SUMMARY

World Health Organization

GLOBAL STATUS REPORT ON ROAD SAFETY 2018

Global status report on road safety 2018: Summary

WHO/NMH/NVI/18.20

Suggested citation. Global status report on road safety 2018: summary. Geneva: World Health Organization; 2018 (WHO/NMH/NVI/18.20). Licence: CC BY-NC-SA 3.0 IGO).

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

Sales, rights and licensing. To purchase WHO publications, see http://apps.who.int/bookorders. To submit requests for commercial use and queries on rights and licensing, see http://www.who.int/about/licensing.

Printed in Switzerland

World Health Organization

SUMMARY

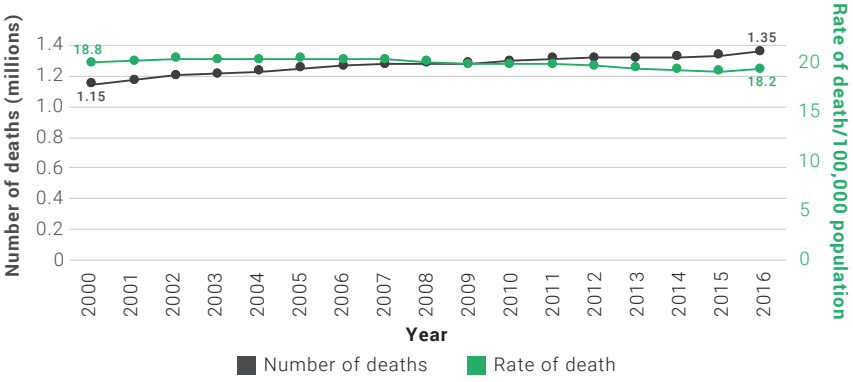
GLOBAL STATUS REPORT ON ROAD SAFETY 2018

The global burden of road traffic deaths

The number of deaths on the world's roads remains unacceptably high, with an estimated 1.35 million people dying each year.

The number of road traffic deaths continues to rise steadily, reaching 1.35 million in 2016. However, the rate of death relative to the size of the world's population has remained constant. When considered in the context of the increasing global population and rapid motorization that has taken place over the same period, this suggests that existing road safety efforts may have mitigated the situation from getting worse. However, it also indicates that progress to realise Sustainable Development Goal (SDG) target 3.6 – which calls for a 50% reduction in the number of road traffic deaths by 2020 – remains far from sufficient.

Figure 1: Number and rate of road traffic death per 100,000 population: 2000–2016



A leading killer of children

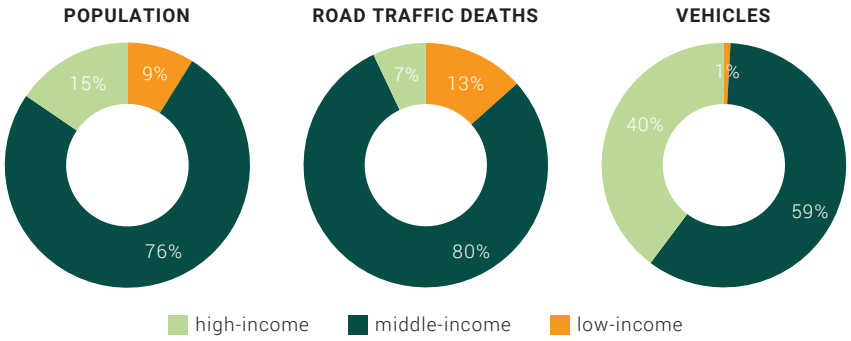
As progress is made in the prevention and control of infectious diseases, the relative contribution of deaths from noncommunicable diseases and injuries has increased. Road traffic injuries are the eighth leading cause of death for all age groups. More people now die as a result of road traffic injuries than from HIV/AIDS, tuberculosis or diarrhoeal diseases. Road traffic injuries are currently the leading cause of death for children and young adults aged 5–29 years, signalling a need for a shift in the current child and adolescent health agenda which, to date, has largely neglected road safety.

Road traffic injuries are now the leading cause of death for children and young adults aged 5–29 years.

Progress is far from uniform

A number of countries have seen success in reducing road traffic deaths over the last few years, but progress varies significantly between the different regions and countries of the world. There continues to be a strong association between the risk of a road traffic death and the income level of countries. With an average rate of 27.5 deaths per 100,000 population, the risk of a road traffic death is more than three times higher in low-income countries than in high-income countries where the average rate is 8.3 deaths per 100,000 population. Furthermore, as shown in Figure 2, the burden of road traffic deaths is disproportionately high among low- and middle-income countries in relation to the size of their populations and the number of motor vehicles in circulation.

Figure 2: Proportion of population, road traffic deaths, and registered motor vehicles by country income category*, 2016

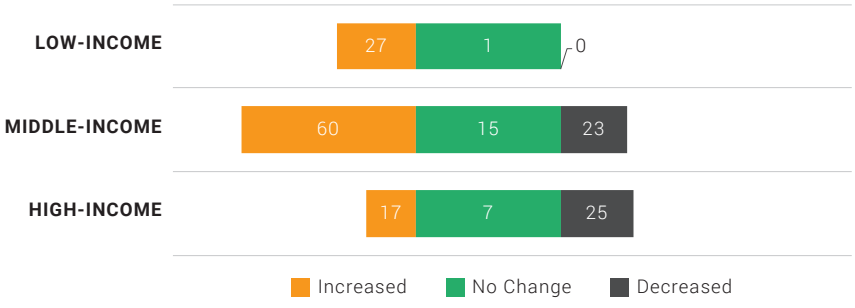


*income levels are based on 2017 World Bank classifications.

