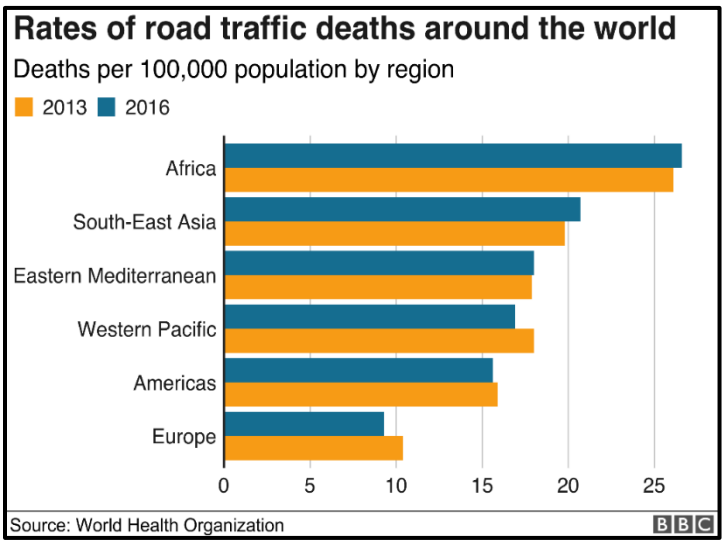
Road Safety Abroad

Product of the Research & Information Support Center (RISC)

OVERVIEW

Death and injuries resulting from traffic accidents constitute the largest risk to travelers overseas, surpassing even crime, civil unrest, and terrorism. Underscoring this risk, the UN reports its personnel – who often deploy to conflict zones and other dangerous theaters of the world – are more than twice as likely to die in traffic accidents as in incidents of terrorism. Worldwide, road traffic crashes claim the lives of 1.35 million people every year, and seriously injure between 20 and 50 million more. While some regions have experienced recent reductions in traffic fatalities, Africa and Southeast Asia experienced increases.



Road accidents represent one of the more prevalent risks to private-sector organizations abroad. Overall, the frequency with which they occur and the high fatality rate makes them high-probability, high-impact risks to personnel. Likelihood of occurrence and catastrophic impact varies by location, and can even change based on seasonal shifts and trends in the broader security environment. Income levels both across regions and within countries have been shown to impact traffic fatality rates. This report serves to inform private-sector security managers of the road safety factors in overseas locations; they in turn must warn employees that the risks may differ – sometimes significantly – from road safety standards in the United States.

WHO IS AT RISK?

Pedestrians and cyclists

Globally, pedestrians and cyclists account for 26% of road traffic deaths, but this proportion varies widely by region; Africa and the Eastern Mediterranean account for 44% and 36% of all pedestrian and cyclist deaths worldwide, respectively. Poor maintenance or lack of sidewalks often forces pedestrians, cyclists, and even animals to use the same roadways as vehicles for transit. Approximately 88% of pedestrian travel worldwide occurs on roads that lack sidewalks and safe crossings.

Young males

Age is a major determinant in road traffic crashes; males under 25 are three times more likely to be involved in an accident, and account for 73% of all vehicular deaths. This may be because there are typically more males on the roads due to sociocultural factors, as well as evidence that (especially young) males engage in riskier behaviors than females.

