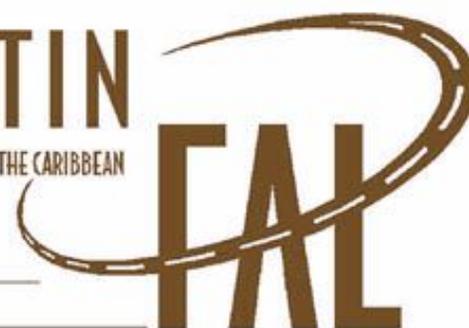




# BULLETIN

FACILITATION OF TRADE AND TRANSPORT IN LATIN AMERICA AND THE CARIBBEAN



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## ROAD SAFETY: A PRIORITY ISSUE FOR THE UNITED NATIONS

This issue of the Bulletin deals with road safety, which has become an urgent worldwide problem. Given the fact that road accidents are increasing, that they affect the planet's most vulnerable population (namely the lowest income groups in developing countries) and that this is becoming a genuine public health crisis, the United Nations has decided that it is urgent to address the matter. The World Health Organization (WHO) has therefore dedicated the World Health Day 2004 to road safety.

Given the urgent need for action, the Chiefs of Transport of the five Regional Economic Commissions of the United Nations held a meeting in Geneva (September 2004), where they agreed to reinforce the studies and projects carried out in this area.

Below is a summary of various information sources and initiatives adopted to assess and tackle this modern epidemic and offers a pessimistic outlook for 2020, when road traffic crashes will constitute the third cause of death unless serious action is taken from today.

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### 1. INTRODUCTION

Injuries and deaths caused by road traffic accidents are a global problem affecting all sectors of society. This serious problem has not received sufficient attention in recent years due to a lack of information, a resulting absence of awareness of the magnitude of the damage involved and a lack of response from the relevant authorities.

However, high-income countries have successfully halved the number of accidents over the last decade, which shows that it is possible to take action to reduce the problem. The World Health Organization (WHO) prepared a United Nations report entitled Global road safety crisis (7 August 2003), which also included comments from other entities of the United Nations system.

In 2000, an estimated 1.26 million people worldwide died as a result of road traffic injuries. World Health Organization (WHO) projections suggest that, by 2020, road traffic injuries could rank third among causes of death and disability, ahead of such other health problems as malaria, tuberculosis and HIV/AIDS.

The burden of road traffic injuries falls disproportionately on people in low- and middle-income countries. Although the number of motor vehicles per capita is considerably higher in high-income countries, low- and middle-income countries have the highest burden of injuries and fatalities due to road crashes. In 2000, for example, road traffic injuries killed more than 1 million people in low- and middle-income countries.

This inequity also applies to other aspects. In developing countries, most accident victims are pedestrians, cyclists, children and public transport passengers, or low-income groups in general. These people have less access to medical services, leading to disparities in chances of recovery or survival. More than 50% of global mortality due to road traffic injury occurs among young adults aged 15 to 44. Furthermore, the road traffic injury mortality rate for males is almost three times as high as it is for females, which means that such deaths have a high cost in terms of reduced family income and economic production.

This is a clear signal that the problem of road traffic injuries is getting worse, and is fast becoming a global public health crisis aggravated by increasing levels of motorization in developing countries. WHO estimates that, by 2020, road traffic crashes would be the second leading cause of mortality and morbidity in developing countries. This is in contrast to higher-income countries, where efforts to improve road safety are bearing fruit on a daily basis.

## 2. LACK OF INFORMATION

In many low- and middle-income countries, information on road traffic accidents is poor and non-standardized, which means that the real scale of the problem is underestimated and makes it impossible to draw comparisons between countries. Information is collected from various sources (police, transport and health sector), which makes it difficult to compile and standardize data. The lack of priority given to studying this problem is in contrast with the natural relevance of such a growing phenomenon and the magnitude of its consequences in low- and middle-income countries.

## 3. RISK FACTORS

A number of factors affect the probability of road traffic injury, including: speeding, alcohol consumption, absence of safety devices (seatbelts, child restraints), insufficient trauma care, inadequate road design and roadway environment, non-compliance with traffic safety regulations and vehicle inspections.

In May 2003, the United Nations General Assembly decided to address the issue globally and recommended that WHO and the Regional Commissions should take concrete action to help countries tackle this genuine public health crisis. In April 2004, WHO and the World Bank published the World report on road traffic injury prevention. The dissemination of this document is one of the priority aims of the fight against road accidents.