There has been no reduction in the number of road traffic deaths in any low-income country since 2013.

There has also been more progress in reducing the number of road traffic deaths among middle- and high-income countries than low-income countries. As shown in Figure 3, between 2013 and 2016, no reductions in the number of road traffic deaths were observed in any low-income country, while some reductions were observed in 48 middle- and high-income countries. Overall, the number of deaths increased in 104 countries during this period.

Figure 3: Number of countries where a change in the number of road traffic deaths has been observed since 2013*



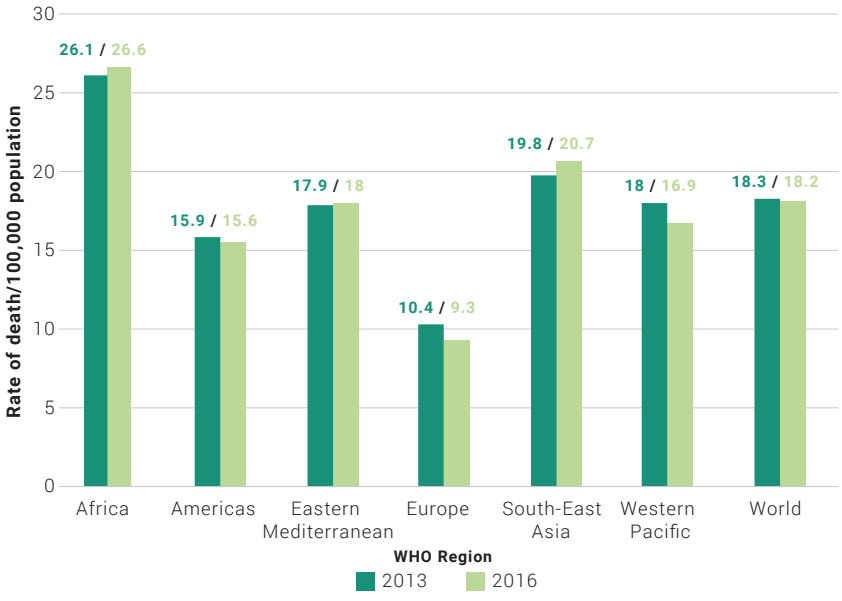
*These data represent countries that have seen more than a 2% change in their number of deaths since 2013, and excludes countries with populations under 200 000. The income levels are based on 2017 World Bank classifications.

Inequalities persist across regions

Whereas the global rate of road traffic death is 18.2 per 100,000 population, there is significant variation across the world's regions, where the rate of death ranges from 9.3 to 26.6 per 100,000 population. Regional rates of road traffic deaths in Africa and South-East Asia are highest at 26.6 and 20.7 deaths per 100,000 population respectively. This is followed by the Eastern Mediterranean and Western Pacific regions, which have rates comparable to the global rate with 18 and 16.9 deaths per 100,000 population respectively. The Americas and Europe have the lowest regional rates of 15.6 and 9.3 deaths per 100,000 population respectively. In terms of progress made, in three of the six regions (Americas, Europe, Western Pacific), the rates of death have decreased since 2013.

The rates of road traffic death are highest in Africa (26.6/100,000 people) and South-East Asia (20.7/100,000 people).

Figure 4: Rates of road traffic death per 100,000 population by WHO regions: 2013, 2016

