Over 1.2 million people die each year on the world’s roads, and between 20 and 50 million suffer non-fatal injuries. In most parts of the world this epidemic of road traffic injuries is still increasing. In the past five years most countries have endorsed the recommendations of the World report on road traffic injury prevention which give guidance on how countries can implement a comprehensive approach to improving road safety and reducing the death toll on their roads. To date, however, there has been no global assessment of road safety that indicates the extent to which this approach is being implemented. The Global status report on road safety is the first broad assessment of the road safety situation in 178 countries, using data drawn from a standardized survey conducted in 2008. The results of the survey provide a benchmark that countries can use to assess their position relative to other countries. The data can also be considered as a global “baseline” against which progress over time can be measured. The Global status report presents a number of key findings.

Road traffic injuries remain a global public health problem, especially in low-income and middle-income countries

Low-income and middle-income countries have higher road traffic death rates (21.5 and 19.5 per 100 000 population, respectively) than high-income countries (10.3 per 100 000). However, even in high-income countries – where road traffic death rates have fallen over the last 40–50 years – road traffic injuries remain an important cause of death, injury and disability.

Table 1. Modelled road traffic injury fatality rates (per 100 000 population)\(^a\), by WHO region and income group

<table>
<thead>
<tr>
<th>WHO region</th>
<th>High-income</th>
<th>Middle-income</th>
<th>Low-income</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>African Region(^b)</td>
<td>–</td>
<td>32.2</td>
<td>32.3</td>
<td>32.2</td>
</tr>
<tr>
<td>Region of the Americas(^c)</td>
<td>13.4</td>
<td>17.3</td>
<td>–</td>
<td>15.8</td>
</tr>
<tr>
<td>South-East Asia Region(^h)</td>
<td>–</td>
<td>16.7</td>
<td>16.5</td>
<td>16.6</td>
</tr>
<tr>
<td>Eastern Mediterranean region</td>
<td>28.5</td>
<td>35.8</td>
<td>27.5</td>
<td>32.2</td>
</tr>
<tr>
<td>European Region</td>
<td>7.9</td>
<td>19.3</td>
<td>12.2</td>
<td>13.4</td>
</tr>
<tr>
<td>Western Pacific Region</td>
<td>7.2</td>
<td>16.9</td>
<td>15.6</td>
<td>15.7</td>
</tr>
<tr>
<td>Global</td>
<td>10.3</td>
<td>19.5</td>
<td>21.5</td>
<td>18.8</td>
</tr>
</tbody>
</table>

\(^a\) 30-day definition of a road traffic death. \(^b\) No high-income countries. \(^c\) No low-income countries.

Figure 1. Population, road traffic deaths\(^a\), and registered motorized vehicles, by income group

\(^a\) 30-day definition, modelled data. HIC = high-income countries; MIC = middle-income countries; LIC = low-income countries.
Nearly half of those dying on the world’s roads are vulnerable road users

Almost half (46%) of those who die in road traffic crashes are pedestrians, cyclists or users of motorized two-wheelers – collectively known as “vulnerable road users”. This proportion is even higher in the poorer economies. In some low-income and middle-income countries up to 80% of road traffic deaths are among vulnerable road users.

Figure 2. Reported deaths by type of road user (%), by WHO region and income group

The Global status report suggests that not enough is being done to meet the needs of these vulnerable groups. For instance:

- only 29% of countries meet basic criteria for reducing speed in urban areas, although speed is a key risk factor for injury among pedestrians and cyclists
- less than 10% of countries rate the enforcement of their speed limits as effective
- only one-third (32%) of the world’s population lives in countries with national policies that promote walking and cycling as alternatives to motorized transport, which suggests that policy measures that allow road users to walk and cycle safely are lacking
- 44% of countries do not have policies that encourage public transport as an alternative to car transport.
Many of the measures that can reduce road traffic injuries among vulnerable road users can also benefit health in other ways—such as improved respiratory health as a result of reduced exhaust emissions and the positive effects associated with increased physical activity.

Few countries have comprehensive road safety laws that are well enforced

The adoption and enforcement of traffic laws appear to be inadequate in many countries. The development and effective enforcement of legislation is critical in reducing drink-driving and excessive speed, and in increasing the use of helmets, seat-belts and child restraints. This survey showed that only 15% of countries have comprehensive laws which address all five of these risk factors.

Enforcement scores for all five risk factors is generally low, which suggests the enforcement of road safety laws needs to be improved. This requires political will and providing law enforcement agencies with sufficient human and financial resources to mount effective enforcement activities. Enforcement efforts must be well-publicized, sustainable, and implemented by the use of appropriate measures and penalties for infringement.

### Speed

Research on effective speed management recommends that the speed limit in urban areas should not exceed 50 km/h, while 30 km/h zones are recommended in areas where vulnerable road users are particularly at risk.

- Less than one-third of participating countries have speed limits of 50 km/h or below on urban roads and allow local authorities to reduce this speed limit where necessary.
- Only 9% of countries report enforcement of their national speed limits as adequate.

What can be done?

- Countries need to set and enforce speed limits that reflect the function of individual roads, with increased priority given to the needs of vulnerable road users. Speed limits on urban roads should not exceed 50 km/h.
- Local authorities need to be given the authority to reduce speed limits where vulnerable road users are particularly at risk.
Drinking and driving

Drinking and driving increases both the risk of a crash and the likelihood that death or a serious injury will result. The risk of involvement in a crash increases significantly above blood alcohol concentration (BAC) levels of 0.04 gram per decilitre (g/dl). Many countries with a strong road safety record have BAC limits of 0.05g/dl.

