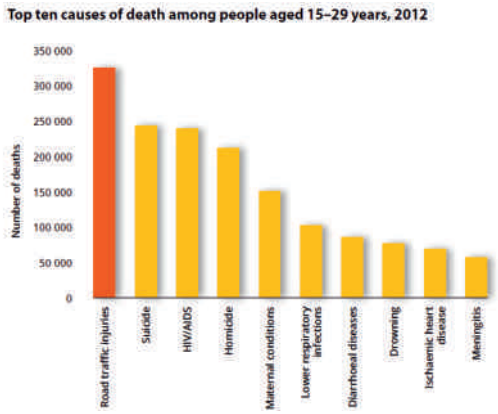
WHO GLOBAL STATUS REPORT ON ROAD SAFETY 2015

More than 1.2 million people die each year on the world's roads, making road traffic injuries a leading cause of death globally. Most of these deaths are in low and middle income countries where rapid economic growth has been accompanied by increased motorization and road traffic injuries. As well as being a public health problem, road traffic injuries are a development issue: low- and middle – income countries lose approximately 3% of GDP as a result of road traffic crashes.

Although road traffic injuries have been a leading cause of mortality for many years, most traffic crashes are both predictable and preventable. There is considerable evidence on interventions that are effective at making roads safer: countries that have successfully implemented these interventions have seen corresponding reductions in road traffic deaths. Rolling out these interventions globally offers huge potential to mitigate future damage and save lives at a global level.

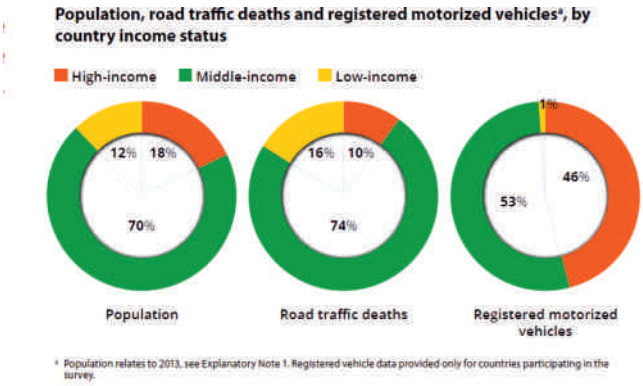
Some of the important points and extracts:

- Road traffic injuries are the number one cause of death among those aged 15-29.



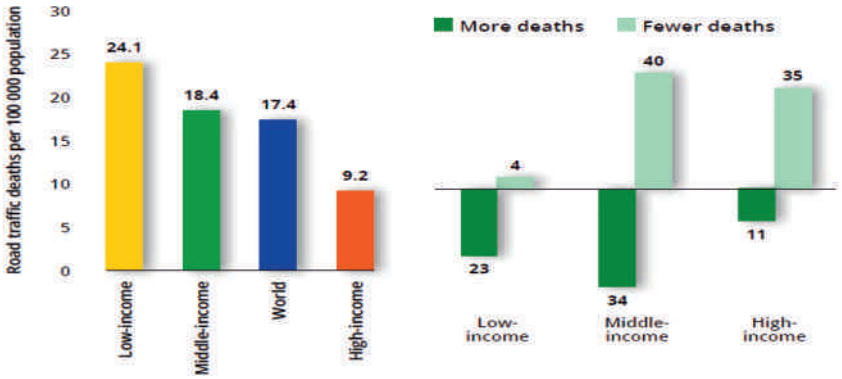
Source: Global Status report on road safety 2015: WHO

- Road traffic deaths and injuries in low and middle-income countries are estimated to cause economic losses of up to 5% of GDP.
- Road traffic death rates in low and middle-income countries are more than double those in high-income countries.