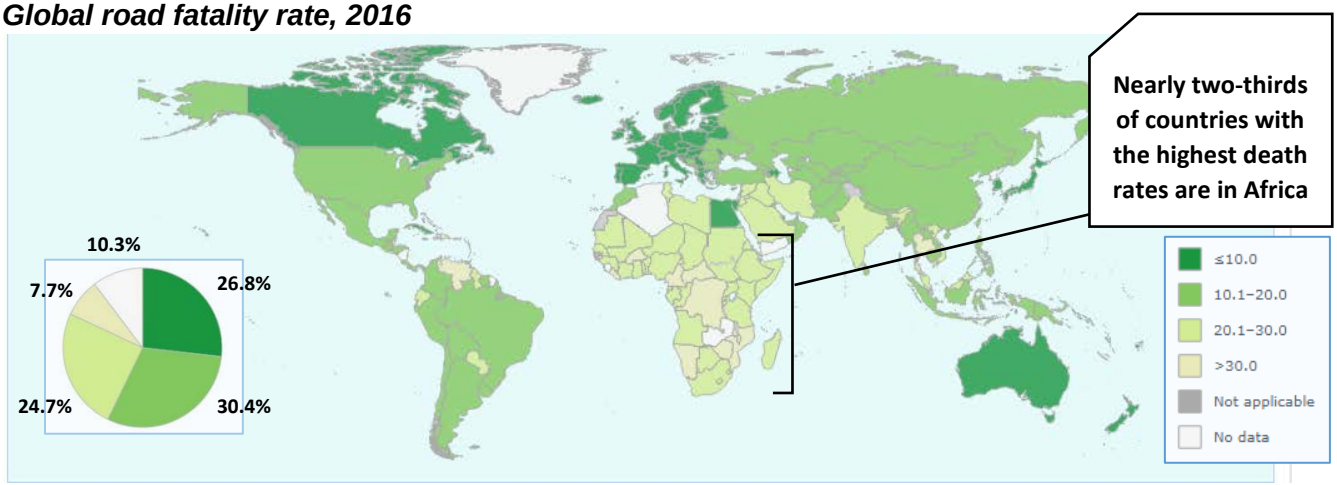
Drunk drivers and their victims

Depending on location, from 5% to 35% of all road deaths involve alcohol use. Many of these alcohol-related accidents occur after-hours, near drinking establishments, and following sporting events; however, such incidents can still occur anywhere and at all times.

Travelers and personnel in lower-income countries

Individuals from lower socio-economic backgrounds are at a higher risk for road injuries. 93% of the world's fatalities on the roads occur in low- and middle-income countries despite these locations having less than two-thirds of the world's vehicles. Notably, Africa and South-East Asia – the regions with most low- and middle-income countries – also have the highest number of traffic accident deaths per capita. This trend also occurs within individual countries, with those of lower socio-economic status generally using less safe transport vehicles.

Global road fatality rate, 2016



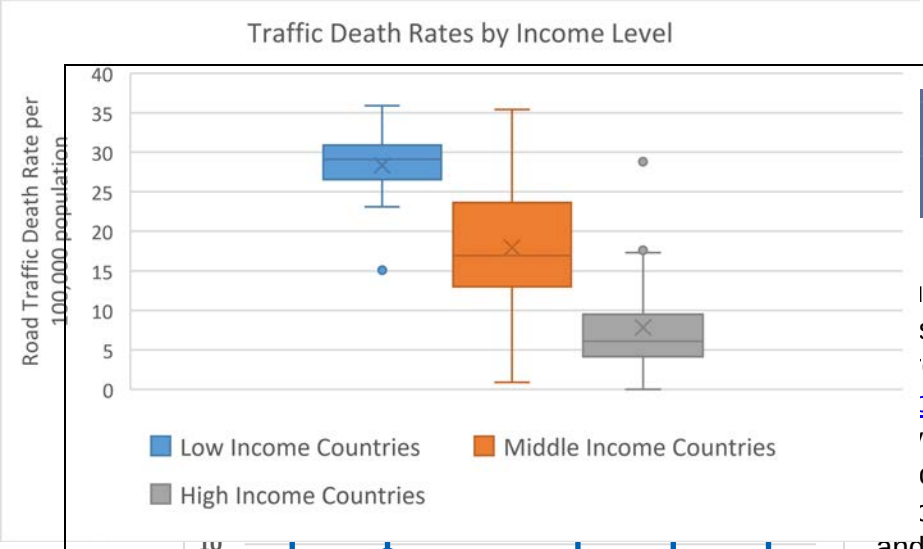
Source: WHO

RISK FACTORS FOR ROAD DEATHS AND SERIOUS INJURIES

A number of factors account for why lower-income countries experience the most traffic accidents, and have particularly grim outcomes for victims.

Better legislation and enforcement needed: The WHO identified five key risk factors in traffic accidents: speed, drunk-driving, motorcycle helmet use, seat-belt use, and child restraint systems. Implementing and enforcing laws that address these issues is critical to reducing deaths.

- **Speed:** Speed is a leading factor in road safety, because higher speeds directly relate to fatal and serious crash risk. Out of the 157 countries who reported on the effectiveness of their speed laws, only 30 countries rated their enforcement as "good."
- **Drunk-Driving:** Driving after consuming alcohol significantly increases the risk and severity of a crash. More high-income countries (58%) possess drunk-driving laws that meet overall best practice criteria versus middle-income countries and low-income



Graph represents the range of road deaths between the countries with the highest and lowest death counts by region accompanied by the median regional point demarcated on the line.