The report has three aims: to create greater levels of awareness and commitment at all levels – government, industry, international agencies and non-governmental organizations – to reduce road traffic casualties; to contribute to replacing the perception that road traffic injury is the price to be

paid for achieving mobility with an idea that emphasizes prevention; and to help strengthen institutions and create partnerships between sectors including public health, transport, finance, law enforcement and other sectors.

#### 4. SOCIAL AND ECONOMIC COSTS OF ROAD TRAFFIC INJURIES

Although everyone killed, injured or disabled by a road traffic crash has a network of others who are deeply affected, it would be impossible to attach a value to each case of human suffering, add up the values and produce a figure that captures the social cost. The economic cost of road crashes and injuries is estimated to be 1% of gross national product (GNP) in low-income countries, 1.5% in middle-income countries and 2% in high-income countries.

Estimating the costs of road crashes and injuries can help countries to understand the seriousness of the problem of road crashes and injuries and to understand the benefits of investing in measures to prevent them. An assessment should take into account both the direct and indirect costs. At the very least, direct costs should be considered to include those of providing health care and rehabilitation, and the indirect costs should include the value of lost household services and lost earnings for survivors, caregivers and families.

A recent study in the United States found that people sustained 5.27 million non-fatal injuries in 2000 as a result of road crashes, with 87% of the injuries considered minor. The cost of treating all these injuries was US\$ 31.7 billion, placing a tremendous burden on public health care services and the finances of road traffic casualties and their families. The serious injuries, including brain and spinal cord injuries, cost an average of US\$ 332,457 per injury.

#### 5. THE SITUATION IN LATIN AMERICA

A few years ago, the Argentine Road Safety Institute (ISEV) decided to generate an index for estimating the progress of this social ill in Latin America. The table below shows some indicators of traffic accidents in Latin American countries and in some developed countries for the purposes of comparison.

<b>Accident rate indices in Latin America and selected developed countries</b>						
Country	A	B	C	D	E	F
Argentina	8536	23.56	1280	5.43	9.84	11.32
Brazil	20178	11.90	1040	8.74	8.00	7.28
Chile	2031	13.14	902	6.87	6.94	7.89
Paraguay	910	16.15	1820	11.27	14	10.64
Uruguay	811	24.28	1248	5.14	9.60	10.22
Colombia	8250	19.15	2959	15.45	22.76	----
Peru	4290	16.28	3548	21.79	27.30	----
Mexico	17881	18.04	1467	8.13	11.29	----
Ecuador	1900	15.63	3059	19.57	23.53	-----
Germany	6977	8.46	133	1.57	1.02	1.24
United States	42116	15.44	193	1.25	1.49	1.45
France	8160	13.94	249	1.78	1.91	1.88

**Source:** Argentine Road Safety Institute (ISEV). February, 2003.

Traffic accident deaths (“hard” data corrected by United Nations coefficient).

Mortality rate per 100,000 inhabitants.

Mortality rate per 1,000,000 vehicles.

Social motorization index (number of inhabitants per vehicle).

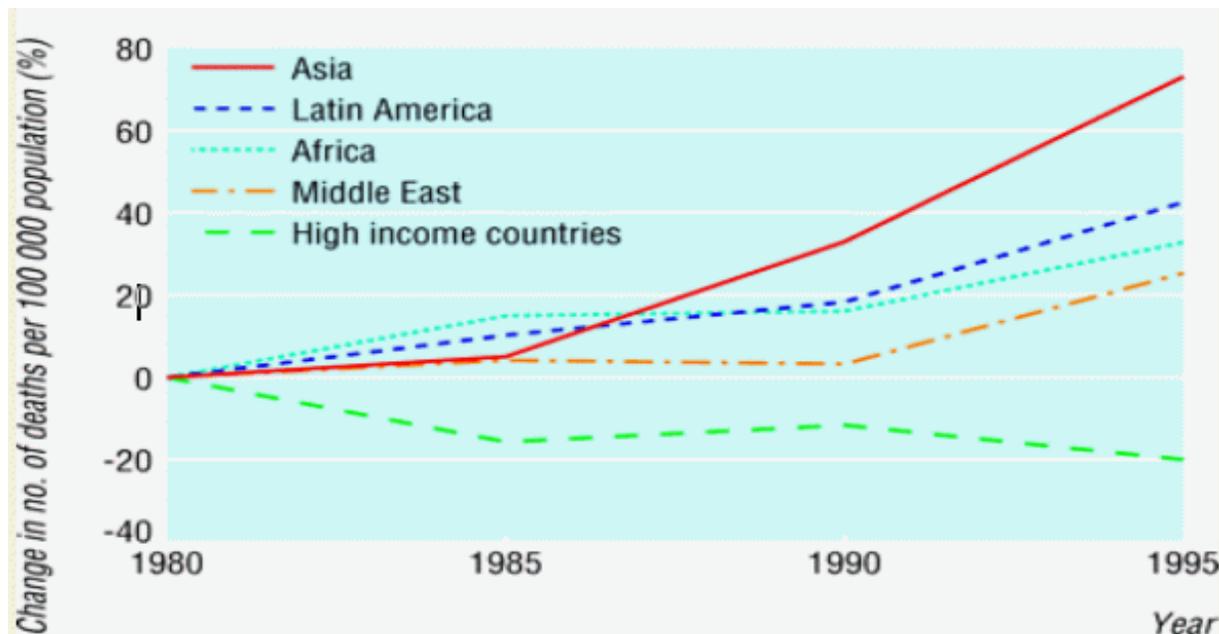
Mortality rate per real 100,000,000 vehicle kilometres. ISEV index – Base (100 = 13,000) Germany (13,953 vehicle km) and United States (15,143 vehicle km).

