2 The need for a global assessment of road safety

As more countries begin or continue to take steps towards addressing their national road safety problem, it has become apparent that regular global assessments of road safety are needed. These are required not only to measure global progress, but also to enable countries to compare their road safety situation with other countries. Such a global assessment requires a standardized methodology that can provide governments, donors, practitioners, planners, and researchers with the information that they need to make evidence-based decisions.

A number of regional mechanisms provide comparable data to assist national policy formulation and drive regional policy.

Examples of such assessments include:

- regular comparisons of road safety performance on a number of indicators in European countries, conducted by the European Road Safety Observatory;
- regional reports on the institutional road safety capacity of member countries, such as those conducted by the Association of Southeast Asian Nations and the Asian Development Bank;
- the International Road Traffic and Accident Database which uses a comparable methodology to collect data on over 500 road traffic variables among 29 member countries;

With an ageing population, high-income countries will need to look again at their road safety strategies to address their vulnerabilities.

- the United Nations Economic Commission for Europe's reviews of legislation on particular risk factors, such as speed and blood alcohol concentration limits; and
- the in-depth road safety assessments conducted by the World Bank in its focus countries.

As well as allowing national developments in the area of road safety to be viewed over time and within an international context, these assessments are essential in providing the data needed to advocate for standardized definitions and measures within regions.

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To date, however, no such global assessment of road safety exists. Previous efforts, while informative, have been limited to the analysis of aggregated data on patterns and trends, or have painted a largely illustrative picture by relying predominantly on case studies, or have focused on specific aspects of road safety, rather than providing a set of criteria against which countries are measured regularly *(14, 15)*. In other areas of health and development such assessments are relatively common: the communities working on climate change, development, alcohol, tobacco control and tuberculosis all have tools and indicators that allow them to assess the global status of their particular topic on a regular basis.

Methodology

In August 2007 WHO began to develop the *Global status report on road safety* (GSRRS) to address this data gap and to assess road safety around the world.

The specific objectives of the project were:

- to assess the status of road safety in all WHO Member States using a core set of road safety indicators and a standardized methodology;
- to indicate the gaps in road safety;
- to help countries identify the key priorities for intervention and to stimulate road safety activities at a national level.

A self-administered questionnaire was developed using the recommendations of the *World report* as a basis for its content. The methodology was developed in consultation with an expert committee of road safety researchers and practitioners and was widely reviewed by representatives of international and regional road safety organizations, governmental and

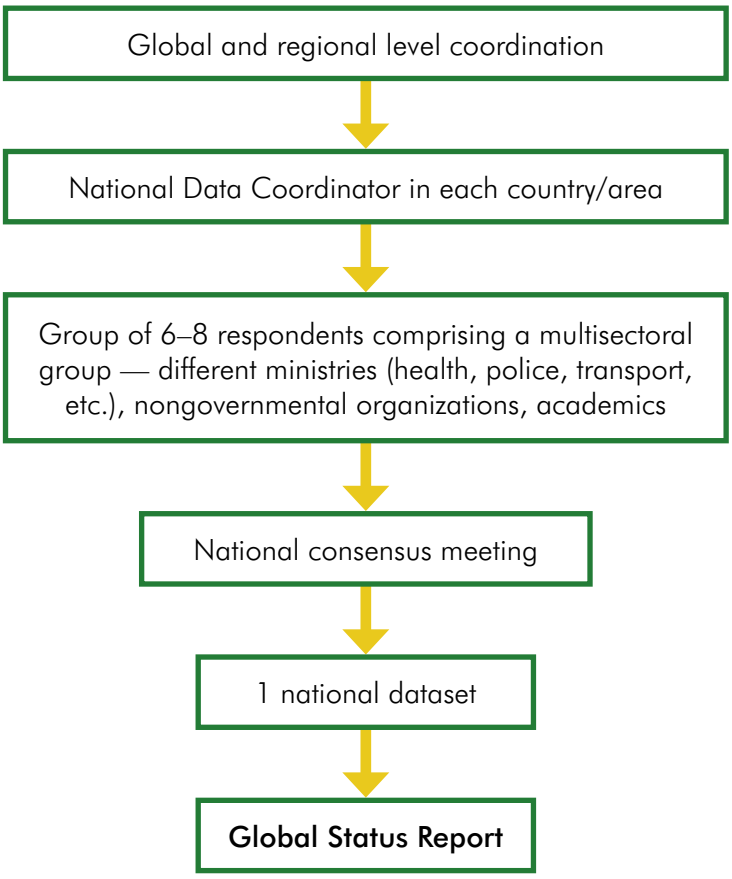
nongovernmental organizations, and academic institutions.[1]

The following areas were addressed in the questionnaire:[2]

