



# Road safety in the Eastern Mediterranean Region

Facts from the  
*Global Status Report on  
Road Safety 2013*



## Introduction



In 2004, the World Health Organization (WHO) and the World Bank jointly launched the *World report on road traffic injury prevention*. The report outlined the major risks for road traffic injuries, and recommended a number of interventions that countries could implement to improve the safety of their roads. In the same year the United Nations General Assembly adopted a resolution on improving global road safety. Five years later, WHO published the *Global status report on road safety 2009*, which provided the first assessment of the road safety situation at global, regional and national levels. This was followed by the *Eastern Mediterranean status report on road safety*, which offered more focus on the regional context and issues, while drawing on data from the global report. In recognition of the gravity of the problem in the Region, in 2009 Member States at the 56th session of the Regional Committee for the Eastern Mediterranean issued resolution EM/RC56/R.7 Road traffic injuries: A growing public health concern.

This heightened momentum was further augmented in 2010 by the United Nations General Assembly resolution 64/255, which proclaimed the period 2011–2020 as the Decade of Action for Road Safety. In this resolution, the publication of further global status reports was proposed as a means to monitoring the impact of the Decade. In 2011, WHO started to work on the *Global status report on road safety 2013: supporting a decade of action*<sup>1</sup>. This work aims to describe the road safety situation in all Member States, assess changes that have occurred since the publication of the first global status report, indicate the gaps in road safety nationally and serve as a baseline for monitoring activities relating to the Decade of Action for Road Safety.

Data collection was carried out in 2011. The 182 countries that participated globally included 19 of the 22 countries of the Eastern Mediterranean Region, representing 97% of the Region's population. Country-level data were collected from a multisectoral group of respondents who collectively provided one set of data that best represented the road safety situation in the country. Data were validated at the global, regional and national level, and officially cleared by the respective government.

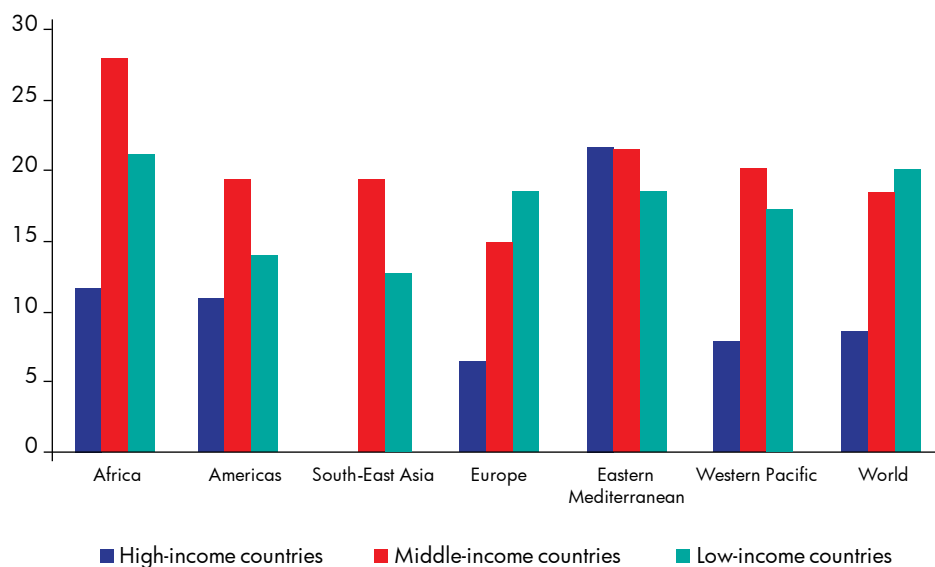
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<sup>1</sup> [www.who.int/violence\\_injury\\_prevention/road\\_safety\\_status/2013](http://www.who.int/violence_injury_prevention/road_safety_status/2013)

## Findings

### High-income countries in the Region have higher fatality rates than other high-income countries

The report shows that an estimated 127 260 persons were killed on the Region's roads in 2010, constituting 10% of the world's estimated deaths (about 1.24 million) in the same year, with a regional fatality rate of 21.3 per 100 000 population. This compares to a global rate of 18.03 per 100 000 population and means the Eastern Mediterranean Region has the second highest road traffic fatality rate in the world, after the African region (at 24.1 per 100 000 population). Moreover, some of its countries have the highest road traffic fatality rates in the world. The Region is also unusual in having the highest rates of road traffic fatalities among its high-income countries, at 21.7 per 100 000 population (see Figure 1). This is more than double the global rate of 8.7 per 100 000 population for high-income countries.