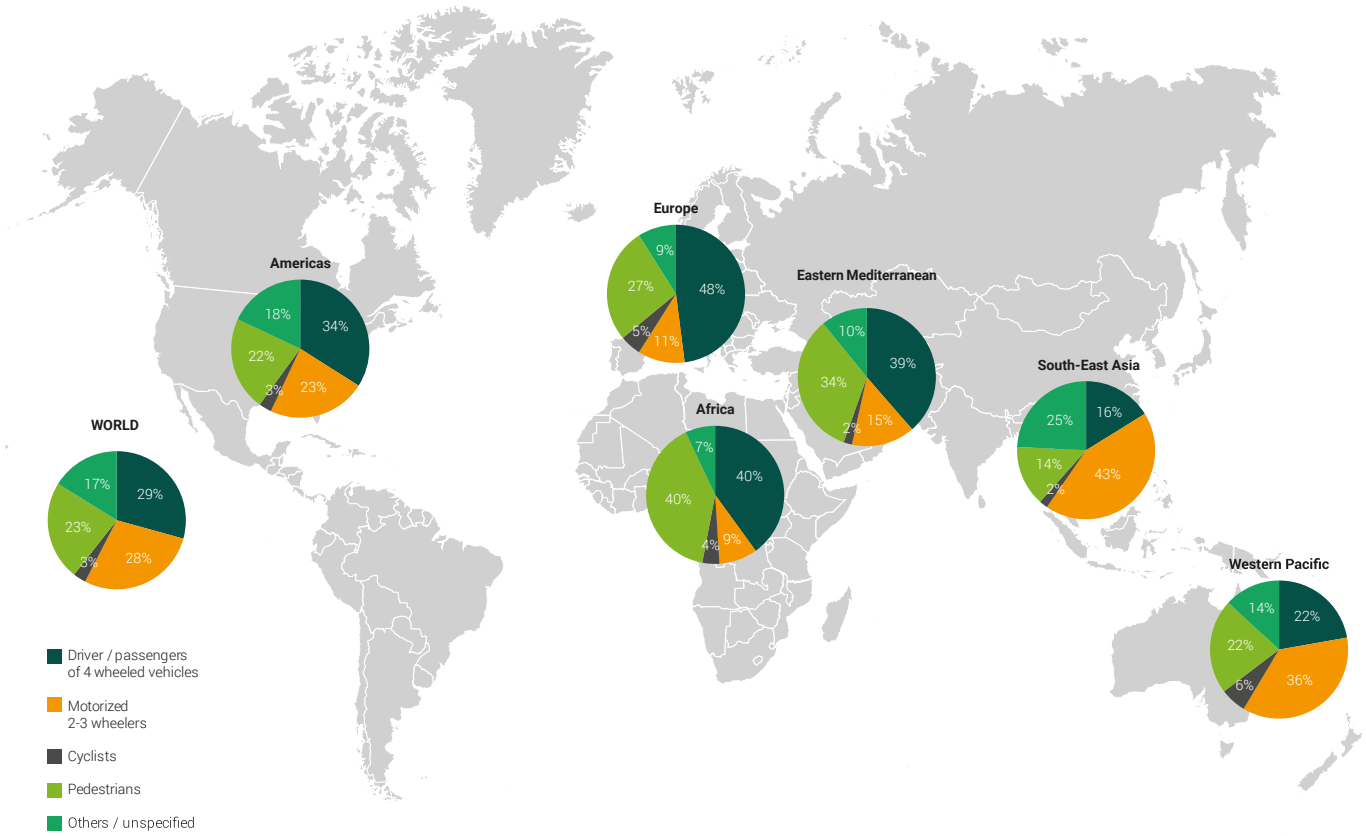


Vulnerable road users disproportionately impacted

More than half of all road traffic deaths are among vulnerable road users: pedestrians, cyclists and motorcyclists.

The variation in rates of death observed across regions and countries also corresponds with differences in the types of road users most affected. Vulnerable road users – pedestrians, cyclists and motorcyclists – represent more than half of all global deaths. Pedestrians and cyclists represent 26% of all deaths, while those using motorized two- and three-wheelers comprise another 28%. Car occupants make up 29% of all deaths and the remaining 17% are unidentified road users[1]. Africa has the highest proportion of pedestrian and cyclist mortalities with 44% of deaths. In South-East Asia and the Western Pacific, the majority of deaths are among riders of motorized two and three-wheelers, who represent 43% and 36% of all deaths respectively.

Figure 5: Distribution of deaths by road user type, by WHO Region



1 The distribution of deaths among road user categories is based on data reported by countries. In some countries, this data is not available or is incomplete, which contributes to the large percentage of those identified as 'others' or 'unspecified'.

Legislation and road user behaviour

Enacting and enforcing legislation on key behavioural risk factors including speed, drink-driving and failing to use motorcycle helmets, seat-belts and child restraints are critical components of an integrated strategy to prevent road traffic deaths. Currently, 123 countries, representing nearly six billion people, have laws that meet best practice for at least one of the five key behavioural risk factors.

Since 2014, 22 additional countries have amended their laws on one or more key risk factors to bring them in line with best practice, covering a potential additional one billion people or 14% of the world's population.

22 countries representing **1 billion people** amended their laws on one or more risk factors to bring them into alignment with best practice.

Figure 6: Countries with laws meeting best practice on 5 risk factors, 2014, 2017

