

GLOBAL STATUS REPORT ON ROAD SAFETY 2013



SUPPORTING A DECADE OF ACTION



Background

Road traffic injuries are the eighth leading cause of death globally, and the leading cause of death for young people aged 15–29. Current trends suggest that by 2030 road traffic deaths will become the fifth leading cause of death unless urgent action is taken.

Strategies exist that are proven to reduce road traffic injuries and, through their implementation, a number of countries have successfully taken steps to reduce their road traffic death toll. Countries' progress in implementing a series of evidence-based measures known to be effective at reducing road traffic injuries was first reported in the *Global status report on road safety: time for action* (2009).

In 2010, governments around the world proclaimed a Decade of Action for Road Safety. The goal of the Decade (2011–2020) is to stabilize and then reduce the increasing trend in road traffic fatalities, saving an estimated 5 million lives over the 10-year period. A *Global Plan of Action* was developed to guide countries on the measures needed to

reduce their road traffic deaths, and for the goal of the Decade to be met. This report presents information on the extent to which these measures are in place in 182 participating countries: as such, it serves as the baseline for monitoring the Decade.



The current state of global road safety

About 1.24 million road traffic deaths occur annually on the world's roads, with little observed change since 2007. However, this plateau should be considered in the context of a corresponding 15% global increase in the number of registered vehicles, suggesting that interventions to improve global road safety have mitigated the expected rise in the number of deaths.

Eighty-eight countries — in which almost 1.6 billion people live — reduced the number of deaths on their roads between 2007 and 2010, showing that improvements are possible, and that many more lives will be saved if countries take further action. However, of concern is that 87 countries saw increases in the numbers of road traffic deaths over the same period.

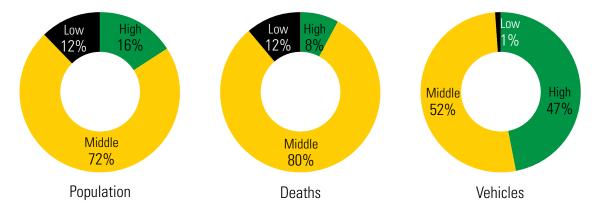
Middle-income countries are hardest hit

Middle-income countries have the highest annual road traffic fatality rates, at 20.1 per 100 000, compared to 8.7 and 18.3 in high- and low-income countries respectively. Eighty per cent of road traffic deaths occur in middle-income countries,

which account for 72% of the world's population, but only 52% of the world's registered vehicles. These countries bear a disproportionately high burden of road traffic deaths relative to their level of motorization (see Figure 1).

The number of road traffic deaths each year has not increased in the past 3 years – but remains unacceptably high at 1.24 million per year.

Figure 1. Population, road traffic deaths, and registered motorized vehicles*, by country income status



^{*} Registered vehicle data provided only for countries participating in the survey.

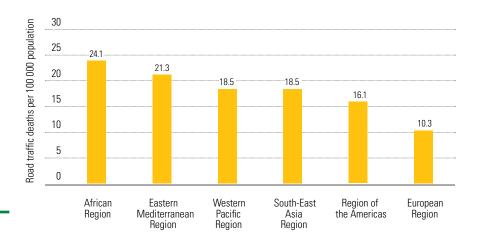
The African Region has the highest road traffic fatality rate

The risk of dying as a result of a road traffic injury is highest in the African Region and lowest in the European Region (Figure 2). Nonetheless, there are significant disparities in road traffic fatality rates between countries in the same region, with the European Region showing the greatest differences.

Half of all road traffic deaths are among pedestrians, cyclists and motorcyclists

Half of the world's road traffic deaths occur among pedestrians (22%), bicyclists (5%) and motorcyclists (23%) – i.e. "vulnerable road users". However, there are significant

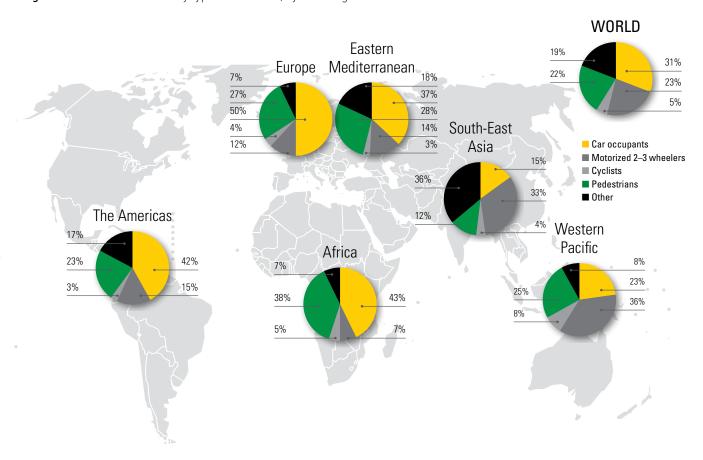
Figure 2. Road traffic deaths per 100 000 population, by WHO region



differences regarding who is most at risk by country income status and by region. In the African Region, where walking and bicycling are important forms of mobility, a high proportion of deaths (38%)

occur among pedestrians. In contrast, in many Western Pacific countries where motorcycles are used frequently, 36% of road traffic deaths are among motorized two- and three-wheelers (see Figure 3).

