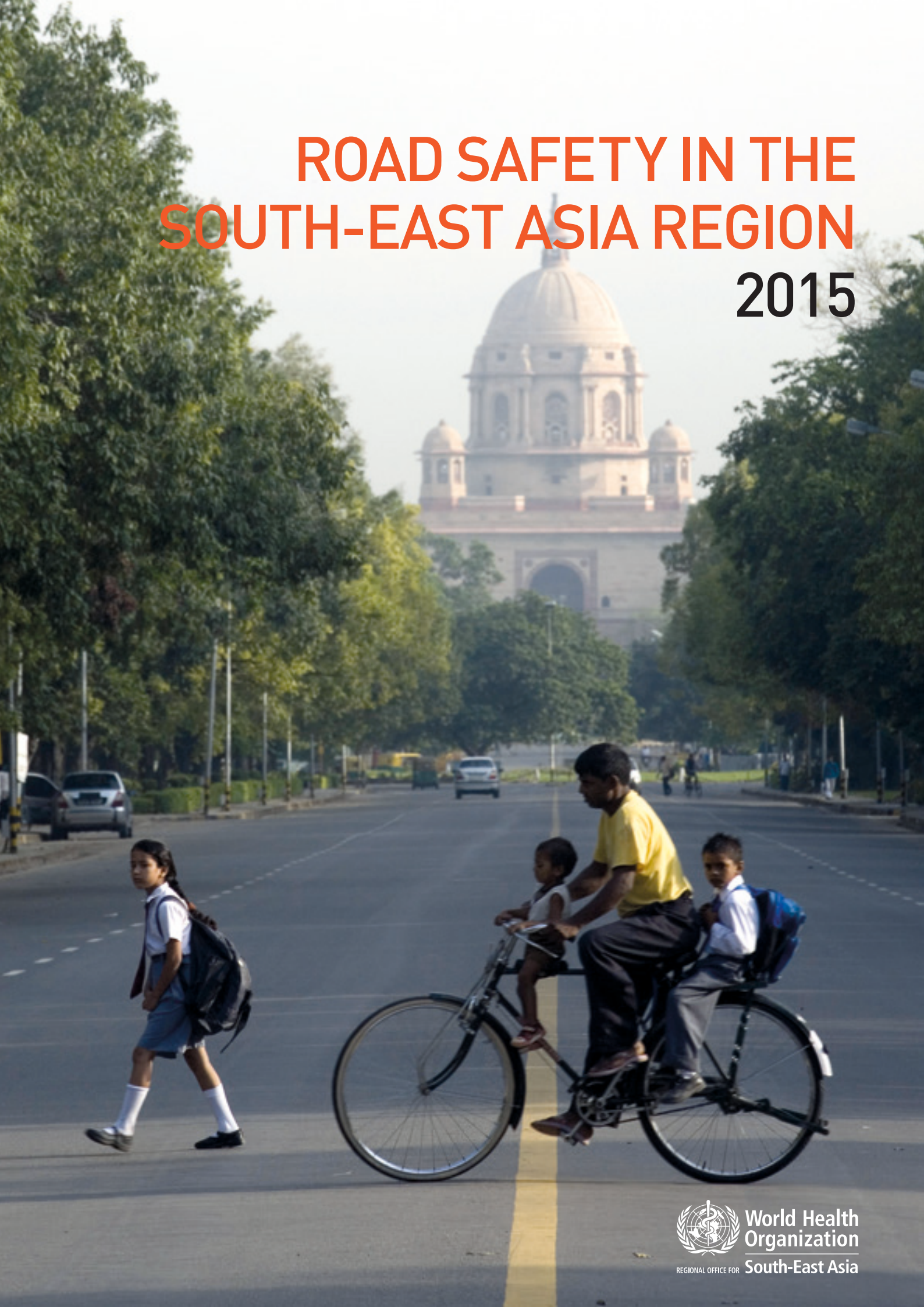
ROAD SAFETY IN THE SOUTH-EAST ASIA REGION 2015



World Health Organization
REGIONAL OFFICE FOR South-East Asia

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Contents

Road safety in the South-East Asia Region: key facts

- Road traffic injuries kill approximately 316 000 people each year in WHO's South-East Asia Region. These deaths account for 25% of the global total of road traffic deaths.

- The South-East Asia region has a road traffic death rate of 17.0 per 100 000 population, compared to the global rate of 17.4. However, there is considerable variation within the region, with rates ranging from 3.5 in the Maldives to 36.2 in Thailand.

- Pedestrians, cyclists and motorcyclists ("vulnerable road users") make up 50% of road traffic deaths in the region: in some countries this figure rises to over 80%. The safety needs of these groups must be addressed if a decline in the number of regional deaths is to be achieved.

- Currently none of the 10 countries reported on in this Factsheet have national policies to separate vulnerable road users from high-speed traffic.

- Legislation is a key strategy to improving road user behaviour but most countries in the region could do much more to bring their laws on key risk factors – speed, drink–driving, helmets, seat-belts and child restraints – into line with international best practice.

- Enforcement of laws relating to the 5 key behavioural risk factors is weak across the region: strengthening enforcement is critical to realising the potential gains associated with passing strong laws.

- Vehicle standards are a critical part of road safety but only 2 countries in the region currently apply any of the 7 priority international vehicle safety standards, while no country applies all of these 7 vehicle standards.

- Improving infrastructure is an effective mechanism for reducing road traffic injuries. Six of the 10 participating countries require road safety audits for new roads, while 4 assess the safety of existing roads.

- Improving post-crash care can help to reduce road traffic deaths and the severity of injuries. Currently only 6 countries in the region have an emergency access number, which can be important in activating an emergency response system.

- The South-East Asia Region comprises a large proportion of global road deaths. Achieving the recently adopted Sustainable Development Goal on road safety – halving the global number of road traffic deaths and injuries by 2020 – means that countries in this region need to accelerate the pace at which they implement effective road safety measures.

Background

Globally, road traffic injuries claim more than 1.2 million lives each year and have a huge impact on health and development. They are the leading cause of death among young people aged between 15 and 29 years, and cost governments approximately 3% of GDP, but up to 5% in low- and middle-income countries.

The rise in global road traffic deaths has been largely driven by the escalating death toll on roads in low- and middle-income countries – particularly in emerging economies where urbanization and motorization accompany rapid economic growth. In many of these countries, necessary infrastructural developments, policy changes and levels of enforcement have not kept pace with vehicle use. In contrast, many high-income countries have managed to sever the link between rising motorization and road traffic deaths, with some managing to dramatically reduce such deaths. These achievements are the cumulative result of making infrastructure safer, improving the safety of vehicles, and implementing a number of other interventions known to be effective at reducing road traffic injuries. Having good quality data to monitor the impact of these efforts is also critical to demonstrating their success.

In addition to deaths on the roads, up to 50 million people incur non-fatal injuries each year as a result of road traffic crashes, while there are additional indirect health consequences that are associated with this growing epidemic. As vehicle ownership grows, many countries face the twin problems of traffic congestion and rising vehicle tailpipe emissions, resulting in higher rates of respiratory illness. Rising car ownership has also resulted in reduced physical activities such as walking and cycling, with associated negative health consequences.

The Decade of Action for Road Safety and the Global status reports

In response to this growing epidemic, in 2010 the UN General Assembly adopted Resolution 64/255 to establish the Decade of Action for Road Safety (2011–2020), the goal of which is to stabilize and reduce predicted levels of road traffic fatalities around the world. A Global Plan of Action provides the roadmap towards this goal, promoting proven, cost-effective solutions for making roads safer. The UN General Assembly Resolution 64/255 also called for regular monitoring of the impact of the Decade of Action through publishing the Global status report on road safety series. This report provides an assessment of the situation three years into the Decade. The objectives of this third report are to describe the road safety situation in all Member States; identify gaps in road safety in all Member States and thereby stimulate road safety action; and monitor countries' progress in implementing measures identified in the Global Plan of Action.

SUSTAINABLE DEVELOPMENT GOAL 3

Ensure healthy lives and promote well-being for all at all ages.

3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents.

Road safety and the Sustainable Development Goals (SDGs)

In September 2015 the United Nations launched the 2030 Agenda for Sustainable Development – the development framework that replaces and builds on the achievements of the Millennium Development Goals. Road safety was absent from the Millennium Development Goals but road safety targets have been integrated into the new 2030 Agenda. The SDG 3 target aims to halve the number of global deaths and injuries from road traffic crashes by 2020, while SDG11 relates to providing access to sustainable transport systems for all, improving road safety, and expanding public transport[1].

Methodology

Data were collected from each participating country through a multi sectoral group of road safety experts. Each expert completed a self-administered questionnaire with information on key variables and collectively they agreed upon a single dataset that best represented their individual country's road safety situation. The data were validated at the national and regional levels and officially cleared by the respective governments. Fatality data, collected through the questionnaires, were reviewed according to a set of criteria that determined how robust the data were, and an estimation process was carried out accordingly. New elements in this (third) *Global status report on road safety* were the comprehensive collection of legislative documents from all participating countries and the collection of data on vehicle standards. For more information on the methodology of these components please see Explanatory Notes 1–3 in the main report.

Of the 11 countries that comprise WHO's South-East Asia Region (SEAR), 10 countries (comprising 99% of the region's population) took part in this survey. Data for these 10 countries are reported in this factsheet. Data on legislation and policies represent the country situation in 2014, while data on fatalities and numbers of vehicles are for 2013, the most recent year for which data were available.

