Monitoring the Decade of Action for Global Road Safety 2011-20: an update

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Abstract

The United Nations Road Safety Collaboration (UNRSC) was set up in 2004 in response to the recognized need for the United Nations (UN) system to encourage efforts to address the global road safety crisis. In 2010, the UN General Assembly Resolution 64/255 declared 2011-2020 the Decade of Action for Road Safety with the overarching goal of stabilizing and reducing the forecasted number of road traffic deaths by increasing activities at national, regional and global levels. In 2011, a Plan of Action for the Decade of Action, a tool to support the development of national and local plans of action, was launched. Countries are encouraged to implement activities according to the five pillars set out by the Plan of Action. The UNRSC, tasked to evaluate the overall impact of the Decade, developed and populated indicators for each pillar. Currently, 36 of 38 proposed indicators are populated by baseline data for 2010 from the second *Global status report for road safety*. However, gaps exist in data quality and availability on a global level. Therefore, there is an urgent need for improving data quality and availability to measure the progress of the Decade of Action.

Key words: United Nations; Indicators; Road traffic; Injuries; Monitoring and evaluation

Introduction

Road traffic injuries (RTIs) are a growing public health and development problem and represent the ninth leading cause of death globally (WHO, 2012). Each year, nearly 1.24 million people die from RTIs (WHO, 2013) and about 50 million are injured (WHO, 2008a). RTIs are the number one killer of young people aged 15-29 years, which accounted for 26% of global road deaths in 2012 (WHO, 2012). Worldwide, 11.1% of disability adjusted life years (DALYs) were due to injuries and the largest group of injuries was RTIs, which accounted for 25.8% (78.7 million DALYs) of the total injury DALY losses in 2012 (WHO, 2012). Low- and middle-income countries (LMICs) account for about 90% of the deaths due to RTI worldwide (WHO, 2012).

The economic cost of road traffic crashes and injuries in LMICs was estimated at 1-2% of their gross national product, reaching US$ 100 billion per year in 2010 (WHO, 2013). Current trends suggest that RTIs will become the seventh leading cause of death by 2030 (WHO, 2012). Evidence from many countries demonstrates that success in preventing RTIs can be achieved through concerted efforts at the national level. Several high-income countries (HICs) have achieved considerable declines in RTI rates through coordinated, multisectoral responses to the problem. Such actions involve the implementation of various proven measures that address not only the safety of the road users but also vehicle safety, road infrastructure and post-crash care (WHO, 2008a, 2013).

This paper describes the process of developing appropriate indicators for the monitoring and evaluation for the Decade of Action for Global Road Safety 2011-2020 with specific attention to one of the key activities - monitoring of the pillar indicators set out by the *Global Plan of Action for the Decade of Action*. This paper introduces the Decade and the United Nations Road Safety Collaboration (UNRSC), the main data sources and data collection process for proposed indicators, and discusses existing challenges in this process, including gaps in data quality and availability on a global scale. The paper ends with the current (2010) baseline estimates for the Decade of Action.

Decade of Action for Road Safety 2011-2020

United Nations Road Safety Collaboration (UNRSC)

The need for improving road safety has been acknowledged by the United Nations system and its members for almost 60 years and extensive examination and analysis of road safety needs have been done by global and regional organizations including WHO, the World Bank and the UN Regional Commissions. While the WHO issued its first call to member states to improve road safety in 1960, it was not until decades later that this was followed by the dedication of the World Health Day to the topic of road safety, and in 2004 the launch of *World report on road traffic injury prevention* (the 'World Report'). In April 2004, the United Nations General Assembly Resolution A/RES/58/289 recognized the need for the United Nations system to encourage efforts to address the global road safety crisis and invited WHO, cooperating closely with the UN Regional Commissions, to act as a coordinator on road safety issues within the United Nations system (GA resolution 58/289, 2004). In response, WHO worked closely with the Regional Commissions to develop the United Nations Road Safety Collaboration (UNRSC), an informal consultative mechanism whose members are committed to road safety efforts. The UNRSC includes WHO, five regional commissions, the World Bank, other UN agencies, international agencies, governments, non-governmental organizations (NGOs), donors, research institutions, and the private sector (WHO, 2008b).