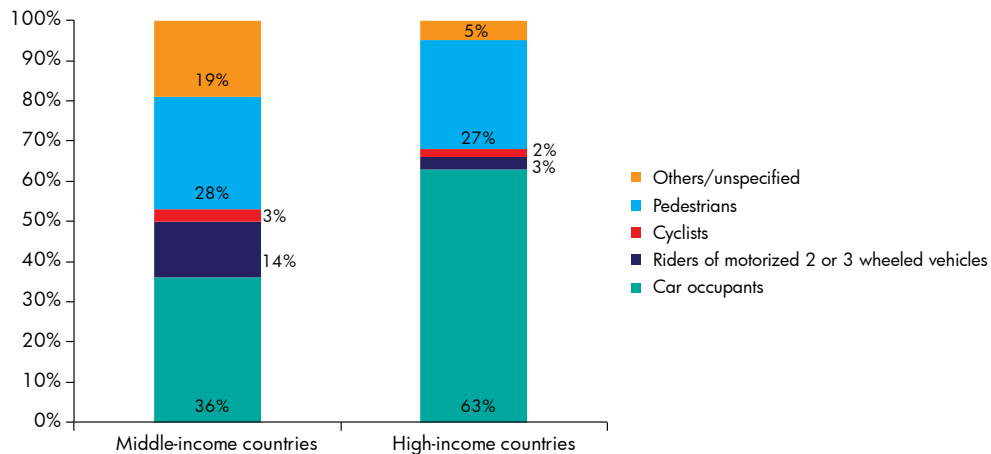


Source: *Global status report on road safety 2013*

**Figure 1.** Road traffic fatality rates per 100 000 population by WHO region and income groups

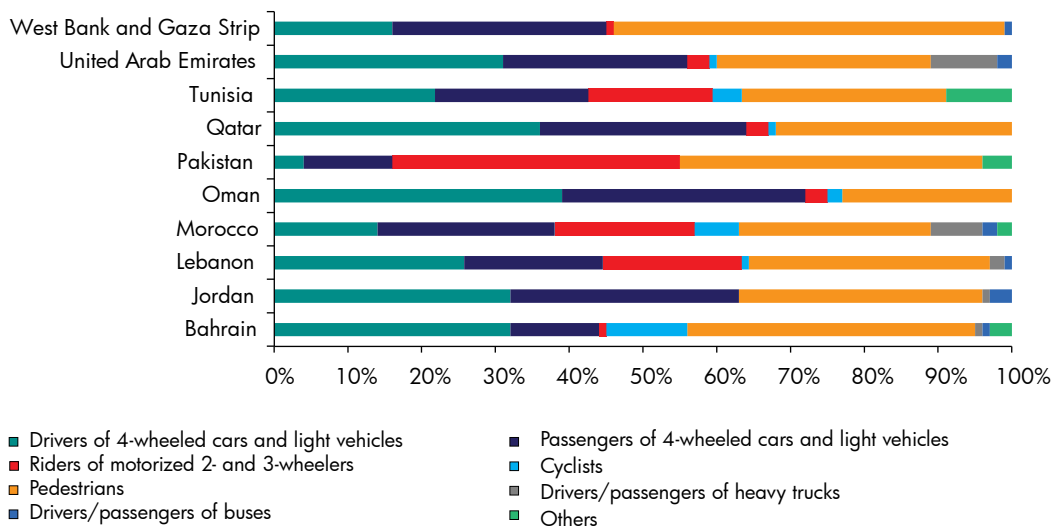
## Nearly half of road traffic deaths in the Region are among vulnerable road users, particularly pedestrians