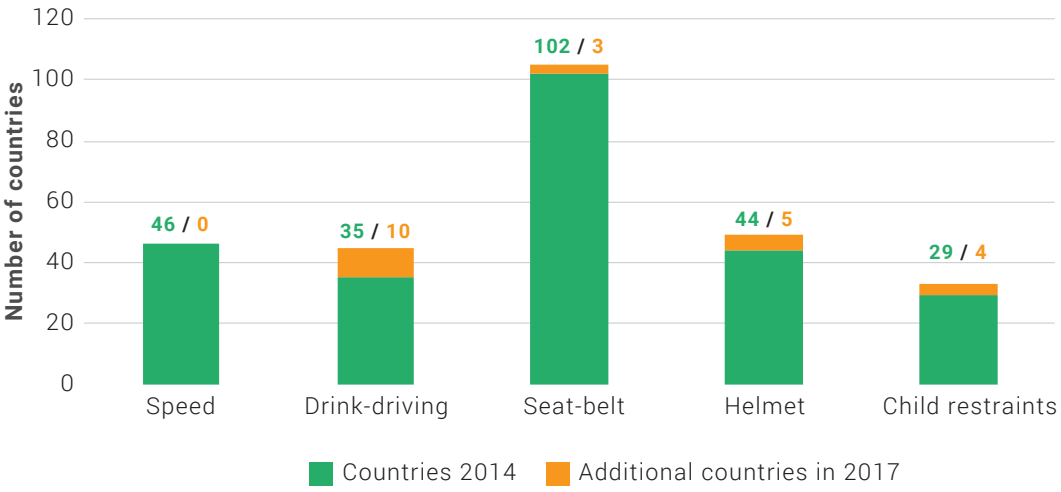
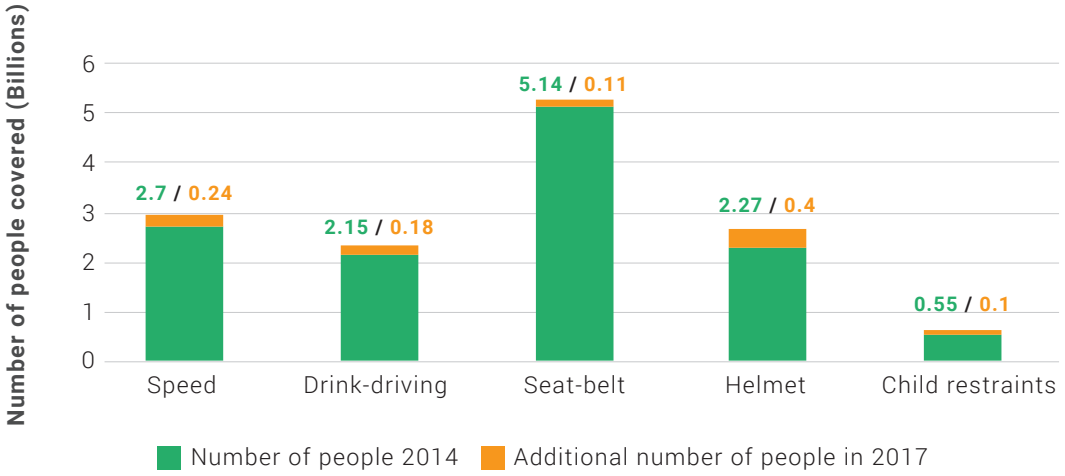


Figure 7: Populations covered by laws meeting best practice, 2014, 2017

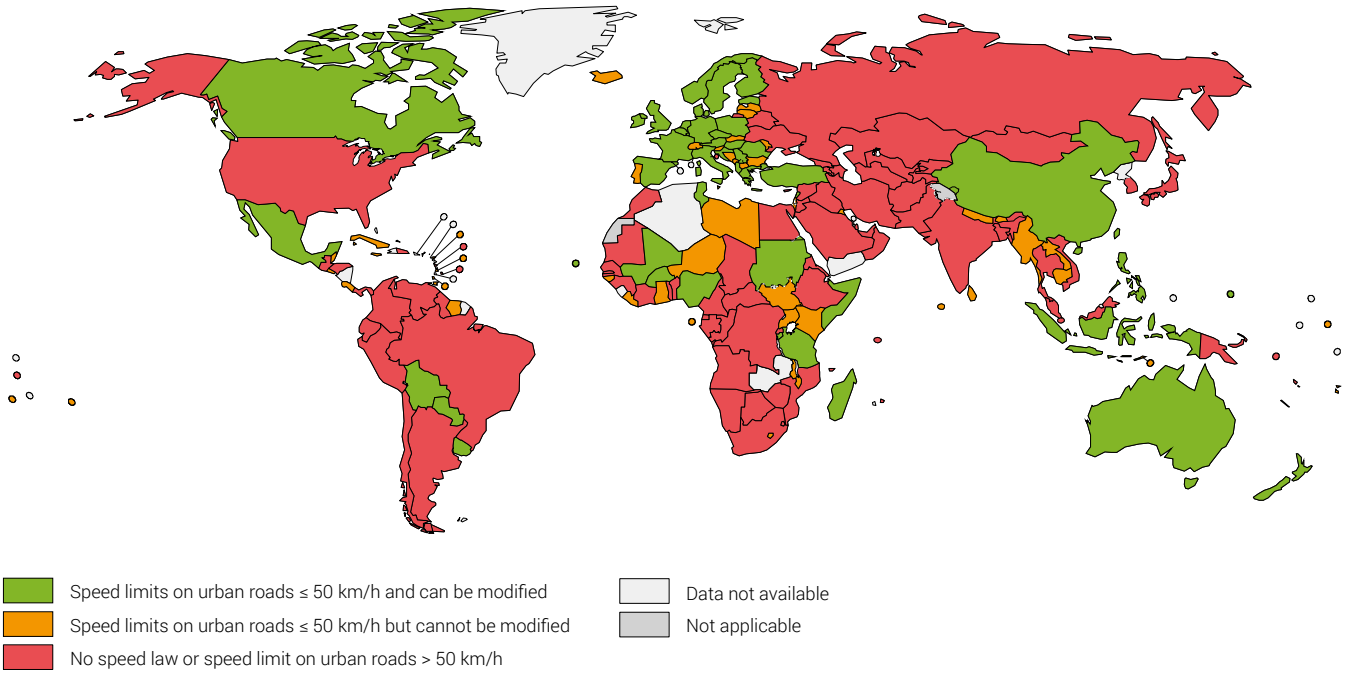


46 countries representing **3 billion people** currently have laws setting speed limits that align with best practice.