The UNRSC's vision is that death and injury should not be the price of mobility. The goal of the UNRSC is to facilitate international cooperation and to strengthen global and regional coordination among UN agencies and other international partners to implement General Assembly resolution 58/289 and the recommendations of the *World report* and thereby support country programs (WHO, 2005). To meet this goal, the following specific objectives have been developed: strengthening global and regional coordination on road safety through information exchange and multi-sectoral collaboration; advocating and encouraging demand and additional resources for road safety; supporting the assessment of the magnitude of the road safety problem; and coordinating and supporting the documentation and dissemination of good practices in the prevention and reduction of road traffic injuries (WHO, 2008b).

The structure of the UNRSC is comprised of the membership (participants), project groups and a secretariat who are charged with holding general meetings; WHO is the chair of the Collaboration (WHO, 2008b). Current eighty members of the UNRSC include UN Regional Commissions, international agencies, governments, foundations and centers, academic institutions, non-governmental organizations and private sector organizations (WHO, 2015). The membership is open to all organizations that are committed to road safety efforts and would contribute to the Collaboration's priority activities (WHO, 2008b). Participants meet two times a year and the meetings rotate between venues. The UNRSC meetings serve as a forum for the exchange of information on progress, problems and challenges relevant to international road safety efforts. They also serve as a way for participants to review progress toward implementation of resolutions of the UN General Assembly and identify and plan major global events and activities (WHO, 2008b). Project groups represent a special mechanism by which participants with similar interests can exchange information and collaborate (WHO, 2008b). To ensure optimal support for the Decade, the UNRSC project groups were aligned with the five pillars of the Global Plan of Action: road safety management, safer roads and mobility, safer vehicles, safer road users and post-crash response in 2012 (Table 1). Although not part of the five pillars, two additional crosscutting project groups: work-related road safety and monitoring and evaluation (M&E) were developed (GA Resolution A/66/389, 2011).

[Table 1 near here]

Decade of Action for Road Safety 2011-2020

The United Nations General Assembly Resolution 64/255 of March 2010 declared 2011-2020 the Decade of Action for Global Road Safety (GA Resolution 64/255, 2010). The overarching goal of the Decade is to stabilize and subsequently reduce the forecasted number of global road traffic deaths by increasing activities at national, regional and global levels (UNRSC, 2015). Meeting this goal is predicted to save up to 5 million lives, and prevent up to 50 million serious RTIs (Commission for Global Road Safety, 2011). This will be attained through meeting specific objectives of the Decade (Table 2). The Decade provides a timeframe for action to support political and resource commitments both globally and nationally (WHO, 2011c). Throughout the Decade, UN Member States, with the support of the international community, pledge to

undertake actions such as developing and enforcing legislation on key RTI risk factors (limiting speed, reducing drink-driving, increasing use of seatbelts, child restraints and motorcycle helmets); making efforts to advance post-crash care; improve road and vehicle standards; promoting road safety and enhancing road safety management in general (Peden, 2010).

[Table 2 near here]

Global Plan of Action and the Five Pillars

As requested by Resolution 64/255, the WHO and the UN Regional Commissions, in cooperation with the UNRSC and other stakeholders, prepared a Plan of Action for the Decade, which was officially launched on May 11, 2011 (Bliss & Breen, 2012; WHO, 2011c). The Plan of Action was based on the recommendations of the *World report on road traffic injury prevention* (Peden, 2010; WHO, 2008a) and supports a five pillar 'Safe System' approach (Commission for Global Road Safety, 2011). It is a guiding document for countries, and facilitates coordination of actions towards the achievement of the goal of the Decade. The Plan is also a tool to support the development of national and local plans of action and provides a framework for coordinated activities at regional and global levels (WHO, 2011c).

The Plan of Action encourages countries to implement activities according to these five pillars within the framework of their national road safety strategy, capacity and use them to measure country progress across each of the pillars (Bliss & Breen, 2012; WHO, 2011c). These five pillars, through specific activities, cover all of the main objectives of the Decade (Table 1).

