WHO’S APPROACH TO ADDRESSING ROAD SAFETY

In making recommendations to countries around the world on addressing road safety, WHO focuses on five risk factors and two additional areas of concern for road traffic injuries and deaths. For long-term improvements, WHO advises a comprehensive approach involving multiple sectors and taking into account vehicles, road users and the road environment. In the short term, some results can be achieved through cost-effective interventions such as comprehensive road safety legislation, law enforcement and awareness-raising campaigns.

KEY RISK FACTORS

Speed: The global context

- 59 countries have implemented an urban speed limit of 50 km/h or less and allow local authorities to reduce these limits.

Speed: What we know

- 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.
- A safe distance for braking is proportional to a vehicle’s speed. For example, a car travelling at 50 km/h takes 28 m to stop, whereas a vehicle driven at 90 km/h takes 70 m to stop.
- Determining a “safe speed” involves consideration of a number of factors, such as the type and function of the road, the kinds of collisions and the traffic mix.

Speed infographic

WHO and partners: Speed management: a road safety manual for decision-makers and practitioners
WHO: Fact sheet on speed
OECD/ECMT: Speed management report

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Drinking and driving: The global context

Enforcement of drink-driving laws has been shown to be more effective when it includes random breath tests for all drivers.

135 of the world’s countries use random breath testing to enforce their drink-driving laws.

Drinking and driving: What we know

• Drinking and driving, especially with a blood alcohol concentration (BAC) level of over 0.05 g/dl (grams per decilitre), greatly increases the risk of a crash and the possibility that it will result in death or serious injury.

• Young people are at greater risk of alcohol-related road crashes. The number of crashes involving young people can be reduced by as much as 24% by laws that establish a lower blood alcohol concentration (around 0.02 g/dl) for young or novice drivers.

• Law enforcement through random breath-testing checkpoints is highly cost–effective and can reduce alcohol-related crashes by approximately 20%.

Motorcycle helmets: The global context

98 countries have comprehensive motorcycle helmet laws which cover drivers and passengers, on all roads.

Motorcycle helmets: What we know

• Wearing a standard 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%.

• Requiring helmets to meet recognized safety standards, to be in good condition and to be properly worn, e.g. not cracked and properly fastened, can significantly reduce head injuries.

Helmets infographic

WHO and partners: Helmets: a road safety manual for decision-makers and practitioners
WHO: Fact sheet on helmets

Drinking and driving infographic

WHO: 2014 Global status report on alcohol and health
OECD/ECMT: Young drivers: the road to safety
WHO and partners: Drinking and driving: a road safety manual for decision-makers and practitioners
WHO: Fact sheet on drinking and driving
Seat-belts: The global context

111 countries have comprehensive seat-belt laws covering all car occupants.

Seat-belts: What we know

- 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%.
- Public awareness campaigns, mandatory seat-belt laws and their enforcement have been highly effective in increasing the rates of seat-belt wearing.

Seat-belts infographic
WHO and partners: Seat-belts and child restraints: a road safety manual for decision-makers and practitioners
WHO: Fact sheet on safety restraints

Child restraints: The global context

96 countries have implemented a child restraint law.

Child restraints: What we know

- 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.
- Mandatory child restraint laws and enforcement are effective in increasing the use of child restraints.
- In order to be effective, child restraint systems must meet standards, be appropriate to the age and size of the child and installed correctly.

Child restraints infographic
WHO: Child restraints fact sheet

Distracted driving

- Distracted driving is a growing problem due to increased use of mobile devices and technology in vehicles.
- Drivers who are using mobile phones typically have slower reaction times to traffic signals and in braking, have trouble staying in their lane and maintain closer following distances.
- Drivers who are using mobile phones are about four times more likely to be involved in a crash.
- Research suggests that hands-free phones are as dangerous as hand-held phones. Using phones while driving can cause drivers to take their eyes and minds off the road and the surrounding situation, causing—in this case—cognitive distraction.
- As this is a new field, new evidence will emerge as more research is conducted. In the meantime, measures to reduce the risks associated with distracted driving can include: adopting and enforcing legislation, public awareness campaigns and new technology such as vehicle applications that automatically re-direct calls if they sense a mobile phone in a moving vehicle.
- Text messaging which involves cognitive, manual, and visual distraction results in a significantly increased likelihood of a crash.

For more information on distracted driving, visit:
WHO: Mobile phone use: a growing problem of driver distraction
VISIBILITY

- In highly motorized countries, bad visibility plays a strong role in three main types of crashes: angled or head-on collisions, vehicles that rear-end or run into the sides of slow-moving or stationary vehicles and rear-end collisions.
- In low- and middle-income countries, poor visibility of pedestrians and vehicles is compounded by the mix of motorized and non-motorized traffic and poor street lighting.
- Cost-effective interventions to increase visibility include daytime running lights, street lights and reflective clothing.

WHO: Visibility fact sheet

For more on key risk factors:
Risk factor infographics
OECD: International Transport Forum
WHO and partners: Risk factor manuals
OECD: International Road Traffic and Accident Database (32 countries)
UNECE: Statistical database for transport
Risk factor fact sheets

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