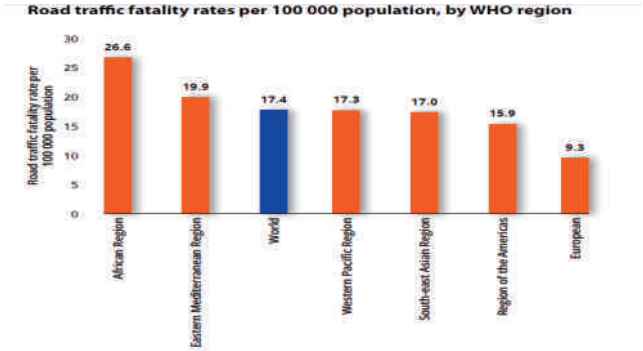
Source: Global Status report on road safety 2015: WHO

- Risk of deaths in a road crash remains highest in low- and middle-income countries
- 68 countries have seen a rise in road traffic deaths since 2010, while 79 have seen a decrease.



Source: Global Status report on road safety 2015: WHO

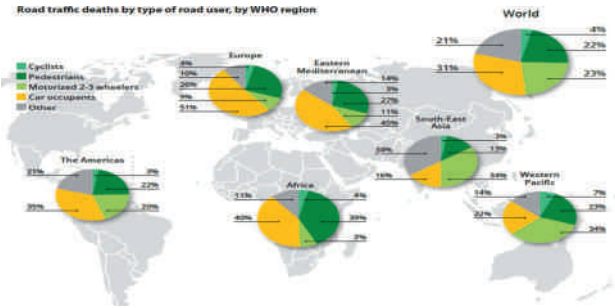
- The risk of a road traffic death is highest in the African Region.
- The Eastern Mediterranean Region is the only region where high-income countries have a higher road traffic death rate than low- or middle-income countries.



Source: Global Status report on road safety 2015: WHO

Road traffic deaths among pedestrians, cyclists and motorcyclists are intolerably high. More attention must be given to the needs of pedestrians and cyclists.

- More than half of countries (92) report policies to increase walking and cycling, compared to 68 in 2010.



Source: Global Status report on road safety 2015: WHO

Making walking and cycling safer is critical to reducing the number of road traffic deaths and is important for achieving the decade of action for road safety's aim to promote non motorized forms of transport. And if public health is to be improved by encouraging forms of travel involving physical activity, making walking and cycling safer needs to be given special attention.

Motorcyclist safety must be prioritized too globally:

- Nearly a quarter of all road traffic deaths are among motorcyclists. However, this too is disproportionately distributed across the world, with the South-East **Asian Region and Western Pacific Region each accounting for 34% of the world's motorcyclists deaths** compared to the African Region which account for 7%.
- **Preventing motorcyclist head injuries is becoming increasingly urgent as motorcycle use rises.**
- Helmet laws should cover all riders and specify a helmet quality standard.
- Helmet must be of good quality to be effective.
- Few countries meet best practice when it comes to helmet laws and helmet standards.
- Children legally allowed as motorcycle passengers must be required to wear a helmet.
- Other promising strategies that protect motorcyclists while this report only addresses helmets as a critical factor to the safety of motorcyclists, there is an increasing body of evidence that relates to other measures that can enhance safety among this group. For example, mandating advanced braking systems (ABS) for all motorcycles, as recently introduced in the European Union, has shown to mitigate injuries and be cost effective; **creating lanes exclusive to motorcycle use and requiring daytime running lights that increase motorcyclist visibility are both effective injury reduction strategies,** while the use of protective clothing is considered a promising strategy.

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

- Data on road traffic fatalities are not robust in many countries.
- For every person that dies in a road traffic crash there are at least 20 others that sustain non-fatal injuries. These injuries can have considerable impact on quality of life, and often carry with them significant economic costs.

