

# Global status report on road safety 2023

Summary



Global status report on road safety 2023: summary

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# Global status report on road safety 2023

## Summary

This summary report is based on the *Global status report on road safety 2023* which presents findings on the progress made during the Decade of Action for Road Safety 2011–2020. The findings in this report are based mainly on a survey completed by Member States and a review of legislation. Additionally, the report incorporates mortality estimates produced by the World Health Organization Division of Data, Analytics and Delivery for Impact (WHO DDI) for the year 2021.



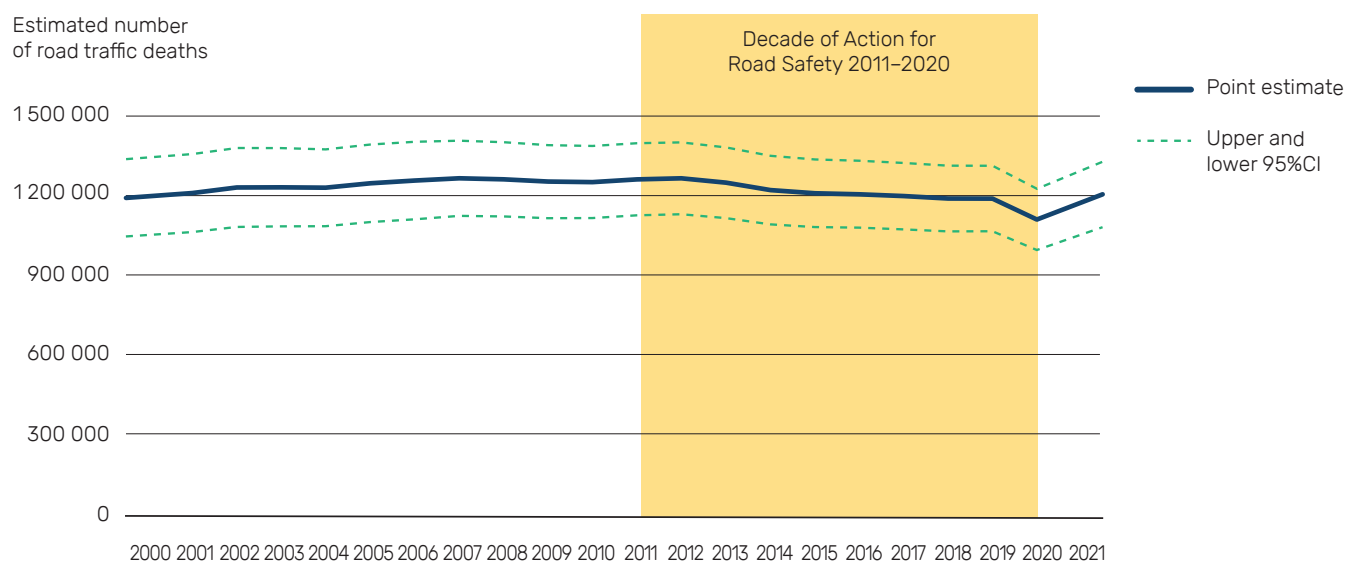
## The global burden of road traffic deaths

- | Road traffic deaths fell slightly to 1.19 million in 2021.
- | **This represents a reduction of 5% in total numbers**
- | **and 16% in deaths per 100 000 population since 2010.**

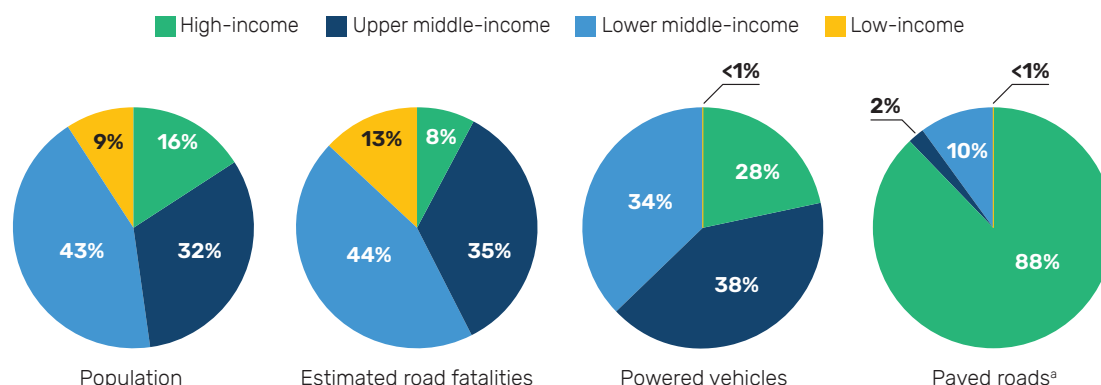
There were an estimated 1.19 million road traffic deaths in 2021 – a 5% decline since 2010 (Fig. 1). The global fatality rate stood at 15 per 100 000 population people in 2021 – a 16% drop since 2010. The slight reduction in deaths occurred despite the global motor-vehicle fleet more than doubling, road networks significantly expanding, and the global population rising by nearly 1 billion. However, the target of the 50% reduction in mortality of the Decade of Action for Road Safety 2011–2020 was not met, and at this pace the world is not on track to achieve the 50% reduction target set out in the Global Goals for Sustainable Development.