1 See http://www.globalgoals.org/

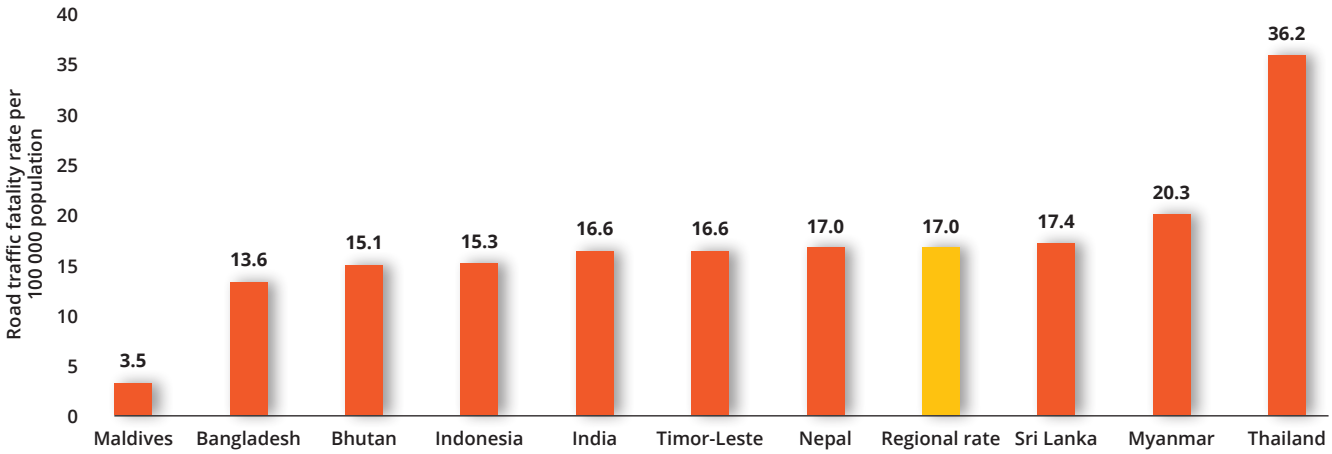
Findings

The South-East Asia Region contributes 25% of the total global road traffic deaths

There are approximately 316 000 road traffic deaths each year that occur in the South-East Asia Region, accounting for approximately 25% of the world's road traffic deaths. This represents a plateau in the number of deaths, from 315 000 in 2010 to 316 000 in 2013: this stabilisation is positive in that it takes place in the context of increasing motorization and population growth in the region.

The region's road traffic fatality rate, at 17.0 per 100 000 population, is below the global rate of 17.4 (see Figure 1). However, there is considerable variation in fatality rates within the region, ranging from 3.5 per 100 000 in the Maldives to 36.2 per 100 000 population in Thailand.

FIGURE 1
Road traffic fatalities per 100 000 population

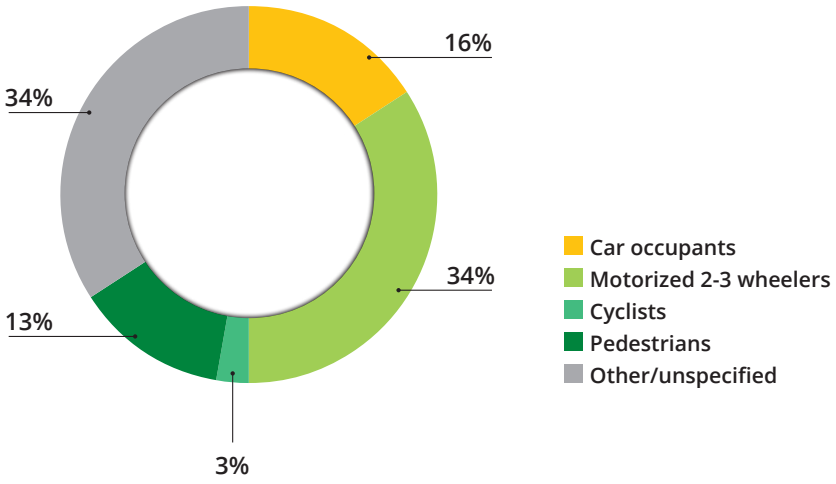


Road traffic deaths among pedestrians, cyclists and motorcyclists are intolerably high

Vulnerable road users, (pedestrians, cyclists and motorcyclist make up 50% of all road traffic deaths in the region (see Figure 2).

FIGURE 2

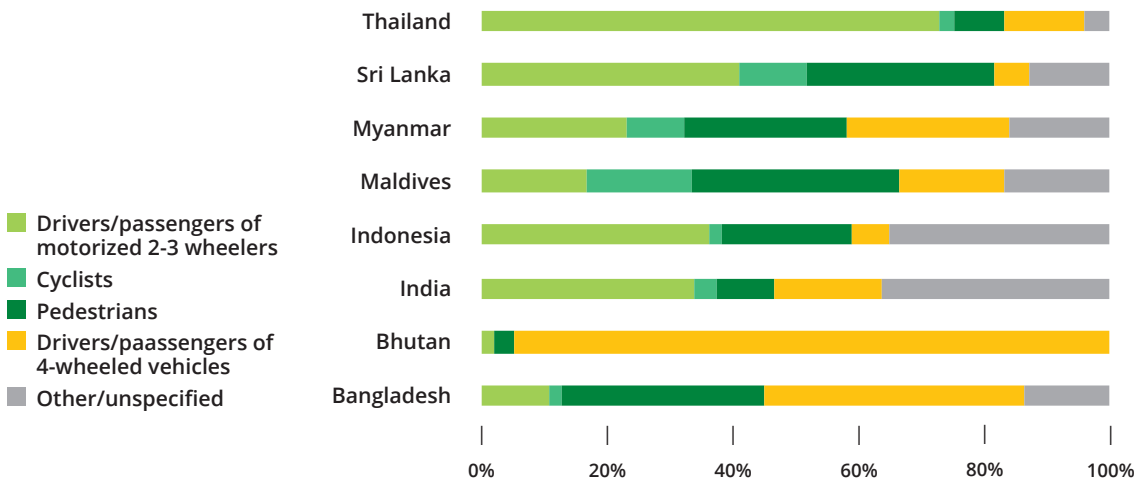
Deaths by road user type, South-east Asia region



However, this regional breakdown of deaths understates the overwhelming burden of deaths among vulnerable road users in all countries except Bhutan (where car occupants are the most affected). There is also much variation in the group most affected: in Thailand, for example, 83% of road deaths are among vulnerable road users (with motorcyclists comprising the bulk of these, at 73%), while in Bangladesh, the Maldives and Sri Lanka pedestrians account for approximately a third of road traffic deaths (see Figure 3).

FIGURE 3

Distribution of road traffic deaths by type of road user[1]



1 Data shown for the 8 countries for which this information was available. Data relate to 2013 or the most recent year for which data were available.

Data on road traffic fatalities are not robust in many countries

Data on road traffic fatalities are essential for monitoring country-level trends, tailoring prevention efforts, assessing progress and comparing the scale of road traffic deaths relative to deaths from other causes.

Vital registration data fulfil these needs best as they are a record of all officially registered deaths and are not time-limited. For example, a person who dies from injury complications a few months after a road traffic crash may or may not be issued with a death certificate showing the road traffic injury as the contributing cause of death. Such deaths will therefore not be coded as road traffic death, leading to distortions in the overall official numbers. In addition, not all countries have vital registration systems that provide cause of death information: where countries do not have vital registration data of good quality, police data is often the best source of information on road traffic fatalities. However, countries still have no consistent definition of a road traffic death for use in police databases; of the 10 participating SEAR countries, 5 now use a 30-day definition for their official road traffic fatality data. Furthermore police data are underreported in many countries. The number of reported deaths in the SEA Region is 188 819, relative to the estimated 316 000, suggesting a that underreporting remains a major issue among the region's official road traffic death data sources.

Getting the injured to quality care

In high-income countries, delivering emergency care at the scene of the collision and getting crash victims quickly to a health-care facility is often performed by professionally trained providers using sophisticated equipment and designated vehicles. However, in low- and middle-income countries, laypeople such as community leaders, police, or taxi drivers who are trained in basic injury care and the coordination of transportation to a health-care facility can also fulfil these roles.

The most efficient way to activate an emergency response is through a universal, centralized access number with a central dispatch system. However, when universal access numbers are unavailable (under development or during disasters), partial measures to facilitate access, including simple mechanisms to advise patients on the nearest facility and transport options, such as public broadcasts, mobile phone applications, electronic billboards or other mechanisms that provide real-time updates on available care resources are utilised.

In the SEA region, 6 countries have an emergency access number, while 2 countries have multiple numbers and another 2 have no such numbers.

ONLY 6 COUNTRIES IN THE REGION

have an emergency access number, which can be important in activating an emergency response system.

Health-care staff must be trained in emergency care

Once at a health-care facility, a systematic clinical approach to the management of road traffic victim's injuries can improve outcomes. Hospitals in low- and middle-income countries are often staffed by general practitioners and nurses who treat a high volume of trauma patients every day, frequently without the support of dedicated trauma care training. Implementing accredited courses on trauma care for doctors and nurses in hospitals receiving a high-volume of trauma victims is an effective way of improving this care. In this assessment, while 9 out of 10 of the region's participating countries report having some type of emergency specialty for doctors, only 4 have equivalent programmes for nurses.

Countries need to strengthen road safety legislation

Road safety laws improve road user behaviour and can be an effective tool in reducing road traffic crashes, injuries and deaths. The most positive changes to road user behaviour happen when road safety legislation is supported by strong and sustained enforcement, and where the public is made aware of the reasons behind the new law and the consequences of noncompliance.

This section reports on an assessment of countries' current legislation to meet five key behavioural risk factors for road traffic injuries: speed, drink–driving, failure to use motorcycle helmets, seat-belts and child restraints. There is a strong evidence base showing the positive impacts that legislation on each of these risk factors can have on reducing crashes, injuries and deaths. A summary of the countries' legislation on the 5 risk factors is shown in Table 1.

