Road safety status in the WHO South-East Asia Region, 2013

Key facts at a glance

(1) Road traffic crashes accounted for 334,815 deaths in the South-East Asia Region during 2010, with the rate of 18.5 per 100,000 population.

(2) Rates of road traffic deaths are higher (19.5 per 100,000 population) in middle income countries in comparison to low income countries (12.7 per 100,000 population).

(3) Vulnerable road users (motorized two or three-wheelers, pedestrians and cyclists) account for nearly 50% of the deaths in the Region.

(4) Two thirds of the road traffic in countries of South-East Asia are made up of two or three-wheelers and one third of the deaths is among these road users.

(5) None of the countries has comprehensive legislation on all five key risk factors of road traffic injury – speeding, drink driving, use of motorcycle helmets, seat-belt and child restraints.

(6) Only three countries have policies to promote walking, cycling, and public transport and only five countries have policies to separate vulnerable road users as a way of protecting them.

(7) Eight countries in the Region have a lead agency for road safety, most of which are interministerial committees.
Background

In 2010, the United Nations General Assembly adopted Resolution 64/255, and proclaimed 2011–2020 the Decade of Action for Road Safety responding to the increasing burden of road traffic injury around the globe. The goal of the Decade is to reduce the increasing trend in road traffic deaths, and to save an estimated 5 million lives over the period.

In order to guide national responses to achieve the decade goal, a global plan of action was developed. It provides a practical tool to support governments and other national stakeholders in the development of national and local plans of action, as well as a framework for coordination of activities at regional and global levels. Resolution 64/255 also called for regular monitoring of the global progress towards meeting the targets identified in the plan of action.

This South-East Asia regional factsheet is developed with data from the second Global status report on road safety 2013. Data were collected from all 11 countries of the Region using a standardized global survey questionnaire during May to December 2011.

Road traffic crashes accounted for 334,815 deaths in SEA region during 2010

In 2010, 334,815 people died from road traffic injuries in the South-East Asia Region. The road traffic death rate is 18.5 per 100,000 but ranges from 1.9 per 100,000 in the Maldives to 38.1 per 100,000 in Thailand (Figure 1).

Rates of road traffic deaths are higher in middle income countries

The rate of road traffic deaths is 19.5 per 100,000 population in the Region’s middle-income countries and 12.7 per 100,000 population in low-income countries. Increasing motorization and economic development are major attributers to the increasing number of deaths in middle-income countries.

Significantly increased numbers of registered vehicles in South-East Asia Region countries

The number of registered vehicles increased by 28% from 168 million reported in the first Global status report on road safety 2009, to 215 million in the second report in 2013.

Figure 1: Estimated road traffic death rate per 100,000 population for South-East Asia Region countries, 2011

Source: Global status survey on road safety 2013
In the South-East Asia Region there are 124.7 registered vehicles per 1000 population. The number of registered vehicles per 1000 population is highest in Thailand (412.1), followed by 303.2 in Indonesia and 189.6 in Sri Lanka. Timor-Leste has the lowest number of registered vehicles per 1000 population (8.6) (Figure 2). However, the ratio does not necessarily predict the rate of death. As an example, the United Kingdom has 565 vehicles per 1000 population but has a death rate as low as 5.4 per 100 000 population. This fact underlines the need for other factors such as proper road safety management, legislation, enforcement, and vehicle safety features, which are dependent on the regulatory system, economic status and political will of countries.

**Vulnerable road users (motorized two- or three-wheelers, pedestrians and cyclists) account for nearly 50% of deaths**

Half of the Region’s road traffic deaths are among vulnerable road users. Specifically, 33% of deaths are among motorized two- or three-wheelers, 12% among pedestrians, and 4% among cyclists. However, this breakdown is different by income status and within countries. For example, while in middle-income countries it is motorized two- or three-wheelers that comprise 34% of the road traffic deaths (of which motorcycle drivers and passengers are the majority), in the Region’s low-income countries, it is pedestrians that make up the greatest part, at 34% (Table 1).

**Table 1:** Proportion of road-user deaths by type of road user in low- and middle-income countries in the South-East Asia Region, for most recent year reported – between 2009 and 2010

<table>
<thead>
<tr>
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<th>Deaths by type of road user</th>
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<tr>
<td></td>
<td>Car occupants (%)</td>
</tr>
<tr>
<td>Low-income countries</td>
<td>25</td>
</tr>
<tr>
<td>Middle-income countries</td>
<td>15</td>
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<tr>
<td>All SEA Region countries</td>
<td>15</td>
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*All figures in the table show percentage of deaths by road user types.*
The difference is reflected when the individual country data are examined. Three quarters of Thailand’s road deaths are among motorized two- and three-wheelers. The proportion of deaths among this group of road users is also highest in Indonesia (36%) and India (32%), while in Bangladesh, pedestrians are the most affected group (41% of all road traffic deaths). Pedestrian death also accounts for the highest proportion of road traffic death in Myanmar (27%); 21% of road deaths in India and 17% in Maldives are pedestrians. The highest proportion of road traffic deaths in Bhutan and Maldives are occupants of four-wheelers 61% and 50%, respectively (Figure 3).