Forty-five percent of road traffic deaths in the Region are among vulnerable road users: pedestrians (28%), motorcyclists (14%) and cyclists (3%). Nonetheless, there is considerable variation in the proportion of deaths borne by different road users in countries. In high-income countries, most road traffic deaths occur among car occupants, while in middle-income countries pedestrians and riders of 2- and 3-wheeled vehicles account for a higher proportion of deaths (see Figure 2). More details on variations among countries are given in Figure 3.

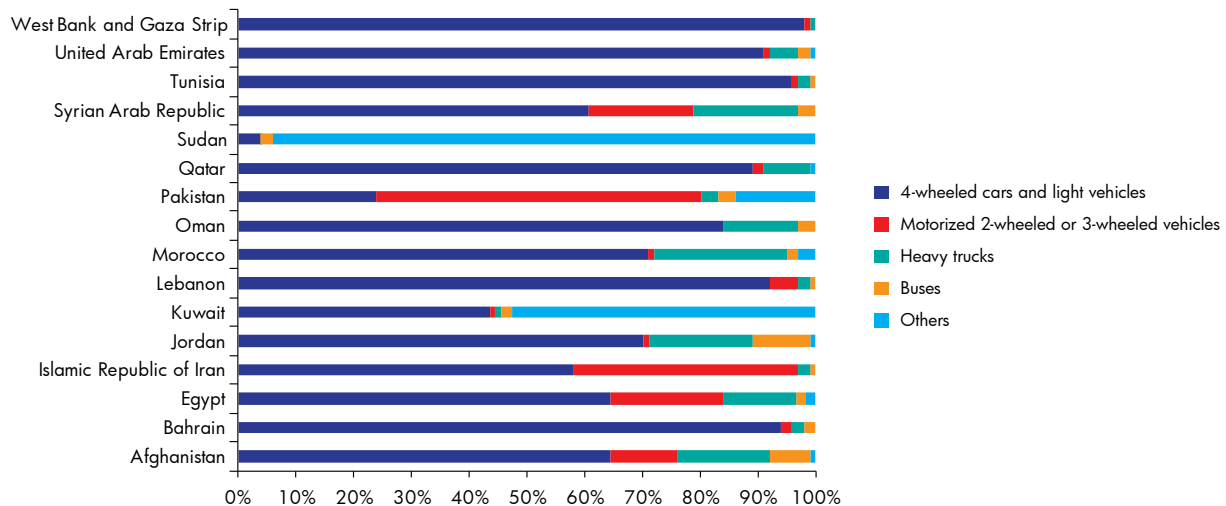


No data on road traffic deaths by type of road user were available from low-income countries of the Region.

**Figure 2.** Distribution of road traffic deaths in the Region, by type of road user, 2010



**Figure 3.** Distribution of road traffic deaths in selected countries, by type of road user, 2010



**Figure 4.** Distribution of types of registered vehicle in countries, 2010

## Motorization is increasing in the Region

Between the first and second global status reports for road safety in 2009 and 2013, an increase of more than 8 million vehicles was reported in the Region. The number of motorized vehicles per 1000 population increased from 94 per 1000 population in 2007 to 105 per 1000 population during 2010. In most countries, motorized 4-wheeled cars and light vehicles account for the highest proportion of registered vehicles. A few countries are showing rapid increases in the number of motorized 2- and 3-wheeled vehicles (see Figure 4).

## Young males are at higher risk of road traffic injury

More than 75% of all road traffic deaths in the Region occur among males, while 60% occur in the productive age group of 15 to 44 year-olds. The majority of road traffic deaths are among the economically active, with potentially significant implications for development due to lost productivity and income.

## More information is needed on the burden of disabilities due to road traffic injuries

The estimated proportion of people injured in a road traffic crash who incur a permanent disability as a result of the crash was available in only five countries and ranged from 1.2% in West Bank and Gaza Strip to 9% in Qatar. However, variations in the definitions and standards used make comparisons between countries difficult.