Road traffic deaths and injuries remain a major global health and development challenge. Road crashes remain the leading killer of children and youth aged 5–29 years, and the 12th leading cause of death when all ages are considered.

**Fig. 1.** WHO-estimated number of road traffic fatalities, 2000–2021



**Fig. 2.** Share of global population, road traffic deaths, paved inter-urban roads, and registered motor vehicles, by country income level, 2021



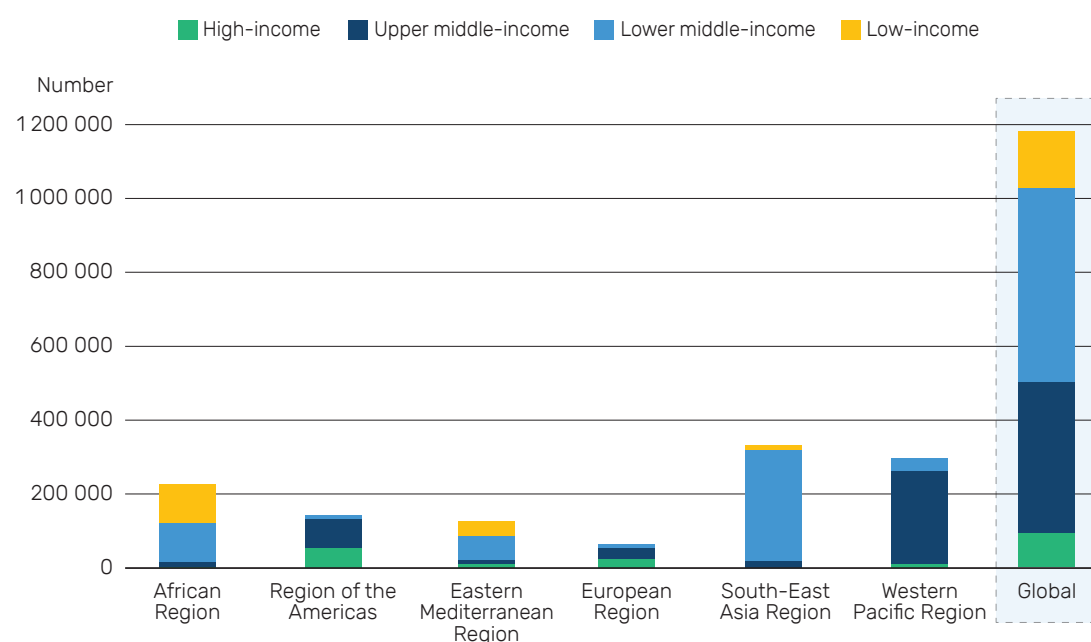
<sup>a</sup> Excludes expressways

Two-thirds of the 1.19 million road fatalities occur among people of working age, causing huge health, social and economic harm throughout societies.

Nine in 10 deaths occur in low- and middle-income countries<sup>1</sup>. These countries also report a disproportionately high number of deaths in relation to the size of their vehicle fleets and road networks. For example, the risk of death per population is three times higher in low-income countries than in high-income countries despite low-income countries accounting for just 1% of all motor vehicles (Fig. 2).

The highest number of deaths occur in the South-East Asia Region, with 28% of the global deaths. The Western Pacific Region accounts for 25% and the African Region for 19%. The Region of the Americas accounts for 12%, the Eastern Mediterranean Region for 11%, and 5% occur in the European Region (Fig. 3). Fatality rates per population are nearly three times higher in the African Region, which has the highest rates at 19 per 100 000, than in the European Region, with the lowest rates at 7 per 100 000.