Figure 3: Distribution of road traffic deaths by type of road users in seven South-East Asia Region countries, for most recent year reported – between 2009 and 2010

Source: Global Status Report on Road Safety 2013

None of the South-East Asia Region countries has comprehensive legislation on five key risk factors for road traffic injury – speeding, drink-driving, use of motorcycle helmets, seat-belts and child restraints

**Speed**

Only Bangladesh has a comprehensive urban speed law (defined as having an urban speed limit of ≤50 km/hour and where local authorities can reduce these limits where appropriate). The remaining 10 countries (except Democratic People’s Republic of Korea) meet one of the two criteria of a comprehensive urban speed law. India, Indonesia and Thailand allow local authorities to modify urban speed limits locally but do not have an urban speed limit of ≤50 km/hour. Bhutan, Maldives, Myanmar, Nepal, Sri Lanka and Timor-Leste do not allow local authorities to modify the speed limit locally, however they have an urban speed limit of ≤50 km/hour. Consensus self scoring of each country on enforcement of speed law is rather low in the Region. Only the Democratic People’s Republic of Korea rate enforcement of their speed law as “good” (8 or more out of 10).

**Drink-driving**

Only four countries (Democratic People’s Republic of Korea, India, Thailand and Timor-Leste) have comprehensive drink-driving laws (defined as a national law that is based on a blood alcohol concentration – BAC – limit of ≤0.05g/dl, as is considered best practice). Bangladesh, Indonesia and Nepal have drink-driving laws but that are based on less robust measurement methods than BAC. Enforcement of drink-driving laws is rather poor in the Region. With the exception of Democratic People’s Republic of Korea, no countries consider the enforcement as good (8 or more out of 10). Bhutan and Thailand have “zero” alcohol limits for professional drivers. Myanmar has “zero” alcohol limits for professional and novice drivers. Only Democratic People’s Republic of Korea has “zero” alcohol limits applicable for all drivers.
**Motorcycle helmets**

All countries except Maldives have comprehensive helmet laws (defined as having a national law that requires helmet use by all drivers and passengers of motorcycles, on all roads, and for all engine types). However, seven countries (Bhutan, Democratic People’s Republic of Korea, India, Indonesia, Myanmar, Sri Lanka, and Thailand) have both comprehensive helmet laws and helmet standards. Four countries (Bhutan, Democratic People’s Republic of Korea, Indonesia, and Maldives) rate their enforcement of motorcycle helmet laws as good (8 or more out of 10).

**Seat-belts**

Out of the 11 countries in the Region, 10 have a national seat-belt law, but this law is only comprehensive (applying to both front and rear-seat occupants) in 6 countries (Bhutan, Democratic People’s Republic of Korea, India, Maldives, Nepal, and Timor-Leste). Seat-belt wearing rates among drivers in the Region ranges from 27% in India to 79% in Sri Lanka. Overall enforcement of seat belt law is poor in the Region: only Democratic People’s Republic of Korea and Indonesia rate their enforcement as good (8 or more out of 10).

**Child restraints**

Much needs to be done regarding child restraints, as only one country (Timor-Leste) has adopted the child restraint law. No information about the enforcement of the law in Timor-Leste is available.

**Lead agencies, strategies, and targets in countries**

Eight countries in the Region have a lead agency for road safety, and these are predominantly interministerial committees, apart from Democratic People’s Republic of Korea (Cabinet). The role of these agencies vary with 8 involved in coordination of road safety decision-making across sectors, 6 involved in periodic review of legislation, rules and standards against best practice, and only 5 involved in development and revision of legislation.

Eight countries have a national strategy for road safety, but none of these is fully funded. India and Thailand have both a national strategy and multiple strategies across different sectors and levels, while Timor-Leste only has strategies for different sectors.
Setting targets is important for monitoring and evaluating progress, but of the 8 countries with a national strategy, 6 (Bangladesh, Bhutan, Democratic People’s Republic of Korea, Indonesia, Myanmar and Thailand) have set measurable targets for fatal injuries, while only DPR Korea has specified targets relating to non-fatal injuries. Only 2 countries (Bhutan and DPR Korea) had measurable targets for all five major risk factors (speed, drink-driving, seat-belts, motorcycle helmets and child restraints) in the strategy. Thailand only has a target for motorcycle helmet wearing, not other risk factors.