TABLE 1
Summary of legislation on key risk factors

	Speed	Drink–driving	Helmets	Seat-belts	Child restraints
Bangladesh					
Bhutan					
India					
Indonesia					
Maldives					
Myanmar					
Nepal					
Sri Lanka					
Thailand					
Timor-Leste					

Meets criteria for best practice
Meets some of criteria for best practice
No law /law doesn't meet best practice
Legislation set at subnational level

Speed

As average traffic speed increases, so too does the likelihood of a crash. If a crash does happen, the risk of death and serious injury is greater at higher speeds, especially for pedestrians, cyclists and motorcyclists.

Setting and enforcing national speed limits is an important step in reducing speed. Of the 10 participating countries, 5 set maximum urban speed limits of less than or equal to 50 km/h, in line with best practice. Given that these urban areas usually involve a high concentration of pedestrians and cyclists, speeds above 50 km/h would be unsafe.

Rigorous enforcement of speed limits is essential to make them truly effective. None of the participating countries rate their enforcement of speed laws as "good" (8 or above on a scale of 0 to 10), suggesting that without ongoing and visible enforcement of speed limit legislation, the potential impact of speed legislation to save lives in the region remains vastly unattained.

It is important that local authorities not only have the legal authority to reduce national limits, but also to manage local speeds according to particular road situations and in conjunction with other traffic calming or speed management policies. However, this survey shows that only 4 of the 10 participating countries allow local authorities to reduce national speed limits.

Only 2 countries in the region (Bhutan and Myanmar) meet both legislative criteria for best practice on urban speed management – a national urban maximum speed limit of 50 km/h, and local authority power to reduce this limit to ensure safe speeds locally (see Figure 4).

Drink–driving

Drink–driving increases the chance of a road traffic crash, as well as the likelihood that death or serious injury will result. Drinking and driving is also associated with other high-risk road use behaviours such as speeding or not using seat-belts. Young and novice drivers are at a much-increased risk of road traffic crashes when under the influence of alcohol compared to older and more experienced drivers.

Drink–driving legislation, accompanied by visible, rigorous and rapid enforcement following enactment, is an effective means of reducing alcohol-related crashes. WHO recommends that countries implement a drink–driving law based on blood alcohol concentration (BAC) limits (or or equivalent breath alcohol concentrations) of 0.05 g/dl for the general population. Laws that establish lower BAC limits (≤0.02 g/dl) for young and novice drivers can lead to reductions in the number of crashes involving young people. However, only India, Thailand and Timor Leste have a BAC of less than or equal to 0.05 g/dl, while, Bhutan is the only country in the region to have a lower limit for young/novice drivers. No country meets both criteria considered necessary for best practice (see Figure 4). Enforcement of existing laws is also weak, with only 1 country rating their enforcement as "good".

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Motorcycle helmets

Motorcyclists are at an increased risk because they are unprotected and often share the traffic space with fast-moving cars, buses and trucks, and because they are less visible. In addition, their lack of physical protection makes them vulnerable to injury. Injuries to the head and neck are the main cause of death, severe injury and disability among motorcyclists.

Wearing a motorcycle helmet can reduce the risk of death by almost 40% and the risk of severe injury by approximately 70%. Effective enforcement of motorcycle helmet laws can increase helmet-wearing rates and thereby reduce head injuries. The effectiveness of national helmet legislation in reducing injuries also depends on the quality of helmets worn: countries laws should specify that helmets worn meet an international or national standard to ensure their quality.

ONLY 3 COUNTRIES IN THE REGION

have helmet laws that meet best practice and apply a helmet standard.

Only 4 countries in the region have national helmet laws that apply to all drivers and passengers, all road types and all engine types, and require the helmet to be properly fastened, in line with best practice (see Figure 4). Most countries in the region do have laws that require helmets to meet a national or international standard.

However, only 3 countries – Bhutan, Thailand and Timor Leste – representing 69 million people, meet both these criteria, in line with best practice. That is, they have helmet laws that meet best practice and apply a helmet standard. Three of the participating countries rate their enforcement of helmet laws as good.

Seat-belts

Wearing a seat-belt reduces the risk of a fatality among drivers and front-seat occupants by 45–50%, and up to about 25% among rear-seat occupants. Seat-belt legislation, when combined with strong and sustained enforcement, is an effective mechanism for increasing seat-belt wearing rates.

While 8 of the 10 participating countries have some type of national seat-belt law in place, in many of these countries the law is weak, for example, the law is only applied inside or in the periphery of cities, weakening its potential to save lives. Currently only 3 countries in the region, Bhutan, India and Timor Leste, have comprehensive seat-belt laws that apply to both front and rear seat passengers at all times (see Figure 4), while enforcement across the region needs improvement – with only 2 countries rating their enforcement as "good".

Child restraints

Children in appropriate restraint are significantly less likely to be killed or injured than unrestrained children, and are also less likely to be killed or injured than children using adult seat-belts. Furthermore, young children are safer sitting in the rear seat than in the front seat. Only Timor- Leste has laws in line with best practice with regard to child restraints, specifically that restricts children under a certain age from sitting in the front and have a child restraint law based on age, weight and-or height (see Table 1).

Policymakers must give more attention to making vehicles and roads safer

Vehicle safety standards

Safe vehicles play an important role in averting a crash and reducing the likelihood of serious consequences in the event of a crash. At the international level, there are efforts to harmonize the different national systems of regulations, ultimately facilitating the roll-out of best practice and making practices such as de-specification of safety features more difficult. The UN World Forum for Harmonization of Vehicle Regulations is the primary global body responsible for the development of passenger car safety standards and its regulations provide a legal framework covering a range of vehicle standards for UN Member States to apply voluntarily.

There are a set of 7 international standards that are increasingly accepted as basic minimum standards for vehicle manufacture/assembly for passenger vehicles.

Rapid motorization in low- and middle-income countries/areas, where the risk of a road traffic crash is highest, and the increasing production of vehicles that is taking place in these emerging economies, means there is an urgent need for these priority vehicle standards to be implemented globally.

India requires 2 of the 7 priority standards, and Thailand applies one. No other countries in the region require any of these standards to be met. This suggests that there is considerable life-saving potential for these priority standards to be rolled out across the region that has yet to be tapped.

NO COUNTRY IN THE REGION

applies all 7 priority vehicle safety standards.

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Making roads safer

Road infrastructure has traditionally maximized mobility and economic efficiency at the expense of safety, particularly for non-motorized road users who are the most vulnerable. Indeed, as motorization increases worldwide, walking and cycling have become less common and more dangerous in many countries. The traffic mix in many countries means that pedestrians and cyclists share the road with high-speed vehicles, forcing them to negotiate dangerous situations and fast-moving traffic.

In many industrialized countries these changes are already taking place, generally at a local level where communities have been involved promoting safe public transport and non-motorized means of transport. Measures to promote walking and cycling are also in line with other global moves to fight obesity and reduce noncommunicable diseases (such as heart disease, diabetes) and improve the quality of urban life. These changes are more pertinent than ever for low- and middle-income countries.

This report found that 3 countries in the region have policies to promote walking and cycling, but if these strategies are not accompanied by other measures – such as effective speed management and the provision of pedestrian and cycling safety measures – they could actually lead to increases in road traffic injuries.

A key strategy for achieving a safe traffic system for pedestrians and cyclists is to separate these different kinds of road use, eliminating conflicts between high-speed and vulnerable road users. Safety benefits of measures such as building separate cycle lanes. Separating road users is particularly relevant for the countries with high proportions of motorcyclists in the South-East Asia Region. Yet none of the countries in the region have national policies to separate vulnerable road users from high- speed traffic, although 3 have policies at the subnational level.

Safe road systems consider the needs of all road users

Improving road infrastructure is a key mechanism for making roads safer. Many high-performing countries have made significant investments in safer infrastructure. These include designing safer new road projects but also upgrading existing roads with proven interventions. Action across both these areas has contributed to declines in road traffic deaths in these countries.

Rapid urbanization, economic growth and the need for improved mobility have led to increased motorization in many low- and middle-income countries, but road infrastructure has not kept pace. This means that poor roads are the norm in many of the countries where the risk of road traffic death is highest, and are often built without sufficient planning to take into consideration the safety needs of vulnerable road users and the communities through which these roads pass
Decisions made at the design stage of a project can have a significant impact on the level of death and injury of the road. Specifying safety standards and acting on findings of a road safety design audit can all identify if further design modifications can increase safety. Currently 6 countries in the region require some type of road safety audit on new roads, although these vary greatly in what they cover, and thus in quality. Existing road infrastructure should also be regularly assessed for safety, with a focus on roads with the highest crash risk: 4 countries currently assess parts of existing road safety networks.

Conclusions and recommendations

- There are approximately 316 000 deaths each year on the roads in South-East Asia, making road safety a major public health issue in the region. While the region has an overall road traffic fatality rate of 17.0 per 100 000 population, lower than the global rate of 17.4, this masks considerable variation in the situation among different member states.

- This regional summary highlights a number of areas in which progress needs to be made. Promulgating and enforcing laws based on best practice that relate to key behavioural risk factors is essential to realizing such change. But this factsheet shows that most countries in the region have multiple areas of their legislation that need to be improved. The data presented here also suggest that lack of enforcement is undermining the potential of existing road safety laws to reduce injuries and deaths.

- Half of all the road traffic deaths in the region occur among pedestrians, cyclists and motorcyclists. Making the region's roads safer will not be possible unless the needs of these road users are considered in all approaches to road safety – including the way roads are built and the way vehicles are manufactured.

- The factsheet shows no country in the region applies the 7 priority vehicle safety standards, despite the fact that some of the region's middle-income countries that are increasingly becoming major car manufacturers. Making cars safer does not only benefit car occupants but is important for avoiding crashes and mitigating the consequences of crashes that involve vulnerable road users. Governments must urgently sign up to the minimum international vehicle standards as requirements for manufacturers and assemblers, and limit the importing and sale of sub-standard vehicles in their countries.

