



## Confronting ‘Death on Wheels’: Making Roads Safe in ECA

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### Key Messages<sup>1</sup>

- Weak road safety management capacity, deteriorated roads, unsafe vehicles, poor driver behavior, patchy enforcement of road safety laws, and exponential growth in the number of vehicles have contributed to increasing road traffic injuries and fatalities in the ECA region.<sup>2</sup>
- The nature of the challenge is multisectoral—cutting across transport, health, education, and legal and governance sectors.
- Coordinated action and partnership between the World Bank, World Health Organization (WHO), multilateral development banks, international agencies and donors, governments, and private and civil society institutions is required to address this often-ignored development challenge.

### Death on Wheels

Road traffic injuries (RTIs) have become a major public health challenge in many low- and middle-income countries (LMICs). About 90 percent of the 1.3 million deaths and 50 million injuries from road traffic crashes worldwide each year occur in LMICs, although these countries have only 48 percent of the world’s registered

<sup>1</sup> This Knowledge Brief summarizes the key messages of a recent report: *Confronting “Death on Wheels”: Making Roads Safe in Europe and Central Asia*. World Bank. 2009. It can be downloaded at: [www.worldbank.org/eca/roadsafety](http://www.worldbank.org/eca/roadsafety).

<sup>2</sup> Countries of the former Soviet Union, the Baltics, the Balkans, Eastern and Central Europe, and Turkey.

vehicles.<sup>3</sup> Increasing motorization and urbanization in LMICs could double this toll by 2030. The difference in road crashes between LMICs and high-income countries (where many road deaths still occur), is stunning.

ECA countries have experienced rapid growth in the number of passenger cars on the roads over the last two decades. In the Commonwealth of Independent States (CIS), there was a 120 percent increase in passenger cars per 1,000 persons—from 64 in 1990 to 141 in 2003.<sup>4</sup> Similar trends were observed in countries in southeastern Europe. Vehicles in many ECA countries tend to be old and have sub-standard safety features. Length of roads and highways (in km.) has also increased since the 1990s—by 18 percent and 157 percent in the CIS, 21 percent and 75 percent in EU-10 countries, and 46 percent and 144 in southeastern Europe, respectively. In spite of significant investments in road infrastructure since the 1990s, in some ECA countries the roads still suffer from poor maintenance and under-investment.

While road traffic fatalities declined steadily in Western Europe—to below 6 fatalities per 100,000 (in 2006) in the Netherlands, Sweden, Switzerland, Norway, and the United Kingdom, deaths from RTIs increased in most ECA countries in spite of the smaller car fleet and relatively low number of km travelled per capita by car. RTI deaths in ECA in 2007 showed increases ranging from 8 percent to 39 percent. *The average mortality rate due to RTIs in several ECA countries is nearly three times that of EU-15 and other Western European countries (7.9 per 100,000)* (Figure 1). Kazakhstan has the highest mortality rate in ECA (30.6 per 100,000), followed by Russia (25.2 per 100,000) and Kyrgyzstan (22.8 per 100,000). In 2007, there were an estimated 80,000 reported traffic deaths in ECA countries, and more than

<sup>3</sup> WHO. 2009. *Global Status Report on Road Safety: Time for Action*. Geneva.

<sup>4</sup> WHO and UNECE. 2009. *Amsterdam Declaration. Making the Link: Transport Choices for our Health, Environment and Property*. Copenhagen: WHO EURO.

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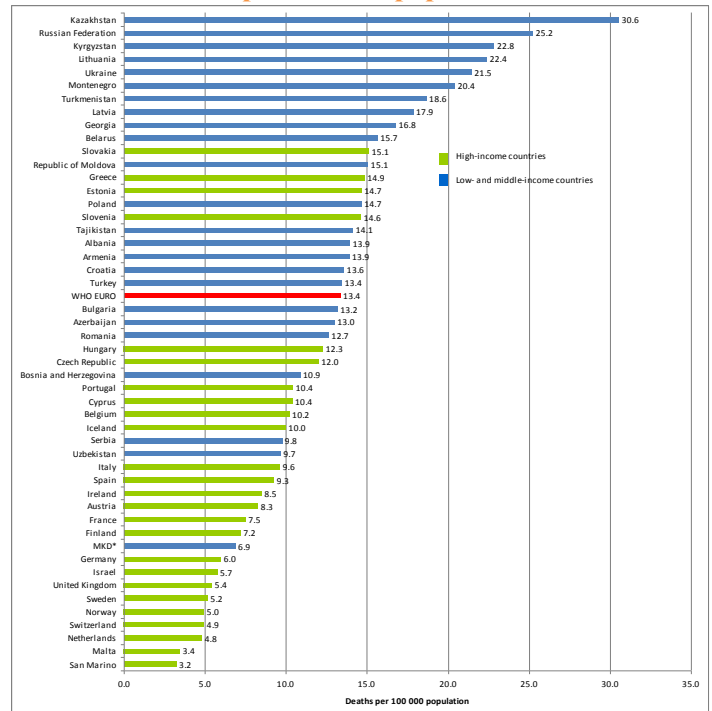
800,000 nonfatal injuries. RTIs are already among the top 10 causes of death in ECA.

