Road safety in Montenegro: challenges and opportunities

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WHO Regional Office for Europe
Road safety – Public health challenge

Road traffic injuries: the facts

1.24 million road traffic deaths occur every year.

#1 cause of death among those aged 15-29 years

3 out of 4 road deaths are among men
Road traffic fatality rates per 100,000 population, by WHO region

- African Region: 26.6
- Eastern Mediterranean Region: 19.9
- World: 17.4
- Western Pacific Region: 17.3
- South-East Asian Region: 17.0
- Region of the Americas: 15.9
- European: 9.3
Inequalities persist in the WHO European Region

Road traffic injury mortality rates are:

- 8.6 times higher in the country with the highest rate than in the country with the lowest rate
- 3 times higher in CIS countries than in EU countries
- 1.4 times higher in LMIC than in HIC

Legend
Death rates per 100,000 population
- 2.8 - 4.1
- 4.1 - 6.5
- 6.5 - 8.8
- 8.8 - 11.9
- 11.9 - 24.2
- No data
Road traffic deaths per 100,000 population, by country income status

- Countries showing changes in the number of road traffic deaths, 2010–2013, by country income

![Bar chart showing road traffic deaths per 100,000 population for low-income, middle-income, and high-income countries.

- Low-income countries: 24.1
- Middle-income countries: 18.4
- World: 17.4
- High-income countries: 9.2

- More deaths: Low-income = 23, Middle-income = 34, High-income = 11
- Fewer deaths: Low-income = 4, Middle-income = 40, High-income = 35]
World Health Organization

Road traffic fatality rate per 100,000 population

11.9/100,000
LMICs have 90% deaths but 54% of vehicles

- **High-income**
  - Road traffic deaths: 16%
  - Registered motorized vehicles: 1%

- **Middle-income**
  - Road traffic deaths: 74%
  - Registered motorized vehicles: 53%

- **Low-income**
  - Road traffic deaths: 10%
  - Registered motorized vehicles: 46%
Top ten causes of death among people aged 15–29 years, 2012

- Road traffic injuries: 350,000 deaths
- Suicide: 250,000 deaths
- HIV/AIDS: 220,000 deaths
- Homicide: 200,000 deaths
- Maternal conditions: 150,000 deaths
- Lower respiratory infections: 120,000 deaths
- Diarrhoeal diseases: 100,000 deaths
- Drowning: 60,000 deaths
- Ischaemic heart disease: 50,000 deaths
- Meningitis: 40,000 deaths

World Health Organization
Regional Office for Europe
## Leading causes of death in WHO European Region

<table>
<thead>
<tr>
<th>Rank</th>
<th>0–4 years</th>
<th>5–14 years</th>
<th>15–29 years</th>
<th>30–49 years</th>
<th>50–69 years</th>
<th>70+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Preterm birth complications 30216</td>
<td>Road traffic injury 2584</td>
<td>Road traffic injury 25912</td>
<td>Ischaemic heart disease 86834</td>
<td>Ischaemic heart disease 494001</td>
<td>Ischaemic heart disease 1657718</td>
</tr>
<tr>
<td>2</td>
<td>Lower respiratory infections 17820</td>
<td>Drowning 1790</td>
<td>Self-harm 22888</td>
<td>HIV/AIDS 48591</td>
<td>Stroke 223441</td>
<td>Stroke 1010335</td>
</tr>
<tr>
<td>3</td>
<td>Congenital heart anomalies 15242</td>
<td>Other malignant neoplasms 1502</td>
<td>Other unintentional injuries 13920</td>
<td>Cirrhosis of the liver 44065</td>
<td>Trachea, bronchus, lung cancers 184569</td>
<td>Other circulatory diseases 403905</td>
</tr>
<tr>
<td>4</td>
<td>Birth asphyxia and birth trauma 13648</td>
<td>Leukaemia 1428</td>
<td>Drowning 7194</td>
<td>Self-harm 41844</td>
<td>Cirrhosis of the liver 100004</td>
<td>Alzheimer’s and other dementias 209930</td>
</tr>
<tr>
<td>5</td>
<td>Other congenital anomalies 8891</td>
<td>Lower respiratory infections 1399</td>
<td>Interpersonal violence 6877</td>
<td>Other unintentional injuries 33669</td>
<td>Other malignant neoplasms 94210</td>
<td>Trachea, bronchus, lung cancers 188656</td>
</tr>
<tr>
<td>6</td>
<td>Other neonatal conditions 7747</td>
<td>Other unintentional injuries 1375</td>
<td>Ischaemic heart disease 6623</td>
<td>Stroke 31167</td>
<td>Colon and rectum cancers 76092</td>
<td>Hypertensive heart disease 185688</td>
</tr>
<tr>
<td>7</td>
<td>Diarrhoeal diseases 5920</td>
<td>Other neurological conditions 1184</td>
<td>Drug use disorders 5827</td>
<td>Road traffic injury 29372</td>
<td>Breast cancer 60881</td>
<td>Chronic obstructive pulmonary disease 185356</td>
</tr>
</tbody>
</table>

*Source: World Health Organization*
For every person who dies, 23 are injured

• For every death 23 people were reported to be non-fatally injured
• It is estimated that ca. 4% of those injured in road crashes ended up with a permanent disability
• Better information on non-fatal injuries is needed.