- The factsheet also highlights that countries need to do more to ensure that road infrastructure is safe. Road safety audits should be conducted on both new and existing roads, assessing the safety as it relates to the needs of all road users, including pedestrians and cyclists. Making walking and cycling safer will also have other positive co-benefits if these non-motorized forms of transport become more popular, including more physical exercise, reduced emissions, and the health benefits associated with such changes.

- As well as preventing crashes the report stresses the role that post-crash care can make in mitigating the consequences of road traffic crashes. Interventions that can improve access to care as well as the quality of care administered at health facilities can have a major impact on outcomes.

- The number of road traffic deaths that occur each year in the South-East Asia region has stabilised over the past 3 years. While this is positive news in the context of increasing motorization and population growth, this progress is too little, and too slow. If the international road safety targets set for the Sustainable Development Goals – a halving of deaths and injuries by 2020 – are to be met, then strong political will and rapid action is needed by governments within the South-East Asia Region.

For more information on the methodology and references please see the global report at www.who.int/violence_injury_prevention/road_safety_status/2015/en/

Country profiles

Bangladesh • Bhutan • India • Indonesia • Maldives • Myanmar • Nepal • Sri Lanka • Thaiand • Timor-Leste

BANGLADESH

Population: 156 594 962 • Income group: Low • Gross national income per capita: US$ 1 010

INSTITUTIONAL FRAMEWORK

Lead agency	National Road Safety Council (NRSC)
Funded in national budget	No
National road safety strategy	Yes
Funding to implement strategy	Partially funded
Fatality reduction target	50% (2011–2020)

SAFER ROADS AND MOBILITY

Formal audits required for new road construction projects	Yes
Regular inspections of existing road infrastructure	Yes
Policies to promote walking or cycling	No
Policies to encourage investment in public transport	Yes
Policies to separate road users and protect VRUs	No

SAFER VEHICLES

Total registered vehicles for 2014	2 088 566
Cars and 4-wheeled light vehicles	547 423
Motorized 2- and 3-wheelers	1 336 339
Heavy trucks	141 850
Buses	59 500
Other	3 454
Vehicle standards applied[a]	
Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	No

[a] UNECE WP29.

POST-CRASH CARE

Emergency room injury surveillance system	No
Emergency access telephone numbers	None
Permanently disabled due to road traffic crash	—

DATA

Reported road traffic fatalities (2012)	2 538[b] (57% M, 17% F)
WHO estimated road traffic fatalities	21 316 (95%CI 17 349–25 283)
WHO estimated rate per 100 000 population	13.6
Estimated GDP lost due to road traffic crashes	1.6%[c]

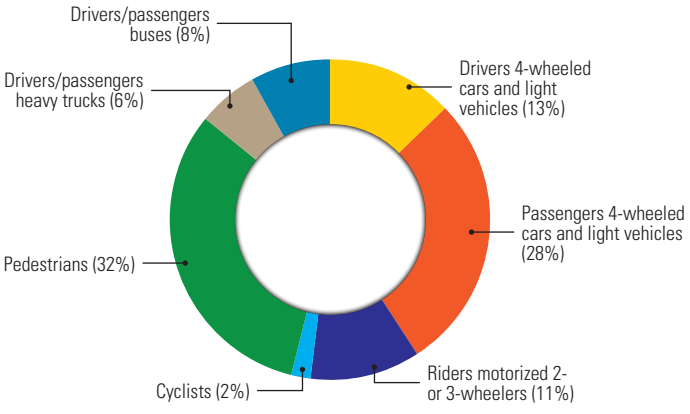
[b] Police First Information Report (FIR). Defined as died at scene of crash.
[c] Transport Research Laboratory, UK (data from 2003).

SAFER ROAD USERS

National speed limit law	Yes
Max urban speed limit	No
Max rural speed limit	~112 km/h
Max motorway speed limit	No
Local authorities can modify limits	No
Enforcement	0 1 2 ③ 4 5 6 7 8 9 10
National drink–driving law	Yes[d,e]
BAC limit – general population	—
BAC limit – young or novice drivers	—
Random breath testing carried out	No
Enforcement	0 1 ② 3 4 5 6 7 8 9 10
% road traffic deaths involving alcohol	—
National motorcycle helmet law	Yes
Applies to drivers and passengers	Yes
Law requires helmet to be fastened	No
Law refers to helmet standard	Yes
Enforcement	0 1 2 3 ④ 5 6 7 8 9 10
Helmet wearing rate	—
National seat-belt law	No
Applies to front and rear seat occupants	—
Enforcement	—
Seat-belt wearing rate	—
National child restraint law	No
Restrictions on children sitting in front seat	No
Child restraint law based on	—
Enforcement	—
% children using child restraints	—
National law on mobile phone use while driving	No
Law prohibits hand-held mobile phone use	—
Law also applies to hands-free phones	—
National drug-driving law	Yes

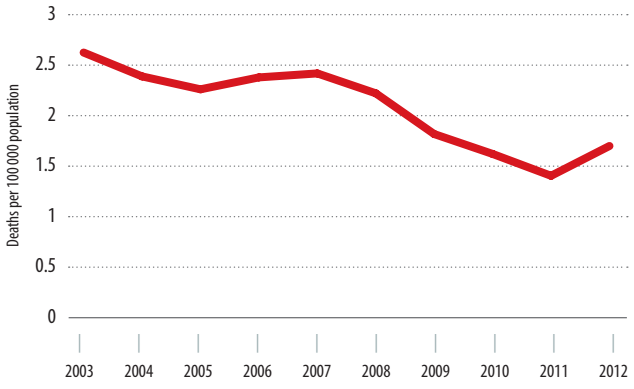
[d] Not based on BAC.
[e] Alcohol consumption legally prohibited.

DEATHS BY ROAD USER CATEGORY



Source: Road Transport Authority Annual Report (data from 2012).

TRENDS IN REPORTED ROAD TRAFFIC DEATHS



Source: Road Transport Authority Annual Report (data from 2012).

Legislative review conducted by WHO. Vehicle safety data from UNECE WP29. Other data collected by questionnaire and cleared by National Institute of Traumatology and Orthopaedic Rehabilitation (NITOR).

BHUTAN

Population: 753 947 • Income group: Middle • Gross national income per capita: US$ 2 330

INSTITUTIONAL FRAMEWORK

Lead agency	Road Safety and Transport Authority (RSTA)
Funded in national budget	Yes
National road safety strategy	Yes
Funding to implement strategy	Partially funded
Fatality reduction target	Less than 10 deaths per 10 000 vehicles (2011–2020)

SAFER ROADS AND MOBILITY

Formal audits required for new road construction projects	No
Regular inspections of existing road infrastructure	No
Policies to promote walking or cycling	Yes
Policies to encourage investment in public transport	Yes
Policies to separate road users and protect VRUs	No

SAFER VEHICLES

Total registered vehicles for 2014	68 173
Cars and 4-wheeled light vehicles	46 575
Motorized 2- and 3-wheelers	9 758
Heavy trucks	9 397
Buses	475
Other	1 968
Vehicle standards applied[a]	
Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	No

[a] UNECE WP29.

POST-CRASH CARE

Emergency room injury surveillance system	No
Emergency access telephone numbers	112
Permanently disabled due to road traffic crash	—

DATA

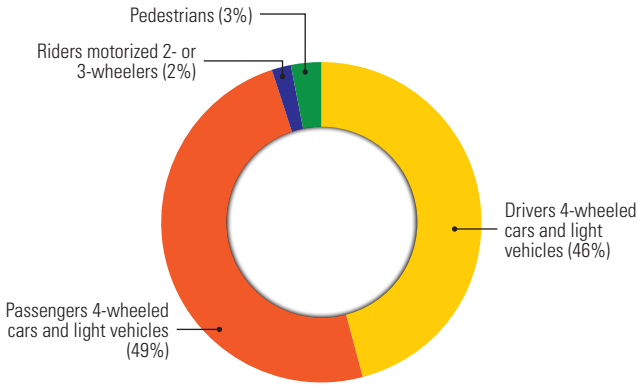
Reported road traffic fatalities (2013)	59[b] (76% M, 24% F)
WHO estimated road traffic fatalities	114 (95%CI 98–130)
WHO estimated rate per 100 000 population	15.1
Estimated GDP lost due to road traffic crashes	—

[b] Royal Bhutan Police (Traffic Division). Defined as died within 30 days of crash.

SAFER ROAD USERS

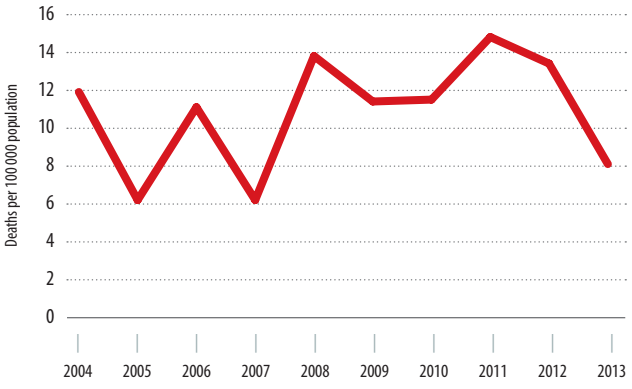
National speed limit law	Yes
Max urban speed limit	30 km/h
Max rural speed limit	50 km/h
Max motorway speed limit	50 km/h
Local authorities can modify limits	Yes
Enforcement	0 1 2 3 4 ⑤ 6 7 8 9 10
National drink–driving law	Yes
BAC limit – general population	≤ 0.08 g/dl
BAC limit – young or novice drivers	0.00 g/dl
Random breath testing carried out	Yes
Enforcement	0 1 2 3 4 ⑤ 6 7 8 9 10
% road traffic deaths involving alcohol	—
National motorcycle helmet law	Yes
Applies to drivers and passengers	Yes
Law requires helmet to be fastened	Yes
Law refers to helmet standard	Yes
Enforcement	0 1 2 3 4 5 6 7 8 9 ⑩
Helmet wearing rate	—
National seat-belt law	Yes
Applies to front and rear seat occupants	Yes
Enforcement	0 1 2 ③ 4 5 6 7 8 9 10
Seat-belt wearing rate	—
National child restraint law	No
Restrictions on children sitting in front seat	No
Child restraint law based on	—
Enforcement	—
% children using child restraints	—
National law on mobile phone use while driving	Yes
Law prohibits hand-held mobile phone use	Yes
Law also applies to hands-free phones	No
National drug-driving law	Yes

DEATHS BY ROAD USER CATEGORY



Source: Royal Bhutan Police (Traffic Division) (data from 2013).