The RTI epidemic has negative effects on individuals, societies, and health budgets. RTIs negatively affect economically productive age groups: 55 percent of road traffic deaths in ECA countries are among people aged 15-44; more than 80 percent of those killed are men. Worldwide, the cost of road deaths and injuries is estimated at about 1 percent of GDP in low-income countries, 1.5 percent in middle-income countries, and 2 percent in high-income countries. The total costs to governments exceed US\$ 500 billion annually. In ECA, the highest costs are in Russia (US\$ 34 billion per year), Turkey (US\$ 14 billion), Poland (US\$ 10 billion), and Ukraine (US \$5 billion).

## Mapping the Road to Safety

An effective road safety strategy requires a multisectoral ‘safe system’ approach. It needs a lead agency to coordinate contributions by the many public and private entities across which road safety responsibilities tend to be diffused (Table 1).

**Figure 1: RTI Death Rates in WHO-EURO Member Countries, per 100,000 population, 2007**



Note: MKD is the international standardized abbreviation for the Former Yugoslav Republic of Macedonia.

Source: WHO EURO. 2009.

**Table 1: Multisectoral Collaboration for Road Safety**

Action Areas	Scope	Main Actors
Partnerships	Promotion, engagement, coordination, and harmonization of efforts across many sectors of society to ensure long term sustainability of the effort.	Governmental agencies addressing transport, health, education; law enforcement, and civil society organizations; private companies, religious entities, and mass media.
Policies, legislation, enforcement	Enactment of laws and regulations. Costing of strategies and programs, adoption of sustainable funding mechanisms, and assignment of institutional responsibilities and accountability. Establishment of enforcement mechanisms.	Governmental agencies, parliaments, civil society organizations, car insurance companies, interior ministries, and police.
Design, building and maintenance of roads	Assessment and implementation of policies, plans, and new investment projects.	Transport ministries, finance, economic development, private firms, and enterprises.
Safe vehicles	Improvements in vehicle design to meet safety and environmental standards.	Automakers, regulatory agencies, insurance companies, and consumer organizations.
Public information, education and communication	Creation of a road safety culture to support implementation of road safety strategies. Inclusion of road safety themes in core curriculum of health education programs, targeting children and adolescents.	Transport, education and health ministries, mass media, and insurance companies.
Injury prevention, medical care, rehabilitation	Implementation of health system interventions along a continuum of service provision: public health, primary health care, post-impact medical care, including blood transfusion services and rehabilitation.	Health ministries and health insurance agencies.
Data collection and monitoring, and their use for decision-making and management	Collection and assessment of detailed and accurate data and information on road traffic injuries and fatalities for policymaking and program management across sectors.	Government agencies and systems (for example, epidemiological surveillance systems), data depositories at policy departments, and insurance companies.

Source: Bekefi (2006), and Peden and others (2004).

Many ECA countries already have structures and processes in place to address RTIs, including lead agencies that have the mandate to coordinate the national response, funding in national budgets, and national road safety strategies. National laws set speed limits, regulate driving under the influence of alcohol, and mandate the use of safety equipment. Publicly available pre-hospital care systems for post-crash medical care are in place, albeit with varied quality.

However, in spite of progress achieved in recent years in some countries, the ECA region (including countries that are now part of the EU) continues to have one of the worse road safety performances in the world. Additional efforts and resources are needed to remedy this situation. Experience from HICs and other MICs show that improving road safety requires a consistent 20-to-30-year effort to develop and implement comprehensive, integrated safe system programs.

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## Doing the Groundwork in ECA

The findings of a landmark WHO/World Bank report<sup>5</sup> led to six over-arching recommendations that set out the strategic initiatives necessary to improve country road safety performance:

- Identify lead agencies in governments to guide the national road safety efforts.
- Assess the problem, policies and institutional settings relating to road traffic injury, and the capacity for road traffic injury prevention in each country.
- Prepare national road safety strategies and plans of action.
- Allocate financial and human resources to address the problem.
- Implement specific actions to prevent road traffic crashes, minimize injuries and their consequences, and evaluate the impact of these actions.
- Support the development of national capacity and international cooperation.

Implementing these recommendations at country level requires building capacity to create the resources and tools necessary to implement target initiatives. Managing for improved road safety results at country level must address three inter-related elements of the road safety management system: institutional management functions, interventions, and results.

## Building institutional management functions requires:

- *Strengthening institutions and governance capacity for RTI prevention*, including lead agency capacity, targeting evidence-based training of senior policymakers, executive managers in the various relevant sectors, and ministry focal points and practitioners, especially in transport, justice, traffic police, and health. Creating space for civil society and private sector participation has the potential to galvanize political support on the basis of well-articulated social demands from communities that bear the burden of RTIs.