**Fig. 3.** Number of road traffic fatalities by WHO region and country-income level, 2021



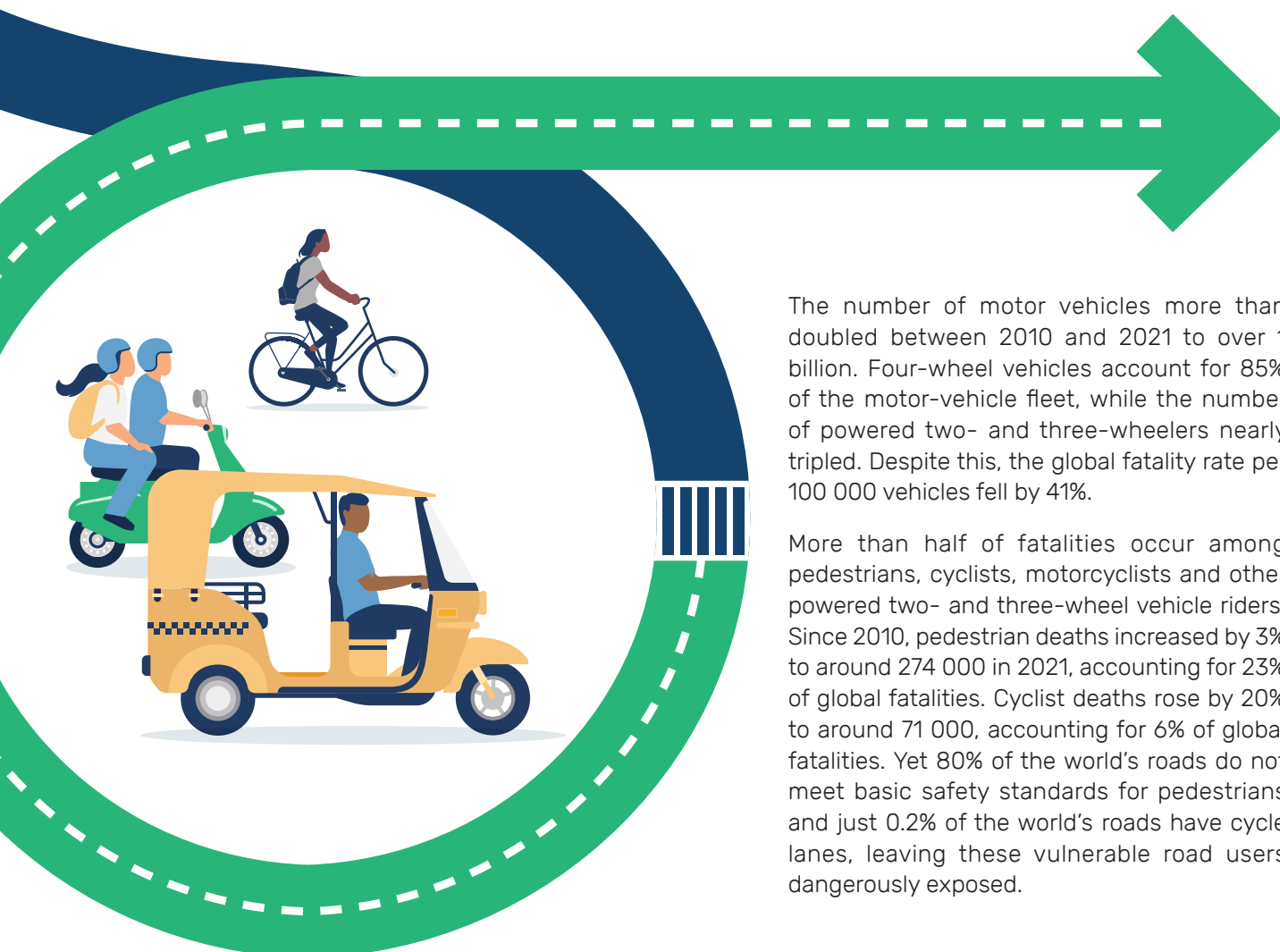
<sup>1</sup> The terms "country" and "national" as used in the text of this publication should be understood to refer to countries, territories, and areas as well as national and local institutions, data, and information.