Managing speed

The speed at which a vehicle travels directly influences the risk of a crash as well as the severity of injuries, and the likelihood of death resulting from that crash. Effective speed management is, as such, central to most road safety intervention strategies. Setting national speed limits is an important step in reducing speed. Maximum urban speed limits should be lower than or equal to 50 km/h, in line with best practice. In addition, local authorities should have the legislative power to reduce speed limits further, allowing them to take into account local circumstances such as the presence of schools or high concentrations of vulnerable road users. The results show that only 46 countries have laws that meet best practice criteria for speed.

Figure 8: Countries with speed laws meeting best practice, 2017



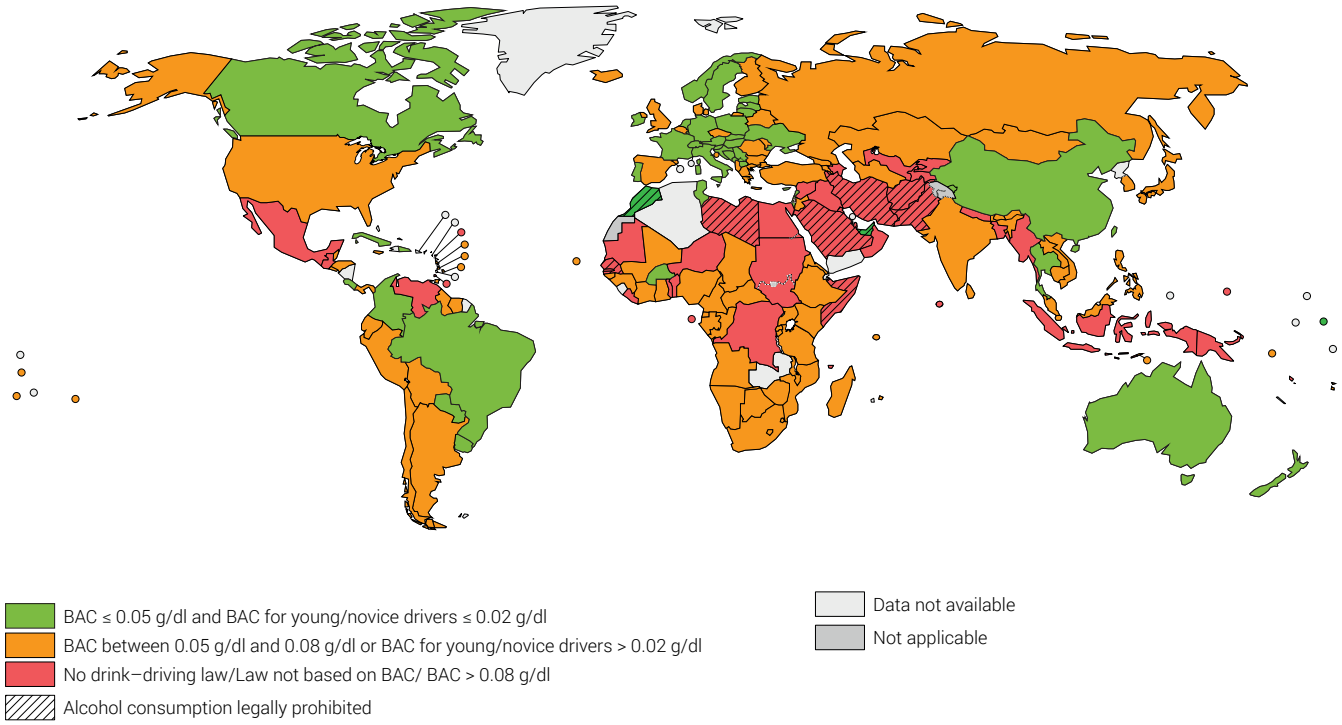
45 countries representing **2.3 billion people** currently have drink–driving laws that align with best practice.

Reducing drink–driving

It is estimated that 5–35% of all road deaths are reported as alcohol-related. Driving after drinking alcohol significantly increases the risk of a crash and the severity of that crash. While blood alcohol concentration (BAC) limits provided for in legislation need to be at the core of efforts to address drinking and driving, an integrated approach to intervention involves combined publicity and high-visibility police enforcement. Best practice for drink–driving laws includes a BAC limit of 0.05 g/dl for the general population and a BAC limit of 0.02 g/dl for young or novice drivers.

Progress has been made since 2014 with an additional ten countries now meeting overall best practice for drink–driving laws, representing coverage of an additional 180 million people.

