tip of the iceberg. For every reported death at least 23 people are injured, with 1.6 million nonfatal road traffic injuries reported in 2013 requiring hospital admissions, and many more require emergency room attendances (1).
- Furthermore, road traffic injuries have drastic consequences for the individuals involved and their families:
  - Disability associated with road traffic injuries contributes to a significant public health burden and economic loss in the Region, particularly in countries with low and middle incomes (1); and
  - The median estimate of permanent disability from road traffic injuries in the Region is 4% and the societal costs of this are between 0.6% and 5.8% of gross national product throughout the Region (1).
- In 2013, about 40% of people who died as a result of road crashes in the WHO European Region were vulnerable road users such as pedestrians, cyclists or motorcyclists (Fig. 1) (1,4).
- Legislation is a powerful tool to improve road safety by improving the behaviour of road users. However, there are gaps in both legislation and law enforcement in the WHO European Region (1). For example:
  - Since 2010, six countries have changed laws to bring them into line with best practice on one or several of the five key risk factors – speeding, drink-driving, and non-use of motorcycle helmets, seat-belts and child car restraints;
  - While some countries in the WHO European Region have legislation in place addressing one or more of the five key risk factors, much more work must be done to enhance their enforcement;
  - 20 countries reported a high level of enforcement for seat-belt legislation but only five countries reported this for speed, suggesting the need to extend this good practice; and
  - Only 21 countries in the WHO European Region have national drink-driving laws with a blood alcohol content limit of ≤0.05 g/dl as well as lower limits of ≤0.02 g/dl for young and novice drivers.
- Speed contributes to around one third of all fatal road traffic crashes in high-income countries, and up to half in low- and middle-income countries (3,5,6).
- Lowering average speeds by 5 km/h would cut deaths by 25% in western Europe (3,5,6).
- Seat-belts reduce the risk of death in a crash by 61% when used correctly (3,5,6).

Large disparities exist within the WHO European Region: the death rate from road traffic injuries is 8.6 times higher in the country with the highest rate than in the country with the lowest rate (Fig. 2) (1,3).
- Road traffic death rates in countries belonging to the Commonwealth of Independent States are three times higher than that in countries of the European Union (3).
Commitment to act

The SDGs were adopted in a historic decision by the United Nations General Assembly in September 2015 (7). Two of the targets are specifically related to road safety: SDG 3 target 3.6 aims to halve the number of global deaths and injuries from road traffic accidents by 2020 and SDG 11 target 11.2 seeks to provide access to sustainable and safe transport systems. In synergy with the Sustainable Development Agenda, the WHO Regional Office for Europe proposed road safety as a priority area in the European policy framework for health and well-being Health 2020 (8) and included an additional indicator for age-standardized mortality rate from motor vehicle traffic accidents.

After the Decade of action for road safety 2011–2020 was launched on 11 May 2011 (9), the United Nations Road Safety Collaboration developed the Global plan for the decade of action for road safety 2011–2020 (10), which provided a roadmap to stabilize and reduce road traffic fatalities around the world. In line with this Global plan, the following actions are proposed to assist Member States of the WHO European Region to achieve greater safety on their roads (1,3,11):

- **national road safety strategies** that include targets to reduce mortality and severe injuries from crashes;
- **improved injury surveillance systems** to enhance data collection and to monitor progress towards the targets;
- **enactment of laws based on best practice** to modify road user behaviour;
- **enforcement of existing laws** governing road safety;
- **social marketing campaigns** to increase the adherence to and acceptance of laws by the public;
- **the implementation of measures to protect vulnerable road users and to promote physically active transport** (Box 1) such as walking and cycling; and
- **investment in public transport** and other sustainable forms of transport.

Box 1. Leaving no one behind...

**Protecting vulnerable groups:** the risk of dying from road traffic crashes is higher among children, young men, the elderly and populations living in countries in the eastern part of the Region and in low- and middle-income countries (1). For example, countries belonging to the Commonwealth of Independent States have a road traffic mortality rate that is three times higher than that of the European Union (1).

Even in high-income countries in Europe, children of deprived families are at greater risk than the children from wealthier families. Some of the risk factors that have been observed in deprived populations are unsafe vehicles, less access to safety equipment and emergency trauma services, and exposure to hazardous traffic situations in unsafe environments (2).

The policy measures that are most efficient in reducing death rates among vulnerable groups promote better enactment and enforcement of legislation on road safety, including laws on vehicle speed, drink-driving and the use of child car restraints, seat-belts and motorcycle helmets (2).

Through the World Health Assembly resolution WHA 69.7 adopted in May 2016 (12), WHO committed to work with other United Nations organizations to assist the interested countries to develop global performance targets on key risk factors and service delivery mechanisms to reduce road traffic fatalities and injuries (13).

In the context of the WHO European Region, the European Union’s road safety policy framework 2011–2020 also has a target of 50% reduction in fatalities (11). Preventing road traffic injuries is achievable if the five major risk factors for road traffic injuries – speeding, drink-driving, and non-use of motorcycle helmets, seat-belts and child car restraints - are addressed through public campaigns (Box 2) and through the adoption and enforcement of comprehensive legislation (1,10,15).

The health system has an important role in improving survival and outcomes after a crash (1). Improvements in post crash fatality and disability can be achieved by investment in quality emergency trauma care and rehabilitation, and comprehensive injury surveillance systems can support monitoring.

Road safety requires a comprehensive national strategy that is delivered by national, regional and local governments and actors. In countries where success in reducing road traffic injuries and fatalities has been
achieved, transport agencies or government departments delivered action on road safety initiatives through funded strategies that engage stakeholders from different sectors and political commitment to a systems approach (16).