Monitoring and Evaluation of the Decade of Action

The UN General Assembly, in resolution 64/255, requested WHO and the United Nations regional commissions to coordinate regular monitoring of the progress toward achieving the goal of the Decade by tracking indicators against which progress can be systematically measured (GA Resolution 64/255, 2010). UNRSC partners, through its M&E project group and other pillar project groups, developed a set of potential indicators based on the 5 pillars of the Plan of Action (WHO, 2014). The initial sets of core and optional indicators for each pillar were developed based on the main activities proposed under each pillar in the Plan of Action (UNRSC, 2015). The initial indicators were selected based on their simplicity and measurability (WHO, 2011a).

Progress towards attainment of the Decade goal is assessed by monitoring these pillar indicators, observing milestones linked to the Decade (WHO, 2011c). Regular global assessment of road safety is needed not only to measure global progress, but also to enable countries to compare their road safety performance with other countries (WHO, 2009a).

The M&E project group of the UNRSC was established in order to monitor and evaluate progress throughout the Decade (WHO, 2011a). The M&E project group finalizes recommendations on indicators, assesses availability and quality of data and is responsible for communicating and disseminating updates on progress regularly. Since the M&E project group is crosscutting in nature, it cooperates with all other project groups as well as relevant individual UNRSC partners.

Pillar indicators

Through the collaborative work of the M&E project group with other UNRSC project groups, the criteria for selecting pillar indicators were expanded and the initial sets of indicators proposed in the Plan of Action were revised. The process of updating pillar indicators involved rigorous review of all available data sources for each indicator. Since the main purpose of the M&E project group is to monitor the progress of the Decade globally (not at country level) at baseline, mid-term and at the end of the Decade, the revision of the indicators was conducted following specific requirements, namely, a revised set of indicators were selected for each pillar based on their ability to represent global-level data, rather than provide information on a few countries or a region; their utility for monitoring process and outcome measures; and the availability of reliable data that are easily accessible through valid sources on regular basis in order to monitor progress throughout the Decade.

While the M&E project group made considerable efforts to access and review many potential data sources to populate the initial set of indicators proposed in the draft action plan (WHO, 2011c), the *Global status report on road safety 2013 (GSRRS*) proved to be the main source for these indicators since it satisfied all of the above listed requirements. It should be noted that using GSRRSs as the main source for populating these indicators, has its disadvantage, specifically, the choice of the final set of indicators heavily depends on the data collected and reported by the GSRRSs. current list of 38 indicators represents a reduction from the initial

proposed 50 core and optional indicators in the Global Plan of Action (Table 3). This finalized set of indicators was populated with 2010 data from the second GSRRS and serves as the baseline for the Decade.

[Table 3 near here]

Pillar one has five indicators, for which information is collected on countries which have agencies leading road safety, on countries with national strategy and time-based safety targets and dedicated funds to implement road safety strategy. Pillar two indicators cover basic information on the formal safety review for new road infrastructure projects and the inspection and rating of existing road infrastructure networks; pillar two also provides information on national policies that encourage cycling, walking and using public transport as well as those policies that protect vulnerable road users. Pillar three currently has only one indicator, which collects information on the number of registered vehicles by vehicle type per country. Since this sole indicator does not provide information on vehicle safety globally, at the most recent UNRSC meeting, the Pillar 3 project group proposed 5 additional indicators under the Pillar (Table 3). The project group hopes to obtain data for the proposed indicators from reports on UN Regulations (containing provisions related to safety and environmental performance) and Global Technical Regulations (GTR). Pillar four, which has 15 indicators, gathers information on national or subnational laws on five main risk factors, as well as on use of hand-held phones while driving. With six indicators, pillar five tries to monitor progress towards improving pre-hospital and hospital-based care for injured patients.

Since the pillar indicators follow the specific pillar activities outlined in the Global Plan of Action and most of them are process-oriented, in addition to the indicators for each pillar, the UNRSC compiled a separate set of six outcome indicators to track the global-level progress toward achieving the main objectives of the Decade worldwide (Table 3).

The number of indicators differs from pillar to pillar; this variation is mainly caused by considerable differences in data availability based on the focus and main activities of each pillar. For example, pillar four, safer road users, has a total of 15 indicators out of which 14 are populated using 2010 data, and one (number of countries with data on child restraint wearing rates) will be populated using 2013 data from the third GSRRS. At the same time, pillar three,

safer vehicles, has only one indicator (total number of registered vehicles by vehicle type per country), which emphasizes existing scarcity in the availability of global level data on vehicle standards.

