

ROAD SAFETY

There were 1.25 million road traffic deaths globally in 2013. While the global rate for road traffic deaths is 17.4 per 100 000, there is great disparity by income, with rates more than twice as high in low- and middle-income countries than in the world's high income countries (WHO, 2015a). The burden of road traffic injuries falls disproportionately on vulnerable road users – pedestrians, cyclists and motorcyclists. Two thirds and half of those who die in road traffic crashes in WPRO and SEARO respectively are pedestrians, cyclists, or users of motorized two-wheelers, and this proportion is higher in emerging economies where urbanisation and motorisation 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 (WHO, 2015a).

In September 2015 the United Nations launched the 2030 Agenda for Sustainable Development (SDG). The SDG 3 target aims to halve the number of global deaths and injuries from road traffic crashes by 2020, while SDG 11 relates to providing access to sustainable transport systems for all, improving road safety, and expanding public transport.

In 2013, Asia-Pacific countries and territories reported 43 deaths per 100 000 population due to road traffic accidents (Figure 4.26), two and half times the rate observed across OECD countries. In Thailand, 70 males per 100 000 population aged more than 15 years old died because of road traffic injuries in 2012.

The five key risk factors in road traffic deaths and injuries are drinking and driving, speeding, and failing to use motorcycle helmets, seat-belts and child restraints (Table 4.1). In addition, distracted driving is a growing threat to road safety such as use of mobile phone and other in-vehicle technologies. Texting causes cognitive distraction and both of manual and visual distraction as well. Even talking on mobile phones without holding or browsing a phone can reduce driving performance (WHO, 2015a). Since hands-free phone and hand-held phone are equally at risk of cognitive distraction, some national laws regulate both of the ways of using mobile phones (Table 4.1).

Drinking and driving, especially with a blood alcohol concentration level of over 0.05g/dl (grams per decilitre), greatly increases the risk of a crash and the

possibility that it will result in death or serious injury. Furthermore, lower limit BAC limits (0.02 g/dl) for young people and novice drivers can reduce the risk of road crashes, hence in Australia and New Zealand and China, for instance, they have additional national laws for young and novice drivers (WHO, 2015). Law enforcement through random breath testing checkpoints is highly cost effective and can reduce alcohol-related crashes by approximately 20%.

In high-income countries, speed contributes to about 30% of road deaths, while in some low and middle-income countries speed is the main factor in about half of road deaths. Speed limits are enforced by a national law in all Asia-Pacific countries. However, in several countries speed limits are not adapted at local level (Table 4.1).

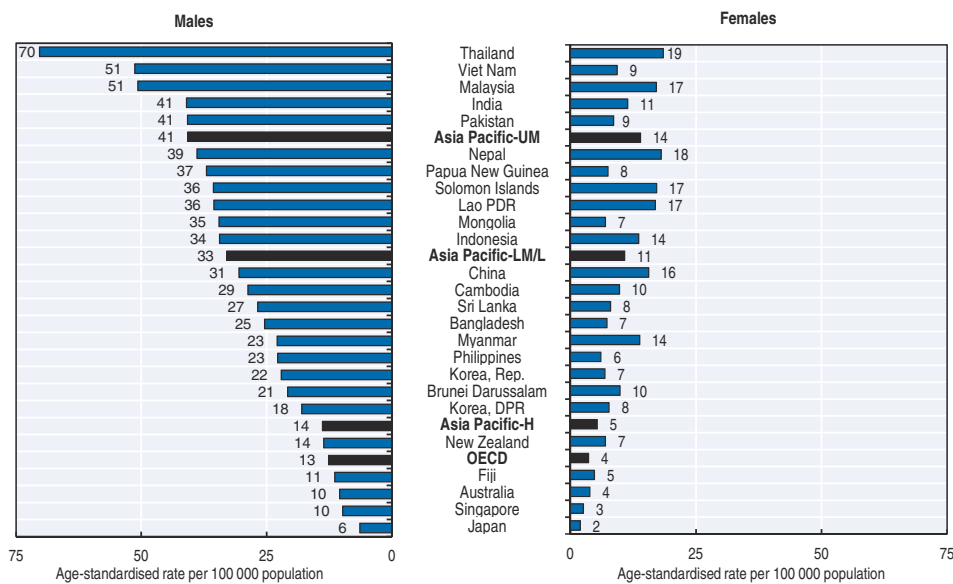
Wearing a motorcycle helmet correctly can reduce the risk of death by almost 40% and the risk of severe injury by over 70%. When motorcycle helmet laws are enforced, helmet-wearing rates can increase to over 90%. However, the motorcycle helmet wearing rate is very low in China (20%) and Pakistan (10.4%).