The boxes in this chart represent the middle 50% of values. The line represents the total range of values. The dots are outliers.

ıntries (40% and 2%, respectively). Of st practice" countries, 60% are opean, while only 2% are African (WHO port, p. 32), even though the regions e the same number of countries. Best ctices are based on level of allowable od alcohol concentration while driving and effectiveness of enforcement.

- **Motorcycle Helmet Use:** Rapidly increasing circulation of motorcycles on the roads demands greater oversight of specific safety standards. Head injuries are the leading cause of death in two- and three-wheeled motor vehicle users, yet only 49 countries currently have laws that include the introduction of a national motorcycle helmet law, helmet requirement for both drivers and passengers, and specified standard for helmets.
- **Seat-Belt Use:** Seat-belt use reduces risk of death for front seat occupants by 45-50%, and rear seat occupants by 25%; however, only 7% of low-income countries apply seat-belt laws for both front and rear seat passengers. Worldwide, only 40 countries rated their enforcement of seat-belt laws as "good."
- **Child Restraint Systems:** The use of child restraints is responsible for a 60% reduction in deaths. Yet, no low-income country meets WHO best practice criteria, and only 15% of middle-income countries do. Only 22 countries have reported their child restraint law enforcement as "good." This safety factor is particularly relevant because road traffic injuries are the third-highest cause of death in children ages 5-9.

In addition to WHO-identified risk factors, additional factors may influence road safety such as infrastructure weakness, limited host-nation bandwidth, and security concerns such as crime, terrorism, and armed conflict. The presence of multiple factors can compound risk.

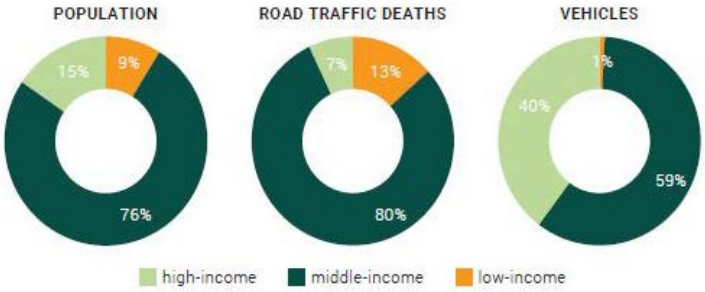
- **Lack of health infrastructure results in poor emergency medical response and post-crash care.** Injuries that would be otherwise survivable are often fatal. In countries without prehospital care infrastructure, taxis and private vehicles are often the only methods of transportation to a healthcare center. According to the WHO, in over 40% of countries, fewer than half of seriously injured people get from the scene of an accident to a hospital by ambulance. Patients often go to lower-level clinics before transport to a facility equipped with emergency care. Areas outside urban areas may lack medical facilities with emergency care services, and those that offer such services may have limited resources.

URBAN VERSUS RURAL

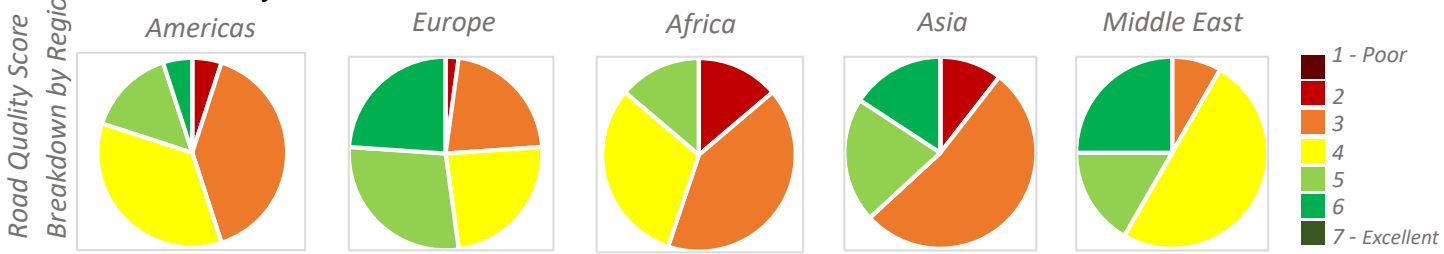
Poor and variable road conditions:

Major transit arteries and roads in and around urban areas tend to be in better condition than roads in rural areas. However, higher volumes of vehicles on major transit arteries and road use by pedestrians, vendors, and livestock increase frequency of traffic accidents and number of victims involved. Without strong speeding laws and enforcement, local drivers tend to speed along roads that are in better condition, making them counterintuitively more dangerous than unpaved or degraded roads in some cases.