Figure 9: Countries with drink-driving laws meeting best practice, 2017



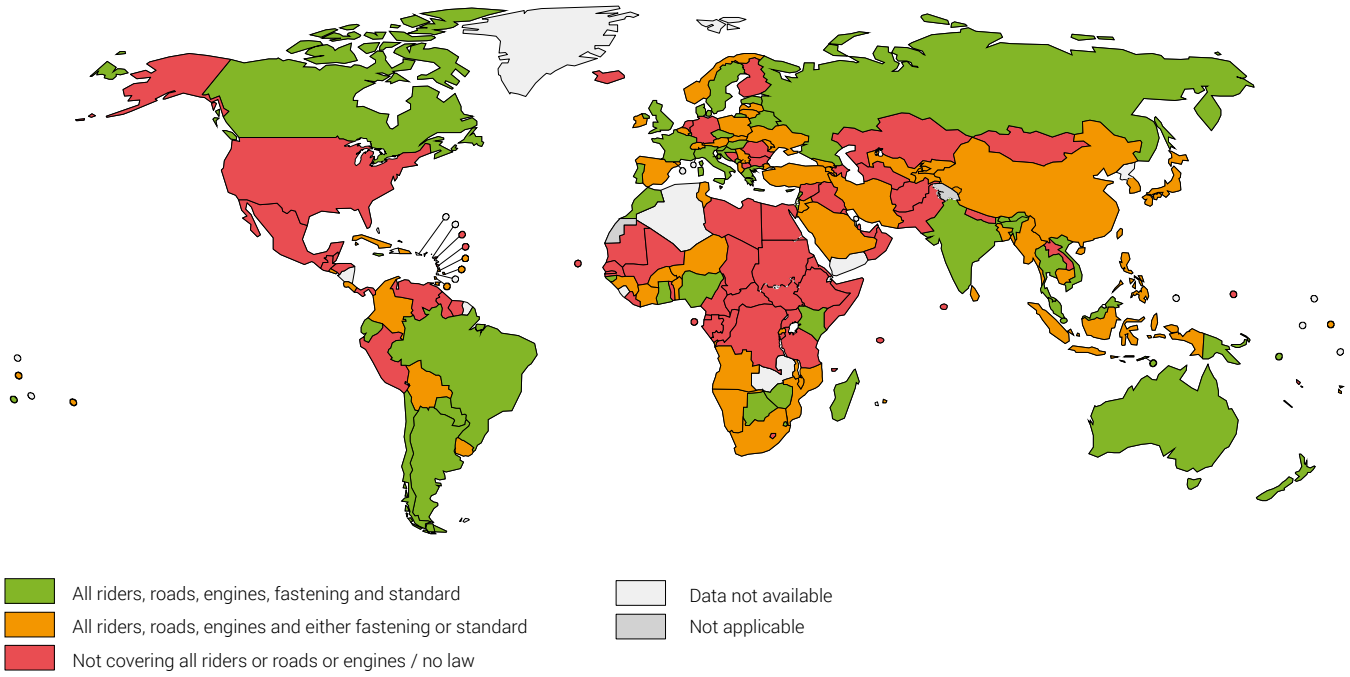
Increasing motorcycle helmet use

Head injuries are the leading cause of death and major trauma for two- and three-wheeled motor vehicle users. Correct helmet use can lead to a 42% reduction in the risk of fatal injuries and a 69% reduction in the risk of head injuries. The use of helmets is, as such, an increasingly important means of preventing road traffic deaths. Best practice for motorcycle helmet laws includes a requirement for drivers and passengers to wear a helmet on all roads, a specification that helmets should be fastened, and a reference to a helmet standard.

Since 2014, five countries have made amendments to existing legislation to align them with best practice, providing coverage to an additional 397 million people. Only 63 countries, representing 33% of the world's population, restrict child passengers on motorcycles.

49 countries representing **2.7 billion people** currently have laws on motorcycle helmet use that align with best practice.

Figure 10: Countries with helmet laws meeting best practice, 2017



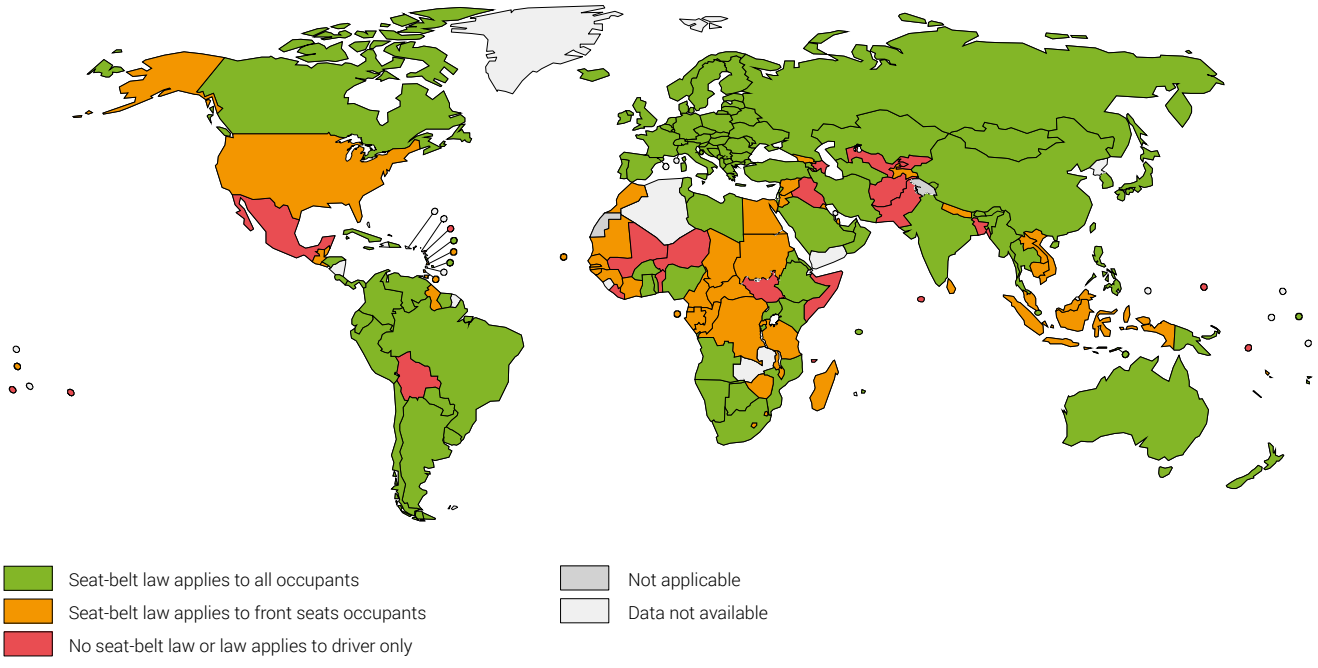
105 countries representing **5.3 billion people** currently have laws on seat-belt use that align with best practice.