# Progress and challenges

**Ten countries reduced the number of deaths by 50% and another 35 countries reduced deaths by 30–49% between 2010 and 2021.**

More than half of all United Nations (UN) Member States reduced road traffic deaths between 2010 and 2021, including – for the first time – low-income countries. In addition to the 10 countries achieving the 50% target, 15 achieved reductions between 40% and 49%; 20 achieved reductions between 30% and 39%; 33 achieved reductions between 20% and 29%; 19 achieved reductions between 10% and 19%; and 11 countries achieved reductions between 2% and 9%. This progress offers hope that the goal of a 50% reduction in road traffic deaths in a 10-year period is indeed achievable.

These reductions are seen across four regions, ranging from a 36% decrease in the European Region to a 0.1% decrease in the Region of the Americas, a 2% reduction in the South-East Asia Region (even though the South-East Asia Region has the highest death rates and numbers overall); and a 16% reduction in the Western Pacific Region. In contrast, the number of deaths in the African Region rose by 17% and in the Eastern Mediterranean Region by less than 1%.



The number of motor vehicles more than doubled between 2010 and 2021 to over 1 billion. Four-wheel vehicles account for 85% of the motor-vehicle fleet, while the number of powered two- and three-wheelers nearly tripled. Despite this, the global fatality rate per 100 000 vehicles fell by 41%.

More than half of fatalities occur among pedestrians, cyclists, motorcyclists and other powered two- and three-wheeler riders. Since 2010, pedestrian deaths increased by 3% to around 274 000 in 2021, accounting for 23% of global fatalities. Cyclist deaths rose by 20% to around 71 000, accounting for 6% of global fatalities. Yet 80% of the world's roads do not meet basic safety standards for pedestrians and just 0.2% of the world's roads have cycle lanes, leaving these vulnerable road users dangerously exposed.

# Measures to reduce deaths and injuries

## Developing multimodal transport systems

- The vast majority of people identify as pedestrians and public transport users, yet **just one quarter of countries have policies** to promote walking, cycling and public transport

With a growing and increasingly urban global population, the rising demand for mobility is set to overwhelm transport systems in the coming years, particularly those that rely heavily on private vehicles.

The Global Plan for the Decade of Action for Road Safety 2021–2030 calls for a safe, efficient, and sustainable mix of transport modes for the benefit and safety of all users, and survey data for this report indicate that the vast majority of people identify as pedestrians and public transport users. Despite this, very few countries have systematically assessed multimodal transport planning as part of their road safety strategies, and just one quarter have policies to promote walking, cycling and public transport.

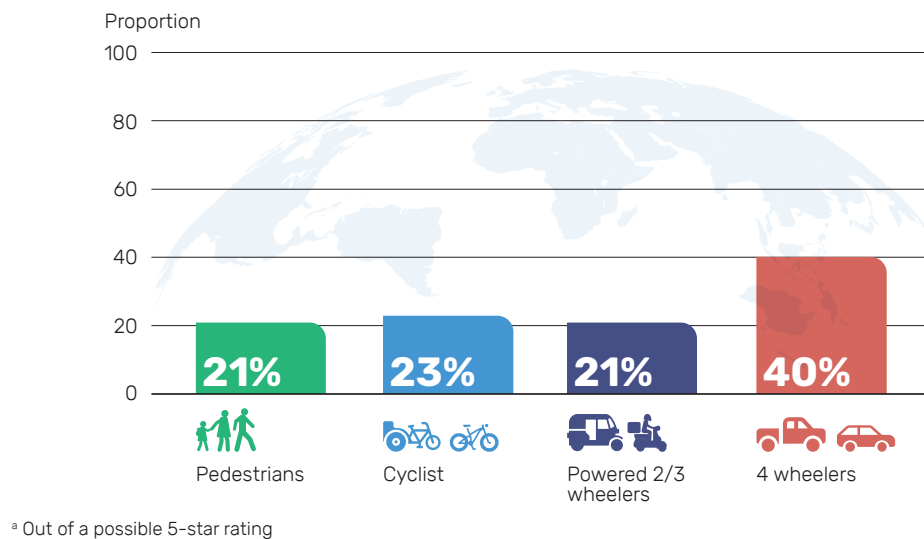
## Strengthening safe road infrastructure

- **Nearly 80% of roads do not meet basic pedestrian safety standards**, and just 0.2% of roads have cycle lanes.