## Post-crash care needs strengthening

In 74% of countries, one national emergency access number is available, while other countries have multiple numbers. The majority of countries have a recognized specialty of emergency medicine for medical doctors while only 58% of countries have a recognized formal postgraduate training programme in emergency medicine for nurses. This indicates that emergency care in the Region needs to be evaluated to ensure that the quality of hospital care is optimal. It also shows that more investment is needed in training for all hospital staff, including nurses, in trauma-related care.

## Under-reporting is a challenge



- It is important that countries use a 30-day definition of road traffic deaths and complement police data, which are often under-reported, with health data, in order to capture the majority of road traffic deaths. While some progress has been made in the Region in this regard over the past few years, only 13 countries use the 30-day definition. And while 89% do have a vital registration system, they are frequently not linked to police data. In addition, despite the existence of vital registration systems in the majority of countries, most official data sources are police and do not make use of vital registration or health data. Thus under-reporting of death data still appears to be a major problem, as indicated by the estimated number of deaths compared to what is reported.
- Reporting for non-fatal injuries is even more challenging. Only 42% of the Region's countries have injury surveillance systems and many of these do not have national coverage.
- Data on intermediate indicators can also be a good way to assess progress, but these are weak in many countries. 37% of countries have a national data system that captures road traffic deaths attributable to alcohol impairment. 47% of countries have figures for seat-belt use and 32% of countries have figures for helmet use.

## Legislation on key risk factors is available but not comprehensive

Adoption and enforcement of legislation on key risk factors (speed, drink-driving, use of motorcycle helmets, seat-belts and child car restraints) has been shown to be an important tool in reducing road traffic injuries. It is important that these laws are in line with best practice and are comprehensive in scope. All countries have national speed limit laws, 95% have drink-driving and seat-belt laws and 89% have laws requiring motorcycle helmets and restricting mobile phone use. However, many of these laws are not comprehensive and this limits their effectiveness.

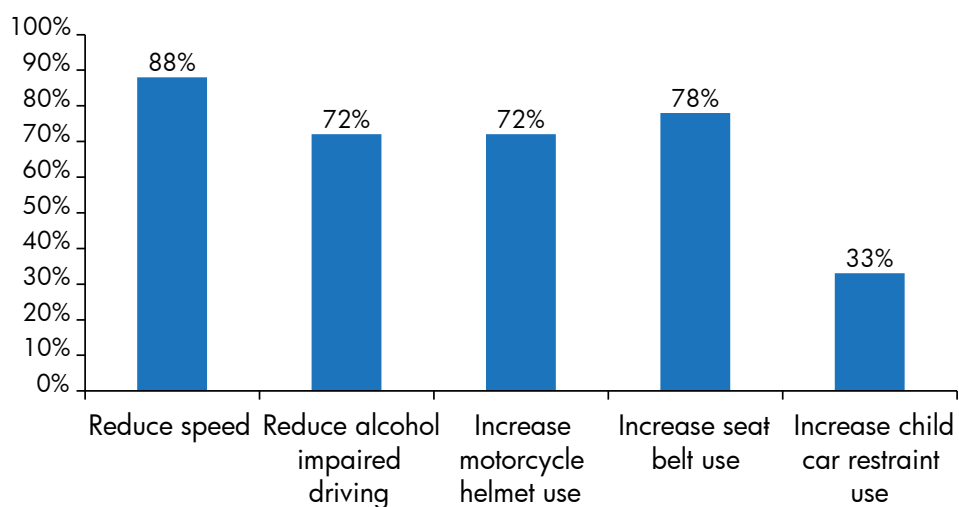
- **Speed limits:** Only 2 countries have comprehensive laws with urban speed limits of 50km/hour or less and that allow their local authorities to modify their local speed limits, for example, around schools or in residential areas. Furthermore, enforcement of these laws is reported as poor in most countries: Only 16% of countries rated enforcement of their speed laws as 'good'<sup>2</sup>.
- **Drink-driving:** 10 countries in the Region legally prohibit the use of alcohol; however, 18 of the 19 surveyed have a drink-driving law. Fewer than two-thirds of these countries (61%) base their drink-driving laws on blood alcohol concentration (BAC). Of these, 7 countries (37%) stipulate BAC limits of 0.05 g/dl or less, which is recommended by WHO and considered to be best practice. Many countries do not know the magnitude of their drink-driving problem; fewer than third of countries test all fatally-injured drivers. Enforcement of drink-driving laws is reported as 'good' in only 4 countries.
- **Seat-belts:** 18 of the 19 countries have seat-belt laws, but only 26% of countries have a national legislation that requires use among all occupants (i.e. front and rear seats). Again just 37% of countries rate enforcement of their seat-belt law as 'good'.
- **Child car restraints:** Only 2 countries in the Region have a national law requiring child car restraints. Enforcement in these two countries was not rated as 'good'.
- **Motorcycle helmets:** 21% of countries have helmet laws applying to all motorcycle riders (drivers and passengers), all road types, all engine types and have a helmet standard. A mere 16% of countries rate enforcement of their laws as 'good'. Only one country requires a minimum age or height for children to ride as passengers on motorized two-wheelers.
- **Use of mobile phones while driving:** National legislation prohibiting the use of hand-held mobile phones while driving exists in 89% of countries, while 21% of countries prohibit use of both hand-held and hands-free mobile phones.

