Approximately 1.35 million people die each year as a result of road traffic crashes. While the global rate for road traffic deaths is 17.4 per 100 000, there is great disparity by income, with rates higher in low- and middle-income countries than in the world's high-income countries (WHO, 2018[29]). The burden of road traffic injuries falls disproportionately on vulnerable road users – pedestrians, cyclists and motorcyclists. Road injuries will cost the world economy USD 1.8 trillion (constant 2010 USD) in 2015-30, which is equivalent to an annual tax of 0.12% on global gross domestic product (Chen et al., 2019[30]). 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 2016, LAC countries reported 17 deaths per 100 000 population due to road traffic accidents (Figure 4.26). In Saint Lucia, Dominican Republic and Venezuela, there were over 30 deaths per 100 000 population because of road traffic injuries in 2016, followed by Ecuador, El Salvador, Paraguay, Guyana and Belize with over 20 deaths. On the other end, Barbados, Antigua and Barbuda and Cuba have the lowest road traffic death rates.

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 considering the 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, 2018[29]). 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 (grammes 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. Enforcement through random breath testing checkpoints is highly cost effective and can reduce alcohol-related crashes by approximately 20%.

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 Antigua and Barbuda, while several other countries do not require that all the occupants of a car wear a seat belt. 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 16 LAC countries.

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 LAC countries except in Venezuela. However, in several countries speed limits are not adapted at the 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, four countries does not have a regulation mandating helmet use. Motorcycle helmet wearing rate is very low in Dominican Republic, Guatemala and Jamaica, and in rural areas of most countries. Only Brazil, Chile, Colombia, Costa Rica, Cuba and Surinam report motorcycle helmet use over 80% in rural areas.

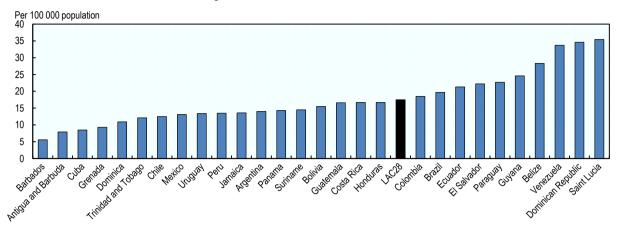
Definition and comparability

To calculate road injury mortality data, countries were classified into four groups: (1) Countries with death registration data completeness of at least 80%. For these countries' death registration, projection of the most recent death registration, reported death or projected reported deaths were used. (2) Countries with other sources of information on cause of death. For these countries a regression method was used to project forward the most recent year for which an estimate of total road traffic deaths was available. (3) Countries with population less than 150 000 and which did not have eligible death registration data. For these countries the death reported in the survey were used directly, without adjustment. (4) Countries without eligible death registration data. For these countries a negative binomial regression model was used. For more information about this process, see the report Global Status Report on Road Safety (WHO, 2018[31]).

References

- [30] Chen, S. et al. (2019), "The global macroeconomic burden of road injuries: estimates and projections for 166 countries", *The Lancet Planetary Health*, Vol. 3/9, pp. e390-e398, *http://dx.doi.org/* 10.1016/S2542-5196(19)30170-6.
- [29] WHO (2018), Road traffic injuries, World Health Organization, https://www.who.int/news-room/fact-sheets/detail/road-trafficinjuries.
- [31] WHO (2018), The Global Status Report on Road Safety, World Health Organization, https://www.who.int/publications-detail/ global-status-report-on-road-safety-2018.

Figure 4.26. Road traffic death rates, 2016



Source: WHO GHO 2018.

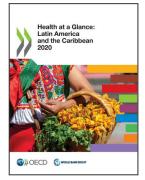
StatLink ang https://stat.link/mowfry

Table 4.1. Existence of a national legislation on five main risk factors of road traffic deaths, 2016 or latest year available

	Drink Diving		Seat-belt		Child restraint	Speed limit		Motorcycle helmet		Mobile phone use	
Country	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 (% drivers/% passengers)	National law on hand-held/hand- free mobile phone use
Antigua and Barbuda	Yes	17.95	No		No	National	64	32	No		No
Argentina	Yes	18.13	Yes	Yes	Yes	Both	110	60	Yes	65/44	Yes
Barbados	Yes	17.06	Yes	Yes	Yes	National	80	80	Yes		Yes
Belize	Yes	20.70	Yes	No	No	National	88	40	Yes		No
Bolivia	Yes	20.84	Yes	No	No	Both	80	40	Yes	52/3	No
Brazil	Yes	19.52	Yes	Yes	Yes	Both	80	60	Yes	83/80	Yes
Chile	Yes	16.68	Yes	Yes	Yes	Both	100	60	Yes	99/98	Yes
Colombia	Yes	20.34	Yes	Yes	No	Both	120	80	Yes	96/80	Yes
Costa Rica	Yes	19.69	Yes	Yes	Yes	National	60	50	Yes	98/92	Yes
Cuba	Yes	18.82	Yes	Yes	No	National	90	50	Yes	95/90	Yes
Dominica	Yes	18.97	Yes	Yes	No	None			No		No
Dominican Republic	Yes	20.75	Yes	Yes	Yes	National	60	60	Yes	27/2	Yes
Ecuador	Yes	20.34	Yes	Yes	Yes	Both	120	60	Yes	90/12-52	Yes
El Salvador	Yes	20.75	Yes	No	Yes	National	90	50	Yes		Yes
Grenada	Yes	20.26	Yes	No	No	National	64	32	Yes		No
Guatemala	Yes	21.68	Yes	No	No	Both	80	60	Yes	36/11	Yes
Guyana	Yes	20.84	Yes	No	Yes	National	64	64	No	50/20	Yes
Honduras	Yes	21.92	Yes	Yes	No	National			Yes		Yes
Jamaica	Yes	19.11	Yes	Yes	Yes	National	80	48	Yes	6/2	No
Mexico	Yes	20.39	Yes		No	Both	20-90	20-70	No	83/55	No
Panama	Yes	19.23	Yes	Yes	No	National	100	80	Yes		Yes
Paraguay	Yes	20.49	Yes	Yes	Yes	Both	110	50	Yes		Yes
Peru	Yes	20.34	Yes	Yes	Yes	Both	60	60	Yes	70/8	Yes
Saint Lucia	Yes	19.85	Yes	No	No	National	24	24	Yes		Yes
Suriname	Yes	20.26	Yes	Yes	Yes	National	80	40	Yes	95/92	Yes
Trinidad and Tobago	Yes	18.49	Yes	No	Yes	National	80	50	Yes		Yes
Uruguay	Yes	18.32	Yes	Yes	Yes	Both	90	45	Yes	80/71	Yes
Venezuela	Yes	19.85	Yes	Yes	Yes	None			Yes		Yes
LAC28		19.70					82.25	53.125			

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

Source: WHO Global Status Report on Road Safety 2018, CONAPRA 2015 for Mexico.



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