Safe road infrastructure is key for safety. Road infrastructure should be designed and operated to eliminate or reduce risks for all road users. Despite this, survey findings for this report indicate that (where audited) most roads continue to be built for the growing motor vehicle fleet and nearly 80% of the roads assessed do not meet a minimum safety rating for pedestrians (Fig. 4). As stated, just 0.2% of the total length of all roads assessed include cycle lanes, and this deficit in cycle-friendly infrastructure may help explain why increasing numbers of cyclists are being killed on the road relative to other road users.



**Fig. 4.** Proportion of paved roads with a 3-star<sup>a</sup> or higher safety rating, by user group (500 000 km evaluated, globally), 2021

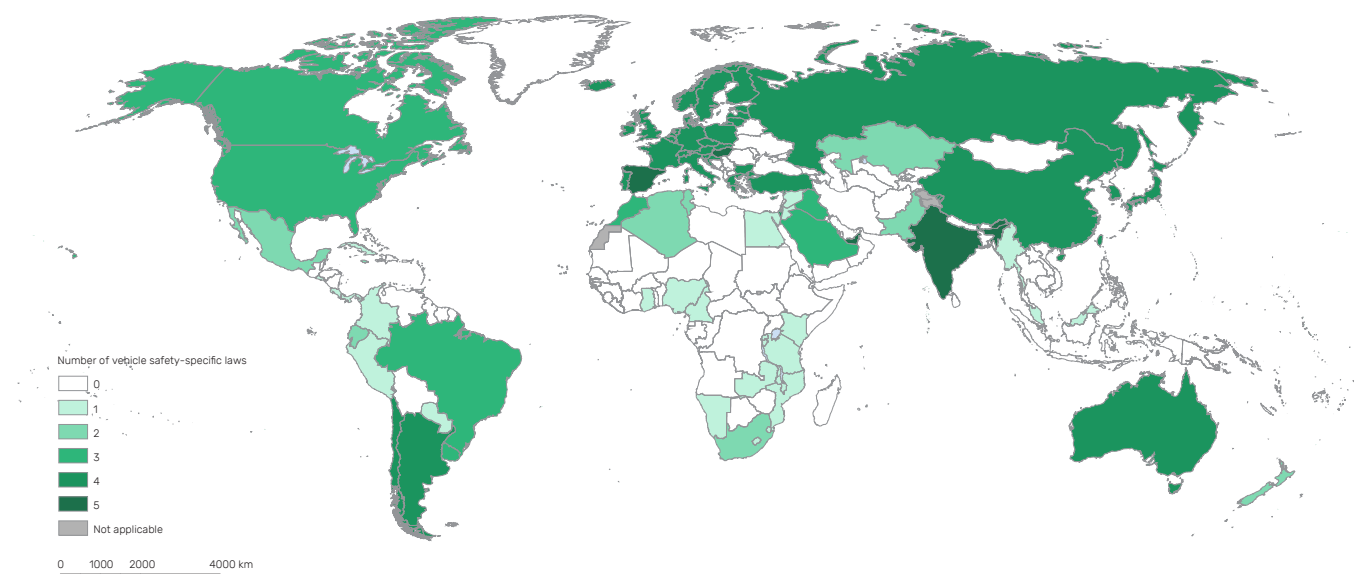


## Making vehicles safer

**Only 35 countries have legislation mandating all five core areas of vehicle safety equipment** while 77 countries have no legislation on vehicle safety standards

The world's motor vehicle fleet is likely to double by the year 2030. Despite this growth, many new vehicles are being produced and sold that do not meet minimum safety standards. Only 35 countries have legislation mandating all five core areas of vehicle safety equipment while 79 countries have no legislation on vehicle safety standards (Fig. 5).

**Fig. 5.** Number of countries with legislation on “core” vehicle safety requirements, 2022










# Advancing legislation and road user behaviour

Twenty-three countries, representing 0.8 billion people, **amended laws on one or more key risk factors** to align with WHO best practice since 2018

While the safe system approach to road safety emphasizes the importance of system designs that facilitate safe road use, laws governing road user behaviours are essential to preventing road traffic deaths and injuries. Drinking and driving is estimated to be involved in approximately 10% of fatal road traffic crashes while as much as 50% of drivers admit to speeding.