Figure 3. Road traffic deaths by type of road user, by WHO region



Progress in global road safety laws

Adopting and enforcing comprehensive laws to address key risk factors (speed, drink-driving, motorcycle helmets, seat-belts and child restraints) has been shown to result in reductions in road traffic injuries. Maintaining a high perception of enforcement among the public through strong social marketing campaigns is essential to their effectiveness.

Between 2008 and 2011, 35 countries representing almost 10% of the world's population passed laws to address one or more of these five key risk factors. However, there has been no increase in the number of countries with adequate legislation on all five key risk factors — the 28 countries (representing 7% of the world's population) with comprehensive laws remain unchanged from the last evaluation (Figure 4). The report also highlights that enforcement of these laws

is inadequate (less than 8, on a scale of 0 to 10).

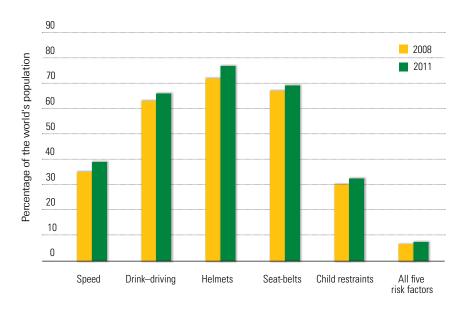
Reducing urban speeds protects pedestrians and bicyclists

Faster driving speeds increase the likelihood of a crash, and the severity of the crash consequences. Limiting speed through legislation and enforcement can

lead to significant reductions in road traffic injuries. In urban areas, 50 km/h is considered best practice for speed limits, while further reducing these limits to 30 km/h in areas with high concentrations of pedestrians and bicyclists is recognized as an effective way to reduce injuries among these road users.

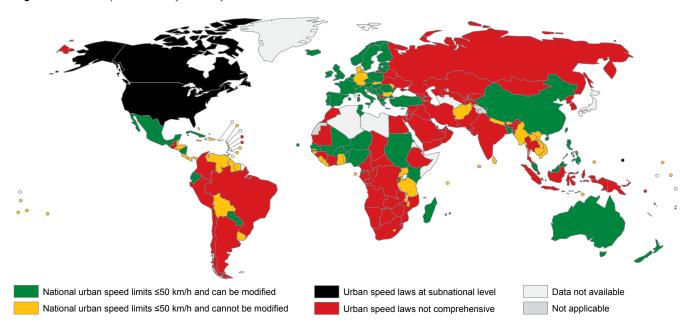
Although 114 countries apply the 50 km/h urban speed limit, these countries represent less than half of the world's

Figure 4. Increase in the percentage of world population covered by "comprehensive" legislation on five key road safety risk factors since 2008



New road safety
laws have
been passed in
35 countries – but
only 7% of the
world's population
is covered by
comprehensive
legislation.

Figure 5. Urban speed laws by country/area



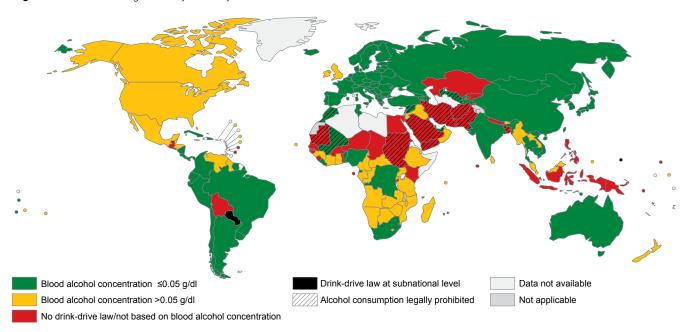
Only 59 countries, covering just 39% of the world's population (2.67 billion people), have implemented an urban speed limit of 50 km/h or less and allow local authorities to reduce these limits.

population. Furthermore, nearly half of all countries lack enabling legislation that permits local authorities to modify national speed limits. In total, just 59 countries implement both national urban speed limits of less than or equal to 50 km/h and allow local authorities to further reduce these limits where appropriate (Figure 5). These countries represent 2.67 billion people, or just 39% of the world's population.

Enforcement of speed limits is essential for successfully developing safer driving behaviour and needs to be given increased emphasis in most countries: only 26 countries rate enforcement of their national speed limits as "good" (8 or above, on a scale of 0 to 10).