TRENDS IN REPORTED ROAD TRAFFIC DEATHS



Source: Royal Bhutan Police (Traffic Division).

Legislative review conducted by WHO. Vehicle safety data from UNECE WP29. Other data collected by questionnaire and cleared by Ministry of Information and Communication.

INDIA

Population: 1 252 139 596 • Income group: Middle • Gross national income per capita: US$ 1 570

INSTITUTIONAL FRAMEWORK

Lead agency	Department of Road Safety, Ministry of Road Transport and Highways (MORTH)
Funded in national budget	Yes
National road safety strategy	Yes
Funding to implement strategy	Partially funded
Fatality reduction target	No

SAFER ROADS AND MOBILITY

Formal audits required for new road construction projects	Yes
Regular inspections of existing road infrastructure	No
Policies to promote walking or cycling	Yes
Policies to encourage investment in public transport	Yes
Policies to separate road users and protect VRUs	Subnational

SAFER VEHICLES

Total registered vehicles for 2012	159 490 578
Cars and 4-wheeled light vehicles	38 338 015
Motorized 2- and 3-wheelers	115 419 175
Heavy trucks	4 056 885
Buses	1 676 503
Other	0
Vehicle standards applied[a]	
Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	No

[a] UNECE WP29.

POST-CRASH CARE

Emergency room injury surveillance system	No
Emergency access telephone numbers	Multiple numbers
Permanently disabled due to road traffic crash	2.0–3.0%

DATA

Reported road traffic fatalities (2013)	137 572[b] (85% M, 15% F)
WHO estimated road traffic fatalities	207 551
WHO estimated rate per 100 000 population	16.6
Estimated GDP lost due to road traffic crashes	3.0%[c]

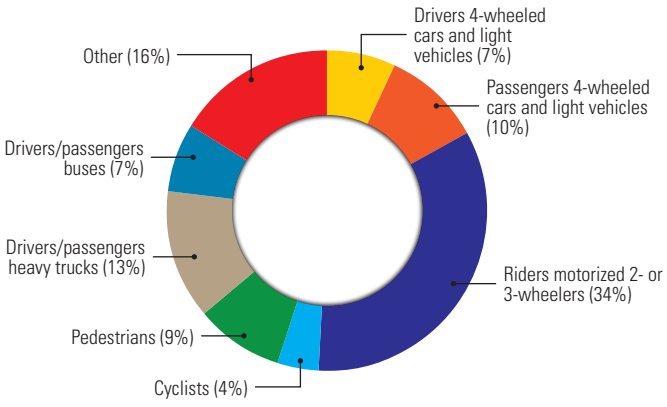
[b] Road Accidents in India; 2013 Transport Research Wing (TRW), Ministry of Road Transport and Highways. Defined as died within 30 days of crash.
[c] 2009, 10th 5 Year Plan, Volume 2.

SAFER ROAD USERS

National speed limit law	Yes[d]
Max urban speed limit	No
Max rural speed limit	No
Max motorway speed limit	No
Local authorities can modify limits	Yes
Enforcement	0 1 2 ③ 4 5 6 7 8 9 10
National drink–driving law	Yes
BAC limit – general population	≤ 0.03 g/dl
BAC limit – young or novice drivers	≤ 0.03 g/dl
Random breath testing carried out	Yes
Enforcement	0 1 2 3 ④ 5 6 7 8 9 10
% road traffic deaths involving alcohol	5%[e]
National motorcycle helmet law	Yes
Applies to drivers and passengers	Yes[f]
Law requires helmet to be fastened	No
Law refers to helmet standard	Yes
Enforcement	0 1 2 3 ④ 5 6 7 8 9 10
Helmet wearing rate	20–80% All riders[g], 60% Drivers[g]
National seat-belt law	Yes
Applies to front and rear seat occupants	Yes
Enforcement	0 1 2 3 ④ 5 6 7 8 9 10
Seat-belt wearing rate	26% Drivers (in Bangalore)[h], 26% Front seats[h]
National child restraint law	No[i]
Restrictions on children sitting in front seat	No
Child restraint law based on	—
Enforcement	—
% children using child restraints	—
National law on mobile phone use while driving	Yes
Law prohibits hand-held mobile phone use	Yes
Law also applies to hands-free phones	Yes
National drug-driving law	Yes

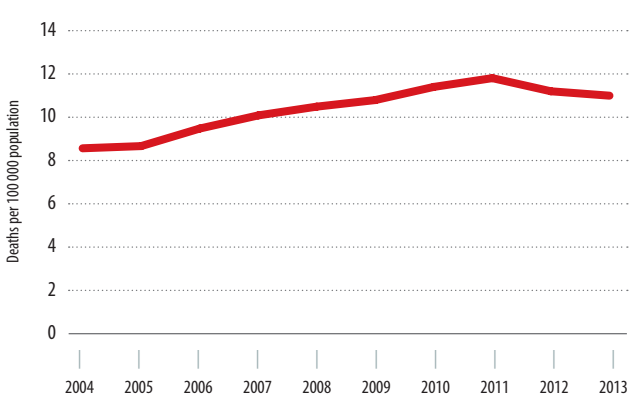
[d] Under the Motor Vehicles Act, state governments in India have the authority to create different speed limits at the local level.
[e] Road Accidents in India, Transport Research Wing (TRW), MORTH (data from 2013).
[f] Under the Motor Vehicles Act, state governments in India have the authority to adopt rules creating exemptions to the national motorcycle helmet requirements.
[g] Bangalore Road Safety Programme (data from 2011–2012).
[h] Bangalore Road Safety Programme (data from 2011).
[i] Child restraints must be used as of April 1, 2016 for vehicles manufactured on or after October 1, 2014.

DEATHS BY ROAD USER CATEGORY



Source: Road Accidents in India; 2013 Transport Research Wing (TRW), Ministry of Road Transport and Highways (data from 2013).

TRENDS IN REPORTED ROAD TRAFFIC DEATHS



Source: Road Accidents in India; 2013 Transport Research Wing (TRW), Ministry of Road Transport and Highways (data from 2013).

Legislative review conducted by WHO. Vehicle safety data from UNECE WP29. Other data collected by questionnaire and cleared by Ministry of Road Transport and Highways.

INDONESIA

Population: 249 865 631 • Income group: Middle • Gross national income per capita: US$ 3 580

INSTITUTIONAL FRAMEWORK

Lead agency	National Planning Agency (Badan Perencanaan Pembangunan Nasional - BAPPENAS)
Funded in national budget	Yes
National road safety strategy	Yes
Funding to implement strategy	Fully funded
Fatality reduction target	50% (2020)

SAFER ROADS AND MOBILITY

Formal audits required for new road construction projects	Yes
Regular inspections of existing road infrastructure	Yes
Policies to promote walking or cycling	Yes
Policies to encourage investment in public transport	Yes
Policies to separate road users and protect VRUs	Subnational

SAFER VEHICLES

Total registered vehicles for 2013	104 211 132
Cars and 4-wheeled light vehicles	10 838 592
Motorized 2- and 3-wheelers	86 253 257
Heavy trucks	5 156 362
Buses	1 962 921
Other	0
Vehicle standards applied[a]	
Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	No

[a] UNECE WP29.

POST-CRASH CARE

Emergency room injury surveillance system	No
Emergency access telephone numbers	Multiple numbers
Permanently disabled due to road traffic crash	—

DATA

Reported road traffic fatalities (2013)	26 416[b] (78% M, 22% F)
WHO estimated road traffic fatalities	38 279 (95%CI 32 079–44 479)
WHO estimated rate per 100 000 population	15.3
Estimated GDP lost due to road traffic crashes	2.9–3.1%[c]

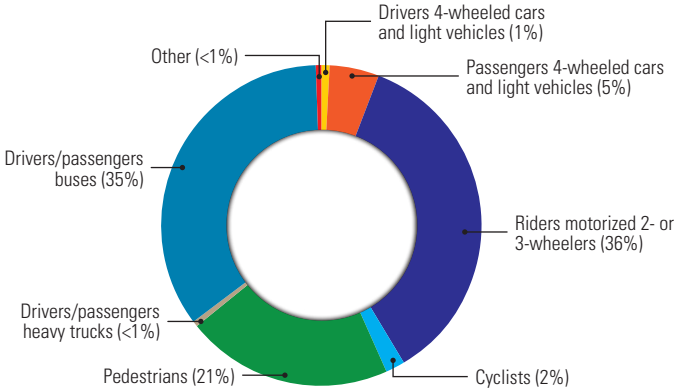
[b] Indonesia National Police. Defined as died within 30 days of crash.
[c] Statistics of Indonesia (data from 2010).