Mortality rate per 100,000,000 vehicle kilometres. ISEV index base 1999/2000.

ECLAC recently carried out a study on the remuneration system for public transport drivers in Santiago, Chile ([FAL Bulletin No. 217](#)). One of the most relevant conclusions of the study was that the majority of drivers are paid per passenger transported, which leads to drivers trying to maximize the number of passengers each one conveys. This real fight for passengers causes indiscipline in the streets and a resulting lack of safety for citizens in general.

This public transport problem in Santiago is repeated, with local variations, in many Latin American cities and is responsible for an increase in road accidents in both urban and suburban areas. According to the statistics of CONASET (the Chilean National Traffic Accidents Council), approximately 22% of road accidents involve public transport buses.

The following graph shows the comparative situation by region:



Note: Graph presented by Ian Thomson at the meeting of the United Nations Economic Commissions. Geneva, September 2004.

The World report on road traffic injury prevention recommends that governments should adopt the following measures:

**Recommendation 1:** identify a lead agency in government to guide the national road traffic safety

effort.

This agency should coordinate efforts by all sectors of government – including those of health, transport, education and the police. National efforts will be boosted if one or more well-known political leaders can actively champion the cause of road safety.

**Recommendation 2:** assess the problem, policies and institutional settings relating to road traffic injury and the capacity for road traffic injury prevention in each country.

The economic impact of road traffic injuries in most countries is substantial. This becomes obvious when assessing the direct and indirect economic costs of road traffic injuries, which can help increase awareness of the scale of the problem. A lack of data, though, should not dissuade governments from beginning to implement many of the other recommendations made in this report.

**Recommendation 3:** prepare a national road safety strategy and plan of action.

A national road safety strategy needs to set ambitious but realistic targets for at least five or ten years. It should have measurable outcomes and sufficient funding to develop, implement, manage, monitor and evaluate actions.

**Recommendation 4:** allocate financial and human resources to address the problem.

Countries may have to identify potential new income sources to afford the investment needed to achieve road safety targets. Examples include fuel taxation, road and parking charges, vehicle registration fees and fines for traffic violations. Many countries do not have the human resources required to develop and implement an effective road safety programme.

International conferences – such as the World Conferences on Injury Prevention and Safety Promotion, the International Conferences on Alcohol, Drugs and Traffic Safety (ICADTS), the conferences of the International Traffic Medicine Association (ITMA) and the congresses of the World Road Association (PIARC) – provide opportunities to exchange knowledge, establish networks and potential partnerships, and strengthen country capacity.

**Recommendation 5:** implement specific actions to prevent road traffic crashes, minimize injuries and their consequences and evaluate the impact of these actions.

These measures should include land-use and transport planning, road design, speed limits, obligatory use of seat belts and helmets, blood alcohol concentration limits, daytime running lights and public information and education.

**Recommendation 6:** support the development of national capacity and international cooperation.

Dedicating World Health Day 2004 to road safety is one step WHO is taking in this direction. With some exceptions, such as the FIA, Volvo and Rockefeller Foundations, few foundations to date have provided significant funding for international road safety programmes.

## 6. CONCLUSION OF THE REPORT

This report attempts to contribute to the body of knowledge on road safety. It is hoped that it will inspire and facilitate increased cooperation, innovation and commitment to preventing road traffic

crashes around the world.

Road traffic crashes are predictable and therefore preventable. In order to combat the problem, though, there needs to be close coordination and collaboration, using a holistic and integrated approach, across many sectors and many disciplines.

While there are many interventions that can save lives and limbs, political will and commitment are essential and, without them, little can be achieved. The time to act is now. Road users everywhere deserve better and safer road travel.

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