Current status of pillar indicators

With financial support from Bloomberg Philanthropies, WHO produces global status reports for evaluating the road safety progress in the Decade. These GSRRSs collect information on the number and rates of fatalities; the existence of national strategies and targets; legislation and enforcement by key risk factors; and the current state of post-crash care. The data are obtained through self-administered questionnaires implemented in participating countries; the survey focuses on the recommendations of the *World Report* as the basis for its content and structure. Most countries use the same methodology for data collection, as outlined in the study protocol. The data processing involves completion of the survey instrument and data entry at a country level, and validation at regional and global level. The validation and the review of the collected data by the country governments is followed by the dialogue between WHO staff and the National Data Coordinators to resolve any inconsistencies (WHO, 2009b). Upon request from the country governments, regional WHO offices provide technical support in strengthening data collection process and improving the quality of national level data. Data cleaning, analysis and report-writing are done at WHO headquarters in Geneva (WHO, 2009a). This multi-step methodology used to generate the data and information in the GSRRSs requires considerable time and resources. The GSRRSs are published every two to three years and the data for the pillar indicators are updated accordingly.

Underreporting has been acknowledged in the first section of the GSRRS report; additionally, the lack of harmonized definitions for road traffic deaths, the use of different data sources, and the quality of the reporting system have also been recognized and documented in the reports. A number of mechanisms were employed to address these issues in order to make data comparable (WHO, 2009a). Detailed information about the questionnaire, protocol, data analysis and adjustment can be found in the methods section of the GSRRSs (WHO, 2009a, 2013). The first GSRRS, published in 2009 (with data from 2007), represents the first broad assessment of the global road safety situation in 178 countries based on data drawn from the standardized survey.

For example, countries can use results from the report as a benchmark to assess their road safety position relative to other countries (WHO, 2009b) (Table 4).

[Table 4 near here]

The second GSRRS was published in 2013 (with data for 2010); similar to first report, a consensus methodology was used to collect information on various road safety indicators from a multi-sectoral group of experts in each country (WHO, 2013). Data were received from 182 countries, accounting for almost 99% of the world's population; the results are based on data from 2010 and serve as baseline for the Decade (WHO, 2013). The questionnaire used to compile the GSRRS underwent slight revision and data collection for the third GSRRS has taken place in 2014-15.

Existing variation in the availability of global-level data among pillar indicators, as well as among indicators under each pillar, resulted in the above described amendments to the number of indicators. For example, those indicators for which data was accessible for developed countries only were removed from the initial set of indicators. For instance, under pillar two, safer roads and mobility, data on such indicators as number of countries with target to eliminate high-risk roads by 2020, is currently available from only four countries. The second GSRRS had also gathered information on some vehicle standard indicators, but the collected data had comparability and reliability issues and thus these indicators were removed from the current list of indicators.

Baseline status –– highlights

A closer look at the indicators reveals that the situation in different focus areas of road safety varies among countries. Under pillar one, 162 out of 182 countries that participated in the survey for the second GSRRS have a clearly empowered agency to lead road safety efforts (Table 3). At the same time, only 112 countries (62%) have time-based road traffic fatality targets and only 62 (34%) have non-fatal targets. Governments should also include targets on intermediate outcomes in their strategies and yet only a third of countries had data on all five – alcohol, speed, helmets, seatbelts, and child restraints - key risk factors (WHO, 2013). Strengthening trauma care services would also lower the burden of death and disability from road traffic crashes (WHO, 2009a).

To balance increases in motorization, governments must ensure the safety of road users both inside and outside motorized vehicles. 68 countries (37%) have policies that promote walking and cycling, but only 79 countries (43%) have policies to protect vulnerable road users by physically separating them from high-speed road users (WHO, 2013). According to the pillar five indicators on post-crash response, emergency-room based injury surveillance systems exist in only 77 countries (47% of high-income and 46% of middle-income countries, but only 24% of low-income countries). The ability to accurately count the actual number of non-fatal road injuries worldwide still remains an important challenge (WHO, 2013).