**Policies to promote walking, cycling, public transport and to separate vulnerable road users as a way of protecting them**

Three countries (Democratic People’s Republic of Korea, India and Indonesia) have a national policy to encourage walking and/or cycling as an alternative to using cars, while seven countries have national policies to support investment of public transport for commuting. Five countries have policies to separate and thus protect vulnerable road users (e.g. pedestrian lanes, motorcycle lanes, and bicycle lanes).

**Safety standards of vehicles to protect vehicle occupants**

Five countries apply international or regional vehicle safety standards or features; of them 3 (India, Myanmar and Timor-Leste) apply a new car assessment programme (NCAP), and 2 countries (Thailand and Indonesia) apply the UN Regulations (UNECE World Forum for Harmonization of Vehicle Regulations, WP.29).

**Good post-crash care can reduce mortality after road traffic accidents**

Only four countries (Bhutan, Maldives, Thailand and Timor-Leste) have a nationwide emergency access telephone number for post-crash care. In six countries, less than 10% of all seriously injured persons (e.g. seriously injured enough to need to be admitted to a hospital) are taken to hospital by an ambulance. In only three countries (Bhutan, Democratic People’s Republic of Korea and Thailand) are an estimated 50% or more taken to hospital by ambulance.
Recommendations

Road traffic injuries remain an important public health problem in the WHO South-East Asia Region. Although road traffic injuries have received considerable global and regional attention over the past decade, much more needs to be done to save lives in the Region.

Greater effort is needed to ensure countries have comprehensive legislation on critical risk factors (speeding, drink-driving, and non-use of seat-belts, child restraints and motorcycle helmets)

While there has been progress in some countries in the Region, greater effort is needed to strengthen road safety legislation and bring countries’ laws in line with what is considered to be best practice, in order to offer the populations as much protection as possible. As none of the countries in the Region has comprehensive legislation on all five risk factors (speed, drink-driving, seat-belts, child restraints and helmets), countries need to work towards increasing the adoption of comprehensive legislation relating to the key risk factors for road traffic injuries.

Laws regarding risk factors of road traffic injury should be strictly enforced

Most countries with some of the legislation showed suboptimal enforcement. To maximize the benefit of legislative measures, successful implementation of policy and enforcement is essential. This requires adequate resources supported by strong political will and motivation to win public understanding and support.

Policies should be in place and implemented to promote non-motorized and public transport and to separate vulnerable road users as a way of protecting them

Governments can support investment in safe public transport systems as a way to try to mitigate some of the negative consequences associated with motorization. Countries should adopt sustainable policies to promote non-motorized forms of transport for commuting, such as walking and cycling. Freeing footpaths from hawkers and building separate bicycle lanes are important in developing sustainable alternative commuting systems. Motorcycle lanes are required to protect users from heavy vehicles. Furthermore, the promotion of safe public transport can reduce the number of vehicles on the road and thus reduce the risk of accidents, as well as reducing traffic congestion and improving air quality. More attention needs to be paid to safeguard vulnerable road users, who constitute almost half of road deaths in the South-East Asia Region. Policies and implementation to separate vulnerable road users as a way of protection (e.g. pedestrian lanes, bicycle lanes, and motorcycle lanes) should be adopted.

Post-crash response should be strengthened

Pre-hospital care and emergency medical services are inadequate and not accessible in countries of the Region. All countries should establish a nationwide emergency access telephone number and an emergency medical system for post-crash care. Capacity-building of care providers with recognized specialities of emergency medicine for doctors and nurses are also required.

Safety standards of vehicles should be improved to protect vehicle occupants

Comprehensive legislation and regulation for crash avoidance technologies should be enacted and implemented adequately for manufactured, assembled or imported motor vehicles. Countries need to apply international or regional vehicle safety standards or features (e.g. NCAP, UN Regulations). Safety features of motorcycles and buses should be monitored.
Injury surveillance systems should be strengthened

Road traffic injury data systems should be strengthened for sustainable data generation. The quality of data systems relating to people who are injured, dead and disabled in road crashes must be improved for utilization in policy planning.

National strategies must have measurable targets for injury prevention

Most strategies in the Region do not have implementation policies and measurable targets. Review of policy should be conducted to incorporate tangible and measurable targets for fatal injuries and the major five risk factors in order to monitor success.

Road safety should be integrated into primary health care packages and public health systems

Road traffic injury prevention and road safety promotion activities should be integrated into public health programmes, and primary health care package and policies. Networks of national institutions, academia and individuals who practice road safety promotion should be developed and strengthened, and experiences should be shared.

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