Figure 6. Drink-driving laws, by country/area



89 countries, covering 66% of the world's population (4.6 billion people), now have a comprehensive drink–driving law, defined as a blood alcohol concentration limit of 0.05 g/dl or less.

Drink-driving laws should be based on blood alcohol concentration (BAC) levels

Drinking and driving increases the risk of being involved in a crash, as well as the severity of resulting injuries. Setting and enforcing legislation on BAC limits of 0.05 g/dl can lead to significant reductions in alcohol-related crashes.

Eighty-nine countries, covering 66% of the world's population (4.6 billion people), now have a comprehensive drink—driving law, defined as a BAC limit of 0.05 g/dl or less, in line with best practice (Figure 6). High-income countries are more likely to have a legal BAC limit of 0.05 g/dl or less (67%) than are middle- or low-income countries (49% and 21%, respectively). Better enforcement of drink—driving laws is urgently needed: only 39 countries rate their enforcement as "good".

Young adults driving with a BAC level of 0.05 g/dl are more than twice as likely to have a road traffic crash than are more experienced drivers. Setting lower BAC limits (0.02 g/dl or less) is an effective means of reducing crashes related to drink—driving among young and novice drivers, but only 42 countries apply lower BAC limits of ≤0.02 g/dl among this group.

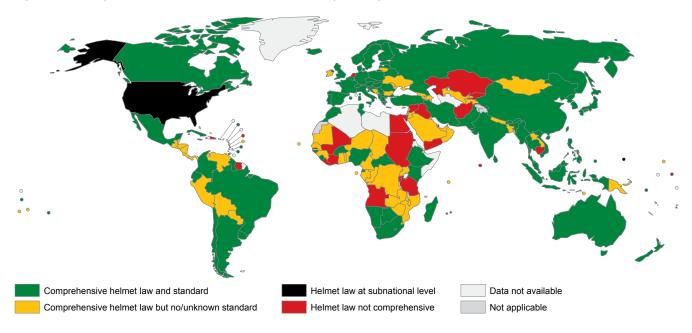
More effort is needed to tighten up motorcycle helmet laws and promote helmet standards

Rapid growth in the use of motorized twowheeled vehicles in many countries has been accompanied by increases in injuries and fatalities among users. Wearing a good quality motorcycle helmet can reduce the risk of death by 40% and the risk of serious injury by over 70%. Introducing and enforcing legislation on helmet use is effective at increasing helmet-wearing rates and reducing head injuries.

Helmets must meet recognized safety standards with proven effectiveness in reducing head injuries to reduce the impact of road traffic crashes. While there are a number of internationally recognized standards, it is important that a particular government's helmet standard is suitable for the traffic and weather conditions of the country, and specifies helmet types that are both affordable and available to users.

Ninety countries meet both the criteria considered essential for comprehensive helmet legislation: that is, they have implemented a helmet law that covers all riders (drivers and passengers), all road types and all engine types, and they apply a national or international helmet standard (Figure 7).

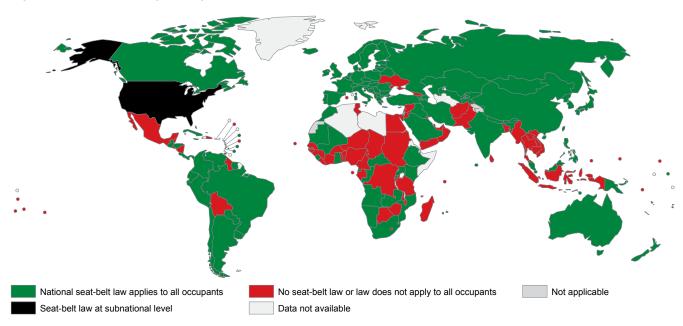
Figure 7. Motorcycle helmet laws and helmet standards, by country/area



90 countries, representing 77% of the world's population, have a comprehensive helmet law covering all riders, all roads and all engine types, and apply a helmet standard.



Figure 8. Seat-belt laws, by country/area



Progress has been made in extending seat-belt laws to include rear-seat passengers

Failure to use a seat-belt is a major risk factor for road traffic injuries and deaths among vehicle occupants. Wearing a seat-belt reduces the risk of a fatal injury by 40–50% for drivers and front seat occupants, and between 25–75% for rear seat occupants.

Comprehensive seat-belt laws covering all occupants are in place in 111 countries, covering 69% of the world's population (4.8 billion people) (Figure 8). Ten additional countries put in place comprehensive seat-belt laws since 2008. Despite these improvements in legislation, much more is needed to improve enforcement of seat-belt laws: only a quarter of all countries rate their seat-belt enforcement as "good".