Unfortunately, data availability and quality differs greatly across regions and countries. HICs tend to have more sophisticated data on road safety compared to LMICs. As reported by the GSRRS 2009, only 22% of all countries responding to the questionnaire had data on the magnitude of their RTI problem, the costs incurred by their health sector or national economies, and data on monitoring and evaluation of interventions (WHO, 2009b). Out of 182 countries that participated in the survey for the second GSRRS, 87 countries (48%) had death registration data meeting required completeness criteria, while for 78 countries (43%) that did not have either death registration data or other sources of information on causes of death, and so statistical modeling was used to estimate total road traffic deaths (WHO, 2013). Furthermore, 47 countries (26%; out of which 6 were HICs, 22 middle- and 19 low-income countries) did not have road traffic death data disaggregated by road user type. According to the GSRRS 2013, almost half of all countries lack data on alcohol-related RTIs (in many countries this information is unreliable) and data on helmet use is still weak. Moreover, the majority of countries do not have data on non-fatal road traffic injuries and only 33 countries (18%) have estimates on road traffic crash victims with permanent disability (WHO, 2013) (Figure 1).

[Figure 1 near here]

Discussion

Monitoring of progress is vital in achieving the ultimate goal of the Decade, reducing the forecasted number of road traffic deaths and injuries globally by 2020. The five pillars of the Plan of Action represent a guiding instrument for countries to implement road safety strategies at national and local levels. Specific indicators for each pillar as well as broader outcome measures

serve as the main tool for observing how countries are implementing good practice interventions. Progress on implementation of the interventions and related performance under each of the five pillars also needs to be monitored systematically in order to understand what needs to be done to achieve the goal of the Decade.

Good data systems are crucial for identifying and understanding priority areas for action, and for monitoring the progress. Currently, GSRRSs are used as the main data source for populating pillar indicators, as data from other potential data sources (UN Regional Commissions, private sector, NGOs) quite frequently provide information only on selected countries, or specific regions. Data sources such as European Road Safety Observatory (ERSO), International Traffic Safety Data and Analysis Group (IRTAD), United Nations Economic Commission for Europe (UNECE) Statistics, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and International Road Assessment Program (iRAP) provide data on selected countries or topics primarily from developed regions of the world. For most countries, the number of road traffic deaths is known more accurately than the number of RTIs (Farchi et al., 2006; Garg & Hyder, 2006). Many injuries, particularly the less serious, may or may not be included as part of national reporting systems (Derriks & Mak, 2007). Estimated fatality counts help clarify the overall burden from road traffic casualties but do not assist in orienting interventions, such as those targeting road infrastructure, vehicle safety and post crash response (Bhatti & Salmi, 2012). It is critical that data systems are improved in LMICs since they account for more than 80% of global road traffic deaths and include some of the fastest motorizing countries in the world (WHO, 2013). Pillar indicators could potentially be used for developing road safety indices by incorporating information on various road safety measures. The M&E project group is considering combining several indicators into more complex indices in the future.

There are large global variations in road traffic statistics (Sauerzapf, Jones, & Haynes, 2010) and there is a lack of concordance in indicators between LMICs and HICs (Bhatti, Salmi, Lagarde, & Razzak, 2010). There is a deficiency in RTI reporting capacity and resources in LMICs (Bhatti et al., 2010). The variations in data quality could be partially explained by the differences in data sources and reporting systems used by countries. Among other factors that can affect the quality of data reported are political influences, competing priorities and availability of resources

(WHO, 2009b). Strategies to improve the quality of data should be employed to allow international comparison (Toroyan, 2009). Meaningful global assessment requires a standardized methodology that can provide governments, donors, practitioners, planners, and researchers with the information needed to make policy decisions (WHO, 2009b). Closing the gap that remains in quality and coverage of the RTI data collected on a global level is necessary to measure progress toward achieving the goal of the Decade.

In order for global road safety advocacy to succeed, country governments should make considerable political and economic commitments to address the problem. Reliable data on road traffic burden is critical for drawing attention to the road injury problem, for monitoring the progress of implemented legislative changes, for setting country priorities and evaluating the impact of local policies and expenditures. While national injury surveillance systems are rare in LMICs, many countries have multiple other data sources for road traffic statistics. Emphasis should be put on strengthening and expanding existing data systems and developing efficient strategies for linking data across systems to gather additional and complex information on road safety on a country level (Institute of Medicine, 1999; WHO, 2009a).