Photo: WHO/P. Virot
Economic aspect

Road traffic deaths and injuries in LMICs are estimated to cause economic losses of up to 5% of GDP
Distribution of deaths among VRUs

European Region

- Other: 10%
- Pedestrians: 26%
- Cyclists: 51%
- Motorized 2–3 wheelers: 4%
- Car occupants: 9%

CIS

- Other: 7%
- Pedestrians: 29%
- Cyclists: 58%
- Motorized 2–3 wheelers: 2%
- Car occupants: 4%

EU

- Other: 5%
- Pedestrians: 22%
- Cyclists: 8%
- Motorized 2–3 wheelers: 18%
- Car occupants: 47%
49% of deaths among VRUs
Road safety facts: Montenegro

DEATHS BY ROAD USER CATEGORY

- Drivers/passengers in buses (24%)
- Drivers 4-wheeled cars and light vehicles (24%)
- Pedestrians (20%)
- Passengers 4-wheeled cars and light vehicles (20%)
- Cyclists (2%)
- Riders motorized 2- or 3-wheelers (10%)

Source: 2013, Police Directorate.

TRENDS IN REPORTED ROAD TRAFFIC DEATHS

Source: Police Directorate.

#SlowDown
Speed is at the core of the road traffic injury problem

1 in 3 deaths on the road in high-income countries is due to speed

40–50% of people drive above the speed limit

World Health Organization

Save Lives

#SlowDown
## PROSPECTS: Worsening situation
### Top 10 leading causes of death

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<tr>
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<tr>
<td>1</td>
<td>Ischaemic heart disease</td>
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<tr>
<td>2</td>
<td>Cerebrovascular disease</td>
</tr>
<tr>
<td>3</td>
<td>Lower respiratory infections</td>
</tr>
<tr>
<td>4</td>
<td>Chronic obstructive pulmonary disease</td>
</tr>
<tr>
<td>5</td>
<td>Diarrhoeal diseases</td>
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<tr>
<td>6</td>
<td>HIV/AIDS</td>
</tr>
<tr>
<td>7</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>8</td>
<td>Trachea, bronchus, lung cancer</td>
</tr>
<tr>
<td>9</td>
<td><strong>Road traffic injuries</strong></td>
</tr>
<tr>
<td>10</td>
<td>Prematurity &amp; low-birth weight</td>
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<td>Diabetes mellitus</td>
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<td>8</td>
<td>Hypertensive heart disease</td>
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<td>Stomach cancer</td>
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The overall goal of the Decade is to stabilize and then reduce the forecast level of road traffic fatalities around the world by 2020.

Decade of Action for Road Safety 2011-2020: saving millions of lives

- Projected increase without action
- Projected reduction if action taken

5 million lives saved

Number of deaths (millions)

Year


0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0
Pillars of the Plan

- Road safety management
- Safer roads and mobility
- Safer vehicles
- Safer road users
- Post-crash response
Road safety in the 2030 Agenda for Sustainable Development

SDG Goal 3: Ensure healthy lives and promote well-being for all at all ages
Target 3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents.

SDG Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
Target 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all.

A 5% cut in average speed can result in a reduction of 30% in the number of fatal road traffic crashes.
Response to road safety mortality

• “when meditating over a diseases, I never think of finding a remedy for it but instead, a means of preventing it” – Louis Pasteur

• Preventing road crashes and the injuries is the most important area that calls for attention of the policy makers, as it is not only important for health, social and transportation perspective, but is also cost effective
Best buys in road safety

- Speed reduction
- Seat-belts
- Child-restraints
- Helmets
- Drinking and driving
  - Low cost engineering measures
  - Safer vehicles
  - Pre-hospital and Trauma care

Laws Enforcement Standards Behavior
Seat-belts and airbags

- Wearing a seat-belt reduces the risk of death among front-seat passengers by 40–65% and among rear-seat occupants by 25–75%.

Only 57% of countries require seat-belts (front & rear)!
Motorcycle helmets

- Wearing a good quality motorcycle helmet can reduce the risk of death by ±40% and severe head injury by >70%.

Only 40% of countries have a comprehensive law and standards!
Child restraints

- Infant seats, child seats and booster seats can reduce deaths of infants by ±70% and deaths of small children by between 54%–80% in the event of a crash.

Less than 50% of countries have a child restraint law!
Speed reduction

Urban speed limits should not exceed 50 km/h and local authorities should be able to reduce speeds where necessary.

Only 29% countries have such laws
Road safety week
“Speed or Life”
8-14 May 2017
Conclusions

• National road safety strategies with targets that are monitored are useful tools to achieve road safety
• Better injury surveillance systems and data related to these are needed to monitor progress towards these targets
• Changing road user behaviour is an essential part of achieving safety on the roads, as much of the risk of crashing is due to risky behaviour
• Laws are effective in changing risky behaviour only if well enforced
• Pedestrians, cyclists and motorcyclists make up 39% of the deaths on the roads in the Region. Making walking and cycling safer, and providing public transport will encourage people to use these physically active and sustainable forms of transport
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