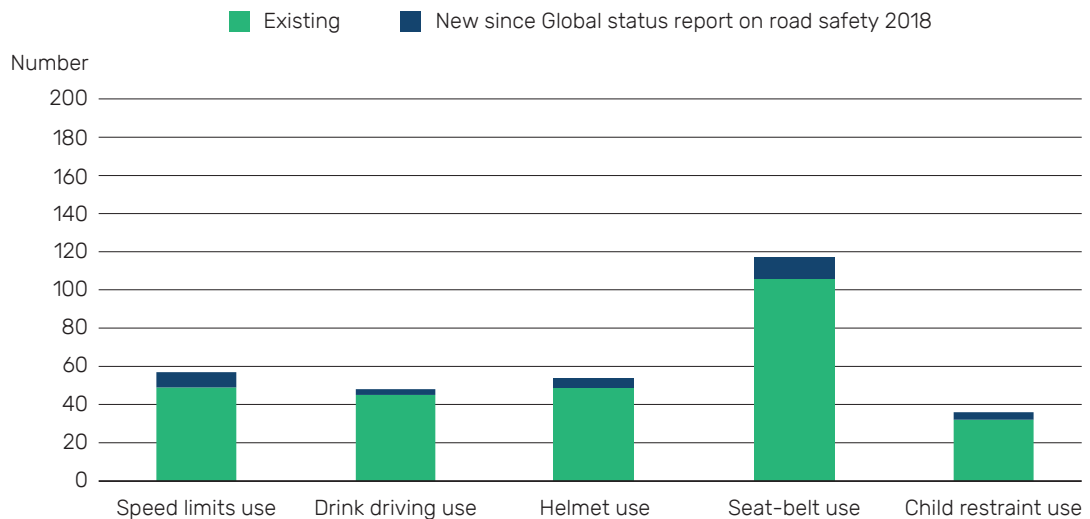
The adoption and enforcement of laws addressing these behaviours can greatly reduce the risk of death and injury. For example, the use of quality helmets reduces the risk of death by over six times and the risk of brain injury by up to 74%. Although many countries have such laws, those laws do not always meet WHO best practice and are not consistently implemented through regulations, or enforced. Existing legislation is assessed against WHO best practice criteria in Table 1.

**Table 1.** WHO best practice criteria for five user behaviour related legislation

Risk Factor	WHO Best Practice Criteria
 <b>Speeding</b>	National law exists, urban limits are set at 50 km/h or lower, and local authorities can further modify this limit
 <b>Drink driving</b>	National law exists, alcohol levels are defined by BAC, alcohol limits per general driving population are $\leq 0.05$ g/dl and for novice drivers $\leq 0.02$ g/dl
 <b>Motorcycle helmet use</b>	National law exists and it covers all riders, on all road types, and all engine types, and the helmet must be fastened and meet a standard
 <b>Seat-belt use</b>	National law exists and it applies to all seating positions in vehicles
 <b>Child restraint system use</b>	National law exists, children up to the age of 10 years, or 135 cm in height, must use a child-restraint system meeting a standard in addition to the prohibition of children of a particular age/height being prohibited from sitting in the front seats

The need for legislation remains a priority for most countries in the world as only a small percentage of them have legislation that meets WHO best practice for the key behavioural risks (Fig. 6). Apart from legislation on seat-belts (which exists in more than half of countries), the vast majority of countries lack legislation meeting WHO best practice on the use of child restraint systems, motorcycle helmets, and on drink driving and speed limits.