Quality of care at scene of the crash:

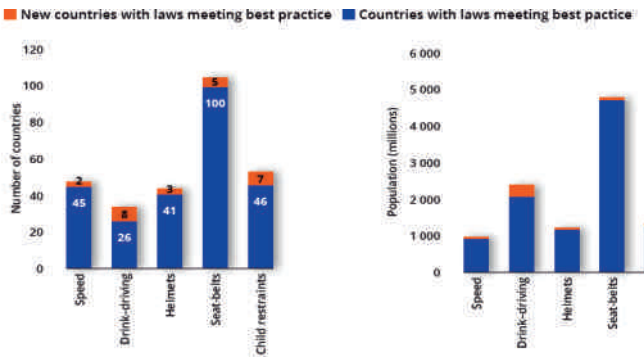
In high-income countries, delivering emergency care at the scene of the collision and getting crash victims quickly to a health-care facility is often performed by professionally trained providers using sophisticated equipment and designated vehicles. However, in low-income countries, lay people such 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.

Road safety laws improve road user behaviour - a critical factor in road safety- to reduce road traffic crashes, injuries and deaths.

- A number of countries have achieved sustained reductions in traffic - related injuries and fatalities through effective road safety programmes that have included legislative change. 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.

- Best practice in drafting and implementing good road safety laws can be used by countries embarking on road safety legislative reform, through it should be recognized that **road safety legislation is a dynamic field and that best practice evolves over time.**
- While there is clear evidence that enforcement is critical to the success of laws, the levels of enforcement required for maximum impact are often less readily available and depend on factors such as political will, available resources and competing priorities at a national level.



Source: Global Status report on road safety 2015: WHO

Reducing speed: Speed is a critical risk factor for road traffic injuries.

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. Male and young drivers are more likely to speed, while other factors likely to influence speed include alcohol, road layout, traffic density and weather conditions.

- **Where motorized traffic mixes with pedestrians, cyclists and moped riders, the speed limit must be under 30km/h.** This is due to the vulnerability of these road users at increasing speed, **an adult pedestrian has less than a 20% chance of dying if struck by a car at less than 50km/h but almost a 60% risk of dying if hit at 80km/h.**
- 47 countries, representing approximately 950 million people, have urban speed laws that meet best practice.

Laws based on blood alcohol concentration (BAC) limits can reduce road traffic crashes.

- **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.
- **Commercial drivers** involved in drunken driving have more serious outcomes.
- **Alcohol ignition interlocks (or alcolocks)**, are automatic control systems designed to prevent driving with excess alcohol. They require the driver to blow into an in-car breathalyzer before starting the ignition. If the device detects alcohol in excess of the threshold value (which can be set a different levels), the

vehicle will not start. Alco locks have been shown to be effective in preventing recidivism for both first time and repeat offenders and can play an important role in rehabilitation programmes (36,37).

- Only 53 countries test all drivers who die in a crash for alcohol use.

Just over half of all countries have enacted good seat-belt laws.

- 105 countries, representing 4.8 billion people, have seat-belt laws that cover both front and rear-seat occupants.
- Protecting children requires properly fitting restraints.
- 159 countries address drug-driving in their road safety legislation but in most cases these laws are too vague to be effective.

Mobile phone use creates various types of distraction: visual, auditory, manual and cognitive. Texting involves cognitive distraction, as well as longer periods of both manual and visual distraction.

- An overview of available data suggests that **driver talking on a mobile phone are approximately four times more likely to be involved in a crash** than those who are not.
- **Hands-free phones appear to have no significant advantage over hand-held phones-** most likely because the most dangerous type of distraction (cognitive) applies equally to both.
- Evidence on effective ways to reduce mobile phone use while driving is still evolving.
- Legislation prohibiting the use of hand-held phones while driving exists in 139 countries; while a further 31 countries prohibit both hand-held and hands-free phones.

Policymakers must give more attention to making vehicles and roads safer.