<sup>2</sup> Good: 8 or above, on a scale of 0 to 10

Risk factor addressed by law	Definition of comprehensive law	Countries with comprehensive law
Speed	A national speed limit law with urban speed limits of $\leq 50$ km/h and the ability of local authorities to reduce speed limits where appropriate	Sudan, Tunisia
Drink-driving	A national drink-driving law based on blood alcohol concentration (BAC), and where the BAC limit for the general population is $\leq 0.05$ g/dl	Lebanon, Morocco, Qatar, Syrian Arab Republic, Tunisia, United Arab Emirates, West Bank and Gaza Strip
Motorcycle helmet non-usage	A national motorcycle helmet law that covers all riders, on all roads and all engine types, and requires an international or national helmet standard	Islamic Republic of Iran, Morocco, Pakistan, Tunisia
Seat-belt non-usage	A national seat-belt law that applies to all private car occupants (front and rear seats)	Islamic Republic of Iran, Iraq, Morocco, Saudi Arabia, West Bank and Gaza Strip
Child car restraint non-usage	A national law requiring the use of child car restraints	Saudi Arabia, West Bank and Gaza Strip

### Some progress is being made in road safety management

The proportion of countries that have a lead agency has increased from 74%, documented in the *Global Status Report on Road Safety 2009*, to 84% in the current survey. In 88% of countries, the existing lead agencies have coordinating functions while in 69% of countries they have functions related to legislation, monitoring and evaluation.



**Figure 5.** Proportion of countries with targets for risk factors within their national strategies



There was also progress in the proportion of countries with a national strategy for road safety, which increased from 75% to 95% between publication of the two reports. There is a need to set realistic long-term targets within strategies for both fatal and non-fatal injuries based on national road traffic crash data in order to identify areas for performance improvement and potential gains. Although 56% of countries have measurable targets for fatal road traffic injuries, only 33% of countries have measurable targets for non-fatal road traffic injuries.

The majority of national strategies for road safety have targets for major risk factors except targets for increasing the use of child restraints, which exist in only 33% of strategies (see Figure 5). Setting targets enables the assessment of performance related to enhancing road safety and thereby improving it. They are also one way to assert political will to improve road safety in a structured and sustainable fashion. However these targets need to be realistic, time-bound, measurable and achievable within the existing context. Once targets are developed within the strategies, baseline data on risk factors are needed to achieve the set targets. Some countries do have defined targets in their strategies but they have not conducted the observational studies needed to measure the risk factors. For example, 78% of national strategies have targets for seat-belt use, yet only 50% have data on seat-belt usage rates.