Increasing seat-belt use

Wearing a seat-belt reduces the risk of death among drivers and front seat occupants by 45–50%, and the risk of death and serious injuries among rear seat occupants by 25%. A requirement that both front and rear occupants use seat-belts is a key criterion for best practice.

Since 2014, seven countries have made changes to their seat-belt legislation: five additional countries now have laws that meet best practice while two countries have made changes that bring their laws out of alignment with best practice. The net increase of three countries accounts for an additional 113 million people covered by best practice seat-belt laws.

Figure 11: Countries with seat-belt laws meeting best practice, 2017



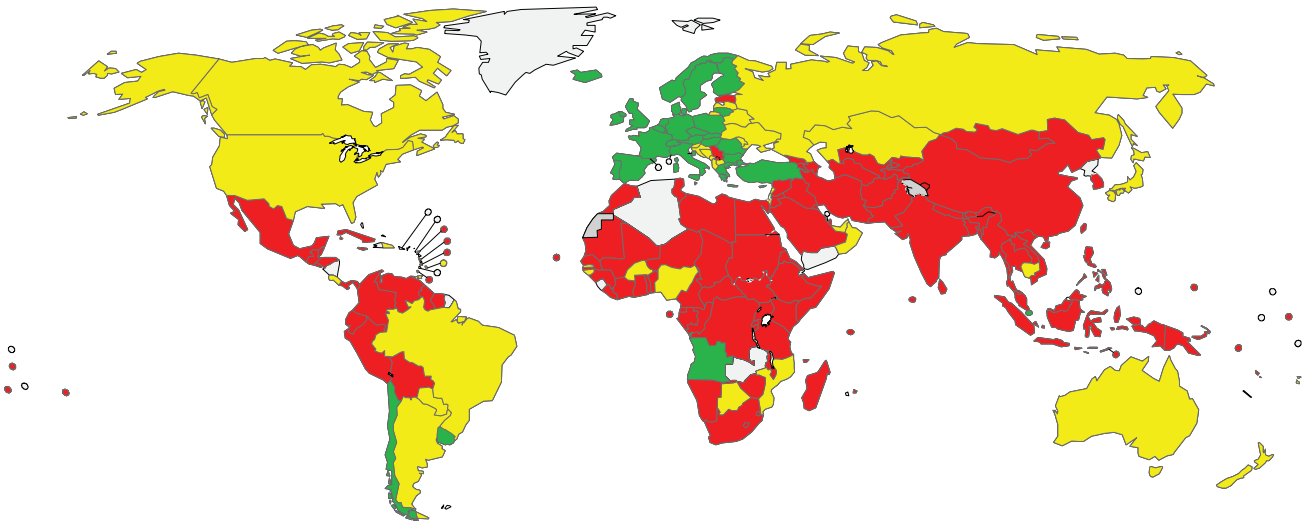
Increasing child restraint use

Child restraints are highly effective in reducing injury and death to child occupants. The use of child restraints can lead to at least a 60% reduction in deaths. Best practice criteria for child restraint laws include a requirement to place children at least until ten years of age or 135 cm in height in a child restraint; a restriction to seating children in the front seat; and a reference to a safety standard for child restraints.

This review showed that 84 countries have a national child restraint law. Among these, 33 countries, representing 9% of the world's population, meet the overall best practice criteria for child restraints. Since 2014, four countries have made amendments to legislation on the use of child restraints to bring them in line with best practice.

33 countries representing **652 million people** currently have laws on the use of child restraint systems that align with best practice.

Figure 12: Countries with child restraint laws meeting best practice, 2017



Safe roads

Road infrastructure is strongly linked to fatal and serious injury causation in road traffic collisions, and research has shown that improvements to road infrastructure, particularly design standards that take into account the safety of all road users, are critical to making roads safe. This review shows that 112 countries have national design standards for the management of speed.

Ninety-two countries have national design standards for separating pedestrians and cyclists from motorized traffic. One hundred and thirty-two countries have national design standards for the provision of safe crossings for pedestrians and cyclists.

This review found that 147 countries reported carrying out road safety audits or star ratings for new roads while 114 countries reported doing safety assessments or star rating on existing roads.