SAFER ROAD USERS

National speed limit law	Yes
Max urban speed limit	70 km/h
Max rural speed limit	100 km/h
Max motorway speed limit	No
Local authorities can modify limits	Yes
Enforcement	0 1 2 3 4 ⑤ 6 7 8 9 10
National drink–driving law	Yes[d]
BAC limit – general population	—
BAC limit – young or novice drivers	—
Random breath testing carried out	Yes
Enforcement	0 1 2 3 4 ⑤ 6 7 8 9 10
% road traffic deaths involving alcohol	—
National motorcycle helmet law	Yes
Applies to drivers and passengers	Yes
Law requires helmet to be fastened	No
Law refers to helmet standard	Yes
Enforcement	0 1 2 3 4 5 6 7 ⑧ 9 10
Helmet wearing rate	80% Drivers[e], 52% Passengers[e]
National seat-belt law	Yes
Applies to front and rear seat occupants	No
Enforcement	0 1 2 3 4 5 6 7 ⑧ 9 10
Seat-belt wearing rate	—
National child restraint law	No
Restrictions on children sitting in front seat	No
Child restraint law based on	—
Enforcement	—
% children using child restraints	—
National law on mobile phone use while driving	Yes
Law prohibits hand-held mobile phone use	No
Law also applies to hands-free phones	No
National drug-driving law	Yes

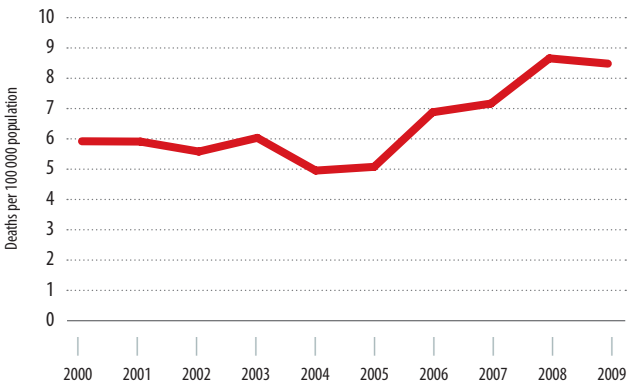
[d] Not based on BAC.
[e] 2007, Study on Helmet Wearing, Universitas Indonesia.

DEATHS BY ROAD USER CATEGORY



Source: Indonesia National Police (data from 2010).

TRENDS IN REPORTED ROAD TRAFFIC DEATHS



Source: Indonesia National Police.

Legislative review conducted by WHO. Vehicle safety data from UNECE WP29. Other data collected by questionnaire and cleared by Ministry of Health.

MALDIVES

Population: 345 023 • Income group: Middle • Gross national income per capita: US$ 5 600

INSTITUTIONAL FRAMEWORK

Lead agency	Transport Authority, Ministry of Economic Development
Funded in national budget	No
National road safety strategy	No
Funding to implement strategy	—
Fatality reduction target	—

SAFER ROADS AND MOBILITY

Formal audits required for new road construction projects	No
Regular inspections of existing road infrastructure	No
Policies to promote walking or cycling	No
Policies to encourage investment in public transport	Subnational
Policies to separate road users and protect VRUs	No

SAFER VEHICLES

Total registered vehicles for 2013	61 412
Cars and 4-wheeled light vehicles	10 256
Motorized 2- and 3-wheelers	50 775
Heavy trucks	145
Buses	140
Other	96
Vehicle standards applied[a]	
Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	No

[a] UNECE WP29.

POST-CRASH CARE

Emergency room injury surveillance system	Yes
Emergency access telephone numbers	119
Permanently disabled due to road traffic crash	—

DATA

Reported road traffic fatalities (2013)	12[b] (75% M, 25% F)
WHO estimated road traffic fatalities	12
WHO estimated rate per 100 000 population	3.5
Estimated GDP lost due to road traffic crashes	—

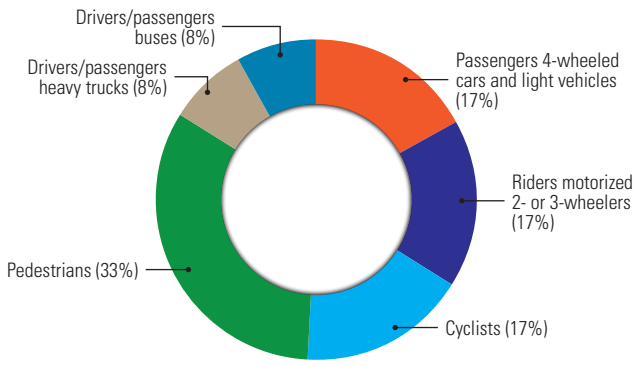
[b] Maldives Police Service. Defined as unlimited time period following crash.

SAFER ROAD USERS

National speed limit law	Yes
Max urban speed limit	30 km/h[c]
Max rural speed limit	30 km/h
Max motorway speed limit	No
Local authorities can modify limits	No
Enforcement	0 1 2 3 4 5 ⑥ 7 8 9 10
National drink–driving law	No[d]
BAC limit – general population	—
BAC limit – young or novice drivers	—
Random breath testing carried out	No
Enforcement	—
% road traffic deaths involving alcohol	—
National motorcycle helmet law	Yes[e]
Applies to drivers and passengers	No
Law requires helmet to be fastened	No
Law refers to helmet standard	No
Enforcement	0 1 2 3 4 5 6 ⑦ 8 9 10
Helmet wearing rate	—
National seat-belt law	Yes[e]
Applies to front and rear seat occupants	No
Enforcement	0 1 2 3 ④ 5 6 7 8 9 10
Seat-belt wearing rate	—
National child restraint law	No
Restrictions on children sitting in front seat	No
Child restraint law based on	—
Enforcement	—
% children using child restraints	—
National law on mobile phone use while driving	Yes
Law prohibits hand-held mobile phone use	Yes
Law also applies to hands-free phones	No
National drug-driving law	No

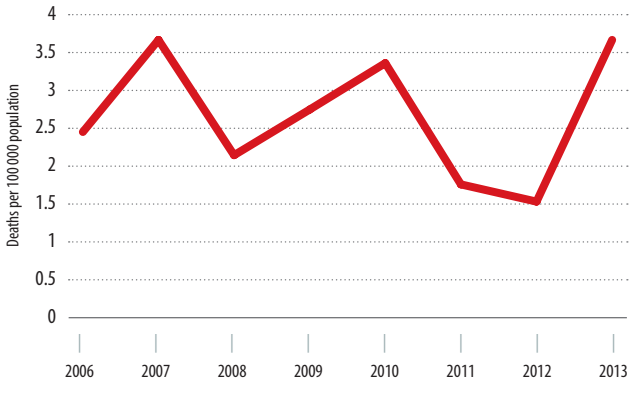
[c] May be increased to an unspecified speed. The speed limit for two-wheeled vehicles is 25 km/h.
[d] Alcohol consumption legally prohibited.
[e] Only required on roads where vehicles may be driven at a speed higher than the normal limit.

DEATHS BY ROAD USER CATEGORY



Source: Maldives Police Service (data from 2013).

TRENDS IN REPORTED ROAD TRAFFIC DEATHS



Source: Maldives Police Service.

Legislative review conducted by WHO. Vehicle safety data from UNECE WP29. Other data collected by questionnaire and cleared by Ministry of Health.

MYANMAR

Population: 53 259 018 • Income group: Low • Gross national income per capita: US$ —

INSTITUTIONAL FRAMEWORK

Lead agency	Traffic Rules Enforcement Supervisory Committee (TRESC)
Funded in national budget	No
National road safety strategy	Yes
Funding to implement strategy	Partially funded
Fatality reduction target	50% (2011–2015)

SAFER ROADS AND MOBILITY

Formal audits required for new road construction projects	Yes
Regular inspections of existing road infrastructure	Yes
Policies to promote walking or cycling	No
Policies to encourage investment in public transport	Yes
Policies to separate road users and protect VRUs	Subnational

SAFER VEHICLES

Total registered vehicles for 2014	4 310 112
Cars and 4-wheeled light vehicles	386 049
Motorized 2- and 3-wheelers	3 712 220
Heavy trucks	127 947
Buses	22 253
Other	61 643
Vehicle standards applied[a]	
Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	No

[a] UNECE WP29.

POST-CRASH CARE

Emergency room injury surveillance system	No
Emergency access telephone numbers	192
Permanently disabled due to road traffic crash	—

DATA

Reported road traffic fatalities (2013)	3 612[b] (75% M, 25% F)
WHO estimated road traffic fatalities	10 809 (95%CI 8 790–12 829)
WHO estimated rate per 100 000 population	20.3
Estimated GDP lost due to road traffic crashes	0.5%[c]

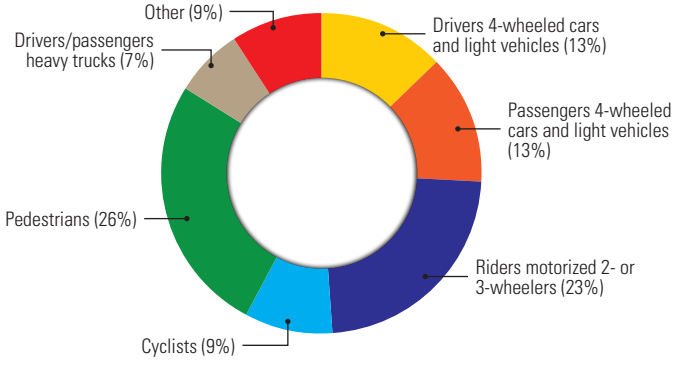
[b] Myanmar Police Force. Defined as died within 30 days of crash.
[c] University of Economics (data from 2008).