### Inspecting the safety of roads needs more emphasis

Increased motorization added new hazards to road users, particularly vulnerable road users. Governments therefore need to ensure that road infrastructure, among other measures, takes account of all road users and all forms of transport and enhances their safety. One way is to apply safety-conscious planning of new roads and periodic reviews and audits of existing ones based on international standards. All but one country in the Region require that new road infrastructure projects are reviewed for safety prior to construction. However, only just over half the countries regularly inspect the safety of all their roads, while 37% carry out inspections on some of the existing road networks. Inspection of the existing road infrastructure is conducted for all roads in only 53% of countries, for some roads in 37% of countries while 2 countries report no regular inspection of roads.

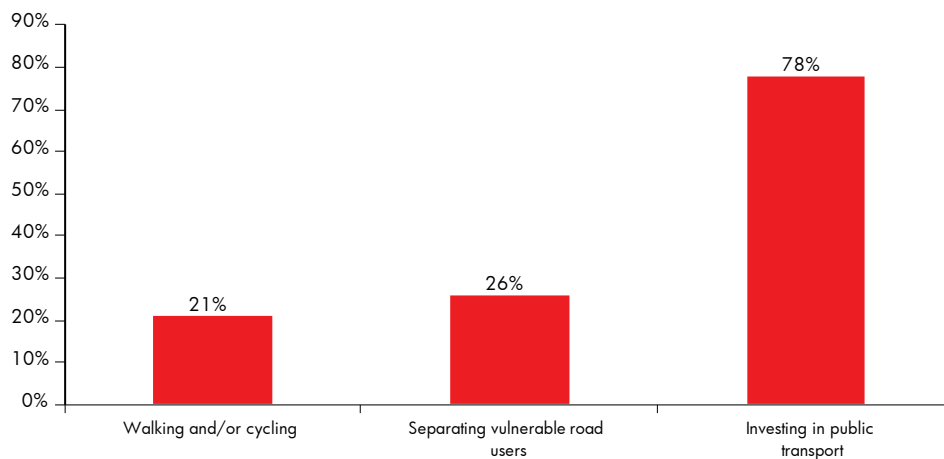




It is important that road safety audits are carried out by an agency independent to the construction company themselves, to ensure no conflict of interest. Only a quarter of countries in the Region have independent road safety audits, suggesting that this area needs more attention. Only 26% of countries have an independent agency for inspection other than the agency responsible for road construction and maintenance and 11% of countries have conducted inspection based on the International Road Assessment Programme (iRAP)<sup>3</sup>.

### Policies are needed that encourage walking and cycling and that separate vulnerable road users

Without making public transportation and walking or cycling safer, it will be difficult to reduce the number of vulnerable road users who die or are injured in the Region. Serious efforts are needed to protect pedestrians, cyclists and motorcyclists and to separate different road users. Yet only 4 countries in the Region have policies to encourage walking and cycling, which are also healthy and inexpensive modes of mobility. In addition, just 5 countries have policies that separate vulnerable road users from motorized high-speed traffic.



**Figure 6.** Proportion of countries with national policies to encourage walking and cycling, separate vulnerable road users and invest in public transport

<sup>3</sup> An iRAP is a highly specialized and detailed road inspection that focuses on more than 30 different design features known to influence the likelihood of crashes as well as their severity and provide star ratings that measure the level of safety 'built in' to the road for car occupants, motorcyclists, bicyclists and pedestrians. Five-star roads are the safest, and one-star roads are the least safe.

## Vehicle safety standards need to be strengthened

Making vehicles safer is an important component of efforts to reduce road traffic injuries, and much progress has been made in implementing minimum standards for vehicle construction. International or regional safety standards are applied in 68% of countries in the Region. 21% apply the safety standards of the New Car Assessment Programme, and 21% apply those of the World Forum for Harmonization of Vehicle Regulations. 42% apply other regional vehicle standards while 21% do not apply any safety standard.