**Box 2. Intersectoral action**

**Communicating road safety measures:** the Province of Lipetsk in the Russia Federation piloted a project of public campaigns to prevent road traffic deaths and injuries through a range of preventive measures such as keeping to speed limits and wearing seat-belts. Over two and a half years, Lipetsk conducted 16 awareness-raising campaigns in the surrounding area. In the two years since the project was launched, the use of seat-belts in Lipetsk Province jumped from 52% to 74%. The second stage of the project focused on speed limits. As a result, the number of drivers respecting speed limits increased from 53% to 69% (14). An effective intersectoral collaboration between authorities from the communication, interior, health and transport sectors at a national, regional and local levels is fundamental in promoting road safety.

**Monitoring progress**

The WHO Regional Office for Europe is developing a joint monitoring framework for the SDG, Health 2020 and noncommunicable diseases indicators¹ to facilitate reporting in Member States and to provide a consistent and timely way to measure progress. The negative impacts of road traffic crashes will compromise all Health 2020 targets (17). The following, as proposed in the global indicators’ framework of the United Nations Economic and Social Council (ECOSOC) (18), will support monitoring progress in reducing mortality and morbidity from road crashes. Further, in November 2017 WHO will host a formal meeting with Member States to discuss global voluntary road safety targets to monitor progress towards the goals of the Decade of action of road safety.

**ECOSOC indicators**

<table>
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<tr>
<th>3.6.1.</th>
<th>Death rate from road traffic injuries</th>
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<tr>
<td>11.3.2.</td>
<td>Proportion of cities with a direct participation structure of civil society in urban planning and management that operates regularly and democratically</td>
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<tr>
<td>11.5.2.</td>
<td>Direct economic loss in relation to global gross national product, damage to critical infrastructure and number of disruptions to basic services attributed to disasters</td>
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<tr>
<td>11.7.1.</td>
<td>Average share of the built-up area of cities that is open space for public use for all, by gender, age and people with disabilities</td>
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**Health 2020 core indicators**

(6) 1.3.a. Age-standardized mortality rates from all external causes and injuries, disaggregated by sex (ICD-10 codes V01–V99, W00–W99, X00–X99 and Y00–Y98 (19))

**Health 2020 additional indicators**

(5) 1.3.a. Age standardized mortality rates from motor vehicle traffic accidents

**Fig. 1. Deaths from road traffic injuries by type of road user in the WHO European Region**

![Fig. 1. Deaths from road traffic injuries by type of road user in the WHO European Region](image)

Source: Jackish et al., 2015 (1).

¹ EUR/RCP67/Inf.Doc.: joint monitoring framework: proposal for reducing the reporting burden on Member States.
Fig. 2. Mortality rates from road traffic injuries per 100 000 population in countries with high incomes (HICs) and low or middle incomes (LMICs) in the WHO European Region

Notes: Data shown are for 49 out of the 52 participating countries, excluding countries with populations under 200 000; rates for these in 2013 were Andorra (7.6), San Marino (3.2) and Monaco (none recorded); mortality rates derived using the modelling process in the Global status report on road safety 2015 (5); *MKD: The former Yugoslav Republic of Macedonia.

Source: Jackish et al. 2015 (1).
WHO support to its Member States

WHO supports Member States in implementing the Global plan for the decade of action (10), and the United Nations road safety-related agreements and conventions. This includes in developing and implementing sustainable road strategies and programmes; setting targets for the reduction of road traffic fatalities; strengthening the infrastructure and capacity for technical implementation of road safety activities; improving the quality of data collected and monitoring progress; advocating for increased funding and better use of existing resources; and building national, regional and global capacity to address road safety (11).

The WHO Regional Office for Europe has also collated baseline data and continues to monitor and provide updated data to measure country progress (20). WHO produces the Global status report on road safety (3), which serves as a regular update and monitoring tool on road safety in Member States for this purpose. The WHO Regional Office for Europe supports Member States by promoting new ways of thinking about road safety, building safety into transport systems, and supports the implementation of tools to achieve road safety (20). A road safety technical package has been developed by WHO (Save LIVES package) to support Member States to achieve progress towards the SDG targets (21).

Partners

WHO collaborates with the following partners, among others, to achieve the goal of reducing mortality and morbidity from road crashes:

- Directorate-General for mobility and transport of the European Commission
- European Association for Injury Prevention and safety Promotion (EuroSafe)
- European Federation of Road Traffic Victims
- European Traffic Police Network
- European Federation of Road Traffic Victims
- European Union Road Federation
- Institute for European Traffic Law
- Organisation for Economic Co-operation and Development
- United Nations Economic Commission for Europe
- World Bank
- YOURS (Youth for Road Safety)

Resources

- Save LIVES: a road safety technical package
- Road safety infographics
- European country profiles and the Global status report on road safety 2015
- European facts and the Global status report on road safety 2015
- Global status report on road safety 2015
- Global plan for the decade of action for road safety 2011–2020
- “How to” road safety manuals
  http://www.who.int/roadsafety/projects/manuals/en/
- Towards a European road safety area: policy orientations on road safety 2011–2020
Key definitions

• **Road traffic crash or collision.** An incident, involving at least one moving vehicle, that may or may not lead to injury and that occurs on a public road (22).

• **Road traffic fatality.** A death occurring within 30 days of a road traffic crash (22).

• **Road traffic injuries.** Fatal or nonfatal injuries incurred as a result of a road traffic crash (22).

• **Vulnerable road users.** Those most at risk in traffic, such as pedestrians, cyclists and motorized two- and three wheeler riders, as well as children, older people and disabled people (22).

References