Wearing a seat-belt can reduce fatalities among front-seat passengers by up to 50% and among rear-seat car passengers by up to 75%. A national law does not exist in Bangladesh, Myanmar and Solomon Islands, while few other Asia-Pacific countries require that a seat-belt is worn by all the occupants of a car.

Child restraint systems, such as child seats for infants and booster seats for older children, decrease the risk of death in a crash by about 70% for infants and up to 80% for small children. However, mandatory child restraint national laws exist only in few Asia-Pacific countries – Australia, Singapore, Japan, New Zealand, Cambodia and Lao PDR.

The road fatality rate is the highest in the age groups of more than 85 (OECD/ITF, 2018). A recent study shows that 4% of current driver aged 75 and above have dementia, which disturbs driving skills (Fraade-Blanar et al., 2018). Drivers over 71 must renew driving license every 3 years instead of 5 years for those under 70 years, and drivers aged 75 and over need to take cognitive impairment screening test when renewing a driving license in Japan (2015 amendment to the Road Traffic Act).

4.26. Road traffic death rates, population aged 15 years and over, 2013



Source: OECD Health Statistics 2018; WHO GHO 2018; Health facts of Hong Kong 2017.

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Table 4.1. Existence of a national legislation on five main risk factors of road traffic deaths, 2013

Country	Existence of a national law on:										
	drink-driving		seat-belt		child-restraint	Speed Limit			motorcycle helmet		mobile phone use (Y.N)
	National law	Road traffic deaths to alcohol (%)	National law	Applicability to all occupants	National law	National or local law	Rural (km/h)	Urban (km/h)	National law	Motorcycle helmet wearing rate (%)	National law on hand-held/hand-free mobile phone use
Thailand	Yes	25.8	Yes	No	No	National	90	80	Yes	n.a.	Hand-held only
Viet Nam	Yes	34	Yes	No	No	National	80	50	Yes	96.0% Drivers, 83.0% Passengers	Nothing
Malaysia	Yes	23.3	Yes	No	No	Both	90*	90*	Yes	97.4% Drivers, 88.7% Passengers	Hand-held only
India	Yes	4.7	Yes	Yes	No	Both	No limit	No limit	Yes	n.a.	Both
Pakistan	Yes	-	Yes	No	No	Both	110*	90*	Yes	10.4% All riders, 10.4% Drivers	Both
Nepal	Yes	-	Yes	No	No	National	80	80	Yes	-	Nothing
Papua New Guinea	Yes	56	Yes	Yes	No	National	75	60	Yes	-	Nothing
Solomon Islands	Yes	16.4	No	-	No	Both	No limit	No limit	Yes	-	Nothing
Lao PDR	Yes	-	Yes	No	Yes	National	90	40	Yes	-	Both
Mongolia	Yes	20.2	Yes	Yes	No	National	80	60	n.a.	6.6% Drivers	Hand-held only
Indonesia	Yes	-	Yes	No	No	Both	100	70	Yes	n.a.	Nothing
China	Yes	3.8	Yes	Yes	No	Both	no data	no data	Yes	20.0% All riders	Hand-held only
Cambodia	Yes	15	Yes	No	Yes	National	90	40	Yes	n.a.	Hand-held only
Sri Lanka	Yes	-	Yes	No	No	National	70	50	Yes	-	Hand-held only
Bangladesh	Yes	-	No	-	No	National	-112	No limit	Yes	-	Nothing
Myanmar	Yes	-	No	-	No	Both	80	48	Yes	n.a.	Nothing
Philippines	Yes	1.4	Yes	Yes	No	Both	80	40	Yes	n.a.	Nothing
Korea, Rep.	Yes	14.3	Yes	Yes	No	Both	80*	80*	Yes	73.8% All riders	Hand-held only
New Zealand	Yes	31	Yes	Yes	Yes	Both	100	50	Yes	-	Hand-held only
Fiji	Yes	14.6	No	-	No	No	no data	no data	No	-	Nothing
Australia	Yes	30	Yes	Yes	Yes	Both	100-130	50	Yes	n.a.	Hand-held only
Singapore	Yes	10.6	Yes	Yes	Yes	National	No limit*	70*	Yes	-	Hand-held only
Japan	Yes	6.2	Yes	Yes	Yes	Both	60	60	Yes	-	Hand-held only

* 2013 GHO speed limits UR.

Note: Speed limit regulation in 2015 (Global status report on road safety, 2015).

Source: WHO 2016, Global Status Report on Road Safety 2015, WHO.

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