Proportion of deaths per income category (comparative stats)



Seasonal weather patterns can also influence road conditions, which can make road hazards more prevalent and increase the likelihood of accident. The rainy season may increase risk of flooding, build-up of silt, and landslides, while the dry season may bring dust storms that may reduce visibility and obstruct roads.



Source: WEF

CRIME AND ROAD SAFETY

Crime Including Robbery, Kidnapping, and Armed Banditry Targeting Road Travelers:

In countries with high rates of crime, it is common for criminals to target road travelers due to their increased visibility. Such targeting may be opportunistic or highly organized, and can often escalate to violence. In urban areas, it is very common for criminals to take advantage of peak traffic hours to victimize motorists that are stuck in in traffic. In rural areas, particularly where government presence and rule of law may be more limited, armed actors may operate with more freedom. Armed actors may take advantage of natural road obstacles and chokepoints, or create roadblocks and checkpoints to control the flow of traffic along targeted routes.

Insecurity Affecting Road Travelers:

In conflict areas, armed actors often occupy strategically important roads to maintain control of transportation routes. The presence of potentially violent actors increases the level of danger on the roads. A case from Cameroon illustrates this point: militants killed a U.S. missionary while he was driving when a stray bullet hit him through the windshield of his car. Additionally, combat activities may heavily damage infrastructure and road quality.

REGIONAL TRENDS

Casualty Variation by Region

Region	Country with Most Deaths per 100K	Country with Least Deaths per 100K	Median Country Deaths per 100K	Regional Avg: Deaths per 100K
Americas	35.4	5.6	14.4	16
Europe	18.1	2.7	7.4	9
Africa	35.9	13.7	27.55	27
Eastern Mediterranean	28.8	5.3	19.6	18
South-East Asia	32.7	0.9	15.6	21
Asia-Pacific	26.4	1.9	14.2	17

Source: WHO Global Status Report on Road Safety 2018.