- *Improving nationwide traffic injury surveillance systems* to better map the causes, risks, extent, and consequences of injuries; to pinpoint risks for more effective action; and to evaluate the effectiveness of those actions.
- *Conducting national road safety reviews to formulate policies and plans*. These reviews help identify main risk groups and exposures to determine priorities, set realistic targets, allocate budgets, specify implementation responsibility, and ensure rigorous evaluation.

## A focus on results requires:

- *Integrating road safety in all phases of planning, design, and operation of road infrastructure*.
- *Reducing speed limits, particularly in urban areas*, and strengthening these efforts with road design, enforcement, publicity, speed cameras and appropriate penalties, to generate immediate safety benefits.
- *Reducing drinking and driving*. Given the relative importance of alcohol abuse in some ECA countries, broad alcohol-control policies, fiscal measures, and interventions are required to support the long-term sustainability of road safety efforts.
- *Increasing seatbelt use* through enforcement and publicity campaigns, revising specifications (at least for new cars), promoting vehicle seatbelt reminder systems, and undertaking periodic surveys to monitor front and rear seatbelt usage rates.
- *Reducing young driver risk* through graduated licensing schemes and extended training programs.
- *Adopting and enforcing laws to prevent 'distracting driving'* due to use of mobile phones and texting while driving.
- *Improving emergency medical systems* as part of broader health system modernization efforts to reduce fatalities and mitigate injuries.
- *Integration of road safety and transport policy*. Recent research indicates that improving transportation options (for example, better walking and cycling conditions, and improved ride sharing and public transport services) can reduce car collision frequency.

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<sup>5</sup> Peden, M., R. Scurfield, D. Sleet, D. Mohan, A. Hyder, E. Jarawan, and C. Mathers, eds. 2004. *World Report on Road Traffic Injury Prevention*. Geneva: WHO.

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- *Designing demonstration projects.* Well-designed demonstration projects can support the process of catching up with best practice in road safety performance and are an essential part of building capacity. They can provide useful benchmarks for rolling out a modern road safety program to the rest of the country with support from donors and international finance organizations.

## The World Bank's Role

To advance the road safety agenda, the World Bank co-founded the Global Road Safety Facility in 2006 with other partners. The Facility works with international partners to provide funding and technical assistance to scale-up LMIC capacity to implement cost-effective road safety programs. Road safety is routinely a key component in World Bank road infrastructure projects. For example, recent projects in Bosnia and Herzegovina, Bulgaria, Georgia, Poland, and Ukraine include pilot measures (and monitoring), such as road safety reviews, strengthening capacity of national road safety authorities, improving safety features of road infrastructure, tightening enforcement, and public campaigns for safer driving.

The World Bank, working with international partners, could support ECA countries in their effort to reduce road crash fatalities during 2010-16 by exploring options to support the identification, selection, design, and implementation of actions most likely to prevent road crashes and improve road crash emergency and rehabilitation services. Some ECA countries, as members of the EU, have the opportunity to deal with the RTI challenge through that membership. Since non-EU ECA countries may not have the same opportunity, the support that could be provided by the World Bank would follow a tailored approach.

As seen in ongoing U.S.-supported efforts under the Recovery and Reinvestment Act of 2009, programs being funded by governments in different countries to reactivate economic growth and employment offer a 'window of opportunity' to scale-up and improve road safety in ECA. This implies that investments directed to roads and highways should incorporate safety features and be coupled with support for implementing existing road safety plans.

On the basis of priorities set by ECA countries and taking into account the individual circumstances of each country, the World Bank could provide an assistance program that advocates greater investment in certain road safety initiatives, taking into account evidence-based, cost-effective approaches and international best practices, evidence from modeling exercises, extrapolation of the impact of different interventions for improving road safety, and available economic evidence.

The proposed road safety effort is fully consistent with and supports the World Bank's transport strategy<sup>6</sup> and the new World Bank guidelines for implementing the recommendations of the 2004 World Report mentioned earlier. It also supports the health improvement and poverty alleviation objectives outlined in the 'Healthy Development' strategy for health, nutrition and population results.<sup>7</sup> These efforts are also consistent with the new strategic directions guiding the World Bank's overall work, particularly those of fostering regional and global public goods that transcend national boundaries and of cooperating with other agencies having special expertise.<sup>8</sup>

## About the Authors

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<sup>6</sup> World Bank. 2008. "Safe Clean and Affordable Transport for Development: Transport Business Strategy 2008-2012." Transport Sector Board. Washington, D.C.

<sup>7</sup> World Bank. 2007. "Healthy Development: The World Bank Strategy for Health, Nutrition & Population Results." Washington, D.C.

<sup>8</sup> Zoellick, R. B., 2008. "Catalyzing the Future. An Inclusive and Sustainable Globalization." Address at the Annual Meeting of the Board of Governors of the World Bank Group. Washington, D.C., October 22.