- Most countries fail to apply minimum UN safety standards to new cars.
- Electronic Stability Control (ESC) is effective at reducing crashes and saving lives but only 46 countries apply a mandatory ESC regulation.
- Standards protecting occupants in front and side impact crashes are poorly implemented.
- Electronic stability control is highly effective and should be mandatory in all vehicles.
- Pedestrians account for 39% of road traffic deaths in the African Region, yet only one African country has signed up to the **UN safety standard that protects pedestrians in the event of a crash.**
- Vehicles can be built to better protect pedestrians. This report shows that pedestrians comprise 22% of all road traffic deaths- approximately 275000 deaths a year globally. The most serious pedestrian injuries are usually caused by the direct impact of the vehicle rather than by being thrown into the road. The severity of injury is influenced by factors such as speed and type of vehicle, and by the design of the front of the vehicle.
- Until recently, vehicle design incorporated few features to protect pedestrians, but there is an increasing effort to include design elements that reduce the likelihood of pedestrian collision and/or reduce the severity of pedestrian injury in the event of a crash. **Softer bumpers, combined with better bonnet area clearance and removal of unnecessarily rigid structures are required to reduce the severity of a pedestrian impact with a car.** The UN regulation for pedestrian protection encourages the design of these more

"forgiving" car fronts.

- Vehicles sold in 80% of all countries fail to meet priority safety standards.

High-performing countries explore how to make transport more sustainable.

- **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. **Planning decisions have been made without sufficient attention to the needs of these groups – for example, cycle paths and foot paths are frequently not part of an integrated network.** At the same time, traffic congestion resulting from rapid motorization means the transport and mobility demands of local communities are frequently no met. Changes are now required to optimize the movement of people and freight with road safety in mind. This optimization needs to take into account the mix and safety of all road users. Measures to promote walking and cycling are also in line with other global moves to fight obesity and reduce no communicable 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, which are now moving rapidly towards much higher levels of motorization, increased levels of air pollution and more sedentary lifestyles.**

- **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 are positive.** Danish studies, for example, showed a 35% reduction in cyclist casualties after cycle tracks were constructed alongside urban roads. Separating road users is also relevant for countries with high proportions of motorcyclists, notably those in the South-East Asian Region and the Western Pacific Region. Yet currently only half (91) of all countries in the survey have policies to separate vulnerable road users from high-speed traffic.
- Safe road systems consider the needs of all road users.
- 91 countries have policies to separate vulnerable road users from high-speed traffic.
- 138 countries currently assess parts of existing road safety networks.

Safe through design Ensuring safety measures are implemented when road infrastructure projects are designed can result in important safety gains for all road users.

- This is particularly true where road design and maintenance are underpinned by a Safe System approach that makes allowances for human error. **The use of infrastructure treatments to help manage speed and reduce the likelihood of a crash (for example through widening of the road, or raised pedestrian crossings), and treatments to mitigate the severity of the crash infrastructural (for example, using roadside barriers and roundabouts) all contribute to less death and injury on the road. Identifying which are the most**

dangerous roads, who uses these roads and which road users are most likely to be injured can all help to determine which affordable engineering counter measures are most essential for upgrading the road and making it safer.

A multifaceted approach is required for the most effective and long-lasting changes to be made to national road safety.

Such changes have been achieved in a number of high-performing countries that have taken on the Safe System approach, and have seen reductions in road traffic deaths and injuries despite increasing motorization.

- Political will is crucial to driving such changes, but this report shows that action is particularly necessary on a number of specific issues.
- Changing road user behaviour is key component of the Safe Systems approach. Setting and enforcing good laws relating to key behavioural risk factors can be effective at realizing such change.
- **Lack of enforcement frequently undermines the potential of road safety** laws to reduce injuries and deaths. More work is needed to explore the best ways to optimize enforcement of existing road safety laws.
- **Insufficient attention has been paid to the needs of pedestrians, cyclists and motorcyclists, who together makeup 49% of all global road traffic deaths.** Making the world'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. 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.

The Sustainable Development goals include a target of 50% reduction in road traffic deaths and injuries by 2020.

*****