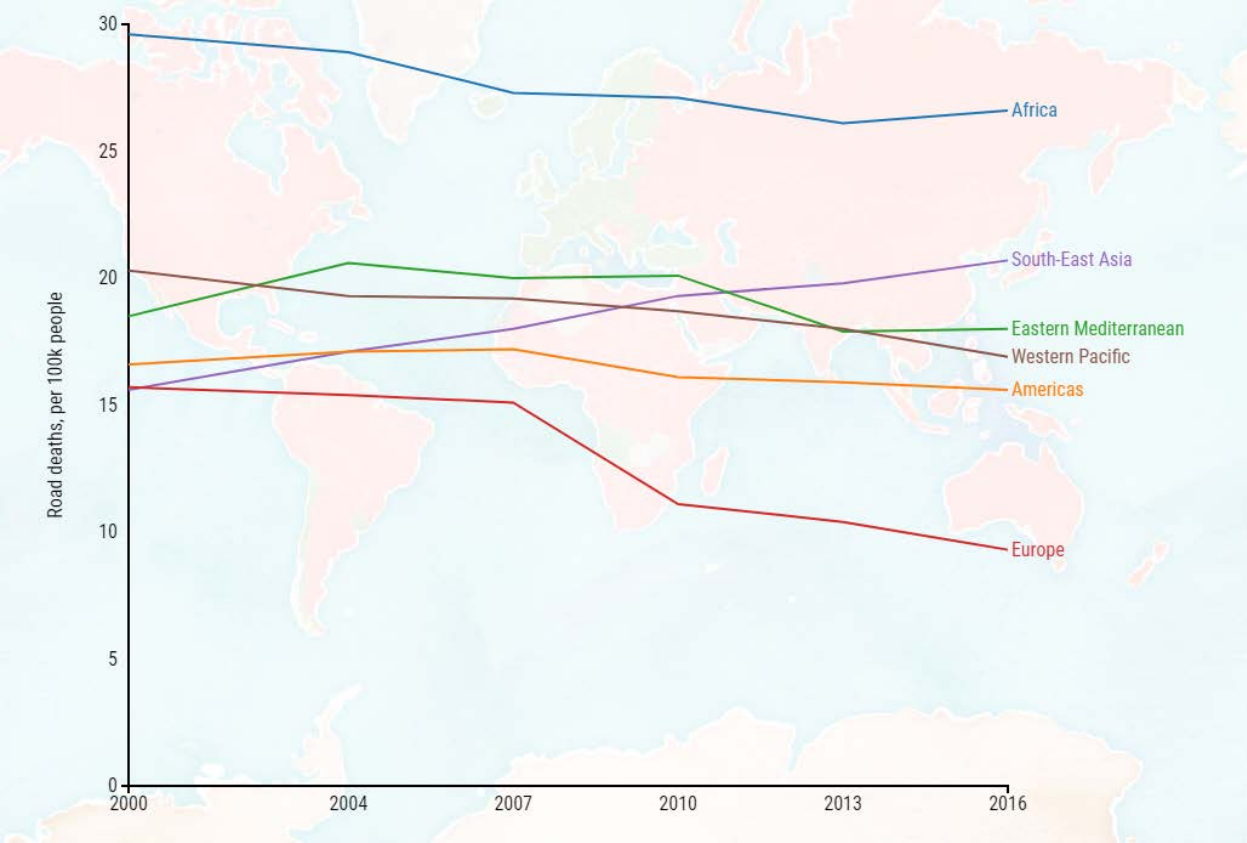
Americas

Road traffic death rates have decreased in the Americas since 2013. Between 2013 and 2016, however, there was a 3% increase in the proportion of deaths among motorcyclists, and the number of registered two- and three-wheeled vehicles increased by 23%.

Europe

While the region has the greatest proportion of countries with high-quality roads, the rate of traffic deaths for middle-income European countries is nearly three times that of the continent's high-income countries. However, the death rate has decreased continent-wide since 2013. The region has the lowest average death rate at only 9 deaths per 100,000. 90% of European countries have good seatbelt laws.

Fatality rate by region over time



Africa

Although Africa's traffic-accident fatality rate has fallen by 10% in the last 20 years, its rate remains the world's highest. Low-income African countries have a higher observable death rate than middle-income countries. Africa has the highest proportion of pedestrian and cyclist mortalities.

Sub-Saharan Africa is the regional epicenter for road traffic deaths worldwide. Liberia has the world's highest traffic fatality rate, at 35.9 deaths per 100,000 people.

Eastern Mediterranean (Middle East)

The Middle East is the only region where national rates of road traffic deaths do *not* decrease as income increases. For example, Saudi Arabia's traffic fatality rate is higher than Africa's despite being one of the wealthiest countries in the Middle East.

Southeast Asia & Asia-Pacific

Southeast Asia has the world's fastest increasing traffic fatality rate, as well as the most deaths in absolute terms. Southeast Asia also has the highest proportion of deaths among riders of motorized two- and three-wheeled vehicles. Asia has the broadest range of road quality, with most countries scoring either very well or very poorly. This disparity is also visible in the range of death rates observed—from fewer than two to more than 32 deaths per 100,000 population.

There have been a number of high profile, mass-casualty motor vehicle accidents in India the past year, due to the high speed limit, alcohol abuse, and lack of helmet and seat belt use. India recently surpassed China as the leading country in total number of road fatalities.

Trends in Improving Countries

Countries that have been successful in curbing vehicular deaths have used a holistic approach to address road safety. Stronger legislation and enforcement of speeding; drinking and driving; seatbelt, helmet, and child restraint use; and dedicated lanes for cyclists and motorcyclists have reduced vehicle deaths. Better safety standards in newer vehicles, such as electronic stability control and advanced braking, have further reduced the risk of an accident. Lastly, improving infrastructure, including road and medical services is a critical piece; however, such changes are often expensive and require sizeable political will. Poor road conditions – particularly when they lead to fatalities -- have been sources of protest and public outcry in Africa and Asia.

RESOURCES:

For additional information on private-sector security, contact OSAC's Research & Analysis Unit.

OSAC Reporting:
- Driving Overseas: Best Practices
- Road Safety in Africa
- Security in Transit: Airplanes, Public Transport, and Overnights
- USG Travel/Safety Mobile Apps

CDC Reporting:
- International Road Safety

WHO Report:
- 2018 Global Status Report on Road Safety
- WHO Interactive Map with Trends by Country
- WHO Interactive Map with Trends by Region
- Post-Crash Response

U.S. Department of State Reporting:
- Driving and Road Safety

UNDSS
- Vision for Road Safety