## Conclusions and actions

Road traffic injuries continue to pose a grave public health problem in the Eastern Mediterranean Region. Data from the *Global status report on road safety 2013* show the high burden of road traffic injuries and resultant disabilities and deaths in the Region. The Region is responsible for 10% of the world's road traffic deaths and has the second highest road traffic fatality rate among WHO regions. More specifically, high-income countries in the Region have the highest fatality rate among similar countries across the world. Road traffic injuries are a serious concern for all countries of the Region.

Some progress has been made in areas such as road safety management and the adoption of legislation. However much more remains to be done. Although laws are in place, they are not comprehensive in most cases and enforcement needs to be strengthened. Addressing the needs of vulnerable road users is a challenge. While existing data systems clearly show this problem, policies to increase the safety of vulnerable road users remain inadequate. The Decade of Action for Road Safety is a great opportunity for countries to build on existing efforts and to work together on further action. Further progress can be achieved through the adoption of proven interventions drawing on the experiences of other countries where road safety efforts were successful. Efforts should draw on political will for strengthening and scaling up coordinated multisectoral action, supported and guided by global and regional commitments, namely the Decade of Action for Road Safety 2011–2020 and Regional Committee resolution EM/RC56/R.7.

The new data presented in the *Global status report on road safety 2013* will serve as the baseline to monitor activities related to the Decade of Action for Road Safety. The following actions are suggested to foster progress towards the common global goals of the Decade.

## Road safety management

- Strengthen or establish a lead agency for road safety and ensure adequate funding to enable them to fulfil their responsibilities. The functions of the agencies need to be periodically evaluated.
- Upgrade national strategies based on the indicators used in the *Global status report on road safety 2013* and those of the Global Plan for the Decade of Action for Road Safety 2011–2020.
- Improve data quality on road traffic deaths, injuries and disabilities in order to be able to set road traffic fatality targets and to monitor the progress in reducing road traffic injuries.

## Road infrastructure

- Review the road safety audit component of the national strategy and include safety review for both new roads and the existing infrastructure.
- Develop national guidelines for road safety audits based on local conditions and risk factors related to the roads network, to be used by the evaluators.
- Conduct training and capacity-building for national staff to be certified as road safety inspectors and to ensure that these auditors are independent from the constructors of the road safety infrastructure.
  - Submit periodic evaluation reports to the lead agency for road safety to identify the strengths and gaps and to coordinate for action.

## Vehicle safety

- Adopt and implement international or regional standards or features for vehicle safety.

## Legislation

- Adopt comprehensive legislation related to the major risk factors.
  - Speed laws should specify a maximum urban speed limit of 50 kilometers per hour that local authorities are able to modify, for example, to allow them to reduce local limits to 30km/h around schools or in residential areas.
  - Drink-driving laws should be based on blood alcohol concentration of 0.05 g/dl or less for general population, with levels of 0 to 0.02g/dl recommended for young/novice drivers.



- Motorcycle helmet laws should be applied to all engines, for riders and passengers, and a helmet standard adopted.
  - Seat belt laws should be applied to all occupants (front and rear seats) and on all roads.
  - Child car restraint laws should be introduced where they do not exist.
- Raise public awareness on the importance of compliance with legislation and application of individual protective measures for personal safety.
  - Regularly measure risk and protective factors as an indicator of the success of law enforcement and related interventions, to ensure that resources for risk factor management are put to good use.

### Post-crash response

- Periodically assess different aspects of the trauma care system and address the weaknesses identified.
- Develop or strengthen data systems that enhance the post-crash response including ambulance-based information systems, hospital-based information systems and vital registration systems.
- Establish one universal emergency access number.
- Build the capacity of all staff involved in post-crash response in trauma care, including doctors and nurses, using recognized and formally approved standards.

The new data invite reflection on the lives that could have been saved, the families who have lost loved ones to the roads and the communities striving to make daily life safer. Sound evidence is available not only on the burden but also, more importantly, on the interventions that have proven successful in other countries across the world. The time is now to make a collective pledge and exert the efforts needed to reduce the number of deaths on our roads.





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