SAFER ROAD USERS

National speed limit law	Yes
Max urban speed limit	48 km/h
Max rural speed limit	80 km/h
Max motorway speed limit	No
Local authorities can modify limits	Yes
Enforcement	0 1 2 3 4 (5) 6 7 8 9 10
National drink–driving law	Yes
BAC limit – general population	≤ 0.08 g/dl
BAC limit – young or novice drivers	≤ 0.08 g/dl
Random breath testing carried out	Yes
Enforcement	—
% road traffic deaths involving alcohol	—
National motorcycle helmet law	Yes
Applies to drivers and passengers	Yes
Law requires helmet to be fastened	Yes
Law refers to helmet standard	No
Enforcement	0 1 2 3 4 (5) 6 7 8 9 10
Helmet wearing rate	48–51% All riders[d]
National seat-belt law	No
Applies to front and rear seat occupants	—
Enforcement	—
Seat-belt wearing rate	—
National child restraint law	No
Restrictions on children sitting in front seat	No
Child restraint law based on	—
Enforcement	—
% children using child restraints	—
National law on mobile phone use while driving	No
Law prohibits hand-held mobile phone use	—
Law also applies to hands-free phones	—
National drug-driving law	No

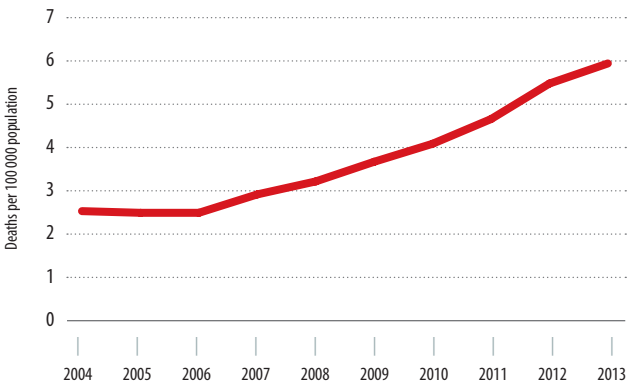
[d] Department of Health, Study carried out by Yangon Hospital (data from 2011).

DEATHS BY ROAD USER CATEGORY



Source: Myanmar Police Force (data from 2010).

TRENDS IN REPORTED ROAD TRAFFIC DEATHS



Source: Myanmar Police Force.

Legislative review conducted by WHO. Vehicle safety data from UNECE WP29. Other data collected by questionnaire and cleared by Ministry of Health.

NEPAL

Population: 27 797 457 • Income group: Low • Gross national income per capita: US$ 730

INSTITUTIONAL FRAMEWORK

Lead agency	Road Safety Council, Ministry of Physical Infrastructure and Transport
Funded in national budget	Yes
National road safety strategy	Yes
Funding to implement strategy	Partially funded
Fatality reduction target	35% (2013–2020)

SAFER ROADS AND MOBILITY

Formal audits required for new road construction projects	Yes
Regular inspections of existing road infrastructure	No
Policies to promote walking or cycling	No
Policies to encourage investment in public transport	No
Policies to separate road users and protect VRUs	No

SAFER VEHICLES

Total registered vehicles for 2011	1 178 911
Cars and 4-wheeled light vehicles	133 992
Motorized 2- and 3-wheelers	891 018
Heavy trucks	47 930
Buses	35 100
Other	70 871
Vehicle standards applied[a]	
Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	No

[a] UNECE WP29.

POST-CRASH CARE

Emergency room injury surveillance system	No
Emergency access telephone numbers	None
Permanently disabled due to road traffic crash	—

DATA

Reported road traffic fatalities (2013)	1 744[b] (70% M, 30% F)
WHO estimated road traffic fatalities	4 713 (95%CI 3 880–5 546)
WHO estimated rate per 100 000 population	17.0
Estimated GDP lost due to road traffic crashes	0.8%[c]

[b] Police Head Quarter (Traffic Division). Defined as died within 35 days of crash.
[c] 2011, World Health Survey, Final Report on Study of Health Care Cost for RTA.

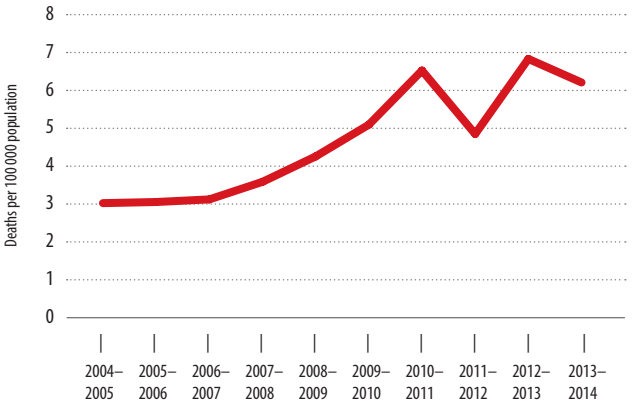
SAFER ROAD USERS

National speed limit law	Yes
Max urban speed limit	80 km/h
Max rural speed limit	80 km/h
Max motorway speed limit	No
Local authorities can modify limits	No
Enforcement	0 1 2 3 4 5 6 (7) 8 9 10
National drink–driving law	Yes[d]
BAC limit – general population	—
BAC limit – young or novice drivers	—
Random breath testing carried out	Yes
Enforcement	0 1 2 3 4 5 6 7 8 (9) 10
% road traffic deaths involving alcohol	—
National motorcycle helmet law	Yes
Applies to drivers and passengers	Yes
Law requires helmet to be fastened	No
Law refers to helmet standard	No
Enforcement	0 1 2 3 4 5 6 7 8 (9) 10
Helmet wearing rate	—
National seat-belt law	Yes
Applies to front and rear seat occupants	No
Enforcement	0 1 2 3 4 (5) 6 7 8 9 10
Seat-belt wearing rate	—
National child restraint law	No
Restrictions on children sitting in front seat	No
Child restraint law based on	—
Enforcement	—
% children using child restraints	—
National law on mobile phone use while driving	No
Law prohibits hand-held mobile phone use	—
Law also applies to hands-free phones	—
National drug-driving law	Yes

[d] Not based on BAC.

DEATHS BY ROAD USER CATEGORY

TRENDS IN REPORTED ROAD TRAFFIC DEATHS



Source: Police Head Quarter (Traffic Division).

Legislative review conducted by WHO. Vehicle safety data from UNECE WP29. Other data collected by questionnaire and cleared by Ministry of Health and Population.

SRI LANKA

Population: 21 273 228 • Income group: Middle • Gross national income per capita: US$ 3 170

INSTITUTIONAL FRAMEWORK

Lead agency	National Council for Road Safety
Funded in national budget	No
National road safety strategy	No
Funding to implement strategy	—
Fatality reduction target	—

SAFER ROADS AND MOBILITY

Formal audits required for new road construction projects	No
Regular inspections of existing road infrastructure	No
Policies to promote walking or cycling	No
Policies to encourage investment in public transport	No
Policies to separate road users and protect VRUs	No

SAFER VEHICLES

Total registered vehicles for 2013	5 203 678
Cars and 4-wheeled light vehicles	832 840
Motorized 2- and 3-wheelers	3 566 184
Heavy trucks	329 648
Buses	93 428
Other	381 578
Vehicle standards applied[a]	
Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	No

[a] UNECE WP29.

POST-CRASH CARE

Emergency room injury surveillance system	No
Emergency access telephone numbers	119
Permanently disabled due to road traffic crash	—

DATA

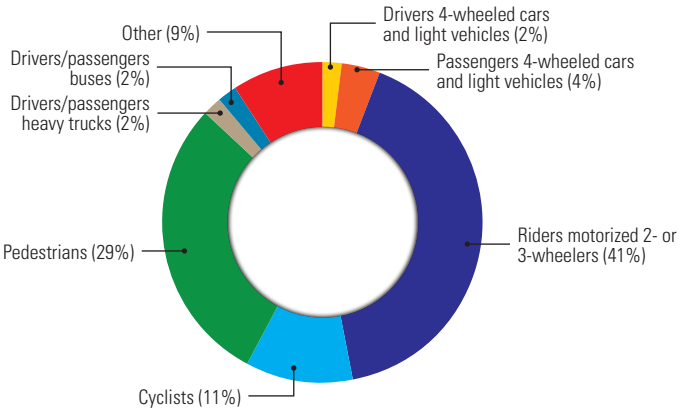
Reported road traffic fatalities (2013)	2 362[b] (82% M, 18% F)
WHO estimated road traffic fatalities	3 691 (95%CI 3 245–4 137)
WHO estimated rate per 100 000 population	17.4
Estimated GDP lost due to road traffic crashes	—

[b] Department of Police. Defined as died within 30 days of crash.

SAFER ROAD USERS

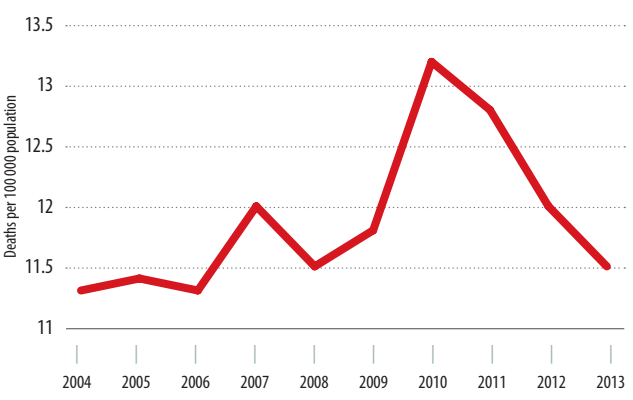
National speed limit law	Yes
Max urban speed limit	50 km/h
Max rural speed limit	70 km/h
Max motorway speed limit	No
Local authorities can modify limits	No
Enforcement	0 1 2 3 ④ 5 6 7 8 9 10
National drink–driving law	Yes
BAC limit – general population	< 0.08 g/dl
BAC limit – young or novice drivers	< 0.08 g/dl
Random breath testing carried out	Yes
Enforcement	0 1 2 3 4 5 ⑥ 7 8 9 10
% road traffic deaths involving alcohol	—
National motorcycle helmet law	Yes
Applies to drivers and passengers	Yes
Law requires helmet to be fastened	No
Law refers to helmet standard	Yes
Enforcement	0 1 2 3 4 5 6 ⑦ 8 9 10
Helmet wearing rate	—
National seat-belt law	Yes
Applies to front and rear seat occupants	No
Enforcement	0 1 2 3 4 5 6 7 ⑧ 9 10
Seat-belt wearing rate	—
National child restraint law	No
Restrictions on children sitting in front seat	No
Child restraint law based on	—
Enforcement	—
% children using child restraints	—
National law on mobile phone use while driving	Yes
Law prohibits hand-held mobile phone use	Yes
Law also applies to hands-free phones	No
National drug-driving law	Yes

DEATHS BY ROAD USER CATEGORY



Source: Police Accident Database (data from 2013).