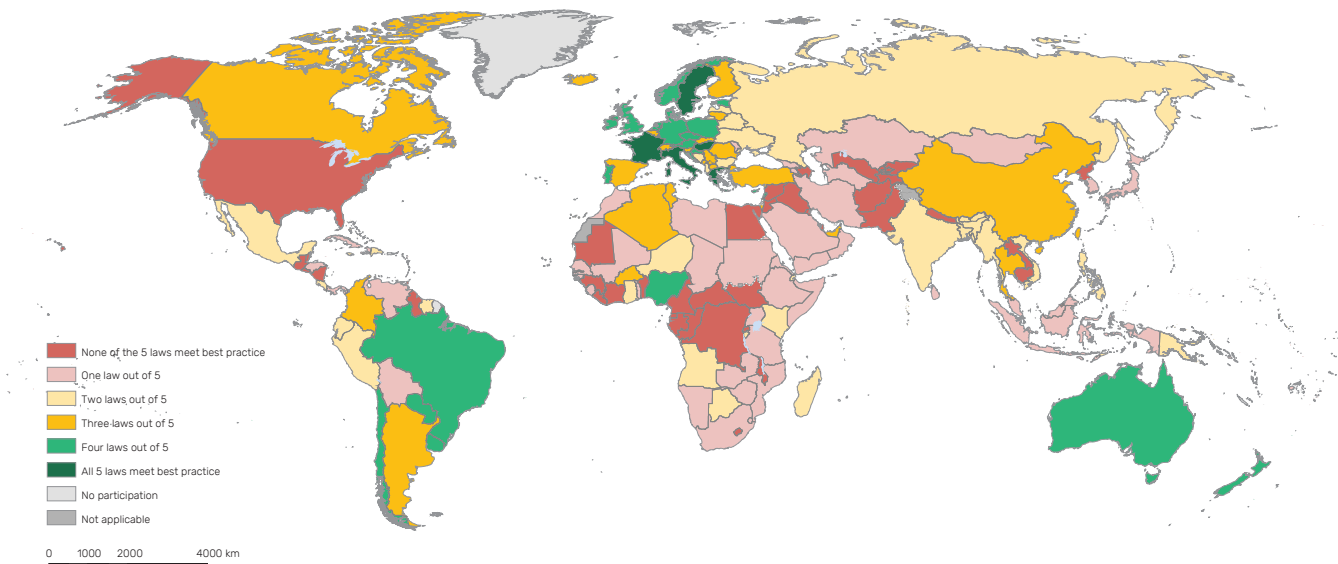
**Fig. 6.** Number of countries meeting WHO best practice criteria, five selected legislation areas, 2022



There have been modest improvements to bring these laws into line with WHO best practice in recent years, with 23 countries modifying their laws on risk factors to align with WHO best practice since the *Global status report on road safety 2018*.

Currently, only six countries have legislation meeting WHO best practice on all five risk factors – speeding, drink driving, motorcycle helmet use, seat-belts, and child restraint systems. Twenty-one countries have laws that meet WHO best practice on four of the five risk factors; 25 have laws on three of the five risk factors; 35 have laws on two of the five risk factors; 53 have laws on one of them, and 54 countries have no laws meeting WHO best practice criteria for any of the key risk factors (Fig. 7).

**Fig. 7.** Countries with laws meeting WHO best practice on one or more of the five key risk factors



## Strengthening road safety governance

Experience from the Decade of Action for Road Safety 2011–2020 highlighted the importance of addressing the challenge of implementation. This includes the development of a strategy, ensuring financing, coordination across sectors, and managing data systems to enable monitoring and evaluation.

Eighty-four countries report having national agencies responsible for road safety, of which 81 report that the agency has funding. One hundred-seventeen countries report having a national road safety strategy, while just 16 of these strategies are fully funded.

There remain significant differences between fatality numbers reported by countries and WHO-estimated fatalities. Differences between estimated and reported fatalities have been highlighted in all previous editions of the *Global status report on road safety*. For this edition of the report, differences between reported and estimated mortality figures are observed in 120 countries. In some cases, the estimated figures are 10 times higher, and in one case, 49 times higher.



## The way forward

Road traffic deaths fell slightly to 1.19 million in 2021 – a 5% drop since 2010. More than half of all UN Member States, including low-income countries, reported a drop in deaths. This slight reduction in fatalities occurred despite the global motor-vehicle fleet more than doubling, road networks significantly expanding, and the global population increasing by more than one billion. However, the decline in deaths falls far short of what is needed to meet the UN Decade of Action for Road Safety 2021–2030 target of halving road traffic deaths by 2030.

Some of the greatest gains have been made where the safe system approach – which puts people and safety at the core of mobility systems – is most widely applied. The European Region saw the greatest concentration of countries take this approach and reported the largest drop in deaths. The Western Pacific Region followed, both in the number of countries adopting aspects of the safe system approach and in reducing fatalities. Ten countries succeeded in halving deaths between 2010 and 2021, and these examples show that ambitious fatality-reduction targets can be met, given the right level of political will and if the right measures are taken.

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<https://www.who.int/teams/social-determinants-of-health/safety-and-mobility/global-status-report-on-road-safety-2023>