Countries should increase efforts to collect robust data on a number of *intermediate indicators* (for example, rates of helmet use, rates of seatbelt use, the proportion of drivers with blood alcohol concentration over the legal limit, etc.) that relate to RTI prevention and can be used in the M&E. While HICs use sophisticated survey methodology, basic helmet and seatbelt wearing surveys are relatively simple and cheap to conduct. Surveys are however often essential for comprehensive M&E of road safety (WHO, 2009a). Further, for improving data quality, it is important to increase human capacity to undertake data collection, analysis and interpretation. Promoting capacity development and research in the field of road safety is therefore vital for evidence-based policy making (WHO, 2009a).

Acknowledgments

This paper is based on the work of the Working Group on Monitoring and Evaluation of the UNRSC chaired by professor Dr. A. Hyder and co-chaired by Dr. M. Peden. We wish to thank the UNRSC and WHO for their help in manuscript preparation. The global status reports on road safety are funded through a grant from the Bloomberg Philanthropies.

Disclaimer

Drs. Peden and Toroyan are staff members of the World Health Organization. They alone are responsible for the views expressed in this publication and this paper does not necessarily represent the decisions or policies of the World Health Organization or United Nations Road Safety Collaboration.

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Table 1. Five Pillars of the Global Decade of Action for Road Safety

	Pillar 1	Pillar 2	Pillar 3	Pillar 4	Pillar 5
Pillars	**Road Safety Management**	**Safer Roads and Mobility**	**Safer Vehicles**	**Safer Road Users**	**Post-crash Response**
Focus	To strengthen institutional capacity to further national road safety	To improve the safety of road networks for the benefit of all road users	To improve vehicle safety by encouraging harmonization of relevant standards and mechanisms	To develop comprehensive programs to improve road user behavior	To improve emergency response and post-crash care
Activities	- Adhere to and implement UN road safety agreements; - Establish a lead agency; - Develop a national strategy; - Set realistic and long-term targets; - Develop data systems	- Improve safety-conscious planning, design, construction and operation of roads; - Assess regularly safety of roads; - Explore various forms of transport and safe infrastructure	- Apply motor vehicle safety regulations; - Implement new car assessment programs; - Equip cars with safety features; - Promote use of crash avoidance technologies; - Encourage managers of fleets to operate and maintain safe vehicles	- Increase awareness of road safety risk factors; - Seek compliance with speed limits, drink-driving laws, seatbelt, child restraint and helmet use laws; - Seek compliance with transport, occupational and health laws	- Develop pre-hospital care systems; - Develop hospital trauma care systems; - Provide early rehabilitation and support to injured; - Establish insurance schemes

Sources: World Health Organization, United Nations Decade of Action for Road Safety: draft action plan, 2011 (WHO, 2011c); World Health Organization, Saving millions of lives, 2011 (WHO, 2011b).

Table 2. Specific objectives of the Decade of Action for Road Safety

- Adhering and fully implementing the major United Nations road safety related agreements and conventions, and use others as principles for promoting regional ones, as appropriate;
- Developing and implementing sustainable road safety strategies and programs;
- Setting an ambitious yet feasible target for reduction of road fatalities by 2020 by building on the existing framework of regional casualty targets;
- Strengthening the management infrastructure and capacity for technical implementation of road safety activities at the national, regional and global levels;
- Improving the quality of data collection at the national, regional and global levels;
- Monitoring the progress and performance on a number of predefined indicators at the national, regional and global levels;
- Encouraging increased funding to road safety and better use of existing resources, including through ensuring a road safety component within road infrastructure projects;
- Building capacities at national, regional and international level to address road safety

Source: World Health Organization, United Nations Decade of Action for Road Safety: draft action plan, 2011 (WHO, 2011c).