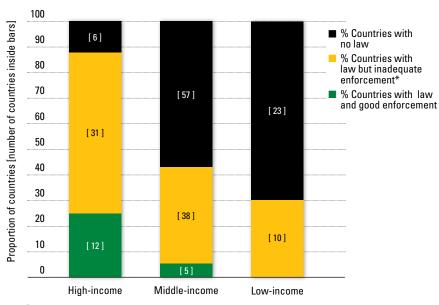
Increasing the use of child restraints

Child restraint systems protect infants and young children from injury during a crash. Child restraints reduce the likelihood of a fatal crash by approximately 70% among infants and between 54% and 80% among young children.

Ninety-six countries have a law requiring child restraints (Figure 9). The majority of high-income countries have child restraint laws in place, while such laws are far less common in low- and middle-income countries. Enforcement of child restraint laws remains low in most countries (including high-income countries): only 17 countries (9%) rate their enforcement of child restraint laws as "good".

More than half of all countries have implemented a child restraint law.

Figure 9. Proportion of countries with child restraint laws and good enforcement, by country income status



 $[\]boldsymbol{*}$ <8 on a scale of 0 to 10, or no answer as reported by countries

Transport policies neglect pedestrians and bicyclists

The findings are a strong warning to governments regarding the need to address non-motorized road users.

Twenty-seven per cent of all road traffic deaths occur among pedestrians and bicyclists. In low- and middle-income countries, this figure is closer to a third of all road deaths, but in some counties it is more than 75%.

Governments need to make walking and bicycling safer

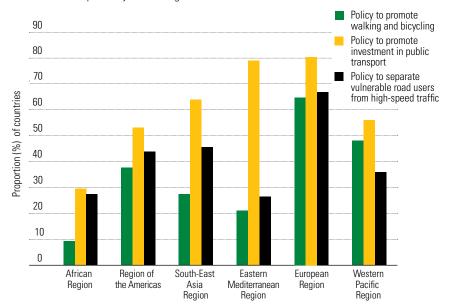
As the world continues to motorize, walking and bicycling need to be made safer and promoted as healthy and less expensive mobility options. However, only 68 countries have national or subnational policies that promote walking and bicycling, and just 79 countries have policies in place that protect pedestrians and bicyclists by separating them from other motorized, high-speed traffic. This figure is much higher in high-income countries (69%) than in low- and middleincome countries (34%). Although governments increasingly recognize the need to promote alternative forms of mobility, more emphasis needs to be given to making these modes of transport safe. Addressing the safety of pedestrians and bicyclists is critical to successfully reducing the total number of global road deaths.

Public transport can make mobility safer and reduce congestion

Safe public transport systems are increasingly viewed as an important way of improving mobility safely, particularly in urban areas with increasing traffic congestion. In many high-income cities, there has been strong political emphasis on decreasing individual car use through investments in public transport systems. Investing in safe public transport is also seen as a mechanism to encourage increased physical activity and thus promote health.

Over 100 countries have national or subnational policies to invest in public transport (Figure 10). Public transport is well regulated and thus considerably safer than private car travel in most high-income countries: however, in many low- and middle-income countries with rapidly developing economies, growth in unregulated and unsafe public transport has led to increases in road traffic injuries among public transport users. Governments must ensure that public transport systems are safe, accessible and affordable.

Figure 10. Proportion of countries with policies to encourage non-motorized modes of transport, by WHO region



Conclusions and recommendations

Real progress has been made towards improving road safety and saving lives, but what this report shows is that faster and more concerted action is needed to prevent many more lives being needlessly lost on the world's roads. The following recommendations are made:

- Governments urgently need to pass comprehensive legislation that meets best practice on all key risk factors to address this preventable cause of death, injury and disability.
- Governments should invest sufficient financial and human resources in the enforcement of these laws as an essential component for their success. Raising public awareness can be an important strategy in increasing understanding of and support for such legislative and enforcement measures.
- Concerted effort is needed to make road infrastructure safer for pedestrians and bicyclists. The needs of these road users must be taken into consideration earlier, when road safety policy, transport planning and land use decisions are made. In particular, governments need to consider how non-motorized forms of transport can be integrated into more sustainable and safer transport systems.

In addition, the report makes a number of other recommendations that governments should follow to improve their road safety situation. These include making road infrastructure safer, intensifying work to

improve vehicle standards, improving postcrash care and harmonizing the reporting of data relating to road traffic injuries.

The decision to proclaim a Decade of Action for Road Safety was adopted unanimously at the UN General Assembly in 2010. While much progress has been made in improving road safety in a number of countries, considerable work will be needed for the goals and objectives of the Decade of Action to be realized. There is strong evidence on what interventions work – government action is now the key to ensure their implementation.



WORLD HEALTH ORGANIZATION

Department of Violence and Injury Prevention and Disability (VIP)

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

E-mail: traffic@who.int

To download a full copy of this report go to www.who.int/violence_injury_prevention/road_safety_status/2013

Made possible through funding from Bloomberg Philanthropies