- institutional settings and policies (existence of a lead agency on road safety, a national strategy on road safety, and allocation of funding for the activities of both);
- data (road traffic fatalities, non-fatal injuries, data on costs of road traffic injuries);
- exposure to risk (such as the existence of policies to encourage non-motorized modes of transport and public transport and strategies to achieve these, and levels of motorization);
- vehicle and infrastructure standards (the existence of manufacturing standards, requirements for safety audits of road infrastructure projects, and vehicle inspection requirements);
- legislation on some of the main behavioural risk factors (speed, drink–driving, use of motorcycle helmets, use of seat-belts and child restraints, and perceptions of enforcement levels relating to each of these risk factors[3]);
- pre-hospital care (existence of a formal, publicly available pre-hospital care system, and of emergency access telephone numbers).

The methodology used for data collection is shown in Figure 2. It involved the identification in each participating country of a National Data Coordinator (see Table A.1 in Statistical Annex) who was trained and then facilitated a consensus meeting involving a multisectoral group of up to eight road safety experts. The methodology stipulated that the health, transport and enforcement sectors should be represented among the respondents in each country, while also encouraging the involvement of nongovernmental organizations, academics and other road safety practitioners. Each respondent was asked to complete the questionnaire[4] independently and then discuss each of the answers at the consensus meeting where the experts would agree as a group on one final country response which was then submitted to WHO.[5]

Figure 2. Methodology



1 See Acknowledgements section, page v.

2 For the questionnaire and accompanying instruction booklet see www.who.int/violence_injury_prevention/road_safety_status/2009

3 This survey reports "perceptions of enforcement", as agreed by the group of respondents in the consensus meeting. Note that the eight countries that did not hold a consensus meeting did not answer these questions, while some groups of respondents could not come to a consensus on these scores and so left the enforcement questions blank.

4 In the Eastern Mediterranean Region questionnaires were administered during face-to-face interviews.

5 More details on the methodology can be found at www.who.int/violence_injury_prevention/road_safety_status/2009

Data collection began in March 2008 and was completed in September 2008, after which the data were validated in a dialogue between WHO staff and the National Data Coordinators to resolve any inconsistencies. Validated data were then sent for government clearance.

Final data were received from 178 participating countries and areas – 176 WHO Member States and Associate Member States, and 2 non-member areas (Table 2). These 178 countries and areas account for over 98% of the world's population.

Most of the data collected through this project are reported in this document. The main text contains an analysis of aggregated information, while the country profiles describe the main variables reported by each participating country using a standard template. The Statistical Annex includes country-by-country results for most variables. Incomplete data and lack of comparability on some variables affected the ability to analyse and report some of the information received from countries.

Table 2. Participation in the survey, by WHO region and income group[a]

WHO REGION	NUMBER OF MEMBER STATES AND ASSOCIATE MEMBER STATES	COUNTRIES/AREAS PARTICIPATING	NON-PARTICIPATING MEMBER/ASSOCIATE MEMBER STATES AND % OF REGIONAL POPULATION
AFRICAN REGION	46	**41** (0 HIC, 11 MIC, 30 LIC)	Algeria, Côte d'Ivoire, Equatorial Guinea, Gabon, Guinea (8.8%)
REGION OF THE AMERICAS	36[b]	**32** (31 Member and Associate Member States, 1 non-member area) (6 HIC,[c] 26 MIC)	Antigua & Barbuda, Dominica, Grenada, Haiti, St. Kitts & Nevis (1.1%)
SOUTH-EAST ASIA REGION	11	**10** (0 HIC, 6 MIC, 4 LIC)	Democratic People's Republic of Korea (1.4%)
EASTERN MEDITERRANEAN REGION	21	**20** (19 Member States, 1 non-member area) (5 HIC, 12 MIC, 3 LIC[d])	Djibouti, Somalia (1.7%)
EUROPEAN REGION	53	**49** (25 HIC, 21 MIC, 3 LIC)	Andorra, Denmark, Luxembourg, Monaco (0.7%)
WESTERN PACIFIC REGION	28[e]	**26** (6 HIC, 15 MIC, 5 LIC)	Niue, Tokelau (< 1%)
GLOBAL	**195** Member and Associate Member States	**178** (176 Member and Associate Member States, 2 non-member areas) (42 HIC, 91 MIC, 45 LIC)	**19** (accounting for 1.7% of population of the 195 Member and Associate Member States)

HIC = high-income countries; MIC = middle-income countries; LIC = low-income countries

[a] See Table A.2 in Statistical Annex for information on WHO regions and income level classifications.
[b] Includes one Associate Member State, Puerto Rico.
[c] Includes one non-member area, the British Virgin Islands.
[d] Includes one non-member area, the West Bank and Gaza Strip.
[e] Includes one Associate Member State, Tokelau.