Table 3. List of Decade of Action indicators and data for 2010

Pillars	Indicators	Baseline for 2010
Pillar 1 Road Safety Management	No. of countries which have a clearly empowered agency leading road safety	162 (of which 122 are funded)
	No. of countries with national strategy	139 (single or multiple national strategies)
	No. of countries with time-based road safety targets	112 fatality targets, 62 non-fatal targets
	No. of countries that collect annual road traffic crash data consistent with internationally accepted definitions	92 use 30 day, 19 use one year and 17 use unlimited
	No. of countries that have dedicated funds to implement their road safety strategy	119 partially or fully funded
Pillar 2 Safer Roads and Mobility	No. of countries requiring formal safety review/audit for new road infrastructure projects	140
	No. of countries requiring formal safety inspection/ratings on existing road infrastructure networks	142
	National policies that encourage cycling and walking as alternative to car travel	68
	National policies that encourage the use of public transport as an alternative to car travel	107
	National policies to protect vulnerable road users	79
Pillar 3 Safer Vehicles	Total number of registered vehicles by vehicle type per country	150
	Number of countries requiring seatbelts and anchorages	*Proposed by the Pillar 3 working group*
	Number of countries requiring front seat and side impact standard	
	Number of countries requiring electronic stability control	
	Number of countries requiring pedestrian protection	
	Number of countries which apply enhanced child restraint systems	
Pillar 4 Safer Road Users	No. of countries with national level speed limits appropriate to the type of road (urban, rural, highway)	114 have urban limit=<50 km/h, 100 allow local authorities to reduce national limits where appropriate
	No. of countries with blood alcohol concentration limits (for general populations) less than or equal to 0.05 g/dl	89
	No. of countries with blood alcohol concentration limits lower than 0.05	42 have limits=<0.02 for young/novice drivers (23

	g/dl for young/novice and commercial drivers	countries have lower limits for this group than for general population), 50 have limits =<0.02 for commercial drivers
	No. of countries with (national or subnational) data on the proportion of alcohol-related fatal crashes	73 countries test all fatally injured drivers
	No. of countries with (national or subnational) data on alcohol related crashes	95 countries have some data on alcohol-related crashes
	No. of countries with a comprehensive helmet use law (including national and international standards)	90
	No. of countries with (national or subnational) data on child restraint wearing rates	GSRRS-3
	No. of countries with (national or subnational) data on helmet-wearing rates	69
	No. of countries with a comprehensive seat-belt law (legislation requires use of seatbelt among all occupants: front and rear seats)	111
	No. of countries with (national or subnational) data on seat-belt wearing rates (front, rear)	84
	No. of countries with a child restraint law	96
	No. of countries with legislation/regulation on hand-held mobile phone use while driving	142
	No. of countries with a ban on hand-held and hands free mobile phone use by drivers	34
	No. of countries that have national laws that address all five key risk factors	94
	No. of countries with a helmet standard	98

Pillar 5 Post-crash Response	No. of countries with one national emergency access number	111
	No. of countries where specific trauma care training is required for emergency care personnel	124 countries training for doctors, 96 training for nurses
	No. of countries using any injury severity grading system in health facilities	GSRRS-3
	No. of countries with vital registration systems	160
	No. of countries with emergency-room based injury surveillance systems	77
	Proportion of seriously injured patients transported to hospital by ambulance	59
Outcome indicators	No. of road traffic deaths, as a core composite indicator for all activities	1.24 million
	Proportion of road traffic injuries that result in a permanent disability	1 in 20, ranging from >1% to 25% median 5%
	Proportion of road traffic deaths by sex	77% male
	Proportion of road traffic deaths by age groups	60% between ages of 15 and 44
	Proportion of road traffic deaths by road user	23 pedestrians, 5% cyclists, 27% motorcyclists, 31% car occupants
	Estimated proportion of GDP lost as a result of RT crashes	Ranges from 0.8 to 6.6