TRENDS IN REPORTED ROAD TRAFFIC DEATHS



Source: Sri Lanka Police Accident Database and Department of Census and Statistics.

Legislative review conducted by WHO. Vehicle safety data from UNECEWP29. Other data collected by questionnaire.

THAILAND

Population: 67 010 502 • Income group: Middle • Gross national income per capita: US$ 5 340

INSTITUTIONAL FRAMEWORK

Lead agency	National Road Safety Directing Center
Funded in national budget	Yes
National road safety strategy	Yes
Funding to implement strategy	Partially funded
Fatality reduction target	Less than 10 deaths per 100 000 population (2010–2020)

SAFER ROADS AND MOBILITY

Formal audits required for new road construction projects	No
Regular inspections of existing road infrastructure	No
Policies to promote walking or cycling	No
Policies to encourage investment in public transport	Yes
Policies to separate road users and protect VRUs	No

SAFER VEHICLES

Total registered vehicles for 2012	32 476 977
Cars and 4-wheeled light vehicles	11 829 221
Motorized 2- and 3-wheelers	19 169 418
Heavy trucks	901 014
Buses	137 609
Other	439 715
Vehicle standards applied[a]	
Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	Yes

[a] UNECE WP29.

POST-CRASH CARE

Emergency room injury surveillance system	Yes
Emergency access telephone numbers	1669
Permanently disabled due to road traffic crash	4.6% of admitted patients[b]

[b] 2006, Study of Dr. Daranee Suwapan, MD. "Incidence of Disability and Impact from Road Traffic Injury".

DATA

Reported road traffic fatalities (2012)	14 059[c] (79% M, 21% F)
WHO estimated road traffic fatalities	24 237
WHO estimated rate per 100 000 population	36.2
Estimated GDP lost due to road traffic crashes	3.0%[d]

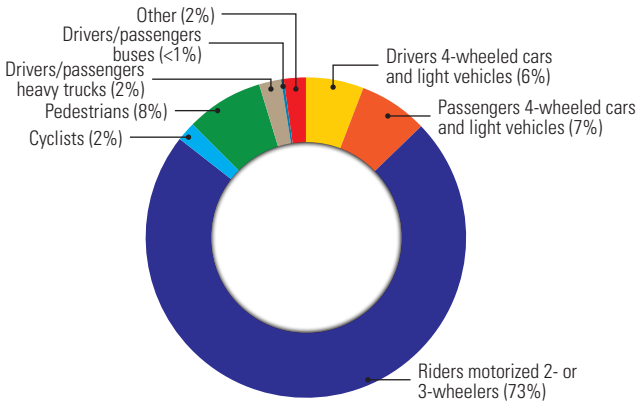
[c] Bureau of Policy and Strategy, Office of Permanent Secretary, Ministry of Public Health. Defined as unlimited time period following crash.
[d] 2009, Dr. Pichai Thaneerananon, PhD. "Traffic Accident Costing in Thailand 2004".

SAFER ROAD USERS

National speed limit law	Yes
Max urban speed limit	80 km/h
Max rural speed limit	90 km/h
Max motorway speed limit	120 km/h
Local authorities can modify limits	No
Enforcement	0 1 2 ③ 4 5 6 7 8 9 10
National drink–driving law	Yes
BAC limit – general population	≤ 0.05 g/dl
BAC limit – young or novice drivers	≤ 0.05 g/dl
Random breath testing carried out	Yes
Enforcement	0 1 2 3 4 5 ⑥ 7 8 9 10
% road traffic deaths involving alcohol	26%[e]
National motorcycle helmet law	Yes
Applies to drivers and passengers	Yes
Law requires helmet to be fastened	Yes
Law refers to helmet standard	Yes
Enforcement	0 1 2 3 4 5 ⑥ 7 8 9 10
Helmet wearing rate	52% Drivers[f], 20% Passengers[f]
National seat-belt law	Yes
Applies to front and rear seat occupants	No
Enforcement	0 1 2 3 4 5 ⑥ 7 8 9 10
Seat-belt wearing rate	58% Drivers[f], 54% Front seats[f]
National child restraint law	No
Restrictions on children sitting in front seat	No
Child restraint law based on	—
Enforcement	—
% children using child restraints	—
National law on mobile phone use while driving	Yes
Law prohibits hand-held mobile phone use	Yes
Law also applies to hands-free phones	No
National drug-driving law	Yes

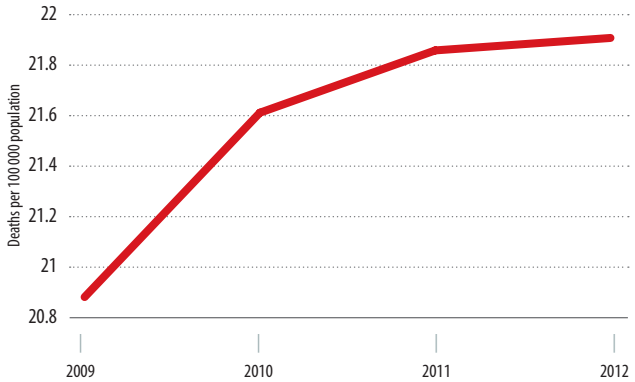
[e] Injury Surveillance System (data from 2012).
[f] Survey of Thai Roads Foundation (data from 2012).

DEATHS BY ROAD USER CATEGORY



Source: Injury Surveillance System (data from 2012).

TRENDS IN REPORTED ROAD TRAFFIC DEATHS



Source: Bureau of Policy and Strategy, Office of Permanent Secretary, Ministry of Public Health.

Legislative review conducted by WHO. Vehicle safety data from UNECE WP29. Other data collected by questionnaire and cleared by Ministry of Public Health.

TIMOR-LESTE

Population: 1 132 879 • Income group: Middle • Gross national income per capita: US$ 3 940

INSTITUTIONAL FRAMEWORK

Lead agency	National Directorate of Transport
Funded in national budget	Yes
National road safety strategy	Yes
Funding to implement strategy	Partially funded
Fatality reduction target	No

SAFER ROADS AND MOBILITY

Formal audits required for new road construction projects	Yes
Regular inspections of existing road infrastructure	Yes
Policies to promote walking or cycling	No
Policies to encourage investment in public transport	No
Policies to separate road users and protect VRUs	No

SAFER VEHICLES

Total registered vehicles for 2006–2013	63 553
Cars and 4-wheeled light vehicles	14 621
Motorized 2- and 3-wheelers	48 143
Heavy trucks	651
Buses	138
Other	0
Vehicle standards applied[a]	
Frontal impact standard	No
Electronic stability control	No
Pedestrian protection	No

[a] UNECE WP29.

POST-CRASH CARE

Emergency room injury surveillance system	Yes
Emergency access telephone numbers	110
Permanently disabled due to road traffic crash	—

DATA

Reported road traffic fatalities (2013)	74[b] (79% M, 21% F)
WHO estimated road traffic fatalities	188 (95%CI 158–219)
WHO estimated rate per 100 000 population	16.6
Estimated GDP lost due to road traffic crashes	—

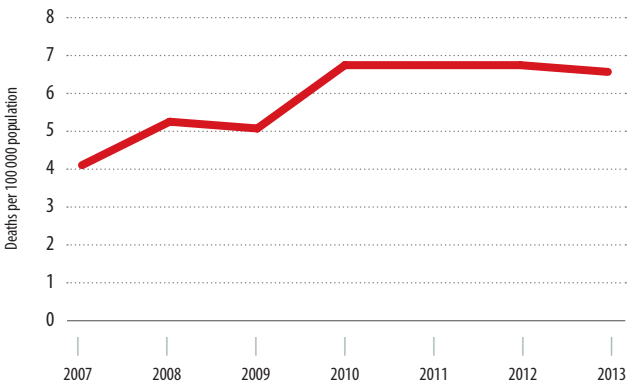
[b] National Police Timor-Leste (PNTL). Defined as died within 24 hours of crash.

SAFER ROAD USERS

National speed limit law	Yes
Max urban speed limit	50 km/h
Max rural speed limit	90 km/h
Max motorway speed limit	120 km/h
Local authorities can modify limits	No
Enforcement	0 1 2 3 4 ⑤ 6 7 8 9 10
National drink–driving law	Yes
BAC limit – general population	≤ 0.05 g/dl
BAC limit – young or novice drivers	≤ 0.05 g/dl
Random breath testing carried out	Yes
Enforcement	0 1 2 3 ④ 5 6 7 8 9 10
% road traffic deaths involving alcohol	—
National motorcycle helmet law	Yes
Applies to drivers and passengers	Yes
Law requires helmet to be fastened	Yes
Law refers to helmet standard	Yes
Enforcement	0 1 2 3 4 5 ⑥ 7 8 9 10
Helmet wearing rate	—
National seat-belt law	Yes
Applies to front and rear seat occupants	Yes
Enforcement	0 1 ② 3 4 5 6 7 8 9 10
Seat-belt wearing rate	—
National child restraint law	Yes
Restrictions on children sitting in front seat	Yes
Child restraint law based on	Weight/Height
Enforcement	0 1 ② 3 4 5 6 7 8 9 10
% children using child restraints	—
National law on mobile phone use while driving	Yes
Law prohibits hand-held mobile phone use	Yes
Law also applies to hands-free phones	No
National drug-driving law	Yes

DEATHS BY ROAD USER CATEGORY

TRENDS IN REPORTED ROAD TRAFFIC DEATHS



Source: National Transit Police, Timor-Leste.

Legislative review conducted by WHO. Vehicle safety data from UNECE WP29. Other data collected by questionnaire and cleared by Ministry of Health.

For further details please see:
http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/

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