Safe vehicles

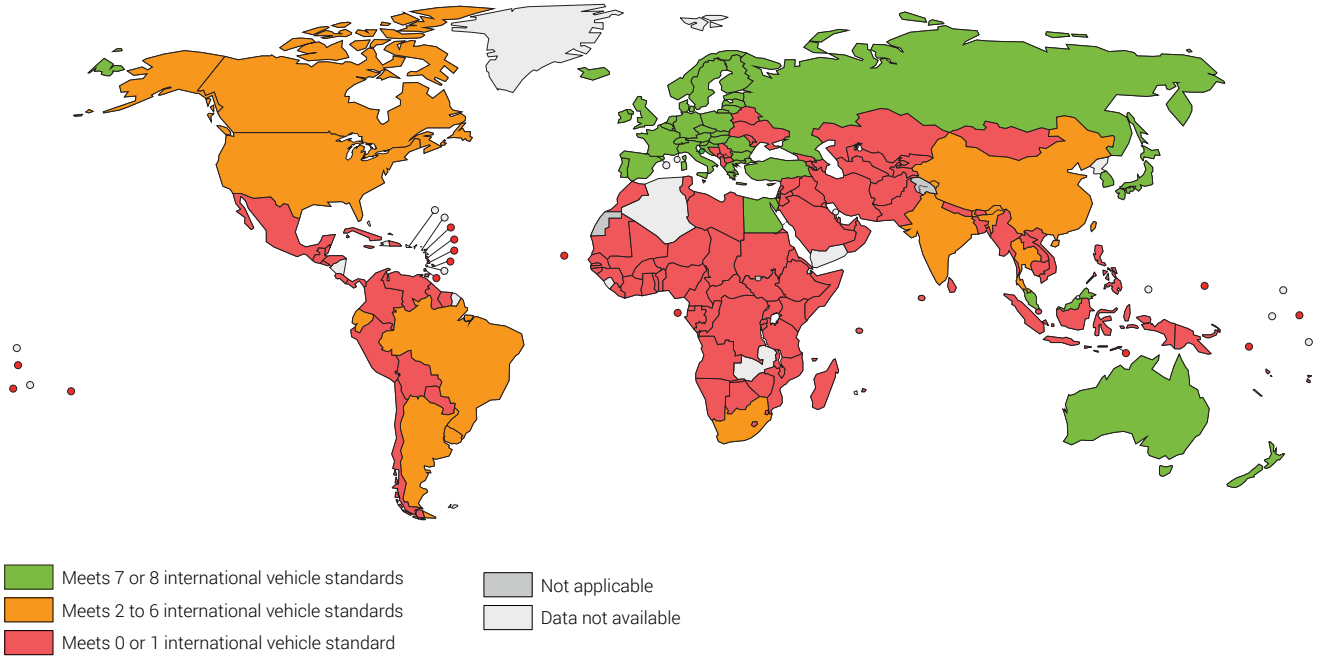
40 countries representing **1 billion people** have implemented at least 7 or all of the 8 priority UN vehicle safety standards.

Vehicle safety is increasingly critical to the prevention of crashes and has been shown to contribute to substantial reductions in the number of deaths and serious injuries resulting from road traffic crashes. Features such as electronic stability control and advance braking are examples of vehicle safety standards that can prevent a crash from occurring or reduce the severity of injuries. Despite these potential benefits, not all new and used vehicles are required to implement internationally recognized safety standards.

Progress with uptake of the eight[2] priority standards has been very limited since the last review. To-date, 40 mainly high-income countries have implemented 7–8 of these standards. Eleven countries apply two to six of the eight priority standards and 124 apply one or none of the priority standards. Since the last review, one additional country, India, is applying the front and side impact protection standard.

2 In the previous report, 7 priority standards were identified. An additional standard for motorcycle anti-lock braking systems (ABS) has been included in this report.

Figure 13: Countries applying UN vehicle safety standards, 2018



Post-crash care

Emergency care is at the core of the post-crash response. There are a series of time sensitive actions that are essential to provide effective care for the injured, beginning with activation of the emergency care system and continuing with care at the scene, transport, and hospital-based emergency care.

109 countries have a telephone number with national coverage to activate the emergency care system.

To activate the emergency care system, ideally there should be a single telephone number that is valid throughout the country, easy to remember and available as a free call. This current report found that 109 countries have at least one number with full national coverage. The proportion of injured people who die before reaching a hospital in low- and middle-income countries is over twice that in high-income countries. Ideally, there would be at least a simple prehospital system that could provide timely care at the scene with equipped ambulances staffed with certified providers, and ensure arrival to an appropriate hospital where there are specialist trauma care providers. Despite the enormous potential impact of prehospital care, the current report shows that only 55% of countries have

a formal process to train and certify prehospital providers while about half (54%) of countries have speciality training pathways in emergency medicine and trauma surgery.

Taking stock and looking ahead

The number of road traffic deaths continues to climb, reaching 1.35 million in 2016, while the rates of death relative to the size of the world population has stabilised in recent years. The progress that has been achieved in a number of countries to stabilise the global risk of dying from a road traffic crash has not occurred at a pace fast enough to compensate for the rising population and rapid motorization of transport taking place in many parts of the world. At this rate, the SDG target to halve road traffic deaths by 2020 will not be met. This review of key risk factors does show, however, that progress is being made in improving key road safety laws, making infrastructure safer, adopting vehicle standards and improving access to post-crash care. Further progress will depend upon future success in addressing the range of significant challenges which remain.

Made possible through funding from Bloomberg Philanthropies.

WORLD HEALTH ORGANIZATION
Management of Noncommunicable Diseases, Disability, Violence and Injury Prevention (NVI)

20 Avenue Appia
1211 Geneva 27
Switzerland
Phone: +41 22 791 2881

http://www.who.int/violence_injury_prevention/road_traffic/en/