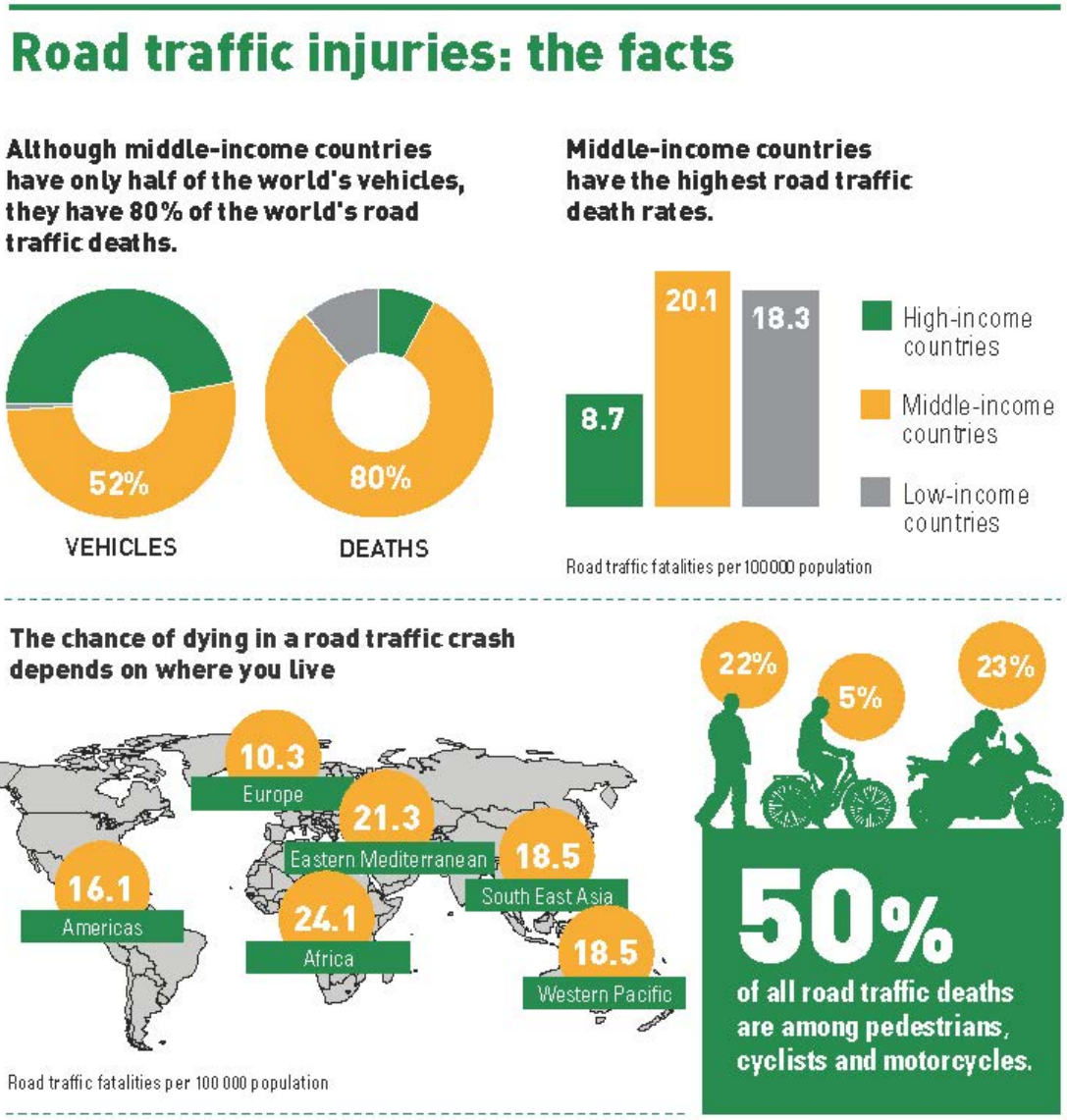
Source: World Health Organization, Global Status Report on Road Safety 2013: Supporting a Decade of Action (WHO, 2013).

Table 4. Global Status Report on Road Safety: data collection methodology

1. Global and regional level coordination
2. Identification and training of a National Data Coordinator in each country/area
3. Identification of ±8 respondents/road safety experts from health, police, transport sectors, NGOs and/or academia
4. Each expert responds to questionnaire independently and then discuss answers at the national consensus meeting where experts agree as a group on one final country report
5. One national dataset submitted to WHO
6. Production of the Global Status Report

Source: World Health Organization, Global Status Report on Road Safety 2013: Supporting a Decade of Action (WHO, 2013).

Figure 1: Main highlights from the Global Status Report on Road Safety, 2013



Source: World Health Organization, Global Status Report on Road Safety 2013: Supporting a Decade of Action (WHO, 2013).