- Over 90% of countries have a national drink–driving law, yet only 49% of countries stipulate a legal BAC limit equal to or less than 0.05 g/dl.
- Only 11% of countries have lower BAC limits for young or novice drivers, although lower limits are recommended for these groups who are at increased risk of a road traffic crash when under the influence of alcohol.

Figure 3. Blood alcohol concentration limits (g/dl) by country/area

What can be done?

✓ All countries should have and should enforce a national drink–driving law
✓ Drink–driving laws should be based on BAC levels which should be equal to or less than 0.05 g/dl, with lower limits of 0.02g/dl for young/novice drivers.

Motorcycle helmets

Motorcyclists who wear a motorcycle helmet can reduce their risk of death by almost 40% and the risk of severe head injury by over 70%. Motorcycle helmets should meet a recognized safety standard and must be correctly fastened in order to be most effective.

- Approximately 74% of countries require helmet use by drivers and passengers of motorized two- and three-wheelers, on all roads, and regardless of engine type.
- Helmet standards are lacking in 43% of countries.
- Only 40% of countries have a motorcycle helmet law that covers both riders and passengers, and also mandate that helmets should meet a specific national or international standard (see Figure 4).
What can be done?
- All countries should have and enforce mandatory laws on helmet use on motorized two- and three- wheelers that apply to all riders, all engine types and all road types.
- Countries should require helmets used to meet a national or international standard.

Seat-belt use
Wearing a seat-belt reduces the risk of death among front-seat passengers by 40–50% and can reduce deaths among rear-seat car occupants by 25–75%.
- Only 38% of low-income countries and 54% of middle-income countries require seat-belts to be used in cars by both front-seat and rear-seat passengers.
- Of the 59 countries that manufacture and assemble cars, more than one quarter (29%) do not require seat-belts to be fitted in both front and rear seats.
What can be done?

- Seat-belt laws should cover all car occupants and enforcement should be equally applied to all occupants.
- Vehicle manufacturers and assemblers should be required to fit seat-belts in all seats of all vehicles, irrespective of the end-market.

Use of child restraints

Child restraints can reduce deaths of infants by as much as 70% and deaths of small children by between 54% and 80% in the event of a crash. Appropriate child restraint systems are designed to secure the child in a way that reduces the risk of severe injury.

- Only 20% of low-income countries have national legislation on child restraints, while the proportion in high-income countries is over 90%.
- Even in high-income countries, enforcement of child-restraint laws appears low.

Figure 6. Child restraint legislation by country/area

![Child restraint legislation by country/area](image)

What can be done?

- Child restraint laws need to be enacted and enforced. These laws should specify the type of restraint, the appropriate age for each restraint, and the seating position.

Few countries have reliable data on road traffic injuries

The *Global status report* shows that huge gaps remain in the quality and coverage of the data that countries collect and report on road traffic injuries. Reliable data on deaths and non-fatal injuries are needed by countries to assess the scope of their road traffic injury problem, to target responses to it, and to monitor and evaluate the effectiveness of intervention measures. Underreporting of road traffic deaths remains a big problem in many countries, and the situation is even worse with regard to non-fatal injuries:

The lack of harmonization of terminology and definitions between countries, and even between sectors within them, limits comparability of data. For instance:
• Only 80 countries define a road traffic death as those that die within 30 days after the crash, according to the recommended definition.
• Only 14% of countries used health data as a source of their fatality information despite studies suggesting that there are higher levels of underreporting in data collected by other sectors.
• There is very poor harmonization of the terminology used for non-fatal injuries (e.g. for defining what constitutes a severe injury as opposed to a non-severe or minor one).
• Less than half of all participating countries have conducted a study on the cost of road traffic deaths and/or injuries.
• Data on monitoring and evaluation indicators is lacking in many countries, while in countries where data are reported, the methodologies used vary considerably, so it is difficult to generalize results. Only one-third of countries reported data on motorcycle helmet-wearing rates, and only 53% reported data on seat-belt wearing rates. Only half of countries in the survey have any data on the proportion of road traffic deaths attributable to alcohol.

What is needed to improve the quality of data on fatal and non-fatal road traffic injuries?

✓ Encourage use of the 30-day definition of road traffic death and standardize terminology for classifying the severity of non-fatal injuries.
✓ Improve the data linkages between police, transport and health services to address underreporting.

Conclusions

There is a growing body of sound scientific evidence on the steps necessary to improve road safety. Over last few years road safety has received increasing international attention and support, while there has been an increase in political will in and action in some countries. However, the results presented in the Global status report show that much more needs to be done. The report’s key recommendations for governments are:

• Consider the needs of all road users when making policy decisions that impact on road safety. To date, the needs of vulnerable road users have been neglected in many countries. They should be given renewed emphasis.
• Enact comprehensive laws to protect all road users by setting appropriate speed limits and blood alcohol concentration limits, and by requiring the use of appropriate protection measures such as helmets, seat-belts and child restraints. Existing legislation should be reviewed and amended to conform with good practices that are based on sound evidence of effectiveness.
• Improve and sustain the enforcement of all road safety laws. Enforcement efforts must be well-publicized and implemented through the use of appropriate penalties for infringement.
• Foster multisectoral collaboration among agencies and ensure that they have the necessary human and financial resources to act effectively.
• Encourage the harmonization of data on road traffic injuries. This involves improving definitions, strengthening data linkages between police, transport and health services, and increasing human capacity to undertake data collection.

The Global status report shows that no country can afford to sit back and assume that its road safety work is complete. Significant progress in national road safety requires close collaboration between the leaders and agencies whose policies – directly or indirectly – impact on the safety of those on its roads. The international community must also play its part in halting and reversing the current global trend of increasing road traffic deaths, by recognizing road traffic injuries as an important health and development problem and by intensifying support for prevention.

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